European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent the Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Final Report

Indufor, Finland
in association with
European Forest Institute (EFI)
Nepcon, Denmark
Markku Kiikeri Ky, Finland

Helsinki
January 21, 2008
DISCLAIMER

Indufor makes its best effort to provide accurate and complete information while executing the assignment. Indufor assumes no liability or responsibility for any outcome of the assignment.

Copyright © 2008 by Indufor Oy
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, but not limited to, photocopying, recording or otherwise.
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY**

1. **INTRODUCTION** 5

2. **OBJECTIVES** 6

3. **STAKEHOLDER PARTICIPATION** 7

4. **NATURE OF THE PROBLEM** 9

5. **OPTIONS**
   - 5.1 Baseline 10
   - 5.2 Additional Option 1: Expansion of the FLEGT VPA Approach to Cover Most Forest Trade from Higher Risk Countries 10
   - 5.3 Additional Option 2: Voluntary Measures by the Private Sector Further Developed 10
   - 5.4 Additional Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber 11
   - 5.5 Additional Option 4: Prohibition on the Placing on the EU Market of illegally Harvested Timber
     - 5.5.1 Sub-option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws Of the Country of Origin (i.e. where trees harvested) 11
     - 5.5.2 Sub-option 4b: Legislation which Requires that Only Legally Harvested Timber and Timber Products be Placed on the Market 11

6. **BASIC DATA**
   - 6.1 Imports to the EU 12
   - 6.2 Estimated Extent of Illegal Activities Related to Wood and Wood Products 15
   - 6.3 Estimated Production of Illegal Roundwood 16
   - 6.4 Estimated Imports of Illegal Wood and Wood Products to the EU 16

7. **METHODOLOGY FOR IMPACT ASSESSMENT**
   - 7.1 Legality Control System 18
   - 7.2 Trade Impact
     - 7.2.1 Trade Model 19
     - 7.2.2 Limitations 20
     - 7.2.3 Scenarios 20
     - 7.2.4 Market Development 21
   - 7.3 Environmental Impacts 22

8. **BASELINE SCENARIO**
   - 8.1 Legality Assurance System 24
     - 8.1.1 Description of System 24
     - 8.1.2 Administrative Cost 24
     - 8.1.3 Private Sector Cost 25
     - 8.1.4 Impacts 25
     - 8.1.5 Risks 28
   - 8.2 Trade Impacts 29
     - 8.2.1 World 29
     - 8.2.2 EU Member States 30
   - 8.3 Impact on Illegal Logging 30
   - 8.4 Environmental Impacts 32
   - 8.5 Social Impacts 33
8.6 Winners and Losers
  8.6.1 EU Countries 34
  8.6.2 Non-EU Countries 35

9. OPTION 1: EXPANSION OF THE FLEGT VPA APPROACH TO COVER MOST FOREST TRADE FROM HIGHER RISK COUNTRIES 36
  9.1 Legality Assurance System 36
    9.1.1 Description of System 36
    9.1.2 Administrative Cost 36
    9.1.3 Private Sector Cost 36
    9.1.4 Impacts 37
    9.1.5 Risks 38
  9.2 Trade Impacts 38
    9.2.1 World 38
    9.2.2 EU Member States 39
  9.3 Impact on Illegal Logging 39
  9.4 Environmental Impact 41
  9.5 Social Impacts 41
  9.6 Winners and Losers 42

10. OPTION 2: VOLUNTARY MEASURES BY THE PRIVATE SECTOR FURTHER DEVELOPED 43
  10.1 Legality Control 43
    10.1.1 Description of System 43
    10.1.2 Private Sector Cost 43
    10.1.3 Impacts 44
    10.1.4 Risks 46
  10.2 Impact on Illegal Logging 47
  10.3 Environmental Impact 47
  10.4 Social Impacts 47
  10.5 Winners and Losers 47
    10.5.1 EU Countries 47
    10.5.2 Non-EU Countries 48

11. OPTION 3: BORDER MEASURES TO PREVENT THE IMPORTATION OF ILLEGALLY HARVESTED TIMBER 49
  11.1 Legality Control 49
    11.1.1 Description of System 49
    11.1.2 Administrative Cost 49
    11.1.3 Impacts 50
    11.1.4 Risks 51
  11.2 Trade Impacts 52
    11.2.1 World 52
    11.2.2 EU Member States 53
  11.3 Impact on Illegal Logging 53
  11.4 Environmental Impacts 54
  11.5 Social Impacts 55
  11.6 Winners and Losers 55
    11.6.1 EU Countries 56
    11.6.2 Non-EU Countries 56

12. OPTION 4A: LEGISLATION WHICH PROHIBITS THE TRADING AND POSSESSION OF TIMBER AND TIMBER PRODUCTS HARVESTED IN BREACH OF THE LAWS OF THE COUNTRY OF ORIGIN 58
  12.1 Legality Control 58
    12.1.1 Description of System 58
    12.1.2 Administrative Costs 58
    12.1.3 Impacts 58
    12.1.4 Risks 59
  12.2 Trade Impacts 60
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Respondents in EU Member States</td>
<td>7</td>
</tr>
<tr>
<td>3.2</td>
<td>Respondents in non-EU countries</td>
<td>7</td>
</tr>
<tr>
<td>6.1</td>
<td>Estimates on illegal roundwood production and exports of wood products</td>
<td>15</td>
</tr>
<tr>
<td>6.2</td>
<td>Estimated illegal roundwood production in 2005</td>
<td>16</td>
</tr>
<tr>
<td>6.3</td>
<td>Estimated imports of illegal wood and wood products to the EU in 2005</td>
<td>17</td>
</tr>
<tr>
<td>8.1</td>
<td>Estimated administrative cost</td>
<td>24</td>
</tr>
<tr>
<td>8.2</td>
<td>Estimated private sector costs by baseline countries</td>
<td>25</td>
</tr>
<tr>
<td>8.4</td>
<td>Change in value added in forestry and forest industries compared to business as usual scenario</td>
<td>30</td>
</tr>
<tr>
<td>8.5</td>
<td>Change in valued added in EU Member States by region compared to business as usual scenario</td>
<td>30</td>
</tr>
<tr>
<td>8.6</td>
<td>Estimated volume of exports of illegal timber to the EU from baseline countries in 2005</td>
<td>31</td>
</tr>
<tr>
<td>8.7</td>
<td>Change in employment in forest industries by regions compared to business as usual scenario</td>
<td>33</td>
</tr>
<tr>
<td>8.8</td>
<td>Change in employment in forest industries in EU Member States by region compared to business as usual scenario</td>
<td>34</td>
</tr>
<tr>
<td>9.1</td>
<td>Estimated administrative cost of LAS</td>
<td>36</td>
</tr>
<tr>
<td>9.2</td>
<td>Estimated private sector LAS costs</td>
<td>37</td>
</tr>
<tr>
<td>9.3</td>
<td>Change in value added in forestry and forest industries compared to business as usual scenario</td>
<td>38</td>
</tr>
<tr>
<td>9.4</td>
<td>Change in valued added in EU Member States by region compared to business as usual scenario</td>
<td>39</td>
</tr>
<tr>
<td>9.5</td>
<td>Estimated volume of exports of illegal timber to the EU in 2005 from countries selected for the analysis of geographically expanded VPA</td>
<td>40</td>
</tr>
<tr>
<td>9.6</td>
<td>Change in employment in forest industries by regions compared to business as usual scenario</td>
<td>41</td>
</tr>
<tr>
<td>9.7</td>
<td>Change in employment in forest industries in EU Member States by region compared to business as usual scenario</td>
<td>42</td>
</tr>
<tr>
<td>10.1</td>
<td>Costs of private sector control systems</td>
<td>43</td>
</tr>
<tr>
<td>10.2</td>
<td>Distribution of FSC chain-of-custody certificates by country group</td>
<td>46</td>
</tr>
<tr>
<td>11.1</td>
<td>Estimated administrative costs</td>
<td>49</td>
</tr>
<tr>
<td>11.2</td>
<td>Change in value added for forestry and forest industries compared to the business as usual scenario</td>
<td>53</td>
</tr>
<tr>
<td>11.3</td>
<td>Change in valued added in EU Member States by region compared to business as usual scenario</td>
<td>53</td>
</tr>
<tr>
<td>11.4</td>
<td>Estimated volume of exports of illegal timber to the EU from all non-EU countries in 2005</td>
<td>54</td>
</tr>
<tr>
<td>11.5</td>
<td>Change in employment in forest industries by regions compared to business as usual scenario</td>
<td>55</td>
</tr>
<tr>
<td>11.6</td>
<td>Change in employment in forest industries in EU Member States by region compared to business as usual scenario</td>
<td>55</td>
</tr>
<tr>
<td>12.1</td>
<td>Change in value added for forestry and forest industries</td>
<td>60</td>
</tr>
<tr>
<td>12.2</td>
<td>Change in valued added in EU Member States by region compared to business as usual scenario</td>
<td>61</td>
</tr>
<tr>
<td>12.3</td>
<td>Estimated volume of exports of illegal timber from non-EU countries and estimated illegal roundwood production in EU in 2005</td>
<td>61</td>
</tr>
</tbody>
</table>
Table 12.4  Change in employment in forest industries by regions compared to business as usual scenario  
Table 12.5  Change in employment in forest industries in EU Member States by region compared to business as usual scenario  
Table 13.1  Estimated administrative costs  
Table 13.2  Estimated private sector costs  
Table 14.1  Key impacts of additional options  
Table 15.1  Cost of expanding product range by additional option  
Table 15.2  Exports of illegal timber to the EU and illegal production of industrial roundwood in high/moderate risk countries in 2005  
Table 15.3  Changes in production value of furniture manufacturing 2009-2020 compared to the business as usual scenario  
Table 15.4  Change in value added assuming a geographically expanded VPA (option 1) combined with similar measures in other consumer countries compared to the business as usual scenario  
Table 16.1  Ranking of options by respondents in EU Member States, first variant  
Table 16.2  Ranking of options by respondents in EU Member States, second variant  
Table 16.3  Ranking of options by respondents in non-EU countries, first variant  
Table 16.4  Ranking of options by respondents in non-EU Member States, second variant  
Table 4.1  Summary of cost impacts in consignment-based system with new sophisticated software tools (Consignment A)  
Table 4.2  Summary of cost impacts in consignment-based system with existing upgraded software tools (Consignment B)  
Table 5.1  Summary of cost impacts in operator-based system with new sophisticated software tools (Operator A)  
Table 5.2  Summary of cost impacts in operator-based system with existing upgraded software tools (Operator B)  

List of Figures

Figure 6.1  Imports of all wood products to the EU in 2005 (RWE)  
Figure 6.2  Imports of all wood products to the EU by country of origin in 2005 (RWE)  
Figure 6.3  Imports of all wood products by EU Member State in 2005 (RWE)  
Figure 6.4  Production of industrial roundwood and imports and exports of wood, and wood products in the EU in 2005  
Figure 7.1  Cost of legality control system under various options  
Figure 7.2  Roundwood production under business as usual and baseline scenarios in Indonesia  
Figure 8.1  Sensitivity of private sector’s LAS cost to annual volume of roundwood processed  
Figure 13.1  Sensitivity of private sector’s cost of legality control to annual volume of processed roundwood  
Figure 6.1  Comparison of costs between the studied systems
LIST OF ANNEXES

Annex 1 Legal Assurance System - Theoretical Country Case
Annex 2 Transfer of Illegal Wood Products from Tropical Countries to the EU via China
Annex 3 Transfer of Illegal Wood Products from Russia to the EU via China
Annex 4 Impacts of Lacey Act
Annex 5 Legal Frameworks Relevant to Imports of Illegal Timber
Annex 6 Terms of Reference
Annex 7 Indications on Market Conditions For FLEGT Licensed Timber
Annex 8 New Markets

TECHNICAL REPORTS

Technical Report 1 Voluntary Private Sector Schemes in EU Timber Trade
Technical Report 2 Legal Analysis
Technical Report 3 Stakeholder Report
Technical Report 4 Brazil Country Case Study
Technical Report 5 Gabon Country Case Study
Technical Report 6 Russia Country Case Study
Technical Report 7 Vietnam Country Case Study
Technical Report 8 Indonesia Country Case Study
Technical Report 9 Scenario Analysis
ABBREVIATIONS AND ACRONYMS

a per year
C&I Criteria and indicators
CEPI Confederation of European Paper Industries
CITES Convention on International Trade In Endangered Species of Wild Fauna & Flora
COMTRADE United Nations Commodity Trade Statistics Database
CSR Corporate social responsibility
DOF Documento de Origem Florestal, Brazil
EC European Commission
EFI-GTM Global Forest Sector Model
EMAS Eco-Management and Audit Scheme
EU European Union
EU-27 European Union with 27 Member States
EUR Euro
FIS Forest Inspection Service
FLEGT Forest Law Enforcement, Governance and Trade
FSC Forest Stewardship Council
GPS Global Positioning System
IIED International Institute for Environment and Development
ISO International Organization for Standardization
ITTO International Tropical Timber Organization
LAS Legality assurance system
m³ Cubic meter
MS Member State
MTCC Malaysian Timber Certification Council
N/A Not available
PEFC Programme for the Endorsement of Forest Certification
RWE Roundwood equivalent
SME Small and Medium-scale Enterprise
SMFE Small and Medium Forest Enterprise
TTF Timber Trade Federation
UK United Kingdom
UNFF United Nations Forum on Forests
USA United States of America
USD United States Dollar
USSR Union of Soviet Socialist Republics
WTO World Trade Organization
WWF World Wide Fund for Nature
EXECUTIVE SUMMARY

Introduction

The European Community policy regarding illegal logging and related trade was set out in the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan which includes a number of measures to ensure that timber and wood products imported into the EU have been legally harvested or manufactured from legally harvested timber.

One of the key measures proposed by the Action Plan is a licensing scheme for the prevention of illegal logging and related trade coming into the European Union (EU). The licensing scheme would be implemented as part of the Voluntary Partnership Agreements (VPAs), which are being negotiated with a number of countries.

The VPA approach is considered promising but it is recognized that it may have limitations. The EU FLEGT Action Plan therefore makes provisions for an analysis of additional measures, which could enhance the EU’s efforts to eliminate imports of illegally harvested timber and timber products to the EU market. A total of four options have been identified.

1) Continuation of the FLEGT VPA approach
2) Voluntary measures by the Private Sector further developed
3) Border Measures to Prevent the Importation of Illegally Harvested Timber
4) Prohibition on the Placing on the EU Market of illegally Harvested Timber
   • Sub-option 4a: Legislation which Prohibits the Trading and Possession of timber and Timber Products Harvested in Breach of the Laws Of the Country of Origin (i.e. where trees harvested)
   • Sub-option 4b: Legislation which Requires that Only Legally Harvested Timber and Timber Products be Placed on the Market

The overall objective of the study is to contribute to the policy formulation process of the European Commission (EC) with respect to further policy or legislative options for measures to address the introduction of timber and timber products to the EU market originating from illegal logging. An analysis of the World Trade Organization (WTO) implications is excluded from the scope of the analysis.

Estimated imports of illegal timber to the EU

In 2005, all imports of wood products from all countries to the EU amounted to about 142 million m$^3$ roundwood equivalent (RWE). Roundwood, sawnwood, plywood and veneer, accounted for 50 percent of the total imports. Considering only these products, the estimated imports of illegal products from countries with a high or moderate risk of illegal logging was 14 million m$^3$ (RWE) in 2005. If all wood products except pulp and paper were considered, the amount in 2005 would have been 16 million m$^3$ (RWE).

In relative terms, the estimated imports of illegal timber products represent 22-23 percent of total imports from countries with a high or moderate risk of illegal logging. Of total imports to the EU, the estimated imports of illegal timber account for about 19 percent.

In 2005, the total volume of timber placed on the EU market was 512 million m$^3$ consisting of imports, 142 million m$^3$ (RWE), and EU roundwood production, 370 million m$^3$. Imports of illegal timber amounting to 16 million m$^3$ (excluding pulp & paper products) accounted for about 3 percent of the total.
Cost of legality control

The unit costs of legality control are rather low in all of the options, and the differences are attributable to variations in implementation arrangements. Assuming a low-tech approach to data management is implemented, the total costs range between EUR 0.22-0.34/m³, which represents only a fraction of log prices ranging from EUR 40/m³ to more than EUR 100/m³ at the mill gate.

Option 4b prohibiting the placing of illegal timber on the EU market and requiring control of legality on all timber could cause significant additional costs for the smallest forest enterprises in the EU. It is estimated that the cost of legality control for "micro" SMEs (EU terminology for enterprises employing 1-9 people) in the EU could in some cases be more than EUR 2/m³. The "micro" SMEs represent more than 80 percent of total number of enterprises in the EU wood and paper industries, account for more than 10 percent of value added generated in the sector and employ more than 20 percent of the workforce.

The total cost of implementation is divided between the government and the private sector but with different proportions depending on the option. From the perspective of the governments in the non-EU countries where illegal logging occurs on a high level, the administrative cost of legality control is in all cases moderate compared to the potential to benefit in the form of improved collection of taxes and fees. Availability of budget funds for the initial investment could potentially be a constraint, if the legality control system is built on advanced information systems.

In absolute terms, the most significant cost, altogether EUR 117 million/a, would be shouldered by the private sector under option 4b prohibiting the placing of illegal timber on the EU market (option 4b). Differing from the other options, it includes the obligation to provide evidence on the legality of all timber materials placed on the EU market including those sourced from the EU.

Trade impact

The trade impact was analyzed with respect to expected changes in value added generated by the forest sector compared to the business as usual scenario. Assuming the effective implementation of the various additional options, the most significant impact would be felt under the VPA scheme (baseline and option 1) in tropical countries where illegal logging occurs on a high level. The licensing scheme and expected improvements in law enforcement reduce illegal supply of roundwood and, as a result, the volume of output and value added in the processing industries would also decline. However, it should be noted that, to a large extent, the decline in production volume is compensated with higher product prices.

In other non-EU regions, the impact of all additional options is expected to remain moderate with changes in value added remaining within a range of a few percent above or below the business as usual scenario. The border measures (option 3) and prohibition to place illegal timber on the market (options 4a and 4b) would have a neutral effect. This applies also to tropical countries with a high level of illegal logging. This is explained by the fact that with these options there is a level playing field for all countries exporting to the EU; no country is able to take advantage of exporting low-cost illegal timber. Another contributing factor is the assumption that the current, rather lax law enforcement, continues allowing illegal logging to recover as traders dealing in illegal timber shift their exports to other markets than the EU.

In the EU, provided that the additional options are implemented effectively and they substantially reduce the imports of illegal timber, there would be a moderate increase in the price and production of timber and wood products in relation to the business as usual scenario. Forest owners, in particular, would benefit from the introduction of additional options as value added in forestry is projected to increase 5-8 percent.
compared to business as usual scenario. On average and for all options (except for option 2, voluntary private sector schemes further developed, whose impact could not be estimated), the value added in the EU forest sector is expected to increase slightly more than 1 percent compared to the business as usual scenario. The only exception is the Nordic Region where the decline of illegal supply from Russia would lead to a minimal reduction of value added.

**Impact on Illegal logging**

The additional options attempt to discourage illegal logging through trade-related measures. Accordingly, their impact is proportionate to the volume of imports from the involved countries to the EU. It is estimated that, globally, they have potential to reduce illegal logging by up to 12 percent. Since traders are likely to take advantage of various loopholes, the actual impact will probably be less but it is likely that there would be a significant impact in selected countries of Africa as well as in northwest Russia which is the main source of imports to the EU.

The impact could be substantially higher in countries entering into VPAs (option 1). The support to be provided to improve law enforcement could significantly curb the illegal logging volume. Also, if the VPA licensing system were extended to all exports, there could be a significant and immediate reduction of illegal logging.

One of the main risks is that traders may divert illegal timber to other markets than the EU. The risk is present with all options and in all regions perhaps with the exception of northwest Russia where the availability of alternative markets is restricted due to high transportation costs and limited absorption capacity of the domestic market.

The impact of option 1, a geographically expanded VPA, would be significant, if the major timber producing countries joined the scheme. However, this is highly uncertain as a number of stakeholders indicated that the governments in many of the countries included in the theoretical analysis would find it politically difficult to enter into VPAs.

Option 4a prohibiting the trade and possession of illegal timber would be difficult to implement because of the difficulty to prove that a timber shipment was linked to an illegal act, possibly in a country thousands of kilometers away. The principal intervention is the introduction of an improved legislative framework but it is doubtful whether this is sufficient to secure the effectiveness of law enforcement.

**Environmental impact**

The main environmental impacts are the benefits resulting from reduced illegal logging and improved adherence to environmental regulations. The impact is dependent on how effectively the various additional options are able to contribute to these objectives.

**Social impact**

In countries where illegal logging occurs on a significant scale, the social benefits depend on whether social provisions have been included in the legality definition and whether they are adequately taken into consideration when implementing the additional options. The border measures (option 3), in particular, entail a risk that a narrow definition is adopted in the interest of finding a broadly acceptable approach.

**Conclusions**

The key benefit of continuing with the VPA approach (option 1) is that it offers broad context-specific solutions at the country level. The downside is that the pace of expansion could be slow as several of the key timber producing countries may be reluctant to engage in the process. However, if implemented successfully, the
expansion of VPAs could make a major contribution to the reduction of illegal logging in a few selected countries. In contrast, the introduction of border measures (option 3) and prohibition to place illegal timber on the EU market (options 4a and 4b) would have comprehensive country coverage and would address many of the weaknesses in the VPA approach. However, the formulation of approaches that would be tailored to specific situations is challenging. The number of countries involved is too large to allow extensive consultations and development processes, and there is a risk that non-EU countries perceive the implementation of these options as an infringement of their sovereignty. Providing support to continued development of voluntary private sector schemes (option 2) is a highly useful intervention but it is more of a complementary measure rather than a stand-alone approach.

The potential impact of additional options may not materialize unless their implementation is effective. In this regard, the VPA approach (option 1) has merit, as it would be backed by substantial technical assistance and support to capacity building. Voluntary private sector schemes (option 2) can be implemented quite effectively but their impact is limited by the fact that they do not focus on illegal activities; they rather try to “crowd them out”. Securing the credibility of the legality control system is a major challenge for border measures (option 3) and the difficulty of enforcement creates a substantial risk for the successful execution of option 4a, a variant of the additional option prohibiting the placing of illegal timber on the EU market. Implementation of the other variant, option 4b, is expected to be substantially more effective because the burden of proof is on the private sector. However, the obligation to prove legality (as opposed to illegality) appears difficult to implement from a legal perspective. Many stakeholders in the EU saw it implying that timber is illegal unless proven legal and therefore being in conflict with the legal principle that guilt should be proven rather than innocence.

The higher prices for roundwood and end products could potentially erode the global competitiveness of EU-based forest industries, especially considering that increased use of wood energy is likely to induce a parallel development where timber prices in the EU are pushed higher. The trade model, however, suggests that when introducing additional options the potential loss of the global competitiveness of the EU forest industries due to higher product prices would be largely offset by reduced imports which increase demand for products manufactured in the EU. On the other hand, higher prices for wood products would be a negative development from the EU consumers’ standpoint.

Border measures (option 3) and the prohibition to place illegal timber on the market (options 4a and 4b) would eliminate unfair competition, which would have significance for EU importers and manufacturers. At the same time, option 4b could be problematic for the smallest enterprises in the EU. Even though the typical cost of legality control systems is estimated to be low in comparison with timber prices, the economies of scale work against smallest enterprises which could face substantial costs. They could also experience difficulty in funding the initial investment in system development.

The impact of additional options would be strengthened further, if other consumer countries developed their regulatory frameworks in a similar manner. The assessment shows that a concerted action implemented simultaneously by the main timber consumer countries in partnership with timber producing countries can be an effective approach. By implementing the VPA scheme and/or additional options, the EU is providing a platform that other consumer countries contemplating similar measures could take direct advantage of. Someone has to be first, and with its initiative the EU is paving the way for other countries to join the effort.
1. INTRODUCTION

The European Community policy regarding illegal logging and related trade was set out in a Communication on a FLEGT Action Plan (COM(25 1)2003). The FLEGT Action Plan sets out a number of measures to ensure that timber and wood products imported to the EU have been legally harvested or manufactured from legally harvested timber.

One of the key measures proposed by the Action Plan is a licensing scheme aiming at the prevention of illegal logging and related trade to the EU. The licensing scheme would be implemented as part of a set of VPAs, which are being negotiated with a number of countries.

The VPA approach is considered promising but it is recognized that it may have limitations. The EU FLEGT Action Plan therefore makes provisions for an analysis of additional measures, which could enhance the EU’s efforts to eliminate imports of illegally harvested timber and timber products to the EU market. A total of four options have been identified.

   a) Continuation of the FLEGT VPA approach
   b) Voluntary measures by the Private Sector further developed
   c) Border Measures to Prevent the Importation of Illegally Harvested Timber
   d) Prohibition on the Placing on the EU Market of illegally Harvested Timber

The EU Commission has contracted Indufor Oy, a Finnish consulting company, to conduct an impact assessment on the four options (Terms of Reference in Annex 6). This report presents the findings of the study.
2. OBJECTIVES

The overall objective of the study is to contribute to the policy formulation process of the EC with respect to further policy or legislative options for measures to address the introduction of timber and timber products to the EU market originating from illegal logging.

The likely economic (including administrative), social and environmental impacts of the options identified are assessed and presented in qualitative and quantitative terms. The aim is to reveal differences with regard to the effectiveness of various additional options in addressing illegal logging and associated criminal activities. An analysis of WTO implications is excluded from the scope of the analysis.

The study will not make recommendations on the various options, but it will identify the pros and cons, risks and potential associated costs without taking a final position on which option is considered to be best.
3. STAKEHOLDER PARTICIPATION

The assignment comprised of stakeholder consultations which were conducted through

- Stakeholder workshops arranged in October 2007 in
  - EU Member Countries: Estonia, Finland, Germany, Italy, the United Kingdom (UK); and
  - Non-EU Countries: Brazil, Indonesia, Russia.

- Bilateral consultations with selected stakeholders in France, Spain, Belgium, the Netherlands, Gabon, and Vietnam

The consultations conducted under this project complemented the EU consultation “Your Voice in Europe” on the additional options conducted in early 2007. The respondents of that consultation were mainly from the EU, although a few responses were received from other countries.

Under this project, the stakeholders consulted were identified from three basic interest groups (i) government, (ii) private sector, and (iii) civil society. An attempt was made to identify all key players. In countries where bilateral consultations were conducted, only selected stakeholders were interviewed. The priority was given to stakeholder groups whose views were not available from public sources. All workshops were conducted in the local language of the participants. Bilateral consultations were also, to a large extent, conducted in the local language of the participant.

The consulted individuals were asked to fill in a questionnaire. A total of 74 questionnaires were received from stakeholders in EU Member States and 83 from non-EU countries (Table 3.1 and Table 3.2). In both regions, the most active stakeholder group was civil society followed by the private sector. The results from the questionnaire survey, as well as other written feedback, is presented in Technical Report 3.

Table 3.1 Respondents in EU Member States

<table>
<thead>
<tr>
<th>Country</th>
<th>Government</th>
<th>Private sector</th>
<th>Civil society</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>3</td>
<td>5</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>UK</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Belgium</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Spain</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Estonia</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>26</td>
<td>33</td>
<td>74</td>
</tr>
</tbody>
</table>

Table 3.2 Respondents in non-EU countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Government</th>
<th>Private sector</th>
<th>Civil society</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>Gabon</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Russia</td>
<td>2</td>
<td>5</td>
<td>21</td>
<td>28</td>
</tr>
<tr>
<td>Brazil</td>
<td>1</td>
<td>13</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Vietnam</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>29</td>
<td>40</td>
<td>83</td>
</tr>
</tbody>
</table>
In several cases, the feedback provided by stakeholders guided the study team to focus on issues and viewpoints that would not necessarily have received the attention they deserve. Many useful literature references were also provided. The feedback provided by the stakeholders will also provide the decision-makers with information on their preferences with respect to additional options as well as argumentation in support of their choice (see ch. 16 and Technical Report 3).
4. NATURE OF THE PROBLEM

At the Community level there is no overall legislation dealing with the import and trade of timber and timber products produced in breach of the laws of the country of origin (cf. subsection 4.2.4 of the FLEGT Action Plan).

The reviews carried out on the possibilities of national legislation to address the problem in five Member States indicate possibilities to draw on existing legislation concerning theft and trafficking of stolen goods, money laundering, corruption or smuggling. This would however require that adequate evidence could be produced on the link between an alleged illegal activity in another country and a specific piece or shipment of timber imported to the EU. Such evidence would be difficult to establish in most cases, which limits the effectiveness of the current national legislations to address the problem.

At the international level, the Convention on International Trade In Endangered Species of Wild Fauna & Flora (CITES) is a relevant instrument, which has proved to be effective in controlling the international trade of endangered species. The CITES scope in timber is limited to a few tree species and it cannot therefore offer a solution for trade in illegal harvested timber in general. In addition, the paper-based implementation mechanism is becoming an obstacle when trade procedures are being digitized.

In spite of the recent progress under the United Nations Forum on Forests (UNFF) towards a non-legally binding instrument on forests, it is unlikely that in this forum a multilateral agreement on trade in forest products could be established in the foreseeable future, as many governments oppose the idea and consider legislation and law enforcement issues of national sovereignty.

The VPA was crafted within this overall framework as a partial measure. Due to the short implementation period of the Council Regulation 2173/2005, there is little track record to properly assess the effectiveness of the instrument as yet. It is, however, evident that other complementary measures would be required if fast progress is to be made at eliminating the access of illegally harvested timber and timber products to the EU market.
5. OPTIONS

5.1 Baseline

To compare the impact of additional options, it is necessary to define a baseline. The baseline was identified in collaboration with the representatives of the EC. The baseline was agreed as a scenario where VPAs were made between the EU and six timber producing countries viz. Indonesia, Malaysia, Ghana, Cameroon, Gabon, and Congo Brazzaville. These are countries where VPA negotiations are currently underway or are expected to start in the near future.

A key VPA component is the establishment of a licensing scheme to ensure that only timber products that have been legally produced in accordance with the national legislation of the exporting country may be imported into the EU. Under the licensing scheme, imports into the EU from timber exported from a Partner Country will be prohibited unless the timber is covered by a valid license.

The issuing of licenses will require the implementation of a legality assurance system (LAS). Under such a system, in order to issue a license, the Licensing Authority will need to have evidence to confirm that the timber was legally produced and that it can be traced through the supply chain back to its legal origin. This requires three things:

- A definition of legally-produced timber.
- A mechanism for control of the supply chain e.g. wood tracing system or chain of custody.
- A means for verifying that the requirements of the legality definition and the supply chain have been met so this information can be presented to the Licensing Authority to allow the license to be issued.

In addition, as an important part of the VPAs, the EU will commit itself to providing support to capacity building and technical assistance to eliminate the root causes of illegal activities such as poor governance, poverty, excessive capacity of wood processing industries, etc.

Initially, the products to be covered by the licensing scheme comprise of roundwood, sawn timber, veneer and plywood, but the product coverage can be expanded on the condition that the parties to the VPA agree.

5.2 Additional Option 1: Expansion of the FLEGT VPA Approach to Cover Most Forest Trade from Higher Risk Countries

This option is an expansion of the baseline scenario. To conduct the theoretical analysis six additional VPA countries were selected, as together they represent the bulk of timber trade from countries perceived as high risk in terms of illegal logging. The selected countries are Brazil, China, Vietnam, Russia, Ukraine, and Belarus.

It is stressed that the countries were selected for illustrative purposes only, to indicate the potential impact of an expanded VPA coverage. China and Vietnam are also significant transit and processing countries for illegal and legal timber. The Commission has not officially approached these countries and no negotiations are underway.

5.3 Additional Option 2: Voluntary Measures by the Private Sector Further Developed

The key element of option 2 is to support the development of voluntary private sector schemes to eliminate illegal products from supply chains. Many private sector
associations and companies have already established voluntary policies and codes of conduct to this effect but various policies have different compliance rules and requirements for verification and reporting weakening their effectiveness. Under this option, the efforts would focus on accelerating the expansion of private sector schemes and increasing their rigor.

5.4 Additional Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber

Option 3 would prohibit the importation of illegally harvested timber to the EU from all non-EU countries. Documents providing proof of legality would need to be presented at the EU border control post for each consignment containing wood products. The responsibility for providing evidence of legality would rest with the authorities in the exporting country.

5.5 Additional Option 4: Prohibition on the Placing on the EU Market of illegally Harvested Timber

Under this option, there would be new Community legislation prohibiting the placing on the EU market of illegally harvested timber. The prohibition applies to imports from non-EU countries as well as products sourced from EU Member States. Two variants are being considered:

5.5.1 Sub-option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws Of the Country of Origin (i.e. where trees harvested)

The key feature of sub-option 4a is that burden of proof is on the one who claims that imported products are illegal i.e. goods are legal unless proven otherwise. Evidence would have to be produced that timber was illegally harvested on a case-by-case basis. Disputed cases would be tried in the European court of law.

5.5.2 Sub-option 4b: Legislation which Requires that Only Legally Harvested Timber and Timber Products be Placed on the Market

Option 4b requires suppliers to provide evidence on the origin of timber as well as evidence on legality of forest harvesting in the origin. The burden of proof would be on the party importing or placing goods on the EU market. Being unable to provide such evidence of legality would constitute an offence punishable under European laws.
6. BASIC DATA

6.1 Imports to the EU

In 2005, all imports of wood products from all countries to the EU were about 142 million m³ (RWE)\(^1\) (Figure 6.1). Roundwood, sawnwood, plywood and veneer accounted for 50 percent of the total. Boards and panels, manufactured wood, and wood furniture accounted for 1, 3 and 4 percent, respectively. Imports of wood pulp contributed to 26 percent and those of paper and 16 percent to the total imports of wood products to the EU in 2005.

**Figure 6.1 Imports of all wood products to the EU in 2005 (RWE)**

In 2005, the largest individual country supplying wood products to the EU was Russia with more than 35 million m³ (RWE)\(^2\) (Figure 6.2). The United States of America (USA), Brazil and Canada contributed 17, 16 and 9 million m³ (RWE) respectively. Imports from the tropical countries were 31 million m³ of which Brazil contributed about one half\(^2\).

1. The data presented in this chapter refers to direct trade flows between countries. Trade through third countries is excluded.
2. Almost two thirds of imports from Brazil were pulp and paper products originating mostly from plantations from the southern part of the country, where levels of illegal logging are low.
In 2005, the principal EU Member States in terms of importing wood and wood products (RWE) were Italy, Germany, the UK and Finland, which together accounted for more than one half. Other significant importers include France, Spain, Belgium and the Netherlands\(^3\) (Figure 6.3).

In 2005, the production of industrial roundwood in the EU totaled 370 million m\(^3\). In comparison, the volume of imports of wood and wood products (RWE) to the EU were 142 million m\(^3\) (RWE) or 38 percent of the volume of industrial roundwood production. The volume of exports from the EU was 107 million m\(^3\) or 29 percent of the volume of industrial roundwood production (Figure 6.4).

---

\(^3\) It should be noted that the statistics are slightly misleading because imports are recorded by the Member State where the goods entered the EU. The trade is concentrated at a few ports, but the actual destination may be elsewhere in the EU. For instance, the volume imported to Belgium through Antwerp is not necessarily consumed in Belgium even though it is recorded as imports to Belgium.
Figure 6.3  Imports of all wood products by EU Member State in 2005 (RWE)

Source: COMTRADE 2007

Figure 6.4  Production of industrial roundwood and imports and exports of wood, and wood products in the EU in 2005

Source: COMTRADE 2007
6.2 Estimated Extent of Illegal Activities Related to Wood and Wood Products

The available estimates on the extent of production, imports and exports of illegal timber are highly indicative. Due to the very nature of illegal activities, the statistical data on such activities cannot be very accurate. The estimates presented below should therefore not be considered more than indications of their order of magnitude.

The share of illegal wood in the roundwood production, as well as the export of roundwood, sawnwood, plywood, and veneer, are taken from Turner et al. (2007), which is considered the most comprehensive and detailed assessment available (Table 6.1). In their study, the definition of illegal logging was taken from Seneca Creek (2004) who defined ‘illegal’ harvests as:

- harvesting without authority in designated parks or forest reserves,
- harvesting without authorization or in excess of concession permit limits,
- failing to report harvesting activity to avoid royalty payments or taxes, and
- violating international trading rules and agreements.

Turner et al. (2007) note that this definition does not encompass the full range of issues considered illegal, but it does cover the main concerns raised by the international community. It was also considered adequate for the purpose of this analysis where the main aim is to provide indicative estimates on the impact of additional options to implement FLEGT.

A more detailed account of the methods of estimation and the estimated proportion of exports and imports of illegal timber is presented in the report by Turner et al. (2007). Estimates for illegal wood furniture were derived from these estimates. Estimates for pulp and paper were not developed due to the lack of reliable assessments.

**Table 6.1 Estimates on illegal roundwood production and exports of wood products**

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimates on illegal share in 2005, (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>of roundwood production*)</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>18</td>
</tr>
<tr>
<td>Indonesia</td>
<td>60</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5</td>
</tr>
<tr>
<td>China</td>
<td>30</td>
</tr>
<tr>
<td>Brazil</td>
<td>19</td>
</tr>
<tr>
<td>Africa excl. South Africa</td>
<td>30</td>
</tr>
<tr>
<td>Other Latin America</td>
<td>8</td>
</tr>
<tr>
<td>Other Asia excl. Japan</td>
<td>25</td>
</tr>
<tr>
<td>EU Member States</td>
<td>10</td>
</tr>
<tr>
<td>joined in 2004 or later**)</td>
<td></td>
</tr>
</tbody>
</table>

*) Sourced from natural forest and plantations

**) Average for Bulgaria, Estonia, Latvia, and Slovakia, information on other Member States joined in 2004 or later was unavailable


---

4 For the purposes of this report the term illegal timber is considered synonymous with illegally harvested, transported or processed wood and wood products. Similarly, illegal roundwood is synonymous with illegally harvested roundwood.
6.3 Estimated Production of Illegal Roundwood

The extent of illegal logging was assessed based on the estimates provided by Turner et al (2007). It is stressed that the results are indicative.

The assessment suggests that in 2005 illegal production of industrial roundwood was about 139 million m³ or about eight percent of the total (Table 6.2). There are four broad regions where the risk of illegal logging was considered high or at least moderate. Among them, the proportion of illegal production is estimated to be highest in Africa (excl. South Africa) and Asia (excl. Japan), around 30 percent. In Latin America, the estimated share of illegal production is 15 percent and the average for Russia, former Union of Soviet Socialist Republics (USSR) countries and the Balkans is put at 17 percent of the total.

In absolute terms, Asia is estimated to produce the largest volume of illegal roundwood, 66 million m³. In Latin America, an estimated total of 28 million m³ of illegal roundwood is harvested and an equal amount would come from Russia, former USSR and the Balkans. The estimated amount of illegal production in Africa is 14 million m³.

In other regions, the risk of illegal logging was considered low. In the EU-27, the illegal supply was estimated at 3 million m³ or about 1 percent of the total. It should be noted that minor volumes were not included in the analysis (< 1 percent of the total at a country level); lack of data also prevented an analysis on some countries.

Table 6.2 Estimated illegal roundwood production in 2005

<table>
<thead>
<tr>
<th>Region</th>
<th>Production of industrial roundwood</th>
<th>Estimated production of illegal industrial roundwood</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>million m³/a</td>
<td>million m³/a % of total</td>
</tr>
<tr>
<td>High or moderate risk countries/regions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa excl. South Africa</td>
<td>45</td>
<td>14</td>
</tr>
<tr>
<td>Asia excluding Japan</td>
<td>221</td>
<td>66</td>
</tr>
<tr>
<td>Latin America</td>
<td>187</td>
<td>28</td>
</tr>
<tr>
<td>Russia, Former USSR &amp; Balkans</td>
<td>162</td>
<td>28</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>615</strong></td>
<td><strong>136</strong></td>
</tr>
<tr>
<td>Low risk countries/regions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU-27</td>
<td>368</td>
<td>3</td>
</tr>
<tr>
<td>Norway and Switzerland</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>South Africa</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Japan</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>USA and Canada</td>
<td>632</td>
<td>-</td>
</tr>
<tr>
<td>Australia and New Zealand</td>
<td>46</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>1 093</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>Total World</strong></td>
<td><strong>1 709</strong></td>
<td><strong>139</strong></td>
</tr>
</tbody>
</table>


6.4 Estimated Imports of Illegal Wood and Wood Products to the EU

Imports of illegal wood and wood products to the EU were assessed based on the indicative estimates on exports of illegal wood products provided by Turner et al (2007). Considering only the imports of roundwood, sawnwood, plywood and veneer (i.e. basic VPA products), the estimated imports of illegal products from high/moderate risk countries was 14 million m³ (RWE) in 2005. If all wood products except pulp and paper were considered, the amount in 2005 would have been 16 million m³ (RWE) (Table 3.1).
In relative terms, the estimated imports of illegal wood and wood products represent 22-23 percent of total imports from high/moderate risk countries (outside of the EU). Of the total imports to the EU, imports of illegal wood and wood products account for about 19 percent.

In 2005, the total volume of timber placed on the EU market reached 512 million m$^3$ consisting of imports, 142 million m$^3$ (RWE), and EU roundwood production, 370 million m$^3$. Imports of illegal timber amounting to 16 million m$^3$ (excl. pulp & paper products) accounted for about 3 percent of the total.

### Table 6.3 Estimated imports of illegal wood and wood products to the EU in 2005

<table>
<thead>
<tr>
<th>Products</th>
<th>Imports of illegal timber</th>
<th>Wood and wood product imports from</th>
<th>Estimated imports of illegal wood products from</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High/moderate risk countries</td>
<td>All non-EU countries</td>
</tr>
<tr>
<td></td>
<td>million m$^3$</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Roundwood, sawnwood, plywood &amp; veneer</td>
<td>14</td>
<td>61</td>
<td>73</td>
</tr>
<tr>
<td>All wood products except pulp &amp; paper</td>
<td>16</td>
<td>70</td>
<td>83</td>
</tr>
<tr>
<td>All wood products</td>
<td>N/A</td>
<td>95</td>
<td>142</td>
</tr>
</tbody>
</table>
7. METHODOLOGY FOR IMPACT ASSESSMENT

The impact assessment was conducted considering the following principles and assumptions:

- The product range is limited to roundwood, sawnwood, plywood and veneer.
- Costs and impacts are estimated assuming a broad definition of legality incorporating a fairly comprehensive range of core legislation to be covered (e.g., forestry, environment, labor, land, fiscal, etc.).
- WTO-related issues are excluded from the scope of the analysis in accordance with the Term of Reference.
- It is assumed that additional options can be implemented effectively; risks to it are assessed separately.

The basic assessment is followed by a sensitivity analysis on the impact of key variables.

7.1 Legality Control System

The costs of a legality control system were assessed through a theoretical country case examining the costs of the licensing system under the VPA in the baseline countries (Annex 1). The theoretical case study estimates the average costs of legality control for the entire sector (incl. cost incurred by the private sector and government) in a situation where the supply chain consists of three stages, including roundwood harvesting (1st stage), sawmill processing (2nd stage) and further processing (3rd stage). The outputs and the size of the processing units were fixed to represent a “typical” situation for production units involved in timber exports. The basic data used in establishing the cost of legality control systems is presented in Annex 1.

When assessing the costs of legality control for options 1, 2, 3, 4A and 4B, the basic unit cost derived from the theoretical case study was adjusted based on expert judgment and qualitative information on the characteristics of forest sector production in the involved countries.

The unit cost of the legality control system was assessed under two different approaches. The system is either

- a totally new development using advanced information systems (case A), or
- built on existing systems combining manual work phases and limited use of information technology (case B).

For case A, the necessary inputs, investment and running costs were estimated based on information supplied by a private sector service provider. For case B, the consultants’ own estimates are applied (see Annex 1/Appendix 1).

In addition, the following options were considered:

- Consignment-based system
- Operator-based system

Based on the analysis, the cost legality control varies between EUR 0.2-1.8/m³ of roundwood logs (Figure 7.1). The cost includes recurrent costs as well as depreciation on investment. There are several factors influencing the cost but the main one is the type of technology used i.e. whether the legality control system is based on expensive

---

5 The cost structure used in the assessment is specific to the service provider and includes items such as a volume-based service fee. Other service providers may structure their fees differently. It was however considered that as the costs are converted into average annual costs, they are representative of the general cost level.
high-tech systems (case A), or less costly low-tech “paper systems” (case B). Government-based systems could have some economies of scale when compared with company-based systems, but since the main costs are associated with field checks which entail an equal amount of work and costs irrespective of the operator, the cost advantage is not considered as a major factor.

Figure 7.1 Cost of legality control system under various options

The basic impact analysis was based on the assumption that a low-tech “paper system” (case B) is in use. It is currently the most widely used approach and considered adequate for most conditions. For instance, most of the existing chain-of-custody certificates have been issued to companies using low-tech systems. It is recognized that such systems may be more prone to errors, or they can be manipulated more easily than those based fully on information technology. Their control also requires significant on-site supervision inputs from the verification body.

It should also be noted that the estimate refers to the incremental cost; it does not cover the current costs of forest authorities given the task to control the legal compliance of forest management and timber processing, or the existing costs of the private sector. Also, the assessment does not cover private sector operators’ costs due to the amendments and changes needed in their planning, control and other procedures to fully comply with the legality definition applied. While this cost may be significant, it is nevertheless assumed that legal compliance is the baseline for each company carrying out harvesting and timber processing.

7.2 Trade Impact

7.2.1 Trade Model

The potential shifts of trade flows from one region to another and the impact on prices of wood and wood products were analyzed using the EFI-GTM Global Forest Sector Model. This trade model is a regional global partial equilibrium model for forestry and forest industries, covering production and trade between 60 world regions – cf. Kallio.

---

6 The term “low tech” refers to systems where e.g. basic data is recorded on paper forms and then transferred to simple computer applications for further processing. In the smallest enterprises, the system could be entirely paper based. “High tech” systems involve the use of bar codes, hand held computers, etc.

A central feature of the model is that it simulates the market mechanisms under the assumption of perfect markets. Changes in demand and supply, as well as economic factors such as production and transport costs, are the key variables. Factors such as price premiums for FLEGT licensed timber, impact of substitute products, etc. could not be considered because of poor data and the absence of existing models (see Annex 7).

7.2.2 Limitations

The model has the following limitations that should be taken into consideration when interpreting the results.

- The model does not distinguish between products made from tropical and non-tropical tree species. In reality, there are limits to substituting tropical species with non-tropical ones. The EU market for tropical products is rather small and a reduction of supply may cause greater increases in price than those predicted by the model.
- The model does not differentiate between prices for legal and illegal timber. The price mechanism is complex, and the development in individual countries will depend on a number of factors such as a shift in demand to other regions, capacity to increase legal supply, competitiveness in producing legal goods, etc. However, a qualitative assessment suggests that in most cases the price for legal wood products increases while the price of illegal ones decreases as a result of introducing additional options.

7.2.3 Scenarios

The trade impact was based on the following scenarios:

(i) Baseline Scenario – VPAs are made between the EU and six countries: Indonesia, Malaysia, Ghana, Cameroon, Gabon, and Congo Brazzaville. It is assumed that there are no direct exports of illegal wood products from these countries to the EU starting from the year 2009 when the licensing system applying to exports to the EU is introduced. In addition, improvements in law enforcement in VPA countries start increasingly to limit the supply of illegal wood products from year 2011 onwards. It is assumed that improved law enforcement will eliminate all illegal logging by 2020.

(ii) Option 1 - VPAs are made between the EU and 12 countries. In addition to the six countries included in the baseline scenario, VPA agreements are made with six additional countries: Brazil, China, Russia, Ukraine, Belarus and Vietnam. It is assumed that there are no direct exports of illegal wood products from these countries to the EU starting from the year 2009 when the licensing system is introduced. In addition, improvements in law enforcement in VPA countries start to increasingly limit the supply of illegal wood products from the year 2011 onwards. It is assumed that improved law enforcement will eliminate all illegal logging by 2020.

(iii) Option 3 - It is assumed that all imports of illegal timber from all non-EU countries to the EU are eliminated starting in the year 2009 when the import ban is introduced.

(iv) Options 4a and 4b - It is assumed that all imports of illegal timber from all non-EU countries to the EU, as well as illegal logging within the EU, are eliminated starting from the year 2009 when the measures preventing the placing of illegal goods on the EU market are introduced.

NB! The impacts of option 2 could not be assessed using the trade model.
7.2.4 Market Development

To facilitate the interpretation of the detailed results presented in the following chapters, the key market developments and the mechanisms behind them are described below. It should be noted that only the most salient features related to supply and demand are presented. There are other factors such as administrative and other costs which influence the market mechanism especially with respect to option 4b, the prohibition of placing illegal timber on the EU market, but they could not be taken into consideration in the modeling exercise because of lacking data on their impact (e.g. impacts on SMEs) or because the impact was too limited for the model to capture.

Immediate impact

- In the non-EU countries affected by the additional options, the immediate impact is a decline in demand and prices for wood products. As illegal wood products are barred entry to the EU market, the total demand for wood products in non-EU countries declines. A weaker demand leads to falling prices and reduced harvesting and processing of wood products. Part of illegal supply is re-directed to non-EU markets.
- At the same time, the total supply on the EU market declines, as illegal wood products are no longer able to enter the EU market. Reduced supply increases the prices of wood products giving rise to increased timber harvesting and processing of wood products in the EU.

Impacts after adjustments on the market

Baseline scenario and option 1

- In non-EU countries, production bounces back as the export of legal wood products to the EU increases due to higher prices on the EU market. This is usually accompanied by a price increase for legal goods on the domestic market. As soon as improved law enforcement takes effect and starts limiting the supply of illegal goods, prices on the domestic market increase further.
- On the EU market, the production of wood products and prices of wood products stay above the level assumed in the business as usual scenario because of the declining supply from non-EU countries. Supply from “low risk” forest product exporters could to some extent replace the declining supply from the “high risk” baseline countries.

Options 3, 4a, and 4b

- In non-EU countries, production bounces back as the export of legal wood products to the EU increases close to the level assumed in the business as usual scenario encouraged by higher prices on the EU market. Because legal goods are in higher demand on the domestic market, they benefit from a price increase compared to the business as usual scenario. Conversely, the price of illegal goods declines below the level assumed in the business as usual scenario due to weaker demand.
- On the EU market, with the gradual recovery of supply from non-EU countries, the production and prices of wood products start falling back towards the level assumed in the business as usual scenario. In relative terms, roundwood prices remain higher above the business as usual scenario than the prices for processed forest products due to the way in which the market mechanism works.
7.3 Environmental Impacts

The change in the volume of illegal logging was assumed to be the key variable determining the environmental impact. As discussed in ch. 7.2, the introduction of additional options is expected to cause an initial decline in roundwood harvesting in countries exporting wood products to the EU as illegal products no longer enter the EU market. The basic assumption is that the impact on illegal logging is proportionate to the volume of exports of illegal timber to the EU.

It is further assumed that the loss will eventually be recovered as exporters and their suppliers adjust to the new situation and increase their supply of legal goods to the EU market. Figure 7.2 illustrates the projected development of roundwood harvesting in Indonesia under the baseline scenario.

Figure 7.2 Roundwood production under business as usual and baseline scenarios in Indonesia

Initially, barring the entry of illegal wood products to the EU leads to a declining volume of illegal roundwood harvesting in the countries of origin. It is assumed that the maximum potential reduction of illegal logging equals this decline, i.e. the volume of illegal roundwood that was needed to produce the various illegal wood products exported to the EU. The reference year for estimating the maximum potential reduction is 2005.

In principle, it is possible that additional options leverage a reduction of illegal logging beyond the volume estimated above. If companies complying with FLEGT requirements expand the same standard to exports going to non-EU markets, the reduction could be larger. The potential of this taking place could, however, not be estimated due to absent data, and it was excluded from the analysis.

The actual reduction of illegal logging depends on the adjustment strategies adopted by the various market players. The following optional strategies for increasing legal exports to the EU were identified:
• Increased supply of legal roundwood becomes available from resources that were unused either because of low demand or because low-cost illegal timber made their utilization uneconomical.
• Suppliers evading the payment of royalty fees and/or taxes choose compliance, to maintain access to the high-value EU market; exports of illegal timber are "transformed" into exports of legal timber.
• Trade flows are reshuffled so that legal goods are shipped to the EU and illegal goods to other, less discerning markets; with exporters of illegal goods finding new markets, illegal logging resumes to previous levels.

To the extent either one of the first two options materializes, there would be a true reduction of illegal logging. The third one is a negative option since there would limited or even no effect on illegal logging.

The probability of these options materializing could not be evaluated in quantitative terms, but some indicative projections on the future development will be made based on a qualitative assessment.

It should be noted that some of the countries with which VPA negotiations are underway (e.g. Indonesia and Ghana), have expressed that the VPA licensing scheme could be applied to all their exports. In this case, the roundwood supply would probably not recover to the level assumed in the business as usual scenario. Domestic markets are usually small and unable to absorb the illegal timber supply becoming available if access to export markets is prevented. A lack of alternative markets would eliminate the possibility of reshuffling of trade flows and enable a major reduction of illegal logging.

In this case there would probably be an oversupply of illegal timber on the domestic market resulting in falling prices. Legal exports from VPA countries could face stiff competition from illegal supply available from non-VPA countries. The cost of the legality control system would also be higher because of the larger volume of trade that would have to be handled by it.

If the VPA licensing scheme is expanded further to cover even domestic trade (contemplated e.g. in Ghana), it would, in principle, have comprehensive coverage with ability to target all illegal timber trade. In this case, the average cost for private sector could be significantly higher because the enterprises catering to the domestic market are usually much smaller in size than those involved in export production. With smaller size, the unit costs could increase rapidly (cf. discussion in ch. 8.1.3).
8. BASELINE SCENARIO

8.1 Legality Assurance System

8.1.1 Description of System

Approach

The licensing system under the VPA (for description see ch. 5.1) is built on existing systems combining manual work phases and limited use of information technology. The costs of LAS consist of (i) control of forest operations, (ii) control of wood supply chain, (iii) verification of forest operations and wood supply chain, (iv) licensing, and (v) third-party monitoring of the whole LAS. The costs are assessed for the following options:

- Consignment-based system
- Operator-based system

Assumptions

It is assumed that the verification of forest operations and wood supply chain under the consignment-based system are largely run by government agencies, whereas in the operator based system, verification relies on the private sector’s own management systems and external checks. In both systems, however, private and public sector participation is needed.

It is further assumed that the case country has a Forest Inspection Service (FIS) that is responsible for controlling and monitoring legal compliance in forest management and flows of timber and timber products from the forest. Under the national FLEGT Licensing Scheme, the FIS will be assigned for the LAS related verification tasks. However, the FIS is inadequately resourced with inspectors, other resources and funds for operational costs.

8.1.2 Administrative Cost

The administrative cost consists mainly of expenses related to verification and licensing as well as independent monitoring. Table 8.1 presents the LAS costs for the EU exports under both consignment-based and operator-based systems, assuming that there is no significant variation in the unit costs between the baseline countries.

Table 8.1 Estimated administrative cost

<table>
<thead>
<tr>
<th>Baseline countries</th>
<th>Exports to the EU(^1)</th>
<th>Cost of consignment-based system</th>
<th>Cost of operator-based system</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>million m(^3)/a</td>
<td>EUR/m(^3)</td>
<td>Total million EUR/a</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1.4</td>
<td>0.17</td>
<td>0.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.4</td>
<td>0.17</td>
<td>0.3</td>
</tr>
<tr>
<td>All baseline</td>
<td>7.0</td>
<td>0.17</td>
<td>1.2</td>
</tr>
</tbody>
</table>

\(^1\) RWE, Roundwood, sawnwood, plywood and veneer

7 The expression Legality Assurance System (LAS) is an established term used in conjunction with VPAs (option 1). In terms of content, it is considered synonymous with the term Legality Control System which is applied when discussing other additional options.
It is expected that in the consignment-based system, the government covers the system implementation costs, including purchase of hardware and software. The government would save significantly on the LAS costs, if the operator-based systems were employed. The lower government costs are due to the fact that the companies take responsibility for demonstrating the legal compliance and respective expenses.

8.1.3 Private Sector Cost

The unit cost of the LAS for the private sector is expected to be of the same order of magnitude irrespective of the country or product to be monitored. Table 8.2 summarizes the private sector's LAS costs for timber and timber products exported to the EU.

Table 8.2 Estimated private sector costs by baseline countries

<table>
<thead>
<tr>
<th>Baseline countries</th>
<th>Exports to the EU</th>
<th>Cost of consignment-based system</th>
<th>Cost of operator-based system</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>million m³/a</td>
<td>EUR/m³</td>
<td>Total million EUR/a</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1.4</td>
<td>0.05</td>
<td>0.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.4</td>
<td>0.05</td>
<td>0.1</td>
</tr>
<tr>
<td>All baseline</td>
<td>7.0</td>
<td>0.05</td>
<td>0.4</td>
</tr>
</tbody>
</table>

*RWE, roundwood, sawnwood, plywood and veneer

8.1.4 Impacts

Private sector costs

The cost of the LAS for the private sector was estimated at EUR 0.05-0.25/m³, which is a minor factor and not considered a constraint for legal trade. Compared to the price of tropical logs, which habitually reach levels beyond EUR 75/m³ at the mill gate (Indufor database), the additional cost is insignificant. The costs of the operator-based system would be higher if the production units involved in timber exports were smaller than those represented in the theoretical case study (see the discussion on small and medium-scale forest enterprises below). This may be the case in many African countries.

In high-risk situations, companies may wish to employ state-of-the-art advanced information systems. In this case, the LAS cost for the private sector is estimated at EUR 1.2-1.6/m³ depending on whether consignment- or operator-based systems are used (Annex 1/Appendix 2). Compared to the typical cost of tropical logs, the cost is still relatively low and would not constitute a major constraint for legal trade.

The introduction of the licensing scheme in the baseline countries would eliminate the unfair advantage enjoyed by illegal operators within the country. For instance, in Gabon, the tax payments that illegal operators are able to avoid represent more than 20 percent of the legal timber price (Technical Report 5). In Indonesia, the price of illegal logs is reportedly less than half of that of legal logs (Sudarno 2007). In principle, the additional cost of the LAS widens this gap, but as shown above, the impact is limited.
Small and medium-scale forest enterprises (SMFEs)

The small and medium-scale forest enterprises (SMFEs) represent the clear majority of forest enterprises in developing countries (Box 8.1). It is however unclear to which extent they are involved in timber exports and would participate in the VPA licensing system. Timber exports tend to be the domain of large enterprises but smaller enterprises are often suppliers to larger ones thus becoming subject to the obligations of the licensing system. If the VPA licensing system were expanded further to cover domestic trade, all enterprises would be obliged to comply with the same requirements.

Box 8.1 Small and medium-sized forest enterprises (SMFEs) in developing countries

The information available on small and medium forest enterprises (SMFEs) in developing countries is scant but a forthcoming study conducted by Macqueen and Mayers (quoted by Kozak 2007) provides data, inter alia, on the significance of SMFEs in Brazil, China, Guyana, India, South Africa, and Uganda.

The major role played by SMFEs comes clearly across from the data. With the exception of South Africa, the SMFEs account for 87.0-98.9 percent of the total number of enterprises. With respect to employment, the proportion ranges from 50.0 to 97.1 percent. The revenue generated by SMFEs represents 43.0-82.0 percent of the total in the forest sectors. It is probable that these proportions are typical of the situation in other developing countries as well.

Some key findings on the characteristics and significance of SMEs in the forest sector:

<table>
<thead>
<tr>
<th></th>
<th>Brazil</th>
<th>China</th>
<th>Guyana</th>
<th>India</th>
<th>South Africa</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of SMFEs as a proportion of total forest enterprises (%)</td>
<td>98.2-98.9</td>
<td>87.0⁺</td>
<td>93.0⁰</td>
<td>87.0-98.0</td>
<td>33.0-95.0</td>
<td>-</td>
</tr>
<tr>
<td>Number of SMFE employees as a proportion of total forestry employment (%)</td>
<td>49.5-70.4</td>
<td>50.0</td>
<td>75.0c</td>
<td>97.1d</td>
<td>25.0</td>
<td>60.0</td>
</tr>
<tr>
<td>SMFE revenues as a proportion of total forestry revenues (%)</td>
<td>75.0</td>
<td>43.0</td>
<td>50.0</td>
<td>82.0e</td>
<td>3.0</td>
<td>60.0</td>
</tr>
</tbody>
</table>

a. All forest enterprises, b. All forest production enterprises, c. Forest harvesting, d. Safety match manufacturing, e. Sawn timber production

Source: Macqueen & Mayers, forthcoming (IN Kozak 2007)

The definitions of SMFEs vary from country to country, but in the context of the study conducted by Macqueen & Mayers, they are meant to be interpreted as forest-based enterprises which employ limited numbers of workers (typically less than 100), are locally owned and managed, rely on financing from ownership, have limited influence over the marketplace, and lack scale efficiencies.

The one quantitative indicator for SMFEs used by Macqueen and Mayers, less than 100 employees, cannot be directly translated into production volumes because of great variation in technologies, labor costs, etc. However, inferring from the results of a study conducted in Indonesia (EPIQ/NRM 2001), a sawmill or a plywood plant with 100 employees would in this context have an output of approximately 12 500 m³/a corresponding roughly to 25 000 m² of roundwood. The number of companies below this limit was about three quarters of the total number but in terms of output they accounted for only about ten percent of the total.
The basic calculation of private sector costs in ch. 8.1.3 assumes that the volume of roundwood processed annually is approximately 75,000 m$^3$. Enterprises classified as SMEs in developing country conditions (Box 8.1) would process roughly one third of this volume - 25,000 m$^3$/a - or less. Establishing a relatively high processing volume as a basis for the cost calculation was due to the assumption that timber exports is mainly in the hands of large forest enterprises.

Figure 8.1 illustrates how the scale of operations affects the LAS cost depending on the technology. With a low-tech solution and applying a consignment-based approach, the increase in annual costs would be very limited. The basic need is a properly managed accounting system, even a very simple solution would do.

![Figure 8.1 Sensitivity of private sector’s LAS cost to annual volume of roundwood processed](image)

Regarding operator-based systems, the annual cost increases sharply below an annual processing of 25,000 m$^3$ of roundwood. Compared to the cost estimate in the basic calculation, the expense for SMEs could double or triple. The initial investment may also be prohibitive. It is estimated that the cost of upgrading investment systems and system development could reach up to EUR 19,000 (cf. Annex 1/Appendix 2).

Assuming that advanced high-tech information systems are used, the increase of production has only a marginal influence on the annual LAS cost. However, the LAS costs start rapidly increasing, when the annual cutting volumes are halved from the baseline case. As a result, the SMEs would be faced with significant additional expenses.

In particular, SMEs may have difficulties in shouldering the cost of the initial investment in the LAS. It is estimated that a sawmill processing and harvesting 25,000 m$^3$ of roundwood annually would have to make an initial investment of up to EUR 30,000 in hardware and software, if it opts for an advanced information system (cf. Annex 1/Appendix 2).

While it is true that the smallest enterprises have never been major contributors to export trade, there is a risk that the introduction of the LAS, especially operator-based systems, reinforces the existing pattern.
Countries/regions

Among the baseline countries, Malaysia has the capacity to adjust quickly to the new requirements and reap the benefits accruing to the first mover. It is reported that about a quarter of the forest area is certified under the Malaysian Timber Certification Council (MTCC) scheme and more than a hundred companies possess chain-of-custody certificates (MTCC 2007). The experience gained in developing these systems will be an advantage when establishing the VPA licensing scheme.

Governance

The technical assistance and capacity building to be provided by the EU and the donor community in support of the VPA will potentially make a significant contribution to improved governance in baseline countries. The impact will depend on the availability of resources committed to the VPA implementation by the EU and governments in the Partner Countries, as well as their capacity to remove policy and institutional constraints for the purpose of improving governance.

8.1.5 Risks

The focus of this report is on additional options. The risks related to the VPA schemes have been discussed extensively in other contexts. However, the key points include:

- Delays in the establishment of the licensing system hindering legal exports to the EU.
- Efficient implementation and sustainability of the system require capacity building and technical assistance in the least developed countries.
- In the case that the government in partner countries wish to implement the LAS using advanced information technology, funding the initial investment may become a bottleneck in the least developed countries (Box 8.2).
- Uncertain market demand for FLEGT timber.
- Ultimately the success is determined by the government’s capacity to tackle the root causes of illegal logging such as ineffective governance, poverty, and excessive timber processing capacity.
Box 8.2 Government funding of LAS

If the governments in partner countries wish to establish their LAS based on advanced information systems, the investment and recurrent costs could often be recovered from improved collection of taxes and royalty fees.

In Cameroon, the annual volume of exports of roundwood, sawnwood, plywood and veneer to the EU was about 1.4 million m³ (RWE) in 2005. Of this, about 30 percent or 0.4 million m³ (RWE) was assumed to be illegal.

The initial investment in a low-tech, consignment-based LAS would require EUR 60 000 from the government budget. With the operator-based approach there would be no investment cost for the government or the cost would be negligible. Assuming a high-tech solution, the investment cost for a consignment-based and operator-based LAS would be EUR 1.6 million or EUR 85 000, respectively.

In 2003 in Cameroon, the loss in tax revenue was estimated at USD 36 (EUR 25) per one cubic meter of illegal roundwood (RWE). Assuming that this is still true, an increase of about 65 000 m³ in legal timber exports would be enough to cover the investment cost of the most expensive LAS option. This is about 15 percent of the estimated volume of exports of illegal timber to the EU. The payment for annual recurrent costs are even less of a problem because they are lower than the investment cost.

The planned arrangement in Liberia points to the same conclusion. In Liberia, timber trade monitoring has been contracted to a private company charging an annual service fee of USD 2 million (EUR 1.3 million) (SGS 2007), which is of the same order of magnitude as the estimated costs in Cameroon. While the economics of the arrangement in Liberia are not known in detail, the government obviously plans to benefit financially from the deal; the expected benefits of improved collection of tax and fee revenue are assumed to be higher than the monitoring cost.

In practice, some governments may have trouble funding the most expensive LAS solutions directly from their budgets. In this case, the approach applied in Liberia is a viable alternative. A private company sets up and operates the LAS and is then allowed to recover their costs from the collected taxes and fees.

8.2 Trade Impacts

8.2.1 World

The trade model suggests that the VPA will lead to a declining value added in the forestry and forest industry sectors in the baseline countries, almost by 7 percent by 2015 compared to the business as usual scenario (Table 8.3). The main reason for the projected decline is the assumption on improved law enforcement which is expected to gradually eliminate all illegal logging. Lower supply of roundwood, as well as diminished industrial processing, bring value added below the level projected in the business as usual scenario. The most significant impact can be seen in Indonesia. It should be noted that the projected decline in production volume is, to a large extent, compensated with higher prices.

It should be noted that even if there is a loss of value added, the sector as a whole benefits greatly from being able to operate on a sustainable basis i.e. not being dependent on illegal timber. The business sector would also be much healthier as illegal operators would gradually find less room to maneuver.

---

8 A separate model run indicated that without the assumption of improved law enforcement the change in value added in baseline countries would be - 1.7 percent in 2009-2015 which is a considerable more limited loss than the - 6.5 percent in the current projection.
The model suggests also that non-VPA countries would draw some benefit from the decline in production in baseline countries. For instance, other countries with high and moderate risk of illegal logging are expected to increase their value added by 2.5 percent during the period 2016-2020 compared to the business as usual scenario.

The impact on the EU is very modest; there will be an increase of value added by less than one percent in relation to the business as usual scenario.

### 8.2.2 EU Member States

The introduction of the VPAs in baseline countries is expected to have a very modest impact on the EU Member States. The changes in the valued added generated by forestry and forest industries are less than one percent in relation to the business as usual scenario. In relative terms, forest owners would gain slightly more than forest industries (Table 8.4).

#### 8.3 Impact on Illegal Logging

**Licensing scheme**

Assuming that the licensing scheme applies only to exports going to the EU and provided that its implementation is effective, the maximum reduction of illegal logging in baseline countries would be 2.4 million m³ (Table 8.5). Accordingly, the elimination of exports of illegal timber to the EU would curb up to 11 per cent of estimated...
production of illegal timber, or 4 percent of the total production of industrial roundwood in the involved countries.

Compared to the estimated global volume of illegal industrial roundwood production, 139 million m³ in 2005, the maximum reduction of illegal logging in the baseline countries would represent about 2 percent of the global total.

<table>
<thead>
<tr>
<th>Table 8.5 Estimated volume of exports of illegal timber to the EU from baseline countries in 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total roundwood production in baseline countries (million m³ RWE)</td>
</tr>
<tr>
<td>Illegal production of industrial roundwood (million m³ RWE)</td>
</tr>
<tr>
<td>Estimated volume of exports of illegal timber to the EU from baseline countries (million m³ RWE)</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU of total illegal production of industrial roundwood in the baseline countries (%)</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU of total production of industrial roundwood in the baseline countries (%)</td>
</tr>
</tbody>
</table>

As discussed in ch. 7.3, the actual impact depends on how market players respond to the new requirements. Combining qualitative observations with the results of the trade analysis, the following indicative projections concerning the future developments in baseline countries were made:

- In Cameroon, Congo Brazzaville, Gabon, and Ghana, the licensing scheme is likely have a significant impact on illegal logging provided that the scheme is implemented effectively. The domestic market is small and the EU is the main export market, on average about half of all exports go to the EU. Diversion of illegal goods to other markets could be limited because companies exporting to the EU are often headquartered there and the EU is also their main export market. These companies have limited alternatives unless they relocate their processing facilities to other non-EU markets. At least in the short-term, they would probably attempt to stay in their established markets and continue imports to the EU by ensuring that their exports are in full compliance with the law. This could increase the amount of taxes and royalty fees collected by the national governments.

- In Indonesia, the number of actors is large and the choice of export markets is wider than in African countries, only about 10 percent (RWE) is shipped to the EU. The ties with EU markets are therefore less strong and the introduction of the licensing scheme by the EU could result in the reshuffling of trade flows by diverting exports of illegal timber to other markets. Higher prices on the EU market could encourage companies to pay the necessary taxes and royalty fees but not all companies would opt for this approach.

- In Malaysia, the proportion of wood exports to the EU is low, about 5 percent of the total (RWE), and the share of exports of illegal timber is also estimated to be equally limited, about 5 percent of the total (Table 6.3). Illegal operators would therefore have opportunities to resuffle trade flows and redirect their exports of illegal timber to other, less discerning markets. Higher prices on the EU market could encourage companies to pay the necessary taxes and royalty fees but not all companies would opt for this approach.

- Shipping illegal goods from baseline countries to the EU via China may increase moderately (Annex 2).

In conclusion, the reduction of illegal logging would be significant in African baseline countries but in Indonesia and Malaysia the impact could be substantially less than the estimated maximum.
Other measures

The baseline countries will be supported by the EU in their efforts to improve law enforcement and remove the root causes of illegal logging. The impact would be significant, if the assumption made in the trade analysis holds, i.e. illegal logging will be eliminated by 2020. This is an ambitious goal but compared to past attempts, the VPA approach benefits from the implementation of the licensing scheme providing strong support to more conventional law enforcement.

If the licensing scheme were expanded to cover all exports, the impact would be even more significant than with improved law enforcement. Inconsistencies in basic data prevent a detailed analysis but it appears that in many baseline countries the estimated volume of exports of illegal timber (RWE) is more than half the estimated volume of illegal roundwood harvested. If all exports of illegal timber were eliminated, the only alternative outlet for illegal timber would be the domestic market, which is small in nearly all baseline countries. Accordingly, a very strong reduction of illegal logging could be achieved fairly quickly.

Development of voluntary private sector measures as a parallel measure would bring synergy benefits and strengthen the impact of VPAs. Voluntary measures set an example and provide a platform on which more formal systems can be built.

8.4 Environmental Impacts

Licensing scheme

The VPA licensing scheme is expected to lead to a reduced volume of illegal logging. With this, the following destructive practices could be avoided:

- High-grading, soil and stand damage, which commonly occur at illegal logging sites.
- In some countries, illegal logging is seriously depleting the forest resource base and increasing pressure on remaining intact sites commonly found in protected areas and other environmentally sensitive zones.
- Illegal logging is a key agent of deforestation causing erosion, sedimentation and variations in hydrological regimes leading ultimately to degradation of land and water resources.
- The roads constructed by illegal loggers provide access to intact forest areas. Rural populations looking to maintain their livelihoods may convert these areas into agriculture; loss of forest cover would have a negative impact on climate change.
- In some countries (e.g. in Indonesia) illegal logging has been associated with the occurrence of forest fires.
- Illegal logging and the consequent increase in the supply of low cost wood depress market prices reducing the incentive to invest in sustainable forest management.

Other

The definition of legality with respect to environmental aspects has relevance in this context. In general terms, a broader definition has a stronger positive impact. It is recognized that due to shortcomings in the existing legal frameworks, achieving legal compliance does not necessarily ensure that forest management is fully sustainable. Still, a shift from illegal operations to legal compliance would often bring about positive changes in the forest environment.
The environmental impact in EU Member States is expected to be limited. The environmental impacts are linked to changes in roundwood harvesting and the trade analysis suggests that the change will be modest.

8.5 Social Impacts

Employment

The introduction of VPA is projected to result in reduction production of forest industries and employment in the baseline countries (Box 8.3). In the period 2009-2015, the decline is still moderate compared to the business as usual scenario, but it is projected to accelerate between 2016-2020 as law enforcement takes effect reducing the supply of illegal timber\(^9\). In other regions, changes are expected to be marginal (Table 8.6).

Box 8.3 Method of projecting changes in employment

The impact on employment resulting from introduction of additional options is assessed only with respect to forest industries. The changes are related to adjustments in production volume. The basic principle is that a reduction in production volume is coupled with a proportionate decline in employment. However, an increase of production is assumed to be involve technology improvements requiring only a limited number of additional employees. Accordingly, an increase in production is projected to result only in a marginal increase of employment.

Table 8.6 Change in employment in forest industries by regions compared to business as usual scenario

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in employment in forest industries</th>
<th>2009-2015</th>
<th>2016-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Baseline countries</td>
<td></td>
<td>-2.0</td>
<td>-14.5*</td>
</tr>
<tr>
<td>Countries in expanded VPA</td>
<td></td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td></td>
<td>-0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>EU-27</td>
<td></td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>USA</td>
<td></td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>World</td>
<td></td>
<td>0.0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

* The trade model is likely to exaggerate the change

In the EU, the projected changes for employment in forest industries are very small. The Member States in the Central and Western EU would benefit slightly more due to the fact that they are the main export destination for timber materials originating from baseline countries. Declining imports would result in increased production and employment in the EU (Table 8.7).

---

\(^9\) The estimates for baseline countries are slightly too high because the trade model is exaggerates the impact on pulp and paper production due to its inability to make a clear distinction between illegal and legal roundwood supply.
Table 8.7  Change in employment in forest industries in EU Member States by region compared to business as usual scenario

<table>
<thead>
<tr>
<th>Group of Member States</th>
<th>Change in employment in forest industries 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>MS in Nordic Region</td>
<td>0.1</td>
</tr>
<tr>
<td>Ms in Central and Western EU</td>
<td>0.3</td>
</tr>
<tr>
<td>Other MS</td>
<td>0.0</td>
</tr>
</tbody>
</table>

MS in Nordic Region = Finland, Sweden, Estonia, Latvia and Lithuania
MS in Central and Western EU = Belgium, France, Germany, Italy, the Netherlands, Spain, the UK

Other

Social impact depends crucially on the extent to which social provisions have been incorporated in the definition of legality. A broader definition of legality would often have a major positive impact, even if the existing legal frameworks were far from perfect.

Legal compliance can seldom be considered to guarantee the social sustainability of forest management but better observance of existing provisions would nevertheless result in several positive impacts. For instance, compliance with existing laws in the baseline countries would in many cases result in better security of tenure and access to land for indigenous communities, increased income to the poor, improved working conditions for forest workers, respect for human rights, etc.

In some cases, however, the legal frameworks can be considered flawed and could actually work against the poor. Existing forest laws in some countries may exclude local people from access to forest resources, forcing them to operate illegally to meet their basic livelihood needs, or compliance may be beyond the practical reality. Strict enforcement of existing regulations could actually entrench the injustices. Such issues may require examination of the current law with a view to a legislative reform.

8.6 Winners and Losers

The introduction of VPAs in baseline countries will favor some actors and put others in a disadvantaged position. The following impacts by stakeholder groups were identified.

8.6.1 EU Countries

Winners

- Importers of legal wood products from VPA countries due to the elimination of imports of illegal timber from these countries; the benefit is highest for product groups where wood costs represent a large proportion of manufacturing costs (e.g. roundwood, sawnwood and plywood).
- Forest owners in the EU benefiting from a modest increase, 0-5-0.8 percent, in value added compared to the business as usual scenario.
- Importers of low-cost illegal goods from non-VPA countries potentially winning market shares from importers of legal goods from VPA countries.
Losers

- Traders involved in the import of illegal wood products from VPA countries.
- Small- and medium-sized importers that are unable to meet the additional cost from the LAS for imports from VPA countries.
- Forest industries and wood manufacturers facing a higher cost of tropical timber on the EU market.
- Consumers in the EU experiencing a higher cost of tropical wood products.

8.6.2 Non-EU Countries

Winners

- Operators participating in the supply chain of legal wood products to the EU (concession holders, large logging companies, large wood processing companies, export agents, etc.).
- Forest-dependent people in VPA countries benefiting from the improved implementation of legal provisions providing social and environmental benefits, such as the security of land tenure, respect for land rights, increased share of financial benefits, availability of environmental services etc.; the extent of the impact depends on the definition of legality and its implementation.
- Governments in VPA countries benefiting from the increased payment of royalties and fees.
- Exporters in non-VPA countries potentially winning market shares from exporters in VPA countries.

Losers

- Producers of illegal timber and wood products in VPA countries facing declining demand and falling prices resulting in declined value added; the projection for the decline is - 6.5 percent and - 8.6 percent for the periods 2009-2015 and 2016-2020, respectively compared to the business as usual scenario.
- The companies in VPA countries unable to participate in the supply chain of legal wood products to the EU; SMEs are especially at risk of being excluded.
- Governments in VPA countries where the elimination of illegal logging results in declining corporate tax revenue.
- Rural people losing their jobs because of declining production and processing of wood products in VPA countries; rural areas are seldom able to offer alternative employment, at least in the short term. The decline of employment in baseline countries is projected to be limited in the period 2009-2015 but more than 10 percent in the following period 2016-2020.
9. OPTION 1: EXPANSION OF THE FLEGT VPA APPROACH TO COVER MOST FOREST TRADE FROM HIGHER RISK COUNTRIES

9.1 Legality Assurance System

9.1.1 Description of System

The LAS for option 1, a geographically expanded VPA, is similar to that for the baseline scenario (ch.8.1). In terms of geographical coverage, the VPA is expanded to include Brazil, China, Vietnam, Russia, Belarus and Ukraine. The countries were selected to illustrate the potential impact of the expanded VPA. Together they represent the bulk of timber trade from countries perceived as high risk in terms of illegal logging. In addition, China and Vietnam are important transit and processing countries for legal and illegal wood products. No formal discussions regarding potential VPA entry are underway with these countries.

9.1.2 Administrative Cost

In the countries included in the geographically expanded VPA, the administrative costs of the LAS per unit (new development) are largely similar to those in the baseline countries. Since their export quantities to the EU are more than fivefold compared to the baseline countries, the cost effect in absolute terms is manifold (Table 9.1).

Table 9.1 Estimated administrative cost of LAS

<table>
<thead>
<tr>
<th>Countries in the geographically expanded VPA</th>
<th>Exports to the EU(^1)</th>
<th>Cost of consignment-based system</th>
<th>Cost of operator-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>5.2 m(^3)/a</td>
<td>0.16 EUR/m(^3)</td>
<td>0.09 EUR/m(^3)</td>
</tr>
<tr>
<td>Russia</td>
<td>30.0 m(^3)/a</td>
<td>0.17 EUR/m(^3)</td>
<td>0.09 EUR/m(^3)</td>
</tr>
<tr>
<td>All countries</td>
<td>43.8 m(^3)/a</td>
<td>0.17 EUR/m(^3)</td>
<td>0.09 EUR/m(^3)</td>
</tr>
</tbody>
</table>

* RWE, roundwood, sawnwood, plywood and veneer

The Brazilian government has already achieved significant improvements in the control of timber supply chains through the introduction of DOF (Documento de Origem Florestal). The DOF manages data in an electronic form and has replaced the former paper-based system. However, the cost advantage is not significant when compared to other countries. Implementation of a high-tech system necessarily carries moderate running costs and it was assumed that the other countries adopt low-tech systems that can be implemented at a low cost.

In boreal and temperate zones (Russia, Belarus, Ukraine and certain areas of China), where physical segregation is not required for roundwood logs as in tropical countries, technically simpler control systems relying on inventory management methods can be applied. The LAS costs, however, would be at the same level as in the baseline countries, because the national chain of custody systems needs to be developed from its current weak basis.

9.1.3 Private Sector Cost

In the geographically expanded VPA countries, the private sector’s costs are estimated to be comparable to those in baseline countries (Table 9.2). The private sector is responsible for key costs related to the control and monitoring systems.
Table 9.2 Estimated private sector LAS costs

<table>
<thead>
<tr>
<th>Countries in the geographically expanded VPA</th>
<th>Exports to the EU$^{1}$ million m$^3$/a</th>
<th>Cost of consignment-based system EUR/m$^3$</th>
<th>Total million EUR/a</th>
<th>Cost of operator-based system EUR/m$^3$</th>
<th>Total million EUR/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>5.2</td>
<td>0.05</td>
<td>0.3</td>
<td>0.24</td>
<td>1.2</td>
</tr>
<tr>
<td>Russia</td>
<td>30.0</td>
<td>0.05</td>
<td>1.2</td>
<td>0.17</td>
<td>4.2</td>
</tr>
<tr>
<td>All countries</td>
<td>43.8</td>
<td>0.05</td>
<td>2.2</td>
<td>0.19</td>
<td>8.4</td>
</tr>
</tbody>
</table>

* RWE, roundwood, sawnwood, plywood and veneer

Exports from Russia to the EU are mainly in the hands of companies seeking environmental and social acceptance for their operations from their European customers. These companies have typically had their management systems certified in accordance with relevant ISO standards or forest certification schemes. These existing management systems reduce the need to make further investments in controlling the supply chain of timber and timber products.

9.1.4 Impacts

**Private sector costs**

The assessment made in ch. 8.1.4 applies to tropical countries under a geographically expanded VPA.

The mill gate price for logs imported from Russia and Eastern European countries to the EU is between EUR 50-100/m$^3$; pulpwood prices range from EUR 40-65/m$^3$ (Indufor database). With the paper-based approach, the additional LAS cost of EUR 0.2-0.4/m$^3$ is not significant even for pulpwood. The cost of an advanced LAS is estimated at EUR 1.2-1.6/m$^3$ (Annex 1/Appendix 2) and could affect the trade of low-cost pulpwood.

The introduction of the licensing scheme in the countries included in the geographically expanded VPA would eliminate the unfair advantage that exporters of illegal goods to the EU in these countries currently enjoy. In Russia, illegal logging operations may raise profits by 30-40 percent by eluding taxes, afforestation costs and social costs (Technical Report 6). If all countries considered in this assessment actually introduced the licensing scheme, a major portion of timber imports to the EU would be covered. In this manner, it would also considerably limit unfair competition from countries where the licensing scheme is not in use.

If FLEGT VPAs covered timber imported from third countries, circumvention of the licensing scheme by passing illegal goods to the EU through China would be eliminated (Annex 2 and 3). Circumvention through other countries could, however, still occur.

**SMEs**

The observations made in ch. 8.1.4 apply. The role of SMEs is important in Russia where about 20 000 small- and medium-sized enterprises operate in the forest sector, many of them engaged in export trade (Technical Report 6).

It is reported that SMEs in Brazil are experiencing difficulties in using the electronic DOF system. The reason is limited computer access in remote regions as well as computer illiteracy among SME workers (Thiel & Viergever 2006).
Countries/regions

Among the countries included in the geographically expanded VPA, Brazil has the capacity to adjust quickly to the new situation. The FLEGT system could be built on the existing, advanced monitoring systems.

Governance

The observations made in ch. 8.1.4 apply.

9.1.5 Risks

Many stakeholders expressed doubt that the countries included in this analysis as potential VPA Partner Countries would actually enter into the VPAs. Political and technical constraints were cited as possible reasons for the countries’ reluctance to join the scheme. It was also pointed out that the negotiation process would inevitably be quite lengthy. A number of other countries in Central Africa (e.g., Côte d’Ivoire, Congo Democratic Republic) and the Andean region in Latin America (e.g., Ecuador, Bolivia) were identified as more willing potential candidates to engage in VPAs.

If this scenario materialized, the impacts of the geographically expanded VPA would be insignificant compared to those identified in the present assessment, especially with respect to the impacts on the EU. Some effects would be felt in the Central African countries but timber trade between the EU and the Andean countries is so limited that the impacts attributable to the licensing scheme would be negligible.

Regarding other risks, the observations made in ch. 8.1.5 apply.

9.2 Trade Impacts

9.2.1 World

The introduction of VPAs in six “new” countries is expected to cause a decline in the generation of value added in these countries compared to the business as usual scenario (Table 9.3). The change is attributable both to the elimination of exports of illegal timber to the EU as well as improved law enforcement. The change is much less significant than in the baseline countries because illegal logging in the “new” VPA countries is less widespread than in the baseline countries.

Similarly to the baseline scenario, other high/moderate risk countries stand to gain from the reduced production in VPA countries using the business as usual scenario as a reference point. The impact on the EU-27 is positive but still modest.

Table 9.3 Change in value added in forestry and forest industries compared to business as usual scenario

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in value added in forestry and forest industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Baseline countries</td>
<td>-6.8</td>
</tr>
<tr>
<td>Countries in expanded VPA</td>
<td>-1.7</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td>1.3</td>
</tr>
<tr>
<td>EU-27</td>
<td>1.1</td>
</tr>
<tr>
<td>USA</td>
<td>0.9</td>
</tr>
<tr>
<td>World</td>
<td>0.2</td>
</tr>
</tbody>
</table>
9.2.2 EU Member States

The impact of expanding the VPA coverage to six “new” countries has a much more significant impact on the EU Member States than the baseline scenario. The most notable impact would be felt in the Nordic Region where the reduction of imports from Russia benefit forestry and cause a decline in forest industries in relation to the business as usual scenario. Reduced imports drive roundwood prices and production higher whereas forest industries suffer from a decline in supply and higher raw material prices (Table 9.4).

Overall, forest owners gain much more than forest industries. The reason is that forest owners draw full benefit from higher roundwood prices while for forest industries it is a cost. The higher price for roundwood and end products may erode the global competitiveness of EU forest industries, especially considering that increased use of wood energy is likely to induce a parallel development where timber prices in the EU are pushed higher. The trade model, however, suggests that when introducing additional options the loss of the global competitiveness of the EU forest industries due to higher product prices would be offset by the fact that reduced imports increase demand for products manufactured in the EU. On the other hand, higher product prices are a negative development from the EU consumers’ standpoint.

<table>
<thead>
<tr>
<th>Group of Member States</th>
<th>Change in Valued Added 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forestry</td>
</tr>
<tr>
<td>MS in Nordic Region</td>
<td>8.0</td>
</tr>
<tr>
<td>Ms in Central and Western EU</td>
<td>5.3</td>
</tr>
<tr>
<td>Other MS</td>
<td>4.3</td>
</tr>
</tbody>
</table>

**Table 9.4 Change in valued added in EU Member States by region compared to business as usual scenario**

*MS in Nordic Region = Finland, Sweden, Estonia, Latvia and Lithuania*
*MS in Central and Western EU = Belgium, France, Germany, Italy, the Netherlands, Spain, the UK*

9.3 Impact on Illegal Logging

The following assessment on the impact on illegal logging is valid, on the condition that all countries included in the analysis choose to enter into VPAs. As discussed earlier, the assessment is made for illustrative purposes only; the actual interest of these countries to join the VPA scheme is not known.

With effective implementation of the geographically expanded VPA, the maximum volume of illegal logging that could be eliminated is estimated at 9 million m$^3$ (Table 3.1). Elimination of exports of illegal timber to the EU could curb up to 13 per cent of the estimated production of illegal timber, or 13 percent of the total production of industrial roundwood in the involved countries.

Compared to the estimated global volume of illegal industrial roundwood production, 139 million m$^3$ in 2005, the maximum reduction of illegal logging in the involved countries would represent about 7 percent of the global total.
Table 9.5  Estimated volume of exports of illegal timber to the EU in 2005 from countries selected for the analysis of geographically expanded VPA

<table>
<thead>
<tr>
<th>Total roundwood production (million m³)</th>
<th>365</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated illegal production of industrial roundwood (million m³ RWE)</td>
<td>78</td>
</tr>
<tr>
<td>Estimated volume of exports of illegal timber to the EU (million m³ RWE)</td>
<td>10</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU of total illegal production of industrial roundwood (%)</td>
<td>13</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU of total production of industrial roundwood (%)</td>
<td>3</td>
</tr>
</tbody>
</table>

Combining qualitative observations with the results of the trade analysis, the following indicative projections were made concerning the future development in countries that were selected in the analysis on the geographically expanded VPA:

- The licensing scheme is likely to have a significant effect in northwestern Russia, and possibly also in Belarus and Ukraine, even though the information on illegal logging in these countries is quite limited. The EU is the main export market and traders in illegal timber have limited options due to lack of local processing capacity and high cost of transport to alternative markets. In Russia, however, the rapidly developing domestic market could eventually provide an outlet for illegal timber and enable a reshuffle of trade flows. The implementation of the plan to raise export duties over three years in Russia could bring all roundwood exports, both legal and illegal, to an end but in this case, exports of illegal timber could continue in the form of processed goods. The first duties took effect in July 2007 and the Finnish press reported (Kauppalehti, 17 Jan 2008) that already in 2007 Finland’s roundwood imports from Russia had decreased by about one third compared to previous year.

- In Brazil, the EU represents about 25 percent of total exports of roundwood, sawnwood, plywood and veneer from the Amazon region (hotspot for illegal logging), but the domestic market would be able to absorb a large portion of the illegal but high-value products, if they were barred entry to the EU market. In addition, illegal logging is driven mainly by the high profits to be gained from forest conversion the production of illegal logs is not the main objective of illegal activities. Therefore, trade related measures could have a limited impact on illegal logging.

- In China, exports to the EU represent more than 10 percent of the total export market for roundwood, sawnwood, plywood and veneer suggesting that diversion to other markets is possible. The sales of high-value wood products are also on the increase on the domestic market in China providing another outlet for illegal goods.

In conclusion, the reduction of illegal logging would be significant in Russia, and possibly also in Belarus and Ukraine. In Brazil and China the impact would probably be less than the estimated maximum. The impact in Vietnam is negligible due to the very small export volume of roundwood, sawnwood, plywood and veneer.

Regarding the impact of capacity building supported by the EU, the assessment made in ch. 8.3 with respect to baseline countries applies.

Development of voluntary private sector measures as a parallel measure would bring synergy benefits and strengthen the impact of VPAs. Voluntary measures set an example and provide a platform on which more formal systems can be built.
9.4 Environmental Impact

The assessments made in ch. 8.4 apply with respect to

- the impacts of declining illegal logging
- the risk of forest conversion in tropical regions
- the significance of the legality definition

Even though the harvesting volumes in the EU are expected to increase more with the geographically expanded VPA than with the baseline scenario, the environmental impact in the EU Member States is expected to remain limited. Increasing harvesting volumes would increase the pressure on the environment but the trade analysis suggests that change will be moderate. The regulatory systems in the EU Member States are generally robust and able to contain the potential threat to the environment.

9.5 Social Impacts

Employment

As in the baseline scenario, the geographic expansion of VPA is projected to result in reduction production of forest industries and employment. The change in baseline countries is similar to that under the baseline scenario\textsuperscript{10} whereas the countries in the expanded VPA experience a much more moderate change. The reason is that the level of illegal logging in these countries is lower than in the baseline countries and the countries are less dependent on exports to the EU (Table 9.6).

Table 9.6 Change in employment in forest industries by regions compared to business as usual scenario

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in employment in forest industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Baseline countries</td>
<td>-2.4</td>
</tr>
<tr>
<td>Countries in expanded VPA</td>
<td>-0.8</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td>0.5</td>
</tr>
<tr>
<td>EU-27</td>
<td>0.0</td>
</tr>
<tr>
<td>USA</td>
<td>0.3</td>
</tr>
<tr>
<td>World</td>
<td>0.1</td>
</tr>
</tbody>
</table>

* The trade model is likely to exaggerate the change

In the EU, the changes in all regions are projected to be quite limited (Table 9.7).

\textsuperscript{10} The estimates for baseline countries are slightly too high because the trade model is exaggerates the impact on pulp and paper production due to its inability to make a clear distinction between illegal and legal roundwood supply.
Table 9.7 Change in employment in forest industries in EU Member States by region compared to business as usual scenario

<table>
<thead>
<tr>
<th>Group of Member States</th>
<th>Change in employment in forest industries 2009-2015</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
<td>2016-2020</td>
<td></td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Member States (MS) in Nordic Region</td>
<td>-0.1</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Ms in Central and Western EU</td>
<td>0.0</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Other MS</td>
<td>0.3</td>
<td>0.3</td>
<td></td>
</tr>
</tbody>
</table>

*MS in Nordic Region = Finland, Sweden, Estonia, Latvia and Lithuania*

*MS in Central and Western EU = Belgium, France, Germany, Italy, the Netherlands, Spain, the UK*

**Other**

The assessment made in ch. 8.5 with respect to the impact of the legality definition and the risks of applying existing legislation apply.

**9.6 Winners and Losers**

The assessment made in ch. 8.6 applies. However, the following additional impacts can be identified:

- With the larger coverage of VPAs, illegal traders have fewer opportunities to take advantage of loopholes.
- Due to declining imports of illegal timber prices and roundwood harvesting increase resulting in higher value added in forestry and benefiting forest owners, especially in the Nordic region due to declining imports from Russia; the increase in value added in forestry in the period 2009-2015 is projected to be 8 percent compared to the business as usual scenario;
- Declining imports from Russia and other regions benefit forest owners in other EU Member States; the increase in value added in the period 2009-2015 is expected to be 4-5 percent above the business as usual scenario.
- Higher roundwood prices are a cost to the forest industries; the increase in the Nordic region is expected to be 6 percent compared to the business as usual scenario and 4 percent on average in the EU (Technical Report 9).
10. OPTION 2: VOLUNTARY MEASURES BY THE PRIVATE SECTOR FURTHER DEVELOPED

10.1 Legality Control

10.1.1 Description of System

Approach

To be credible, voluntary private sector schemes need to provide objective evidence that wood products covered by them are harvested, transported and processed with full compliance to the legal system. It is assumed that, to this effect, timber buyers will require suppliers to present third party issued certificates on the legality of their operations. If the supply chain entails sub-suppliers, they also need to present compliance certificates.

One option is to rely on forest certification schemes to verify legality. While there is some controversy as to whether this is appropriate (Brown & Bird 2007), it is assumed that the problems can be overcome and suppliers may meet the requirement by providing the buyers with a forest management certificate for the site of harvesting, as well as a chain of custody certificate under internationally recognized schemes (e.g. Forest Stewardship Council - FSC, Programme for the Endorsement of Forest Certification - PEFC) or other relevant standards (e.g. ISO 14001). Another possibility is to acquire a special third-party issued certificate that verifies the fulfillment of legal requirements.

The latter approach was adopted as a basis for estimating the costs of legality control. The existence of forest certification schemes and chain of custody systems was taken into consideration as a factor reducing costs.

Assumptions

The development of private sector schemes would focus on countries with high or moderate risk of illegal logging. For illustration’s sake and to enable cost comparisons with other options, it is assumed that full coverage can be achieved.

Option 2 is not considered to bring about costs for the government of the exporting country.

10.1.2 Private Sector Cost

The additional costs for the private sector depend on the share of EU exports covered by control systems and the quality of these systems (fully adequate systems and systems in need of improvements, or no system). Table 10.1 summarizes the estimated cost effects by selected countries at high or moderate risk of illegal logging.

Table 10.1 Costs of private sector control systems

<table>
<thead>
<tr>
<th>Country</th>
<th>Export to the EU</th>
<th>Cost of control systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>million m³</td>
<td>EUR/m³</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1.4</td>
<td>0.23</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1.9</td>
<td>0.23</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.2</td>
<td>0.21</td>
</tr>
<tr>
<td>Russia</td>
<td>30.0</td>
<td>0.25</td>
</tr>
<tr>
<td>All high and moderate</td>
<td>61.2</td>
<td>0.27</td>
</tr>
<tr>
<td>risk countries</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* RWE, roundwood, sawnwood, plywood and veneer
Almost half of all wood imports into the EU originate from Russia, primarily from the northwestern part of the country. It is estimated that 75 percent of imports from this region are covered by tracking systems that are either certified to ISO 14001 or the Eco-Management and Audit Scheme (EMAS) registered (EFI 2005). These systems provide some assurances that only legal timber is imported but, critically, they do not include the requirement of traceability. Many private companies have internally established frameworks enabling traceability of timber in their supply chains but they may not be fully compatible with FLEGT requirements. It is therefore assumed that the existing private sector control systems other than those certified by FSC still need upgrading.

With respect to imports from other “high or moderate risk” countries, the availability of verified legal timber is still quite limited, especially from the tropical countries (TTF 2007). On the other hand, government regulations in these countries have obliged private companies to develop internal systems to fulfill the legal requirements on log tracking. The existing systems serve as a basis for developing more comprehensive frameworks. The unit costs of legality control systems in the tropical countries (Cameroon, Indonesia and Brazil) are therefore estimated to be slightly lower than in the boreal and temperate zone countries.

The costs are calculated for a low-tech system. The introduction of a high-tech system could increase the cost by up to five times (Annex 1/Appendix 1).

10.1.3 Impacts

Private Sector Cost

The costs of private sector schemes are close to those of the VPA licensing scheme. The assessments made in ch.8.1.4 and 9.1.4 apply. It is probable that the companies would opt for the low-cost option in which case the impact on trade is negligible.

SMEs

The development of voluntary private sector schemes is likely to concentrate in larger companies. SMEs do not have the same incentives to develop voluntary schemes, and they may also be disadvantaged in terms of cost (Box 10.1, see also discussion in ch. 8.1.4).
Box 10.1 SMEs and corporate social responsibility

The Corporate Social Responsibility (CSR) agenda has almost entirely focused on large enterprises. The tools, frameworks and justifications for responsible business activities tend to cater to large companies, particularly those that can benefit from investing in measures that reduce the risk to their reputation. SMEs are unlikely to have the kind of public profile and brand image that larger companies feel the need to protect.

The most common mechanism for SMEs to become involved in the CSR agenda is through the supply chain requirements of large companies, particularly in export sectors in which approaches to ethical trade have been pioneered. However, supply chain requirements can discriminate against SMEs in the following manner:

- The standards may themselves be inappropriate or particularly challenging for SMEs, particularly in developing countries.
- The process of demonstrating compliance with the standards may be a barrier because SMEs are less likely to have formal information management systems.
- The cost of audits and certification can be prohibitive. There are significant economies of scale, which works against SMEs.
- As buyers start setting stricter requirements on their suppliers, they may prefer to rationalize their supply base, sourcing from a smaller number of larger suppliers in an effort to reduce the risk of social or environmental problems being uncovered within their supply chains, and spread the transaction costs of audits and inspections across more disparate supply bases.

In addition, only a small fraction of SMEs in developing countries are directly or indirectly involved in the few export markets in which such supply chain mechanisms have been introduced. The vast majority of SMEs operate in markets where environmental or ethical issues are not a significant concern.

Source: IIED 2005

Countries/regions

The expansion of voluntary private sector schemes would probably concentrate in countries where implementation capacity and other infrastructure are well developed. The distribution of FSC chain-of-custody certificates by the income class of the country provides an indication of potential development in this regard (Table 10.2). Even though no direct comparison between country groups is possible because of differences in number of countries in the group, area and type of forest etc., the pattern is still clear. Of all certificates issued, low-income countries account for only 2 percent of certificates, and within the group, Vietnam holds 95 percent of certificates. The lower middle-income countries account for 7 percent of issued certificates and those in the upper middle income bracket account for 15 percent. More than three quarters of chain-of-custody certificates are found in high-income countries.
Table 10.2  Distribution of FSC chain-of-custody certificates by country group

<table>
<thead>
<tr>
<th>Country group (no of countries)</th>
<th>FSC chain of custody certificates in November 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Low income (53)</td>
<td>152</td>
</tr>
<tr>
<td>Lower middle income (55)</td>
<td>529</td>
</tr>
<tr>
<td>Upper middle income (41)</td>
<td>1,109</td>
</tr>
<tr>
<td>High income (60)</td>
<td>5,774</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,564</td>
</tr>
</tbody>
</table>

*Source: FSC 2007, World Bank 2007*

**Governance**

To the extent that the expansion of voluntary private sector schemes encourages illegal suppliers to comply with regulations concerning tax and royalty payments, government revenue will increase, potentially enabling investments in improved governance. The expansion of the legal supply would also reduce opportunities for corruption.

The present concept for the development of voluntary private sector schemes, does not include EU-supported capacity building.

**10.1.4 Risks**

The estimate on the cost of legality control was based on the theoretical assumption that full coverage would be reached in countries with high or moderate risk of illegal logging. In northwest Russia, the coverage of systems that could be developed to meet FLEGT compatibility with a reasonable effort is already high, estimated at 75 percent. However, due to the lack of company-level information, the potential to actually upgrade the systems to meet the FLEGT standard could not be assessed.

Imports from other countries are covered only to a very limited extent by voluntary schemes, and reaching full coverage does not appear possible in the short or even medium terms, despite the fact that in some countries the trade sector has ambitious plans. For instance, the Tropical Timber Action Plan and the Global Forest and Trade Network have continuously expanded their activities. On the whole, however, the interviews with importing companies and trade federations suggest that the expansion of the voluntary private sector schemes will take place at a moderate rate (Technical Report 1).

The future expansion of the voluntary private sector schemes may be hindered by the fact that their development is demand driven and the potential market for verified legal products may be small and even reaching saturation. For instance, in the UK, the market for certified timber products is estimated at 10 percent of the total and as a whole there is an oversupply of certified timber products. The bulk of the supply comes from other EU Member States. There is still a niche for certified wood products from tropical countries, the supply of which still falls short of demand (e.g. hardwood sawntimber or plywood) (Roby, undated).

The varying degree of rigor and effectiveness in the voluntary private sector schemes poses a risk to their credibility. Without a general and harmonized framework incorporating an independent assessment of the effectiveness of the voluntary schemes, there is a risk that the schemes are abused to serve mainly commercial purposes. There are attempts to move towards the harmonization of various voluntary
frameworks, but reaching full transparency is challenging. The Confederation of European Paper Industries (CEPI) has developed a mandatory code of conduct for its members. The CEPI code of conduct does not entail third party verification but there is a sanction mechanism for non-complying companies. The effectiveness of this arrangement could not be assessed as it is still under development.

10.2 Impact on Illegal Logging

The expansion of the voluntary private sector schemes with respect to exports to the EU will gradually reduce the space for illegal enterprises operating and supplying illegal timber to the market. It is also possible that companies with multiple export destinations expand the good practice to exports going to other destinations than the EU.

However, full elimination of illegal logging is challenging when relying only on private sector schemes. As long as there is demand for illegal wood products in the EU markets, and there are no effective instruments to prevent their entry to the EU market, suppliers of illegal products will have a niche. For instance, even if voluntary schemes already cover approximately 75 percent of all imports from northwestern Russia to the EU, illegal logging still persists.

According to some stakeholders, a few years ago in north-western Russia, one could see a “snowball” effect where some of the largest companies adopted voluntary schemes and smaller ones gradually followed suit. Closing the gap fully, is however, considered challenging. The “easy” companies are already implementing voluntary schemes while the remaining ones are those who directly and purposefully benefit from illegal logging. Convincing them to give up illegal practices will be much harder.

10.3 Environmental Impact

To the extent that the private sector schemes reduce illegal logging and increase legal supply, the assessment made in ch. 8.4 applies.

10.4 Social Impacts

The assessment made in ch. 8.5 with respect to the impact of the legality definition and the risks of applying existing legislation apply.

10.5 Winners and Losers

Supporting the development of private sector schemes will favor some actors and put others in a disadvantage position. The following impacts by stakeholder groups were identified.

10.5.1 EU Countries

Winners

- Suppliers of FLEGT licensed goods provided with an opportunity to penetrate the market with environmentally aware consumers.

Losers

- Small- and medium-sized importers that are unable to meet the additional cost of legality controls.
10.5.2 Non-EU Countries

Winners

- Suppliers of legal wood products (concession holders, large logging companies, large wood processing companies, export agents, etc.) benefiting from an expanding market in the EU.

Losers

- Producers of illegal timber and wood products in VPA countries facing declining demand on the EU market.
- The companies unable to participate in the supply chain of legal wood products to the EU, especially SMEs, are at risk of being excluded.
11. OPTION 3: BORDER MEASURES TO PREVENT THE IMPORTATION OF ILLEGALLY HARVESTED TIMBER

11.1 Legality Control

11.1.1 Description of System

**Approach**

The border measures constitute an import ban for illegal timber. The responsibility for providing evidence on legality rests with the authorities in the exporting country. The proposed legality control system for governmental agencies draws on low-tech information technology. The system covers the following elements:

- Field verification of forest operations and supply chain
- Data management (e.g. transmission of data between the private sector and the state authorities, reconciliation of quantities in the prior and subsequent stages in the supply chain)
- Issuance of a legality certificate

The competent authorities of the EU Member States check the legality of 1% of the imported consignments systematically. The check is based on the control of documents and communication to the authorities in producer countries.

**Assumptions**

The government shoulders all other costs related to legality control in the producer country.

The size of import consignments to the EU averages 1 000 m³. This figure is used for determining the number of legality checks to be carried out by the EU authorities. The unit cost is estimated at EUR 500/consignment.

11.1.2 Administrative Cost

The costs of legality control vary by exporting countries due to differentiated operational costs. Estimated costs in selected non-EU countries are presented in Table 11.1.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Exports to the EU⁰</th>
<th>Cost of LAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>million m³/a</td>
<td>EUR/m³</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1.4</td>
<td>0.16</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1.9</td>
<td>0.16</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.2</td>
<td>0.20</td>
</tr>
<tr>
<td>Russia</td>
<td>30.0</td>
<td>0.24</td>
</tr>
<tr>
<td>USA</td>
<td>4.1</td>
<td>0.31</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.8</td>
<td>0.31</td>
</tr>
<tr>
<td>Croatia</td>
<td>1.2</td>
<td>0.25</td>
</tr>
<tr>
<td>All non-EU countries</td>
<td>72.9</td>
<td>0.22</td>
</tr>
</tbody>
</table>

* RWE, roundwood, sawnwood, plywood and veneer

The lowest unit cost is found in Brazil, where the government has already a highly applicable control system in use. In Cameroon and Indonesia, the estimated costs are below those in Europe and the USA because of lower operational costs. Applying a
high-tech approach to legality control could increase the cost by up to five times (Annex 1/Appendix 2).

In addition, the legality checks to be conducted by the competent authorities in the EU are estimated to cost less than EUR 0.01/m³.

11.1.3 Impacts

Private sector cost

Under the proposed legality control system, there are no costs for the private sector.

If implemented effectively, the border measures would eliminate the possibility of circumvention as well as the cost advantage enjoyed by illegal goods on the EU market. The cost advantage can be significant. The observations made in ch. 8.1.4 and ch. 9.1.4 apply.

SMEs

The impact is neutral because the costs are borne by the public sector.

Countries/Regions

The implementation of the border measures option is likely to favor countries that already have well-developed systems in place or have shown the capacity to quickly develop them. On one hand, these would be the developed countries exporting to the EU such as the USA, Switzerland, Norway etc.. With respect to developing world, the assessment made in ch. 8.1.4, 9.1.4 and 10.1.3 regarding the regions and type of countries that are most likely to take advantage of the opportunities offered by FLEGT applies here as well. Countries such as Brazil, Malaysia and possibly Vietnam may be among the first movers.

Non-industrial forest owners could be put in a disadvantaged position because they may face higher cost of legality control than other suppliers of roundwood. The woodlots of non-industrial forest owners are often quite small and with a small area the average harvesting volume decreases, and thereby potentially increasing the number of control visits and unit costs.

Non-industrial forest owners possess a significant portion of forests in the USA and the Balkans and it is likely that part of the imports to the EU derive from these forests. In non-EU countries, only a small part of wood products are exported to the EU, and exporters therefore have access to a variety of supply sources. Given the choice, it is likely that they would often opt for the least cost alternatives i.e. suppliers other than non-industrial forest owners.

Governance

The impact depends on the type of arrangements governments in non-EU countries develop to meet the requirements. If the government sees the introduction of border measures (option 3) as an opportunity to gain from legal trade to the EU, it may choose to upgrade their control and information management systems. In this case there could be a substantial improvement in governance. If the governments, on the other hand, try to meet the requirements with a minimum effort, there would be no particular effects on governance.

The present concept for border measures does not include EU-supported capacity building.
11.1.4 Risks

Cooperation with governments in non-EU countries

Unless a co-operation arrangement with non-EU governments can be established, the EU may be obliged to implement border measures unilaterally. This may raise questions regarding sovereignty; a non-EU government may not be willing to adopt concepts proposed by the EU. In this case, the key problem is how to establish common standards and procedures in a situation where the cooperation with the authorities in the country of origin is limited.

For instance, to ensure equal treatment of countries and to secure that the minimum objectives set for FLEGT can be met, it would be necessary to apply a common definition of legality. Putting this into practice could be challenging because governments may have highly differing perceptions on how legality should be defined. National governments could be reluctant to provide evidence of legality based on definitions that do not conform to their own perception.

To avoid conflicts and find common ground with as many governments as possible, it might be necessary to adopt a rather narrow definition of legality (e.g. legality of origin). This could, in turn, put the social and environmental objectives of FLEGT at risk. Alternatively, the national definitions would apply, but in this case highly differing standards would have to be allowed.

In this assessment, the cost of legality control was established based on the assumption that a chain of custody is required to establish legality. However, the type of assurance that can be considered sufficient may vary from one country to another. For exporting countries where legal compliance is not a problem, a document issued by a regulatory authority might provide adequate assurance of legality, and they may contest the need to provide further evidence as this would entail additional costs with limited in-country benefits. In countries where governance is a problem, a document issued by authorities may not constitute sufficient evidence, but they could equally contest the need to provide further evidence on grounds of equal treatment. It is unclear whether the EU would be in a position to discriminate between exporting countries in this manner.

The establishment of border measures could provoke non-EU countries to impose similar requirements on EU exports. The EU exports a total of 36 million m³ (R.W.E.) of roundwood, sawnwood, plywood and veneer. With this volume, the total cost for the EU is estimated at about EUR 11 million/a (EUR 0.31/m³/a). If all wood products including pulp and paper were considered, the cost would nearly triple. The cost would be shouldered mainly by Sweden, Finland and Germany, which are the principal Member States exporting wood products.

Implementation of legality control

Securing the credibility of the system is another key issue. The establishment of legality would have to be based on evidence provided by official agencies in the exporting country. However, the existing control systems are highly dissimilar with varying degrees of rigor. For countries with governance problems there is a risk that documentation may not guarantee legal production, yet border control would have no reason to reject such shipments. Government agencies are not usually subject to independent auditing and the EU may not be in a position to require non-EU governments to implement such measures. Without independent control there is a risk that the credibility of the systems is undermined.

In countries, where illegal logging is a problem, the implementation costs of legality control are often moderate compared to the potential to benefit in the form of improved collection of taxes and fees. The discussion in ch. 8.1.5, Box 8.2 concerning the
funding of the VPA licensing system is relevant here as well. The availability of budget funds for the initial investment could potentially be a constraint, if the legality control system is built on advanced information systems.

There would be no direct costs for the private sector but from their standpoint, indirect costs such as slowness of procedures or new opportunities for corruption may be significant. Delays in dispatching staff to control points, issuing licenses etc. could cause considerable costs unless the verification and licensing organizations are efficient. In the worst case, the license system would become corrupt and the issuance of licenses would become subject to unofficial “fees” (cf. Nasir et al. 2003).

The practical arrangement to verify legality could become an obstacle for exports to the EU. In practice, it would be necessary to decide prior to each harvesting operation whether the logs to be harvested or products made thereof are destined for EU exports. If this is not known at the time of harvesting and no checks are done, the EU market would be excluded as an export destination for the logs harvested.

**Enforcement in the EU**

The EU Customs Offices at the EU border would control the documents attesting to the legality of imported products. The imports of several other products are controlled in a similar manner and the customs officers interviewed considered the scheme feasible, if verification is based on documentation and the procedures are incorporated into the existing computerized systems. The Finnish Customs expressed some reservation due to the very high volume of imports from Russia (> 15 million m³ RWE/a).

However, the officers interviewed noted that the Customs Office and other concerned agencies have limited resources and capacity for any further investigations such as verifying the correctness of tree species declared. Increased resources would be necessary but this may be difficult to achieve because, based on the interviews, preventing illegal timber imports is not a priority for customs or other law enforcement agencies.

The effectiveness of customs control is hampered by the fact that in case infractions are detected, the customs has no resources or authority to conduct investigations in the country of origin. With FLEGT products, the customs could contact the agency issuing licences in the country of origin, but they may not have the authority to conduct investigations or pursue criminal cases.

**11.2 Trade Impacts**

**11.2.1 World**

The implementation of border measures is projected to modestly reduce value added in all high and moderate risk countries compared to the business as usual scenario (Table 11.2). The difference to VPA scenarios, where the decline was substantial, is that the playing field is levelled for all countries exporting to the EU. Another factor is that lax law enforcement is assumed to continue, as no special measures have been taken to improve it. As a result, illegal logging recovers from the decline in exports to the EU as illegal traders find other markets for illegal timber.

The impact on the generation of value added in the EU is modest but positive. The increase in value added is expected to be around one percent in relation to the business as usual scenario.
Table 11.2  Change in value added for forestry and forest industries compared to the business as usual scenario

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in value added for forestry and forest industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Baseline countries*)</td>
<td>-0.1</td>
</tr>
<tr>
<td>Countries in expanded VPA*)</td>
<td>-0.8</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td>-0.2</td>
</tr>
<tr>
<td>EU-27</td>
<td>1.1</td>
</tr>
<tr>
<td>USA</td>
<td>0.4</td>
</tr>
<tr>
<td>World</td>
<td>0.3</td>
</tr>
</tbody>
</table>

*) It is assumed that under this scenario no country implements VPAs

11.2.2 EU Member States

The impact of border measures on EU Member States is similar to that of the expanded VPA scenario. In the Nordic region, the decline of Russian imports causes an increase in the generation of value added in forestry and a decrease in that of forest industries in relation to business as usual scenario. The overall reduction of imports benefits forestry in other Member States as well (Table 11.3).

The observations made in ch. 9.2.2 regarding the global competitiveness of the forest industries and the impact on EU consumers apply.

Table 11.3  Change in valued added in EU Member States by region compared to business as usual scenario

<table>
<thead>
<tr>
<th>Group of Member States</th>
<th>Change in Valued Added 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forestry</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>MS in Nordic Region</td>
<td>8.2</td>
</tr>
<tr>
<td>MS in Central and Western EU</td>
<td>5.5</td>
</tr>
<tr>
<td>Other MS</td>
<td>4.0</td>
</tr>
</tbody>
</table>

MS in Nordic Region = Finland, Sweden, Estonia, Latvia and Lithuania
MS in Central and Western EU = Belgium, France, Germany, Italy, the Netherlands, Spain, the UK

11.3 Impact on Illegal Logging

In 2005, illegal wood and wood product exports to the EU from countries where the risk of illegal logging is high or moderate were about 14 million m³ (Table 11.4). Provided that the implementation of border measures is effective, the scheme would curtail up to 10 per cent of the estimated production of illegal timber or 2 percent of the total production of industrial roundwood in these countries.

Compared to the estimated global volume of illegal industrial roundwood production, 139 million m³ in 2005, the maximum reduction of illegal logging would represent about 10 percent of the global total.
Table 11.4 Estimated volume of exports of illegal timber to the EU from all non-EU countries in 2005

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total industrial roundwood production in all non-EU countries (million m³ RWE)</td>
<td>615</td>
</tr>
<tr>
<td>Estimated illegal production of industrial roundwood in all non-EU countries (million m³ RWE)</td>
<td>136</td>
</tr>
<tr>
<td>Estimated volume of exports of illegal timber to the EU from all non-EU countries (million m³ RWE)</td>
<td>14</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU of total illegal production of industrial roundwood in all non-EU countries (%)</td>
<td>10</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU of total production of industrial roundwood in all non-EU countries (%)</td>
<td>2</td>
</tr>
</tbody>
</table>

The indicative projections regarding the future development in baseline countries and countries selected for the theoretical analysis on the geographically expanded VPA apply here as well. The impacts identified in ch. 8.3 and ch. 9.3, respectively, are expected to be the most significant developments considering all high and moderate risk countries. The baseline countries and countries analyzed under option 1 account for more than 80 percent of all exports from high or moderate risk countries to the EU.

- Significant reduction of illegal logging is expected to take place in Central and Western Africa and Russia.
- In other major countries exporting wood products to the EU, the reduction of illegal logging is likely to be less than the estimated maximum.

Effectively implemented border measures (option 3) prevent circumvention, i.e. shipping illegal timber to the EU through third countries from the countries of origin, which is an important intervention in terms of leveling the playing field in the enterprise sector. It should be noted, however, that it does not necessarily have a major impact on illegal logging in the countries of origin, unless the opportunities to divert trade to other markets is eliminated. If the illegal timber shipped countries such as China is barred entry to the EU market, there are a large number of other markets including the Chinese domestic market where the illegal goods can be placed (cf. discussion in annex 2 and annex 3).

Development of voluntary private sector measures as a parallel intervention would bring synergy benefits and strengthen the impact of border measures. Voluntary measures set an example and provide a platform on which more formal and comprehensive systems can be built.

11.4 Environmental Impacts

The observations made in ch. 8.4 concerning the overall environmental impact of illegal logging apply to all countries with high or moderate risk of illegal logging.

The trade analysis suggests that there will initially be a slight decline in the overall timber price in the baseline countries. This would increase the relative profitability of other land uses and could lead to increased forest conversion, especially in tropical countries. This, in turn, could have negative environmental consequences.
11.5 Social Impacts

Employment

Option 3, the border measures, is expected to have only a modest impact on employment. The reason is that changes in production volume of forest industries are expected to be very modest (Table 11.5).

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in employment in forest industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td>Baseline countries</td>
<td>0.2</td>
</tr>
<tr>
<td>Countries in expanded VPA</td>
<td>-0.4</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td>-0.4</td>
</tr>
<tr>
<td>EU-27</td>
<td>0.0</td>
</tr>
<tr>
<td>USA</td>
<td>0.3</td>
</tr>
<tr>
<td>World</td>
<td>0.1</td>
</tr>
</tbody>
</table>

In the EU, the border measures (option 3) have almost no impact on the employment in forest industries. There is a slight increase in employment in “other” Member States (Table 11.6).

<table>
<thead>
<tr>
<th>Group of Member States</th>
<th>Change in employment in forest industries 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td>MS in Nordic Region</td>
<td>0.0</td>
</tr>
<tr>
<td>Ms in Central and Western EU</td>
<td>0.0</td>
</tr>
<tr>
<td>Other MS</td>
<td>0.2</td>
</tr>
</tbody>
</table>

MS in Nordic Region = Finland, Sweden, Estonia, Latvia and Lithuania
MS in Central and Western EU = Belgium, France, Germany, Italy, the Netherlands, Spain, the UK

Other

The general observations made in ch. 8.5 apply.

If the definition of legality were narrowed down to exclude social considerations, there could potentially be negative impacts on forest-dependent people, forest workers and other socially vulnerable groups.

11.6 Winners and Losers

The introduction of the VPAs in the baseline countries will favor some actors and put others in a disadvantaged position. The following impacts by stakeholder groups were identified
11.6.1 EU Countries

Winners
- Importers of legal wood products from non-EU countries due to the elimination of imports of illegal timber from these countries; the benefit is highest for product groups where wood costs represent a large proportion of the manufacturing costs (e.g. roundwood, sawnwood and plywood).
- Forest owners in the EU, especially in the Nordic countries where imports of illegal timber from Russia will decline as well as in regions supplying species that are potential substitutes for tropical hardwoods; in the Nordic region the increase in value added in forestry in the period 2009-2015 is projected to be 8 percent compared to the business as usual scenario; in other EU Member States 4-5 percent.

Losers
- Traders involved in importation of illegal wood products from non-EU countries.
- Small- and medium-sized importers that are unable to meet the additional cost of legality control for imports.
- Forest industries and wood manufacturers facing higher raw material costs on the EU market; the increase of timber prices in the Nordic region is expected to be 6 percent compared to the business as usual scenario and 4 percent on average in the EU (Technical Report 9).
- Consumers in the EU experiencing higher costs of wood products.
- In case the introduction of an import ban provokes non-EU countries to introduce a reciprocal ban for products originating from the EU, the governments in EU Member States will be obliged to shoulder the extra cost of producing evidence on the legality of wood exports; the total cost could reach EUR 11 million or more if the measure is expanded to cover all wood products.

11.6.2 Non-EU Countries

Winners
- Operators participating in the supply chain of legal wood products to the EU (concession holders, large logging companies, large wood processing companies, export agents, etc.).
- Forest-dependent people in non-EU countries benefiting from improved implementation of legal provisions providing social and environmental benefits such as security of land tenure, respect for land rights, increased share of financial benefits, availability of environmental services etc.; the extent of the impact depends on the definition of legality and its implementation.
- Governments benefiting from the increased payment of royalties and fees.

Losers
- Producers of illegal timber and wood products facing declining demand and falling prices.
- Companies unable to participate in the supply chain of legal wood products to the EU; SMEs are especially at risk of being excluded.
- Governments in countries where the elimination of illegal logging results in declining corporate tax revenue.
- Non-industrial forest owners in Europe outside the EU (e.g. in the Balkans and the USA); the small sizes of woodlots increase the tracking cost and exporters to the EU would switch to more easily accessible sources of roundwood.
- Rural people losing their jobs because of declining production and processing of wood products; rural areas are seldom able to offer alternative employment, at least in the short term. The decline is, however, not necessarily experienced in
all non-EU countries and where it occurs it is expected to be modest, less than 1 percent.
12. OPTION 4A: LEGISLATION WHICH PROHIBITS THE TRADING AND POSSESSION OF TIMBER AND TIMBER PRODUCTS HARVESTED IN BREACH OF THE LAWS OF THE COUNTRY OF ORIGIN

12.1 Legality Control

12.1.1 Description of System

Approach

The competent authorities of the EU member states conduct investigations on the legality of consignments that are suspected to contain illegal timber and that are being placed on the EU market. Suspicions may be based on information provided by stakeholders or other authorities in the EU or in non-EU countries.

Assumptions

The costs related to investigations conducted by the EU police force or other authorities are excluded from the assessment because criminal investigations regardless of their type or object are part of their normal work routine.

12.1.2 Administrative Costs

No additional costs.

12.1.3 Impacts

Private sector cost

As the prohibition to trade or possess illegal timber does not oblige private companies to make investments in tracking systems, there is no direct impact on them. However, enterprises operating in countries where illegal logging is a common problem may choose to establish necessary systems to protect themselves against unwarranted claims. The costs and impacts of such voluntary schemes were assessed in ch. 10. Some of the private sector representatives interviewed expressed concern over the potentially high cost of litigation which companies may be obliged to shoulder even if they are cleared of criminal allegations.

If the prohibition of trade and possession of illegal timber could be implemented effectively, it would eliminate the possibility of circumvention and unfair competition by illegal operators in EU and non-EU countries. The assessments made in ch. 8.1.4 and 9.1.4 regarding the cost advantage of illegal logs apply.

SMEs

The impact is neutral.

Countries and regions

If the deterrence of this option were sufficiently high, market participants would favour products from low-risk countries or countries able to provide other type of guarantees of legality such as VPA Partner Countries or those with a large supply of certified wood products. EU Member States and other developed countries would probably benefit from the situation. The private sector in middle-income countries such as Brazil and Malaysia, as well as transforming economies such as Vietnam, could probably quickly adjust to the situation and be able to provide verified legal goods (cf. discussion in ch. 10.1.3).
Governance

There are no immediate effects on governance. The increased payment of taxes and royalty fees would expand government revenue potentially enabling investments in improved governance.

In a longer perspective, the legislation that would underpin this option could contribute to improved governance by providing a robust and consistent legal framework for criminal investigations concerning the trade in illegal timber. An existing framework would encourage the development of more advanced methods of investigation (e.g. forensic technology or “sting” operations) (van Helden, pers.comm.).

The present concept for this additional option does not foresee EU-supported capacity building.

12.1.4 Risks

There is a major risk that enforcement will not be effective. Tracing back the supply chain of individual consignments is a major effort, especially with respect to imported products. Companies or individuals with criminal intentions could relatively easily hide the origin of the goods they are placing on the market. Establishing continuity of evidence between imported goods and the alleged criminal act is challenging under any circumstances but wood products may present a particularly complex case (cf. Anonymous 2006). The possibility to conduct “sting” operations could be an effective deterrent but they are not a common practice in the EU Member States.

The US Lacey Act bears many similarities to option 4a. The Lacey Act makes it illegal to import, sell or possess fish or wildlife produced illegally in foreign countries and it is generally regarded by US enforcement agencies as an effective piece of legislation in helping to control illegal trade (Brack 2007). So far, the Lacey Act has applied only to trade of fish and wildlife a bill proposing to expand its coverage to wood products (so-called Legal Timber Protection Act) is currently being processed in the United States Senate. The impact of option 4a would be significantly strengthened, if Lacey Act were implemented in the proposed form.

The key challenge for the Lacey Act is the same as that of option 4a i.e. to establish a link between a timber shipment and an illegal act which may be more complex than for shipments of wildlife or fish catches. For instance, a violation of regulations concerning wildlife trade can often be detected through a physical examination of the imported wildlife (e.g. measurement of minimum size) but with respect to timber the physical characteristics of the shipment do not necessary give any indication of infractions that have taken place on the harvesting site or during transportation (see further discussion in Annex 4).

Regarding option 4a, criminal investigations would be time consuming as each case would have to be analyzed separately. It would be necessary to establish an offence through a court process in the country where the product is placed on the market, using evidence such as witnesses and taking into account the relevant legislation of the country where the offence allegedly took place, be it inside or outside the EU. Enforcement would be more effective on consignments originating from the EU because the supply chain is shorter and less complex but since no major changes in resource allocation is foreseen, it is unlikely that there would be major improvements compared to the current situation.

In the interest of ensuring equal treatment the EU may have to develop a generic definition of legality. However, a generic definition needs to be interpreted in the country context as the legal frameworks in non-EU countries can vary technically as well as with respect to their scope. To ensure a consistent approach, it would be
necessary to identify the relevant laws separately for each country. This is routinely done when formulating standards for voluntary schemes such as FSC and PEFC but the national governments may consider it an infringement of their sovereignty, if the identification is done by a foreign government in an official context (cf. ch. 13.1.5).

Interviews conducted in three EU Member States, Finland, the UK and Spain, suggest that law enforcement agencies have limitations to their capacity to deal with imports of illegal timber. Preventing them was not considered a priority; investigations and available resources are focused on the most common and simple cases while investigations on illegal timber imports were perceived as potentially highly complex. There are also constraints to inter-agency cooperation within individual EU Member States, within the EU as a whole as well as with law enforcement authorities in non-EU countries (Technical Report 2). The basic structure of EU legislation may limit the opportunities to create a common legal framework for cases involving illegal timber imports (Annex 5).

12.2 Trade Impacts

The assessment below is based on the assumption that the prohibition to possess and trade illegal timber (option 4a) can be implemented effectively. The projected impacts are subject to the materialization of risks identified in ch. 12.1.4.

12.2.1 World

The prohibition to possess and trade illegal timber has an impact that is very similar to that of border measures (option 3). There is a slight decline in the value added generated in high and moderate risk countries compared to the business as usual scenario. The impact is quite neutral because all exporters are in a similar position with respect to exports to the EU. Another contributing factor is the assumption that illegal logging will pick up. Without any special measures to improve law enforcement, illegal loggers will be able to continue their activities and find alternative markets for illegal timber (Table 12.1).

There is modest but positive impact on the generation of valued added in the EU. The projected increase is more than one percent in relation to business as usual scenario.

Table 12.1 Change in value added for forestry and forest industries

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in value added for forestry and forest industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Baseline countries*)</td>
<td>0.0</td>
</tr>
<tr>
<td>Countries in expanded VPA*)</td>
<td>-0.8</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td>-0.2</td>
</tr>
<tr>
<td>EU-27</td>
<td>1.3</td>
</tr>
<tr>
<td>USA</td>
<td>0.4</td>
</tr>
<tr>
<td>World</td>
<td>0.3</td>
</tr>
</tbody>
</table>

*) It is assumed that under this scenario no country implements VPAs

12.2.2 EU Member States

The impact of the prohibition to possess and trade illegal timber (option 4a) on the EU Member States is also similar to that of implementing the border measures (option 3). Forestry gains in the Nordic region as a result of declining imports from Russia but
forest industries suffer from reduced supply and higher raw material prices compared to the business as usual scenario. The main difference with this option compared to the impact of border measures is that in other regions the increase of value added in forestry is significantly higher. The reason is the elimination of the illegal supply from the EU Member States which drives roundwood prices higher. The observations made in ch. 9.2.2 regarding the global competitiveness of the forest industries and the impact on EU consumers apply (Table 12.2).

The observations made in ch. 9.2.2 regarding the global competitiveness of the forest industries and the impact on EU consumers apply.

**Table 12.2 Change in valued added in EU Member States by region compared to business as usual scenario**

<table>
<thead>
<tr>
<th>Group of Member States</th>
<th>Change in Valued Added 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forestry</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>MS in Nordic Region</td>
<td>8.8</td>
</tr>
<tr>
<td>Ms in Central and Western EU</td>
<td>8.7</td>
</tr>
<tr>
<td>Other MS</td>
<td>5.0</td>
</tr>
</tbody>
</table>

*MS in Nordic Region = Finland, Sweden, Estonia, Latvia and Lithuania
MS in Central and Western EU = Belgium, France, Germany, Italy, the Netherlands, Spain, the UK*

### 12.3 Impact on Illegal Logging

The assessment below is based on the assumption that the prohibition to possess and trade illegal timber (option 4a) can be implemented effectively. The projected impacts are subject to the materialization of risks identified in ch. 12.1.4.

In 2005, illegal wood and wood product exports to the EU from all non-EU countries was estimated at 14 million m³. The volume of illegal logging in EU Member States was estimated at 3 million m³. In total, the maximum reduction of illegal logging would be 17 million m³/a (Table 12.3).

Provided that the elimination of exports of illegal timber to the EU and illegal roundwood production in the EU are effective, these measures would curb up to 12 per cent of estimated production of illegal timber or 1 percent of all global production of industrial roundwood.

**Table 12.3 Estimated volume of exports of illegal timber from non-EU countries and estimated illegal roundwood production in EU in 2005**

<table>
<thead>
<tr>
<th>Global production of industrial roundwood (million m³)</th>
<th>1 709</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated illegal global production of industrial roundwood (million m³)</td>
<td>139</td>
</tr>
<tr>
<td>Estimated volume of exports of illegal timber from all non-EU countries (million m³ RWE)</td>
<td>14</td>
</tr>
<tr>
<td>Estimated illegal roundwood production in the EU (million m³)</td>
<td>3</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU + illegal roundwood production in the EU of global production of illegal industrial roundwood (%)</td>
<td>12</td>
</tr>
<tr>
<td>Exports of illegal timber to the EU + illegal roundwood production in the EU of global production of industrial roundwood (%)</td>
<td>1</td>
</tr>
</tbody>
</table>
The indicative projections regarding the future development in the baseline countries and countries selected for the theoretical analysis of the geographically expanded VPA as described in ch. 8.3 and ch. 9.3, respectively, are expected to be the most significant developments considering all high and moderate risk countries. The baseline countries and countries analyzed under option 1 account for more than 80 percent of all exports from high or moderate risk countries to the EU.

- Significant reduction of illegal logging is expected to take place in Central and Western Africa, and Russia.
- In other major countries exporting wood products to the EU the reduction of illegal logging is likely to be less than the estimated maximum.

The extent to which illegal logging in EU Member States will be eliminated depends on the effectiveness of criminal investigations (see ch. 12.1.4)

Effectively implemented option 4a prevents circumvention, i.e. shipping illegal timber to the EU through third countries from the countries of origin, which is an important intervention in terms of leveling the playing field in the enterprise sector. It should be noted, however, that it does not necessarily have a major impact on illegal logging in the countries of origin, unless the opportunities to divert trade to other markets is eliminated. If the illegal timber shipped countries such as China is barred entry to the EU market, there are a large number of other markets including the Chinese domestic market where the illegal goods can be placed (cf. discussion in annex 2 and annex 3).

Development of voluntary private sector measures as a parallel measure would bring synergy benefits and strengthen the impact of the prohibition to place illegal timber on the EU market. Voluntary measures set an example and provide a platform on which more formal and comprehensive systems can be built.

12.4 Environmental Impact

The assessment made in ch. 10.3 concerning the overall environmental impact applies. In addition, the positive impacts of eliminating illegal logging extend to those EU Member States where illegal logging occurs.

12.5 Social Impacts

Employment

The impact on employment is projected to be modest. The reason is that changes in production volume of forest industries are expected to be very limited (Table 12.4).

Table 12.4 Change in employment in forest industries by regions compared to business as usual scenario

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in employment in forest industries</th>
<th>2009-2015</th>
<th>2016-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Baseline countries</td>
<td></td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Countries in expanded VPA</td>
<td></td>
<td>-0.4</td>
<td>-0.7</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td></td>
<td>-0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>EU-27</td>
<td></td>
<td>0.0</td>
<td>-0.2</td>
</tr>
<tr>
<td>USA</td>
<td></td>
<td>0.3</td>
<td>0.7</td>
</tr>
<tr>
<td>World</td>
<td></td>
<td>0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>
Similarly to the impact of border measures, the changes in EU employment are very small (Table 12.5).

**Table 12.5 Change in employment in forest industries in EU Member States by region compared to business as usual scenario**

<table>
<thead>
<tr>
<th>Group of Member States</th>
<th>Change in employment in forest industries 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-2015</td>
</tr>
<tr>
<td>MS in Nordic Region</td>
<td>0.3</td>
</tr>
<tr>
<td>Ms in Central and Western EU</td>
<td>-0.1</td>
</tr>
<tr>
<td>Other MS</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*MS in Nordic Region = Finland, Sweden, Estonia, Latvia and Lithuania
MS in Central and Western EU = Belgium, France, Germany, Italy, the Netherlands, Spain, the UK

**Other**

The general observations made in ch. 8.5 apply.

**12.6 Winners and Losers**

The assessment made in ch. 11.6 with respect to border measures applies provided that the prohibition to possess and trade illegal timber can be implemented effectively. The following additional impact was identified:

- In EU Member States with significant volume of illegal logging, elimination of illegal supply will drive roundwood prices higher providing additional benefits to forest owners.
13. OPTION 4B: LEGISLATION WHICH REQUIRES THAT ONLY LEGALLY HARVESTED TIMBER AND TIMBER PRODUCTS BE PLACED ON THE MARKET

13.1 Legality Control

13.1.1 Description of System

Optional approaches

The requirement to place only legally harvested timber and timber products on the market is accompanied by the obligation to provide evidence of legality. The following optional ways of producing such evidence were identified:

- Including the requirement of legality in the supply contracts as well as the right to conduct second party audits on supplier’s operations;
- Excluding suppliers that are not certified as legal producers/traders;
- Establishment of the legality control system to cover the buyer’s own operations and those of all the suppliers.

The buyers may require suppliers to comply with their procurement policies on legality. A common procedure is that the supplier commits itself to the buyer’s procurement policy and related instructions in the contracting phase that allows the buyer to conduct second party audits on its operations.

A more demanding way is to require suppliers to present third party issued certificates on the legality of their operations. If the supply chain entails sub-suppliers, they also need to be covered by these certificates. While there is some controversy whether forest certification schemes can be applied to the verification of legality (Brown & Bird 2007), it is assumed that the problems can be overcome and suppliers may meet the requirement by providing the buyers with a forest management certificate for the site of harvesting, as well as a chain of custody certificate under internationally recognized schemes (e.g. FSC, PEFC) or other relevant standards (e.g. ISO 14001). Another possibility is to acquire a special third-party issued certificate on the fulfillment of legal requirements.

The most challenging option is the buyer’s own control system covering the whole supply chain, including the operations run by any supplier or sub-supplier. Such a system is an expensive solution, in which most of the buyers do not have the financial capacity to meet the necessary investment expenditures. However, some Nordic companies have applied this approach for controlling timber imports from Russia and the Baltic states.

Some of the stakeholders interviewed suggested that national governments might not allow third parties to provide evidence of legality because it is considered to be only within the mandate of the public authorities. Instead, they would set up national institutions issuing the necessary certificates.

Framework for Cost Assessment

The costs of legality control were assessed based on the assumption that suppliers will provide special third-party certified evidence on the legality of delivered timber material. Currently, only few conformity assessment bodies issue these types of certificates but it is expected that if there were sufficient demand for this type of service, most bodies would extend their service lines accordingly.

Operations certified to ISO 14001, FSC or PEFC and separately accepted national certification schemes were also considered an acceptable means of attesting legality of timber supply provided that they cover both forest management and chain of...
custody. Where these exist, it was assumed that no or limited additional costs would have to be incurred to provide the necessary evidence of legality.

In addition, it is assumed that governmental agencies of EU member states are responsible to systematically inspect the market operators to make sure that they have adequate records on timber sources and chain of custody. The inspection frequency is set to 1% of the timber consignments.

The costs of the legality control system include (i) establishment and maintenance of the internal control system in private companies, (ii) third-party certification, and (iii) government inspections.

With respect to the approach where national governments issue legality certificates, the arrangement and its cost would probably be similar to that under the option for border measures (option 3). The cost would be slightly lower than with the arrangement where a third party issues legality certificates. In this case, however, the cost would be borne by the national governments.

Assumptions

The suppliers are responsible for the costs of internal control systems and third-party certification. The governments of the EU Member States fund the inspections of consignments held by timber buyers/parties placing timber on the market.

The control procedure is based on a low-tech “paper system”.

13.1.2 Administrative Cost

The administrative costs relate to sample checking of timber consignments that have been imported or originate from EU Member States. The unit cost of inspection is assumed to be the same irrespective of the origin of the consignment. However, in terms of total cost, the control of EU roundwood production requires much larger resources than the control of imports. The total administrative cost for the EU Member States is estimated at approximately EUR 2 million/a (Table 13.1).

<table>
<thead>
<tr>
<th>Country</th>
<th>Imports*</th>
<th>EU roundwood production</th>
<th>Total admin cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume</td>
<td>Admin cost</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>m3/a</td>
<td>EUR/m³</td>
<td>million EUR</td>
</tr>
<tr>
<td>Finland</td>
<td>15.3</td>
<td>0.005</td>
<td>0.08</td>
</tr>
<tr>
<td>Germany</td>
<td>2.7</td>
<td>0.005</td>
<td>0.01</td>
</tr>
<tr>
<td>Romania</td>
<td>0.3</td>
<td>0.005</td>
<td>0.00</td>
</tr>
<tr>
<td>All EU</td>
<td>72.9</td>
<td>0.005</td>
<td>0.36</td>
</tr>
</tbody>
</table>

* RWE, roundwood, sawnwood, plywood and veneer

13.1.3 Private Sector Cost

The additional costs for the private sector depend on how much of the timber supply to the EU market is covered by control systems and the quality of these systems (fully adequate systems, systems in need of improvements and no system). The cost in non-EU countries is assumed to be the same as when developing voluntary private
sector schemes (Option 2, ref. Chapter 10.1.2). Table 13.2 presents the estimated costs in selected countries outside and within the EU.

Table 13.2 Estimated private sector costs

<table>
<thead>
<tr>
<th>Country</th>
<th>Export to the EU/roundwood production*</th>
<th>Cost of control systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>million m³</td>
<td>EUR/m³</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1.4</td>
<td>0.24</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1.9</td>
<td>0.24</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.2</td>
<td>0.23</td>
</tr>
<tr>
<td>Russia</td>
<td>30.0</td>
<td>0.27</td>
</tr>
<tr>
<td>USA</td>
<td>4.1</td>
<td>0.28</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.8</td>
<td>0.24</td>
</tr>
<tr>
<td>Croatia</td>
<td>1.2</td>
<td>0.16</td>
</tr>
<tr>
<td>All non-EU countries</td>
<td>72.9</td>
<td>0.28</td>
</tr>
<tr>
<td>Finland</td>
<td>47.1</td>
<td>0.17</td>
</tr>
<tr>
<td>Germany</td>
<td>50.9</td>
<td>0.25</td>
</tr>
<tr>
<td>Romania</td>
<td>11.5</td>
<td>0.29</td>
</tr>
<tr>
<td>All EU countries</td>
<td>370.2</td>
<td>0.26</td>
</tr>
</tbody>
</table>

* Non-EU countries: Calculated based on exports quantities (RWE) to the EU, roundwood, sawnwood, plywood and veneer
EU countries: Calculated based on production of industrial roundwood

The additional cost for the Finnish private sector would probably be among the lowest within the EU, because more than 95 percent of timber harvesting is PEFC certified and the forest industries have achieved a high coverage with the chain of custody certification of the domestic timber flows. In Croatia, the unit costs would be even lower due to a high share of state-owned forests that are fully certified under the FSC scheme. The highest costs would be found in countries such as Romania, where the great majority of the timber supply is non-certified and the private sector has established only few ISO certified management systems.

The total annual cost in the non-EU countries would be about EUR 20 million. In the EU Member states, the cost is estimated at EUR 97 million/a. The cost of implementing high-tech solutions would increase these estimates by up to fivefold (Annex 1/Appendix 2).

13.1.4 Impacts

Private sector cost

The cost of legality control is estimated to be approximately the same as the cost of legal assurance in baseline countries and the countries selected for the theoretical analysis of the geographically expanded VPA. Therefore, the assessments made in ch. 8.1.4 and ch. 9.1.4 apply. On average, the cost of legality verification using a low tech approach is considered a minor factor in legal trade. However, the impact on SMEs in the EU may be more significant.

The cost of high tech solutions is substantially higher and it could affect trade in some Member States where the demand for pulpwood is low (e.g. in selected Member States in the eastern part of the EU).

If the requirement to place only legally harvested timber and timber products on the market could be implemented effectively, it would eliminate the possibility of circumvention and unfair competition by illegal operators in EU and non-EU countries.
The assessment made in ch. 11.1.3 regarding the cost advantage of illegal logs applies.

**SMEs**

In the EU, SMEs are defined as enterprises employing less than 250 persons. In the forest and wood industries 99.0-99.5 of all enterprises fall into this group. In a more detailed EU classification, the SMEs are divided into micro (1-9 employees), small (10-49 employees) and medium (50-249 employees) enterprises.

In the basic assessment of the cost for the private sector (ch. 13.1.3), the annual volume of roundwood processed by a forest enterprise was established at 75 000 m³/a. It is estimated that this amount corresponds roughly to the annual volume of roundwood processed by "small" SMEs.

As the cost of legality control increases with lower production volumes, the cost of legality control for SMEs in the “micro” category would be higher than in the basic assessment. The “micro” SMEs account for more than 80 percent of the total number of enterprises in the wood and paper industries, more than 10 percent of value added and their share of employment is higher than 20 percent of the total.

Figure 13.1 illustrates how the scale of operations affects the cost. The costs start gradually rising as the volume of annually processed roundwood goes below 75 000 m³. The cost of legality control could be significant for the “micro” SMEs at the lower end of the scale, more than EUR 2/m³ even if low-tech solutions were applied. With high-tech solutions, the cost would be even higher.

The increase in cost is to a great extent attributable to the assumption that enterprises are obliged to make technology investments. These investments are more or less fixed (e.g. computer workstations) and with a diminishing processing volume, the unit costs rise. In practice, however, to keep the cost reasonable the smallest enterprises could perhaps do without them and rely on low-cost paper-based solutions.

**Figure 13.1** Sensitivity of private sector’s cost of legality control to annual volume of processed roundwood
Box 13.1 Small and medium-sized forest enterprises in the EU

According to Hazely (2000) the EU forest cluster is comprised primarily of SMEs - employing 250 persons or less - which account for about 99% of the total enterprises.

Moreover, SME size classes of 20 employees or less make up the vast majority of the industry - accounting for about 85% of all companies within the forest cluster. SMEs account for about two-thirds of employment and value added within the forest cluster. However, within the mechanical wood sector (including wood furniture), SMEs account for about 90% of the employment, whereas within pulp, paper, printing and publishing, SMEs account for about half. In terms of numbers, the majority of enterprises in the forest cluster are found in Central Europe.

More recent statistics from Eurostat (2007) indicate that SMEs - employing 250 people or less - account for 99.5 percent of all enterprises in the wood and paper industries of the EU. Their share of value added is 57.0 percent and of employment 72.8 percent. The SME’s are further divided into subcategories and the smallest ones, “micro” SMEs with 1-9 employees, represent 82.9 of the total number, 11.0 percent of value added and 21.4 percent of employment.

<table>
<thead>
<tr>
<th>Size class of enterprises in wood and paper industries of EU-27 in 2004:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of enterprises</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>No of persons employed</td>
</tr>
<tr>
<td>Value Added</td>
</tr>
<tr>
<td>Source: Eurostat (2007)</td>
</tr>
</tbody>
</table>

Countries/regions

If the deterrence is sufficiently high, market participants would favour products from low-risk countries or countries able to provide other types of guarantees of legality, such as VPA Partner Countries or those with a large supply of certified wood products. EU Member States and other developed countries would probably benefit from the situation. The private sector in middle-income countries such as Brazil and Malaysia, as well as transforming economies, such as Vietnam, could probably adjust quickly to the situation and be able to provide verified legal goods (cf. discussion in ch. 10.1.3).

Non-industrial forest owners, could be put in a slightly disadvantaged position as roundwood suppliers because of higher than average costs associated with legality control. The assessment made in ch. 12.1.3 regarding the risks for non-industrial forest owners in the USA and the Balkans applies here as well.

In the Baltic countries private forest represent a major source of roundwood supply although the average size of private woodlots is relatively small (3-12 ha depending on the country). Interviews with timber traders suggested that the risk of discrimination against private forest owners is limited, even if a chain-of-custody certificate is required. Timber buyers have been able to absorb the additional cost, which is estimated to be small. It is possible, however, the at least part of the cost has been passed on to the forest owners by lowering roundwood prices.

If private forests represent only a small portion of the potential supply, the risk of discrimination could be higher because timber buyers may not be prepared to establish special procedures for minor quantities of supply.
Governance

The expansion of legality control systems in countries with high or moderate risk of illegal logging improves the regulatory environment. Increased payment of taxes and royalty fees increases government revenue, which potentially enables investments in improved governance. The assessment applies also to those EU Member States where illegal logging is currently a significant problem. The legislation underlying this option would provide an improved framework for law enforcement (cf. ch. 12.1.3)

The present concept for this additional option does not foresee EU-supported capacity building.

13.1.5 Risks

The requirement of traceability increases the potential for detecting illegal activities. The risks related to the implementation of this option relate mainly to law enforcement and the authorities’ capacity to produce evidence on criminal cases.

The assessment of the cost of legality control was based on the assumption that a third party certificate is required. However, it should be noted that a certificate is merely an indication of the overall quality of the management system, it does not attest to the legality of individual consignments. Therefore, if irregularities surface, the certifying party cannot be considered legally liable. The legal responsibility rests always with the party placing goods on the market.

This notion has the implication that in criminal investigations the supply chain would have to be traced back to the point where the alleged criminal act took place. Obviously, investigations can be quite complex, especially, if the crime took place in non-EU countries. The investigations are facilitated by the fact that the supply chain needs to be documented but obtaining evidence can nevertheless be quite challenging.

Besides the probability of detection and conviction, deterrence is determined by the penalty regime. This is subject to interpretation by courts in various Member States and there may be variation among them (cf. Annex 5). For example, it is unclear whether lack of evidence would be considered an act under criminal law or whether it would be treated as an administrative offence. In the latter case, the deterrence could be weak.

Many stakeholders in the EU questioned the appropriateness of the principle that it is necessary to prove the legality of goods. It was considered to be in conflict with basic legal principles in that it implies that goods are illegal unless proven legal. Placing the burden of proof on the private sector as opposed to authorities was considered unjust and views were expressed that the proposal would not be acceptable to courts. No detailed legal analysis on the issue was conducted but it is considered possible that the courts in different Member States would make different rulings (Kilkeri, pers. comm.).

Using third party auditors to verify legality may be in conflict with the mandate that national governments traditionally are responsible for. In Cameroon, the authorities have questioned the practice where private auditors issue certificates for verified legal goods (Lounasvuori, pers. comm.). If the national governments opt for an approach where national institutions issue legality certificates, the risks that are associated with the introduction of border measures (option 3) become relevant. In particular, the credibility of the certificates could easily be put in doubt if the national arrangements for legality control are not subject to independent audits.
There is a risk that legal trade is disrupted in the transition phase unless sufficient time is allowed for the sector to adjust to the new situation. Currently, much of the wood trade within the EU as well as the bulk of current imports of wood and wood products are not subject to any type of legal verification system (Technical Report 3) and only a few suppliers hold chain-of-custody certificates.

The total cost of the legality control to be shouldered by the private sector may be a politically sensitive issue. Even though the cost per unit of trade is a minor factor, in absolute terms, the total cost for companies operating within the EU borders is estimated at nearly EUR 100 million/a. At the same time, the main potential benefit of a reduction in illegal logging, would materialize in countries outside of the EU. The benefits within the EU include the elimination of illegal logging within its borders, as well as leveling the playing field between companies in EU and non-EU countries but it is a matter of political judgment whether these benefits outweigh the costs.

13.2 Other Impacts

The following impacts of option 4b are expected to be similar to those of option 4a, provided that both options are implemented effectively. The expected impacts of option 4a are described in the following chapters.

- trade in ch. 12.2.
- illegal logging in ch. 12.3.
- environmental in ch. 12.4.
- social impacts in ch. 12.5.

The risks associated with the implementation of option 4b are identified in ch. 13.1.5.

13.3 Winners and Losers

The assessments made in ch. 11.6 and ch. 12.6 apply. The following additional impact associated with this option was identified:

- SMEs in the EU experiencing difficulties in meeting the additional cost of legality control systems for roundwood and other wood products sourced from the EU.
14. **COMPARISON OF ADDITIONAL OPTIONS**

Table 14.1 presents a comparison of the baseline scenario and additional options with respect to a few key impact indicators related to:

- legality control
- trade
- illegal logging
- environment
- social issues

**Legality control**

The unit costs of legality control are rather low in all options, the differences are attributable to the variation in implementation arrangements (e.g. third-party verification may be included or excluded). Assuming a low-tech approach to data management is considered, the total costs range between EUR 0.22-0.34/m³ which represents only a fraction of the log prices ranging from EUR 40/m³ to more than EUR 100/m³ at the mill gate.

Option 4b prohibiting the placing of illegal timber on the EU market and requiring control of all timber source from the EU could cause significant additional costs for small and medium-sized enterprises in the EU. It is estimated that the cost of legality control for “micro” SMEs (EU terminology for enterprises employing 1-9 people) could be more than EUR 2/m³. The “micro” SMEs represent more than 80 percent of total number of enterprises in the EU wood and paper industries, account for more than 10 percent of value added generated in the sector and employ more than 20 percent of the workforce.

The main difference between the additional options is how costs are distributed between the private sector and the government administration. The administrative costs are the highest in option 3, where border measures are implemented to prevent the entry of illegal timber into the EU. A consignment-based approach to legal assurance under the VPA (baseline and option 1) also carries rather high administrative costs. The administrative costs are lowest and, conversely, the private sector costs are highest in the approach where it is prohibited to place illegal goods on the EU market (option 4b). At the same time, it is the only option causing administrative costs in the EU.

In absolute terms, the most significant cost, altogether EUR 117 million/a, would be shouldered by the private sector under option 4b prohibiting the placing of illegal timber on the EU market (option 4b). Differing from the other options, it includes the obligation to provide evidence on the legality of all timber materials placed on the EU market including those sourced from the EU.

**Trade**

The trade impact was analyzed with respect to expected changes in value added generated by the forest sector compared to the business as usual scenario. The most significant impact would be felt in the baseline countries under the VPA scheme where value added is expected to decline almost seven percent between 2009-2015. The licensing scheme and improved law enforcement reduce illegal supply of roundwood and, as a result, the volume of output and value added in the processing industries would also decline in relation to the business as usual scenario. However, it should be noted that to a large extent, the decline in the production volume would be compensated with higher product prices.
Table 14.1  Key impacts of additional options
(NB! Impacts are projected assuming effective implementation; risks of failure are assessed separately)

<table>
<thead>
<tr>
<th>Regions covered</th>
<th>Baseline VPA</th>
<th>Option 1 Geographically expanded VPA</th>
<th>Option 2 Voluntary private sector schemes</th>
<th>Option 3 Border measures</th>
<th>Option 4a Prohibition to possess and trade illegal timber</th>
<th>Option 4b Prohibition to place illegal timber</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 countries</td>
<td>6 countries</td>
<td>All high/moderate risk countries</td>
<td>All non-EU</td>
<td>All non-EU + EU</td>
<td>All non-EU + EU</td>
</tr>
</tbody>
</table>

**Legality Control**

<table>
<thead>
<tr>
<th>Unit cost (EUR/m³)</th>
<th>Consign-</th>
<th>Operator</th>
<th>Consign-</th>
<th>Operator</th>
<th>Imports</th>
<th>EU round-wood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.05</td>
<td>0.25</td>
<td>0.05</td>
<td>0.25</td>
<td>-</td>
<td>0.28</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.26</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.17</td>
<td>0.09</td>
<td>0.17</td>
<td>0.09</td>
<td>0.22</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.005</td>
</tr>
<tr>
<td>Average annual cost (EUR million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.4</td>
<td>1.8</td>
<td>2.5</td>
<td>10.1</td>
<td>16.5</td>
<td>20.4</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>96.7</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>1.2</td>
<td>0.6</td>
<td>8.6</td>
<td>5.1</td>
<td>16.0</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**Trade impact**

<table>
<thead>
<tr>
<th>Change in forest sector value added 2009-2015 (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Baseline countries</td>
<td>- 6.5</td>
<td>- 6.8</td>
<td>-</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>- Countries in expanded VPA</td>
<td>0.3</td>
<td>-1.7</td>
<td>-</td>
<td>- 0.8</td>
<td>- 0.8</td>
<td>- 0.8</td>
</tr>
<tr>
<td>- All high and moderate risk countries</td>
<td>0.5</td>
<td>1.3</td>
<td>-</td>
<td>- 0.2</td>
<td>- 0.9</td>
<td>- 0.9</td>
</tr>
<tr>
<td></td>
<td>Baseline VPA</td>
<td>Option 1 Geographically expanded VPA</td>
<td>Option 2 Voluntary private sector schemes</td>
<td>Option 3 Border measures</td>
<td>Option 4a Prohibition to possess and trade illegal timber</td>
<td>Option 4b Prohibition to place illegal timber</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
<td>---------------------------------------</td>
<td>-------------------------------------------</td>
<td>--------------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>- EU-27</td>
<td>0.2</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>- MS Nordic</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>- MS Central/West</td>
<td>0.1</td>
<td>1.4</td>
<td>1.4</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>- Other MS</td>
<td>0.2</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>- USA</td>
<td>0.1</td>
<td>0.9</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Impact on Illegal Logging**

<table>
<thead>
<tr>
<th>Maximum decline of illegal logging</th>
<th>Lower bound: potential impact of licensing scheme</th>
<th>Upper bound: potential impact of law enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Volume (million m³)</td>
<td>2.4 - 22</td>
<td>10 - 78</td>
</tr>
<tr>
<td>- In region (%)</td>
<td>11 - 100</td>
<td>13 - 100</td>
</tr>
<tr>
<td>- Globally (%)</td>
<td>2 - 16</td>
<td>7 - 56</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area of strong impact, if implementation is effective</th>
<th>Initially Central &amp; West Africa, later all involved countries</th>
<th>Initially Russia, later all involved countries</th>
<th>Initially Russia, later all involved countries</th>
<th>Central and West Africa, Russia</th>
<th>Central and West Africa, Russia, EU</th>
<th>Central and West Africa, Russia, EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of risk/main causes</td>
<td>Moderate</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>- Trade Diversion</td>
<td>- Circumvention</td>
<td>- Law Enforcement</td>
<td>- Lacking Interest to Join the Scheme</td>
<td>- Law Enforcement</td>
<td>- Trade Diversion</td>
<td>- Law Enforcement</td>
</tr>
<tr>
<td>- Law Enforcement</td>
<td>- Non-binding Measure</td>
<td>- Credibility</td>
<td>- Trade Diversion</td>
<td>- Law Enforcement</td>
<td>- Trade Diversion</td>
<td>- Law Enforcement</td>
</tr>
<tr>
<td>Environmental Impact</td>
<td>Benefits from reduced illegal logging + improved legal compliance</td>
<td>See baseline</td>
<td>See baseline</td>
<td>See baseline</td>
<td>See baseline</td>
<td>See baseline</td>
</tr>
<tr>
<td>- Non-EU</td>
<td>See baseline</td>
<td>See baseline</td>
<td>See baseline</td>
<td>See baseline</td>
<td>See baseline</td>
<td>See baseline</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Benefits from reduced illegal logging + improved legal compliance</td>
<td>See option 4a</td>
</tr>
<tr>
<td></td>
<td>Baseline VPA</td>
<td>Option 1 Geographically expanded VPA</td>
<td>Option 2 Voluntary private sector schemes</td>
<td>Option 3 Border measures</td>
<td>Option 4a Prohibition to possess and trade illegal timber</td>
<td>Option 4b Prohibition to place illegal timber on the market</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------</td>
<td>--------------------------------------</td>
<td>------------------------------------------</td>
<td>--------------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Social Impact</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in employment 2009-2016 (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Baseline countries</td>
<td>-2.0</td>
<td>-2.4</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>- Countries in expanded VPA</td>
<td>0.2</td>
<td>-0.8</td>
<td>-0.4</td>
<td>-0.4</td>
<td>-0.4</td>
<td></td>
</tr>
<tr>
<td>- All high and moderate risk countries</td>
<td>-0.1</td>
<td>0.5</td>
<td>-0.4</td>
<td>-0.4</td>
<td>-0.4</td>
<td></td>
</tr>
<tr>
<td>EU 27</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>- MS Nordic</td>
<td>0.1</td>
<td>-0.1</td>
<td>0.0</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>- MS Central/West</td>
<td>0.3</td>
<td>0.0</td>
<td>0.0</td>
<td>-0.1</td>
<td>-0.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>- Other MS</td>
<td>0.0</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Benefits from improved adherence to social provisions in legal frameworks</td>
<td>see baseline</td>
<td>See baseline</td>
<td>Risk of applying narrow definitions of legality</td>
<td>See baseline</td>
<td>See baseline</td>
</tr>
</tbody>
</table>

*Baseline values can be seen in the report.*
In other regions, the impact of additional options is expected to remain moderate with changes in value added remaining within a range of a few percent above or below the business as usual scenario. The impact of border measures (option 3) and prohibition to place illegal timber on the market (options 4a and 4b) on the baseline countries is nearly neutral. This is explained by the fact that with these options, there is a level playing field for all countries exporting to the EU preventing other countries from winning market shares at the expense of the baseline countries. Another contributing factor is the assumption that the current, rather lax law enforcement, allows illegal logging to recover as traders dealing in illegal timber shift their exports to other markets than the EU.

Within the EU, the impact would be moderately positive; valued added would increase a few percent compared to the business as usual scenario. The only exception is the Nordic Region where the decline of illegal supply from Russia under some options would lead to a minimal reduction of value added. It should be noted that the neutral impact is a result of two changes offsetting each other. The value added for the forest industries in the Nordic region is expected to decline 2-3 percent but this would be compensated with an increase of 8 percent in the value added of forestry (cf. ch. 11.2.2).

All forest owners, including those in possession of small and medium-sized woodlots, would benefit from the introduction of additional options. The trade model suggests that value added in forestry would increase between 4-9 percent depending on the option and region. The owners of small and medium-sized woodlots could, however, be slightly disadvantaged compared to owners of larger woodlots under option 4b prohibiting the placing of illegal timber on the EU market. This is due to the fact that for small woodlots the unit cost of implementing the licensing system is likely to be higher than the average.

**Illegal logging**

Most additional options attempt to discourage illegal logging through trade-related measures. Accordingly, the impact of these measures is proportional to the volume of imports to the EU from the involved countries. It is estimated that, globally, the additional options have the potential to curtail illegal logging by up to 12 percent. If traders take advantage of various loopholes the impact could be less but it is likely that there would be a significant impact in selected countries of Africa as well as in northwest Russia, which is the main source of imports to the EU.

The impact could be substantially higher in countries entering into VPAs (option 1). The support to be provided in efforts to improve law enforcement could significantly curb the illegal logging volume. Also, if the VPA licensing system were extended to all exports, there could be a significant and immediate reduction of illegal logging.

One of the main risks is that traders divert illegal timber to other markets than the EU. The risk is present with all options and in all regions perhaps with the exception of northwest Russia where the availability of alternative markets is restricted due to high transportation costs and the limited absorption capacity of the domestic market.

The impact of option 1, a geographically expanded VPA, would be significant, if all countries selected for the theoretical analysis would actually join the scheme. However, this is highly uncertain as a number of stakeholders indicated that the governments in many of the countries included in the theoretical analysis would find it politically difficult to enter into VPAs.

Option 4a prohibiting the trade and possession of illegal timber would be difficult to implement because of the difficulty to prove that a timber shipment was linked to an illegal act, possibly in a country thousands of kilometers away. The principal
intervention is the introduction of an improved legislative framework but it is doubtful whether this is sufficient to secure the effectiveness of law enforcement.

**Environmental impact**

The main environmental impacts are the benefits resulting from reduced illegal logging and improved adherence to environmental regulations. The impact is dependent on how effectively the various additional options are able to contribute to these objectives.

**Social impact**

All additional options are expected to have a minor impact on the employment in the forest industries in the EU Member States.

In non-EU countries, where illegal logging occurs on a significant scale, the social benefits depend on whether social provisions have been included in the legality definition and whether they are adequately taken into consideration when implementing the additional options. The border measures, in particular, entail a risk that a narrow definition is adopted in the interest of finding a broadly acceptable approach.
15. OTHER CONSIDERATIONS

15.1 Impact of Expanded Product Coverage

The wood products covered by the FLEG T regulation are roundwood, sawnwood, plywood and veneer. As discussed, it has been proposed that the range of products should be expanded to eliminate the risk of circumvention by processing the roundwood, sawnwood, plywood and veneer into goods that are not covered by the scheme. The proposal has implications in terms of cost, trade and environmental impacts, which are examined below.

15.1.1 Cost of Legality Control

By widening the product range, the volume of imports to be controlled expands increasing the cost of legality control. In absolute terms, the cost increases are between EUR 1-20 million/a (Table 15.1). The increase is dependent mainly on the import volume. The increase is lowest under the baseline scenario where only six countries participate in the scheme. The highest cost increase would be experienced, if the product range were expanded under the implementation of border measures (option 3) and the prohibition to place illegal goods on the EU market (option 4b). With these options, it would be necessary to control all imports from all non-EU countries.

<table>
<thead>
<tr>
<th></th>
<th>Roundwood, sawnwood, plywood and veneer</th>
<th>All wood products except pulp and paper</th>
<th>All wood products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline countries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Private sector cost</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>- Government cost</td>
<td>1.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Countries in Expanded VPA (Option 1)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Private sector cost</td>
<td>2.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>- Government cost</td>
<td>7.0</td>
<td>8.0</td>
<td>11.0</td>
</tr>
<tr>
<td><strong>High/Moderate Risk Countries (Voluntary Measures/Option 2)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Private sector cost</td>
<td>17.0</td>
<td>19.0</td>
<td>26.0</td>
</tr>
<tr>
<td>- Government cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>All non-EU Countries (Border Measures/option 3)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Private sector cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Government cost</td>
<td>16.0</td>
<td>18.0</td>
<td>33.0</td>
</tr>
<tr>
<td><strong>Non-EU + EU (Prohibition to possess and trade illegal timber/option 4a)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Private sector cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Government cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Non-EU + EU (Prohibition to place illegal timber on the market/option 4b)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Private sector cost</td>
<td>117.0</td>
<td>120.0</td>
<td>137.0</td>
</tr>
<tr>
<td>- Government cost</td>
<td>2.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>
15.1.2 Environmental Impacts

With the expansion of the product range, the volume of illegal timber to be barred entry to the EU market increases. Potentially, this increases the impact on illegal logging. The larger the volume blocked off, the higher the impact in the country of origin.

As indicated earlier, the estimated volume of illegal timber (roundwood, sawnwood, plywood and veneer) currently entering the EU is about 14 million m$^3$ (RWE) per year (Table 15.2). This volume equals about 10 percent of all illegal logging in the countries of origin. If all wood products except pulp and paper were denied entry to the EU, the volume would increase to 16 million m$^3$ per year equaling about 12 percent of all illegal roundwood harvesting in the countries of origin.

<table>
<thead>
<tr>
<th>Products</th>
<th>Exports of illegal timber to the EU</th>
<th>Illegal production of industrial roundwood</th>
<th>Exports of illegal timber of illegal production of industrial roundwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundwood, sawnwood, plywood &amp; veneer</td>
<td>14 m$^3$ (RWE)</td>
<td>136 %</td>
<td>10%</td>
</tr>
<tr>
<td>All wood products except pulp &amp; paper</td>
<td>16 m$^3$ (RWE)</td>
<td>136 %</td>
<td>12%</td>
</tr>
</tbody>
</table>

15.2 Impact on Furniture Manufacturing

Due to the lack of basic data, the impact of additional options on furniture manufacturing was analyzed separately. The impact of various options was analyzed comparing the changes in the production volume during the period 2009-2020. The impacts on furniture manufacturing are attributable to changes in the price and availability of timber caused by the implementation of various additional options (Table 15.3).

Under the baseline scenario, the biggest gain is in the group of countries that were selected for the theoretical analysis of the geographically expanded VPA. In particular, China draws the benefit from the reduction of furniture exports from baseline countries. With an expanded VPA, China can no longer take advantage of this development. The trade model suggests that the elimination of illegal logging in all VPA countries would favor the baseline countries, which are able to win market shares. Another important beneficiary is India, which is the main player in the group “other” high/moderate risk countries.

With the implementation of border measures (option 3), the playing field is leveled for all countries. As a result, the position of the “other” high and moderate risk countries on the market is slightly weakened. Baseline countries would still benefit from the situation and there would also be a slight gain for EU-27. The impact of prohibiting the placing of illegal timber on the EU market (options 4a and 4b) would have a largely similar impact to the option for border measures.

The role of China and India in the furniture manufacturing production is indicative of their growing significance on the timber market. With its growing population base and rapidly expanding economy, India could in the future become a major importer of wood products (see Annex 8).
Table 15.3  Changes in production value of furniture manufacturing 2009-2020 compared to the business as usual scenario

<table>
<thead>
<tr>
<th>Country group</th>
<th>Baseline scenario</th>
<th>Option 1 Expanded VPA</th>
<th>Option 3 Border Measures</th>
<th>Option 4 Prohibition to place illegal timber on EU market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline countries</td>
<td>-0.3</td>
<td>3.1</td>
<td>2.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Countries in expanded VPA</td>
<td>2.4</td>
<td>-2.8</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td>-4.3</td>
<td>4.3</td>
<td>-1.1</td>
<td>-1.3</td>
</tr>
<tr>
<td>EU-27</td>
<td>0.0</td>
<td>0.4</td>
<td>0.9</td>
<td>0.4</td>
</tr>
<tr>
<td>USA</td>
<td>0.1</td>
<td>0.2</td>
<td>-0.7</td>
<td>-0.3</td>
</tr>
<tr>
<td>World</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

15.3 Potential Contribution of Other Consumer Countries

The impact of additional options would be strengthened if other consumer countries developed their regulatory environment in a similar manner. Table 15.4 illustrates the impact if the implementation of a geographically expanded VPA (option 1) were combined with the introduction of similar measures in the USA, Japan and China.

The apparent impact is a decline in the value added in forestry and the forest industries in VPA countries (baseline countries and additional countries selected for the theoretical analysis of the expanded VPA) compared to the business as usual scenario. However, it is also a reflection of the fact that with fewer markets accessible for illegal timber, there would be a decline in illegal logging and processing of illegal logs in the VPA countries. The impact would be particularly significant in baseline countries where illegal logging is a major problem and where the forest sector is dependent on export markets. In the “other” VPA countries, the effect would be similar but less pronounced due to the fact that illegal logging is less extensive and they are less reliant on timber exports.

Table 15.4  Change in value added assuming a geographically expanded VPA (option 1) combined with similar measures in other consumer countries compared to the business as usual scenario

<table>
<thead>
<tr>
<th>Country group</th>
<th>Change in value added in forestry and forest industries 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With geographically expanded VPA + the USA, Japan, China applying similar measures</td>
</tr>
<tr>
<td></td>
<td>With geographically expanded VPA (option 1)</td>
</tr>
<tr>
<td>Baseline countries</td>
<td>-6.8</td>
</tr>
<tr>
<td>Countries in expanded VPA</td>
<td>-1.7</td>
</tr>
<tr>
<td>Other high/moderate risk countries</td>
<td>1.3</td>
</tr>
<tr>
<td>EU-27</td>
<td>1.1</td>
</tr>
<tr>
<td>USA</td>
<td>0.9</td>
</tr>
<tr>
<td>World</td>
<td>0.2</td>
</tr>
</tbody>
</table>
15.4 Combining Options

In principle, more than one additional option can be implemented in parallel. Interviews and the stakeholder survey indicated that there is support for a large variety of combinations (Technical Report 3). In fact, most stakeholders preferred a combination of options to an approach with one single option.

15.4.1 VPA (option 1) with Other Additional Options

One of the key questions that emerged from stakeholder interviews is whether the possibility of introducing border measures (option 3) and the prohibition to place illegal goods on the market (options 4a and 4b) constitutes an incentive or disincentive for countries participating in the on-going VPA negotiations.

Seen from a trade perspective, the effective implementation of border measures (option 3) and the prohibition to place illegal timber on the EU market (options 4a and 4b) would give a strong incentive to countries that are seriously planning to enter into the VPAs. These options would eliminate the possibility of non-VPA countries taking advantage of the situation and winning market shares on the EU market at the expense of VPA countries.

With option 4a and especially 4b prohibiting the placing of illegal timber on the EU market, importers in the EU would be legally responsible, if illegal products enter their supply chain. This could give the VPA countries an upper hand on the EU market. The licensing system to be mounted under the VPA would ensure that an adequate supply of verified legal goods would be available rather quickly. In non-VPA countries the supply would essentially depend on how the private sector responds to the new requirements. There is a risk that without an institutional framework supporting the effort, the process would take longer than in the VPA countries. There would also be capacity constraints and a lack of clear incentives could also discourage their participation.

On the other hand, the governments in potential partner countries may view that from a trade perspective, entering into a VPA is not necessary if the border measures in options 3 and 4 are implemented. The effective implementation of border measures (option 3), and the prohibition to place illegal timber on the EU market (options 4a and 4b), would suffice to ensure that a playing field is level for all countries exporting to the EU. In addition, with these the development effort required of governments in potential Partner Countries is limited. With prohibition to place illegal timber on the EU market, (options 4a and 4b), the burden of controlling imports would be shifted entirely to the EU authorities and the private sector. With border measures (option 3), the development of the control systems in the Partner Countries would be in the hands of the national governments and they may assume that their present systems are largely adequate.

Considering trade, the main incentive for implementing the VPA in parallel with border measures (option 3) and the prohibition to place illegal goods on the EU market (options 4a and 4b) would be the possibility of gaining market shares on the EU market by taking advantage of a robust licensing scheme providing a steady supply of verified legal goods. From an institutional perspective, the governments not entering into VPAs would also forego the support provided by the EU for strengthening governance and combating illegal logging. How these compare with the other considerations is a political choice.

Possible variation in definitions of legality may also play a role. As discussed in ch. 11.1.4, it may be challenging to introduce a generic definition that all non-EU countries under would adopt when implementing border measures (option 3). The VPA countries may fear that non-VPA countries would instead be applying...
considerably more lax definitions of legality than those planned for VPAs. The risk of being subject to different legality standards could become a disincentive for governments considering joining the VPA.

15.4.2 Option 2 with Other Additional Options

Even if it may be challenging to fully eliminate illegal logging relying on voluntary private sector schemes, their continued development is a positive development. Regulatory measures cannot inspire the same commitment as voluntary schemes. Implementing voluntary schemes together with other additional options will also provide substantial synergy benefits. The voluntary schemes will smoothen the transition for the implementation of other additional options, as many voluntary systems can be made FLEGT compatible with minor investments. Also, the experience accumulated when developing voluntary schemes will benefit the development of concepts and implementation arrangements for other options.

Conversely, the introduction of VPAs could reduce the burden on the private sector. Agreeing on VPAs with a large number of producer countries would reduce the pressure to develop private sector schemes and the associated costs. As indicated by the cost estimates for a geographically expanded VPA (option 1) and the development of voluntary private sector schemes (option 2), the cost savings for the private sector could be significant, especially if consignment-based legal assurance systems were adopted.

Providing support to the development of voluntary schemes along with the implementation of other measures would considerably strengthen the positive impacts. Potential measures of support include:

- Encouraging trade associations to adopt and harmonize procurement policies in a way that specifically recognizes FLEGT.
- Establishment of public and private timber procurement policies that require credible evidence of legality of supply, possibly specifying FLEGT licences as evidence of legality.
- Providing public support to programs such as the Tropical Timber Action Plan and the Global Forest and Trade Network promoting responsible trade.
16. STAKEHOLDER VIEWS

16.1 Stakeholders in EU Member States

The participants in the questionnaire survey were asked to rank the additional options from best to worst. The way in which the question was put caused some ambiguity in the identification of the best option; the results can be interpreted in two ways. On one hand, the most preferred option or combination of options across the EU are options 1 and 4b, and option 4b followed by option 1+2 and option 2 (Table 16.1).

Table 16.1 Ranking of options by respondents in EU Member States, first variant

<table>
<thead>
<tr>
<th>Option recommended as the best</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options 1 + 4b</td>
<td>8</td>
</tr>
<tr>
<td>Option 4b</td>
<td>8</td>
</tr>
<tr>
<td>Options 1+2</td>
<td>7</td>
</tr>
<tr>
<td>Option 2</td>
<td>7</td>
</tr>
<tr>
<td>Options 1+2+4a</td>
<td>6</td>
</tr>
</tbody>
</table>

Another possible ranking was done based on how many times each option was indicated either as the best option or was included it the favorite combination of options. Ranked in this manner, option 1 was referred to by 37 respondents or about half of all respondents. The second most frequently mentioned option was option 2 with 31 references. Option 4b ranked third with 24 indications and options 3 and 4 were mentioned by 13 respondents each.

Table 16.2 Ranking of options by respondents in EU Member States, second variant

<table>
<thead>
<tr>
<th>Individual option considered best or included in the favorite combination of options</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>38</td>
</tr>
<tr>
<td>Option 2</td>
<td>31</td>
</tr>
<tr>
<td>Option 3</td>
<td>13</td>
</tr>
<tr>
<td>Option 4a</td>
<td>13</td>
</tr>
<tr>
<td>Option 4b</td>
<td>24</td>
</tr>
</tbody>
</table>

16.2 Stakeholders in non-EU countries

The stakeholders in non-EU countries ranked the options slightly differently. Option 1 was the preferred option followed by option 4a. A combination of options 1 and 2 and option 2 alone were also ranked high as well as option 4b (Table 16.3)

Table 16.3 Ranking of options by respondents in non-EU countries, first variant

<table>
<thead>
<tr>
<th>Option recommended as the best</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>9</td>
</tr>
<tr>
<td>Option 4a</td>
<td>8</td>
</tr>
<tr>
<td>Options 1+2</td>
<td>6</td>
</tr>
<tr>
<td>Option 4b</td>
<td>6</td>
</tr>
<tr>
<td>Option 2</td>
<td>5</td>
</tr>
</tbody>
</table>
In the other ranking, option 1 emerged as the favorite similarly as with respondents in the EU Member States. Options 3 and 4a which were the least preferred options among respondents in the EU Member States were ranked more or less on a par with options 2 and 4b (Table 16.4).

More detailed information is available in Technical Report 3.

Table 16.4  Ranking of options by respondents in non-EU Member States, second variant

<table>
<thead>
<tr>
<th>Individual option considered best or included in the favorite combination of options</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>41</td>
</tr>
<tr>
<td>Option 2</td>
<td>28</td>
</tr>
<tr>
<td>Option 3</td>
<td>21</td>
</tr>
<tr>
<td>Option 4a</td>
<td>23</td>
</tr>
<tr>
<td>Option 4b</td>
<td>25</td>
</tr>
</tbody>
</table>
17. CONCLUSIONS

The proposal to develop additional options for FLEGT implementation grew out of the perception that the VPAs have limits to their effectiveness. Three problems related to the trade impact of the VPA were highlighted: (i) the VPA licensing scheme could be circumvented by passing goods through third countries to the EU, (ii) illegal goods may be diverted to other markets than the EU, and (iii) the wood industries in the EU and VPA countries would remain exposed to unfair competition from illegally operating industries in non-participating countries. There was also a concern that the way in which the VPAs will be implemented would not allow sufficient attention to the social and environmental issues. The non-EU countries pointed out that VPAs offer them only a limited amount of direct incentives. Critics of the scheme referred to the limited scale of the expected impacts, especially with respect to illegal logging.

The additional options address these concerns in various ways. The key benefit of continuing with the VPA approach (option 1) is that it offers broad context-specific solutions at the country level. The downside is that the pace of expansion could be slow as several of the key timber producing countries may be reluctant to engage in the process. However, if implemented successfully, the expansion of VPAs could make a major contribution to the reduction of illegal logging in a few selected countries. In contrast, the introduction of border measures (option 3) and prohibition to place illegal timber on the EU market (options 4a and 4b) would have comprehensive country coverage and would address many of the weaknesses in the VPA approach. However, the formulation of approaches that would be tailored to specific situations is challenging. The number of countries involved is too large to allow extensive consultations and development processes, and there is a risk that non-EU countries perceive the implementation of these options as an infringement of their sovereignty. Providing support to continued development of voluntary private sector schemes (option 2) is a highly useful intervention but it is more of a complementary measure rather than a stand-alone approach.

The potential impact of additional options may not materialize unless their implementation is effective. In this regard, the VPA approach (option 1) has merit, as it would be backed by substantial technical assistance and support to capacity building. Voluntary private sector schemes (option 2) can be implemented quite effectively but their impact is limited by the fact that they do not focus on illegal activities; they rather try to “crowd them out”. Securing the credibility of the legality control system is a major challenge for border measures (option 3) and the difficulty of enforcement creates a substantial risk for the successful execution of option 4a, a variant of the additional option prohibiting the placing of illegal timber on the EU market. Implementation of the other variant, option 4b, is expected to be substantially more effective because the burden of proof is on the private sector. However, the obligation to prove legality (as opposed to illegality) appears difficult to implement from a legal perspective. Many stakeholders in the EU saw it implying that timber is illegal unless proven legal and therefore being in conflict with the legal principle that guilt should be proven rather than innocence.

In the EU, provided that the additional options are implemented effectively and they substantially reduce the imports of illegal timber, there will be a moderate increase in the price and production of timber and wood products in relation to the business as usual scenario. Among the various stakeholder groups forest owners in particular would benefit from the introduction of additional options as timber prices and roundwood production are projected to increase substantially. On average and for all options (except option 2, further development of voluntary private sector measures, whose impact could not be assessed), the value added in the EU forest sector is expected to increase slightly more than 1 percent compared to the business as usual scenario.
Border measures (option 3) and the prohibition to place illegal timber on the market (options 4a and 4b) would eliminate unfair competition, which would have significance for EU importers and manufacturers. At the same time, option 4b could be problematic for the smallest enterprises in the EU. Even though the typical cost of legality control systems is estimated to be low in comparison with timber prices, the economies of scale work against smallest enterprises which could face substantial costs. They could also experience difficulty in funding the initial investment in system development.

Among non-EU countries, it is likely that the main beneficiaries are the ones with high implementation capacity and a relatively developed economy. Taking advantage of the opportunities offered by additional options requires technical skills and knowledge that are not readily available in the least developed countries. Countries such as Malaysia and Brazil are already implementing rather sophisticated systems related to forest certification and monitoring timber flows, and they would probably have little trouble in accommodating the FLEGT requirements. The same would apply to transforming countries such as Vietnam, which have already shown their capacity to respond to market-based demands (e.g. by developing chain-of custody systems).

The key feature of all additional options is that they attempt to discourage illegal logging through trade. Accordingly, the impact of this approach is proportionate to the volume of EU imports. It is estimated that trade-related measures could potentially reduce illegal logging up to 12 percent on a global scale. Because of the possibility to divert the trade in illegal timber to less discerning markets, the actual impact could be less significant. However, it is estimated that in selected circumstances, such as a few African countries and northwestern Russia, illegal logging would be significantly curtailed provided that the additional options are implemented effectively.

At a country level, the impact of the VPA approach (option 1) could go substantially beyond the impact of trade-related measures. Capacity building and support to law enforcement may have a major impact especially with a combination of efforts to address the root causes of illegal logging. In addition, some of the countries engaged in the VPA negotiations are contemplating the possibility to extend the coverage of the VPA licensing system to all their exports, possibly even to trade on the domestic market. Because in many countries exports constitute the main trade flow, the effect on illegal logging could be very significant. If it were possible to control domestic trade as well, the impact would be strengthened further.

The extent to which the implementation of additional options provides social benefits depends greatly on the definition of legality applied, especially in tropical countries. The effective implementation of a broad definition would often improve the status of indigenous communities and other socially vulnerable groups. In some cases, however, the legal framework itself may be flawed and work against disadvantaged people. In this case, a review of the legal framework could be necessary. The problem with options other than the VPA (option 1) is that they do not provide a framework for such a process.

The impact of additional options would be strengthened further, if other consumer countries developed their regulatory frameworks in a similar manner. The assessment shows that a concerted action implemented simultaneously by the main timber consumer countries in partnership with timber producing countries can be an effective approach. By implementing the VPA scheme and/or additional options, the EU is providing a platform that other consumer countries contemplating similar measures could take direct advantage of. Someone has to be first, and with its initiative the EU is paving the way for other countries to join the effort.
18. REFERENCES


Contreras-Hermosilla, A., Doornbosch, R and Lodge, M. 2007. The economics of illegal logging and associated trade. Round Table on Sustainable Development. OECD.


TTF 2007. UK market conditions for “legal” and "legal and sustainable" wood products. Timber Trade Federation.


Van Den Biesen Advocaten. 2004. EU Civil Society Initiative for a EU Regulation concerning sustainable forest management and the trade in illegally harvested timber and related products.


Wells, Adrian. 2006. The legal basis for verification systems - standard setting for legal compliance. ODI.


Personal Communications

Dr. Markku Kiikkeri, Docent, European law (Universities of Turku and Lapland), Professor of European law (acting) (University of Helsinki)

Mr. Jussi Lounasvuori, Timber Procurement Specialist, Indufor Oy

Dr. Ir. F.W. van Helden, Nature Department, Ministry of Agriculture, Nature and Food Quality, the Hague, the Netherlands
LEGAL ASSURANCE SYSTEM - THEORETICAL COUNTRY CASE

1. BASELINE CONTROL SYSTEMS

1.1 Government Systems

Most of the states with exploitable forest resources in public ownership have currently systems in place to ensure due collection of forest related taxes and charges as well as compliance to forest and other legislation. Regular inspection of logging sites and logistics with wood products is included in the control systems especially in the tropical regions, where governmental agencies issue cutting rights to private logging companies. The control of round timber flows is typically based on physical segregation with identification marks on individual logs and paper records on harvesting, storing, transportation and transformation of timber.

In the boreal zone, the governmental control entailing e.g. issuance of cutting rights, checking of harvesting notifications submitted by the forest owner or holder of use rights and carrying out of field inspections focuses on the harvesting and other forest operations. Timber flows from the forest to the processing mills and onwards are not systematically monitored and recorded.

1.2 Private Sector Systems

All forest companies have systems in place for controlling timber procurement and raw material flows. Apart from systems designed specifically to comply with governmental log tracking regulations, their main purpose of is usually to support business planning, operational control and cost monitoring. These systems, however, provide an applicable basis for timber tracing, especially if amended for better demonstrating the origin and legal compliance of timber materials.

The introduction of voluntary forest certification has improved the quality of management and resulted in development of chain of custody systems. Forest management and chain of custody systems certified in accordance with the FSC and PEFC should in principal ensure legal compliance in harvesting and other forest operations and a comprehensive control over the wood supply chain.

Forest companies may also have quality and environmental management systems developed in line with ISO standards (ISO 9001 and ISO 14001) or EMAS regulation. These standards require compliance to legislation in force. FLEGT compatible control of wood supply chain can be integrated in these management systems.

2. THEORETICAL COUNTRY CASE

The costs of LAS are assessed in a theoretical country case, in which all commercial forests are state property and governmental agencies sell cutting rights to private companies. The harvested timber is supplied to domestic and foreign timber processing companies, containing sawmills and further processing plants. The country's forest sector is strongly export oriented: one third of annual cuttings are sold overseas as logs and a great majority of processed wood products are sent abroad as sawn timber and further processed goods. The country has only one seaport for the export business.

The key characteristics of private timber industry in the theoretical case country are summarized in Box 2.1. There is substantial variation in the structure of forest industries depending on the region and country, especially with respect to "typical" size of production units involved in export production. Expert opinion suggests that the structure put forward in the case study is more representative of the situation in Asian
and Latin American countries than in African countries where the production units involved in export production tend to be smaller than in other regions.

**Box 2.1 Material flows in the case study**

<table>
<thead>
<tr>
<th>Timber production</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Annual cuttings of 3 million m³ of tropical logs</td>
</tr>
<tr>
<td>- 40 logging enterprises, each owing annual cutting rights of 75 000 m³</td>
</tr>
<tr>
<td>- Each enterprise has four logging areas and log yards in a year</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Timber supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Logs are transported by truck to sawmills or export port</td>
</tr>
<tr>
<td>- 1 million m³ of logs are annually exported as roundwood</td>
</tr>
<tr>
<td>- 2 million m³ of logs are annually supplied to domestic sawmills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sawn timber production</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Total annual output of domestic sawmill industry is 1.2 million m³ of sawn timber (utilization rate of raw material is 60%)</td>
</tr>
<tr>
<td>- 20 sawmills, each producing annually 60 000 m³ of sawn timber</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sawn timber supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Sawn timber is transported by truck for domestic markets and exports</td>
</tr>
<tr>
<td>- 600 000 m³ of sawn timber is exported</td>
</tr>
<tr>
<td>- 200 000 m³ of sawn timber is sold to domestic market</td>
</tr>
<tr>
<td>- 400 000 m³ of sawn timber is further processed in integrated units</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Total annual output of domestic further processing industry is 300 000 m³ of various timber products</td>
</tr>
<tr>
<td>- 20 further processing units (at sawmills), each producing annually 15 000 m³ of timber products</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supply of further processed products</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 200 000 m³ of further processed products is exported</td>
</tr>
<tr>
<td>- 100 000 m³ of further processed products is sold to domestic market</td>
</tr>
</tbody>
</table>

The total volume of products running through the LAS is 4.5 million m³/a for which quantity the total costs are estimated. The unit cost (EUR/m³) is calculated per unit of produced roundwood (3.0 million m³/a).

The theoretical country case is established for the currently defined FLEGT products that are produced in a three-staged supply chain including roundwood harvesting (1st stage), sawmill processing (2nd stage) and further processing (3rd stage). The outputs and the size of processing units were fixed to represent a “typical” situation for exports.

If new products are integrated in the licensing scheme, pulp would be considered to equal sawn timber (second stage products), paper and joinery products further processed products (third stage products). Particle board and fiberboard would be either in the second or third stage depending on the type of raw material used for their production (if roundwood is used as raw material, the production would be in the second stage. If by-products such as wood chips and sawdust are used as raw material, the production would be in the third stage).

Accordingly, the case study is considered to be in broad terms applicable to all situations. The cost varies slightly depending on the proportions of output from harvesting, sawmilling, and further processing but since detailed information on these proportions at the country level is lacking, the cost provided by the case study was adopted as the basic cost, which was then adjusted to various situations based on qualitative information.
The case country has FIS that is tasked to control and monitor legal compliance in forest management and flows of timber and timber products from the forest. However, the FIS is inadequately resourced with inspectors, other resources and funds for operational costs:

- The FIS has currently four full time inspectors for the forest operations/logging enterprises.
- The FIS has currently two full time inspectors for the industrial processing of timber and trade in timber products.
- The FIS controls the logging enterprises and timber processing companies on the basis of submitted documents and records, and carries out only occasional checks in the field.

The governmental regulations require pre-harvesting inventory of forest areas to be harvested and application of selective cutting methods in line with separate instructions that define the size and number of trees for exploitation. Individual logs must contain identification marks that enable their tracing back to the logging site/stump. The source must be physically traceable throughout the supply chain until the export port of logs or to the first transformation point of logs.

Under the national FLEGT Licensing Scheme of the case country, the FIS will be assigned for the LAS related verification tasks. The FIS will be responsible for checking the legal compliance of pre-harvesting inventory and related cutting plans as well as for controlling transportation and transformation of timber. The police force, customs and other governmental institutions will support the FIS e.g. in the control of road haulage of logs and timber products, and export clearances.

The FIS currently practices control and monitoring of legal compliance through a paper-based system, in which data on harvesting, transportation, processing and other phases in the supply chain is collected with forms that are manually filled out. The collected data is later fed in a generic calculation program for baseline analysis. This system will be replaced with more appropriate options while planning and implementing the national FLEGT scheme.

The national FLEGT Licensing Body will be established within the FIS as an independent entity. The Licensing Body that is separated from the verification activities of FIS will issue export licenses for individual consignments or market operators based on documented verification results.

The Joint Implementation Committee including representatives of the government of case country, EU and selected stakeholders will appoint a third party monitoring organization to periodically check the performance of LAS.

3. OPTIONAL LEGALITY ASSURANCE SYSTEMS

The LAS costs consisting of (i) control of forest operations, (ii) control of wood supply chain, (iii) verification of forest operations and wood supply chain, and (iv) third party monitoring of the whole LAS, are assessed for the following options:

- Consignment-based system
- Operator-based system

It is assumed that the verification of forest operations and wood supply chain under the consignment-based system (Box 3.1) is largely run by the governmental agencies, whereas in the operator based system (Box 3.2) the verification relies on the private sector’s own management systems and external checking. In both systems, however, private and public sector participation is needed.
Box 3.1  Key elements of consignment-based system

Key elements of consignment-based systems that affect the implementation costs of LAS

- The national verification body checks the legality of each wood and wood products consignment for exports to the EU
- The national licensing body issues the export license for each wood and wood products consignment
- The operators within the supply chain from the forest to the export port are liable to provide documented evidences on the origin of wood raw material

Box 3.2  Key elements of operator-based system

Key elements of operator-based systems that affect the implementation costs of LAS

- The operators within the supply chain from the forest to the export port have internal management systems to ensure the legality of wood and wood products
- The national verification body assesses and recommends approval of the internal management systems of market operators
- The national licensing body approves the internal management systems and issues export licenses for market operators
- A management system that covers all the elements of LAS and is audited and registered by an accredited certification body needs not necessarily periodical checks by the national verification body
- The national verification body has all rights to randomly check the management systems of market operators, but has predominantly confidence in the audit results of certification bodies

4. COSTS OF CONSIGNMENT-BASED SYSTEM

The consignment-based system draws on the principle that the legality of each export consignment shall be verified and issued with a FLEGT license. The system requires substantial resources for the verification of legality in the forest operations and watertight control of the supply chain from the forest to the export port. The costs are calculated assuming that the FIS checks all logging areas in the field conditions. Verification tasks are estimated to require inspectors and other resources as follows:

- Six new inspectors for the logging enterprises (total need for ten inspectors)
- Two new inspectors for the industrial processing of timber and trade in timber products (total need for four inspectors)
- Additional funds are needed for the operational costs of about 200 annual checks of forest operations, log deliveries and industrial processing of timber.

The forest companies are expected to use either (A) sophisticated software programs with bar code identification of logs for controlling and monitoring the supply chain (Table 4.1) or (B) existing systems that are modified for the needs of LAS (Table 4.2).
The following assumptions are made in the option Consignment A:

- The software programs armed with central server, handheld data collectors, satellite modems and other hardware devices are designed to allow real-time monitoring of timber and timber products flows.
- All the forest companies exporting timber and timber products use IT tools compatible with the FIS control and monitoring system.
- The costs of a national control system are divided between the government and the private sector companies.
- The life time of control and monitoring system is 10 years, the hardware devices are replaced after five years.

The following assumptions are made in the option Consignment B:

- The existing information systems of FIS are modified to cover the whole supply chain of timber and timber products from the forest to the point of export.
- All the forest companies exporting timber and timber products submit the FIS with paper-based or electronic files on their production and deliveries.
- No separate requirements are set forth for the internal information systems of forest companies.
- The FIS feeds the data submitted by the forest companies to its control and monitoring system.
- The government covers all additional costs related to the upgrading of FIS information systems.
- The life time of control and monitoring system is 10 years, the hardware devices are replaced after five years.

All costs regarding the licensing body are additional to the existing governmental control over the forest sector. The licensing body is designed a non-bureaucratic unit with minimal staff of two persons. The office is set within the FIS facilities.

The independent monitoring is assumed to take place once a year. The monitoring costs are estimated based on a five days field audit and three day reporting by a team of three persons.

Table 4.1 Summary of cost impacts in consignment-based system with new sophisticated software tools (Consignment A)

<table>
<thead>
<tr>
<th>Cost factor</th>
<th>Total annual costs</th>
<th>Unit cost1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR 1000</td>
<td>EUR/m³</td>
</tr>
<tr>
<td>Verification</td>
<td>325</td>
<td>0.11</td>
</tr>
<tr>
<td>Control and monitoring system</td>
<td>5 050</td>
<td>1.68</td>
</tr>
<tr>
<td>FLEGT licensing</td>
<td>110</td>
<td>0.04</td>
</tr>
<tr>
<td>Independent monitoring</td>
<td>40</td>
<td>0.01</td>
</tr>
<tr>
<td>Total</td>
<td>5 525</td>
<td>1.84</td>
</tr>
<tr>
<td>- Share of government</td>
<td>1 895</td>
<td>0.63</td>
</tr>
<tr>
<td>- Share of forest companies</td>
<td>3 630</td>
<td>1.21</td>
</tr>
</tbody>
</table>

1 Timber production of 3 million m³/year

More detailed cost calculations are provided in Appendix 1 and Appendix 2.

The total annual costs of about EUR 5.5 million under the consignment-based system with new sophisticated software tools are almost exclusively caused by the establishment and maintenance of control and monitoring system. A well-functioning system, however, is important to provide comprehensive and reliable data on the legality of the forest operations, deliveries of logs, and industrial processing of and trade in timber products.
The total annual costs are divided between the government and the private forest sector companies as follows:

- Government 34%
- Forest companies 66%

The share of government contains (i) verification, (ii) FLEGT licensing, (iii) independent monitoring, and (iv) partially information system costs. With respect to the control and monitoring system, the government is expected to acquire the initial software and hardware devices for the FIS and the private sector companies, to cover the system implementation costs and to take care of the annual service provision during the first two years.

The annual service provision embraces site licenses and transaction charges (charged per m³ flown through the system) as well as system support and maintenance. The site licenses and transaction charges are most expensive cost factors in the whole control and monitoring system. After the two years’ use of the system, the service provision costs are expected to rest with the forest companies.

Table 4.2 Summary of cost impacts in consignment-based system with existing upgraded software tools (Consignment B)

<table>
<thead>
<tr>
<th>Cost factor</th>
<th>Total annual costs</th>
<th>Unit cost¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR 1000</td>
<td>EUR/m³</td>
</tr>
<tr>
<td>Verification</td>
<td>350</td>
<td>0.12</td>
</tr>
<tr>
<td>Control and monitoring system</td>
<td>170</td>
<td>0.06</td>
</tr>
<tr>
<td>FLEGT licensing</td>
<td>110</td>
<td>0.04</td>
</tr>
<tr>
<td>Independent monitoring</td>
<td>40</td>
<td>0.01</td>
</tr>
<tr>
<td>Total</td>
<td>670</td>
<td>0.22</td>
</tr>
<tr>
<td>- Share of government</td>
<td>520</td>
<td>0.17</td>
</tr>
<tr>
<td>- Share of forest companies</td>
<td>150</td>
<td>0.05</td>
</tr>
</tbody>
</table>

¹ Timber production of 3 million m³/year

A more detailed cost calculation is provided in Appendix 1.

The total annual costs of EUR 0.7 million under the consignment-based system with existing upgraded software tools are entirely shouldered by the government. No costs are allocated to the private sector companies, since they are required only to provide data on their pertinent operations. The costs of this system option are only 10% of those under the system with new sophisticated software tools. The low reliability and credibility are considered the main weak points of the system with existing upgraded software tools.

5. COSTS OF OPERATOR-BASED SYSTEM

The operator-based system draws on forest industries’ internal management systems that cover all elements of LAS and are assessed by the FIS and approved by the national licensing body. Since the FLEGT licenses are issued to companies instead of individual export consignments, the application of operator-based system decreases the number of verification carried out by the FIS. It is estimated that under this system option the capacities and resources of FIS need to be built up as follows:

- Two new inspectors for assessing the compliance of internal management systems of companies to the LAS requirements
- Training of the inspectors for assessing the internal management systems
- Additional funds for the operational costs of about 50-100 annual checks of forest operations, log deliveries and industrial processing of timber

The forest companies are expected to use either (A) sophisticated software programs with bar code identification of logs for controlling and monitoring the supply chain (ref. report section 4 and Table 5.1) or (B) existing systems that are modified for the needs of LAS (ref. Table 5.2).

The following assumptions are made in the option Operator A:

- Company-level control and monitoring systems are able to communicate to each other in cases where the custody of timber or timber products is changed.
- The FIS has access to the company level systems through internet or satellite connection.
- The overall costs of control and monitoring systems are the same as in the consignment-based system, but costs are shared differently between the government and the forest companies.
- The life time of control and monitoring system is 10 years, the hardware devices are replaced after five years.

The following assumptions are made in the option Operator B:

- Company-level control and monitoring systems are non-integrated systems between the companies and the FIS (no on-line change of data between business partners or with the verification body).
- The existing systems of companies are upgraded to cover all elements of LAS (e.g. electronic data on timber production, deliveries, processing and exports).
- The internal management systems of companies are verified exclusively on the basis of on-site visits.
- The life time of control and monitoring system is ten years, the hardware devices are replaced after five years.

Under both optional operator-based systems, the FLEGT licensing body is established and independent monitoring arranged in the same way as in the consignment-based system options (ref. report section 5).

Table 5.1 Summary of cost impacts in operator-based system with new sophisticated software tools (Operator A)

<table>
<thead>
<tr>
<th>Cost factor</th>
<th>Total annual costs</th>
<th>Unit cost²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR 1000</td>
<td>EUR/m³</td>
</tr>
<tr>
<td>Verification</td>
<td>95</td>
<td>0.03</td>
</tr>
<tr>
<td>Control and monitoring systems</td>
<td>5 050</td>
<td>1.68</td>
</tr>
<tr>
<td>FLEGT licensing</td>
<td>110</td>
<td>0.04</td>
</tr>
<tr>
<td>Independent monitoring</td>
<td>40</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5 295</strong></td>
<td><strong>1.77</strong></td>
</tr>
</tbody>
</table>

- Share of government 488 0.16
- Share of forest companies 4 806 1.60

² Timber production of 3 million m³/year

A more detailed cost calculation is provided in Appendix 1.

The total annual costs of EUR 5.3 million (Table 5.1) are divided between the government and the private forest sector companies as follows:

- Government 9%
- Forest companies 91%
The government is due to pay entirely (i) verification, (ii) licensing, (iii) independent monitoring costs, and (iv) hardware and software tools necessary for the FIS to supervise the individual company systems. These include e.g. a server station and handheld computers for data capture. In addition, the government participates with minor shares in the operational costs of control and monitoring system. These include e.g. system implementation and annual service provision (maintenance and technical support).

A more detailed cost calculation is provided in Appendix 1.

The total annual costs of EUR 1 million (Table 5.2) are divided between the government and the private forest sector companies as follows:

- Government 26%
- Forest companies 74%

The government share of LAS costs includes (i) verification, (ii) licensing, (iii) independent monitoring, and (iv) hardware and software tools to be acquired for the FIS. The government has no responsibilities to cover costs of the internal control and monitoring systems of the forest companies.

**Table 5.2 Summary of cost impacts in operator-based system with existing upgraded software tools (Operator B)**

<table>
<thead>
<tr>
<th>Cost factor</th>
<th>Total annual costs</th>
<th>Unit cost(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR 1000</td>
<td>EUR/m(^3)</td>
</tr>
<tr>
<td>Verification</td>
<td>110</td>
<td>0.04</td>
</tr>
<tr>
<td>Control and monitoring systems</td>
<td>760</td>
<td>0.26</td>
</tr>
<tr>
<td>FLEGT licensing</td>
<td>110</td>
<td>0.04</td>
</tr>
<tr>
<td>Independent monitoring</td>
<td>40</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 020</strong></td>
<td><strong>0.34</strong></td>
</tr>
<tr>
<td>- Share of government</td>
<td>270</td>
<td>0.09</td>
</tr>
<tr>
<td>- Share of forest companies</td>
<td>750</td>
<td>0.25</td>
</tr>
</tbody>
</table>

\(^3\) Timber production of 3 million m\(^3\)/year

6. **COST COMPARISON AND CONCLUSION**

The quality of applied information technologies is a key factor affecting costs of LAS. In two options (Consignment A and Operator A in Figure 6.1) studied, a high-tech solution was applied to ensure reliable on-time control and monitoring of the supply chain. In the other two options (Consignment B and Operator B in Figure 6.1), the information technology is based on systems with several manual work phases (“paper systems”). These systems are not necessarily designed for controlling the chain of custody.

In principle, the employment of “paper systems” can keep the LAS costs at a low level in countries with high availability of inexpensive and trained labor force. In this study, the additional costs of “paper systems” were less than 1/5 of those of high tech systems. The “paper systems”, however, are prone to forgeries and unintentional errors may bring about during manual work phases. Their control also requires significant on-site supervision inputs from the verification body.
The government is likely to save significantly in the LAS costs, if operator-based systems are employed. The lower governmental costs are due to the fact that the companies take responsibility for demonstrating the legal compliance and respective expenses. In addition, the cost saving impact can be made more effective, if the internal management systems of forest companies are independently certified. The certified management systems clearly decrease the needs for field and other checks by the national verification body.

As regards the additional LAS costs, a key outcome of this theoretical case study is a cost range of EUR 0.2-1.8/m³ of roundwood logs. The range is relatively broad because the solutions for the control and monitoring of timber supply chain vary from expensive high tech systems to low tech “paper systems”. The complexity of the supply chain has also influence on the cost level:

- Number of products in the supply chain
- Number of harvesting and timber processing companies involved
- Length of supply chain
- Share of further processed products

Based on this assessment, it can be concluded that the additional LAS costs under a national FLEGT scheme is possible to be kept under EUR 2/m³ of roundwood logs in the tropical conditions, where physical segregation methods in the supply chain are commonly applied. This estimate does not cover the costs of present FIS and other forest authorities tasked to control the legal compliance of forest management and timber processing.
## COST ESTIMATES

<table>
<thead>
<tr>
<th>Cost factor</th>
<th>Unit cost EUR/unit</th>
<th>No of units</th>
<th>Annual costs EUR</th>
<th>Annual costs EUR/m³</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COST ESTIMATE OF CONSIGNMENT-BASED SYSTEM WITH NEW SOPHISTICATED SOFTWARE TOOLS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Verification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Inspectors</td>
<td>30 000</td>
<td>8</td>
<td>240 000</td>
<td>0.11</td>
<td>Covering all labor costs of new inspectors needed for implementing the verification tasks of the LAS</td>
</tr>
<tr>
<td>1.2 Field checks</td>
<td>300</td>
<td>200</td>
<td>60 000</td>
<td></td>
<td>Covers all operational costs (travel, accommodation, per diems, etc.) related to field checks</td>
</tr>
<tr>
<td>1.3 Office expenses</td>
<td></td>
<td></td>
<td>25 000</td>
<td></td>
<td>Lump sum covering additional office supplies, secretarial services, training, etc.</td>
</tr>
<tr>
<td>2 Control and monitoring system</td>
<td></td>
<td></td>
<td>5 050 000</td>
<td>1.68</td>
<td></td>
</tr>
<tr>
<td>2.1 Hardware costs</td>
<td></td>
<td></td>
<td>420 000</td>
<td></td>
<td>Investment cost of EUR 2.1 million covering e.g. server station, rugged laptops, handheld computers, barcode printers, Global Positioning System (GPS) devices, synchronization stations</td>
</tr>
<tr>
<td>2.2 Software costs</td>
<td></td>
<td></td>
<td>30 000</td>
<td></td>
<td>Investment cost of EUR 0.3 million</td>
</tr>
<tr>
<td>2.3 System implementation</td>
<td></td>
<td></td>
<td>100 000</td>
<td></td>
<td>Implementation cost of EUR 1.0 million covering software configuration, design and implementation (“consulting”/”professional services”)</td>
</tr>
<tr>
<td>2.4 Service provision</td>
<td></td>
<td></td>
<td>4 350 000</td>
<td></td>
<td>Covering site licenses, transaction charges, support and maintenance</td>
</tr>
<tr>
<td>2.5 Human resources</td>
<td></td>
<td></td>
<td>150 000</td>
<td></td>
<td>Consultation with local communities, training, etc.</td>
</tr>
<tr>
<td>3 FLEGT Licensing</td>
<td></td>
<td></td>
<td>110 000</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>3.1 Personnel</td>
<td>40 000</td>
<td>2</td>
<td>80 000</td>
<td></td>
<td>Covering all labor costs of staff of FLEGT licensing body</td>
</tr>
<tr>
<td>3.2 Expenses</td>
<td></td>
<td></td>
<td>30 000</td>
<td></td>
<td>Lump sum covering office expenses and issuance of export licenses</td>
</tr>
<tr>
<td>4 Independent monitoring</td>
<td></td>
<td></td>
<td>40 050</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>4.1 Fees of monitors</td>
<td>9 600</td>
<td>3</td>
<td>28 800</td>
<td></td>
<td>Unit cost covers work input of eight days per year, daily fee being EUR 1 200</td>
</tr>
<tr>
<td>4.2 Monitoring expenses</td>
<td>3 750</td>
<td>3</td>
<td>11 250</td>
<td></td>
<td>Covering international flights, accommodation, per diems and other direct expenses</td>
</tr>
<tr>
<td>5 TOTAL</td>
<td></td>
<td></td>
<td>5 525 050</td>
<td>1.84</td>
<td></td>
</tr>
<tr>
<td>Cost factor</td>
<td>Unit cost</td>
<td>No of units</td>
<td>Annual costs</td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EUR/unit</td>
<td>EUR/m³</td>
<td>EUR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Verification</td>
<td>350 000</td>
<td>0.12</td>
<td>240 000</td>
<td>Covering all labor costs of new inspectors needed for implementing the verification tasks of the LAS</td>
<td></td>
</tr>
<tr>
<td>1.1 Inspectors</td>
<td>30 000</td>
<td>8</td>
<td>240 000</td>
<td>Covering all labor costs of new inspectors needed for implementing the verification tasks of the LAS</td>
<td></td>
</tr>
<tr>
<td>1.2 Field checks</td>
<td>300</td>
<td>200</td>
<td>60 000</td>
<td>Covers all operational costs (travel, accommodation, per diems etc.) related to field checks</td>
<td></td>
</tr>
<tr>
<td>1.3 Office expenses</td>
<td>50 000</td>
<td></td>
<td>50 000</td>
<td>Lump sum covering data handling and analyses, office supplies, secretarial services, training, etc.</td>
<td></td>
</tr>
<tr>
<td>2 Control and monitoring system</td>
<td>170 000</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Hardware costs</td>
<td>5000</td>
<td></td>
<td></td>
<td>Annual investments of FIS in computers, printers and other devices over the life time of the control and monitoring system.</td>
<td></td>
</tr>
<tr>
<td>2.2 Software costs</td>
<td>5000</td>
<td></td>
<td></td>
<td>Annual investments in software tools in ten years</td>
<td></td>
</tr>
<tr>
<td>2.3 System implementation</td>
<td>5000</td>
<td></td>
<td></td>
<td>Implementation costs covering software configuration, design and implementation (&quot;consulting&quot; / &quot;professional services&quot;)</td>
<td></td>
</tr>
<tr>
<td>2.4 Service provision</td>
<td>5000</td>
<td></td>
<td></td>
<td>Covering licenses, charges, support and maintenance</td>
<td></td>
</tr>
<tr>
<td>2.5 Human resources</td>
<td>150 000</td>
<td></td>
<td></td>
<td>Consultation with local communities, training etc.</td>
<td></td>
</tr>
<tr>
<td>3 FLEGT Licensing</td>
<td>110 000</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Personnel</td>
<td>40 000</td>
<td>2</td>
<td>80 000</td>
<td>Covering all labor costs of staff of FLEGT licensing body</td>
<td></td>
</tr>
<tr>
<td>3.2 Expenses</td>
<td>30 000</td>
<td></td>
<td></td>
<td>Lump sum covering office expenses and issuance of export licenses</td>
<td></td>
</tr>
<tr>
<td>4 Independent monitoring</td>
<td>40 050</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Fees of monitors</td>
<td>9600</td>
<td>3</td>
<td>28 800</td>
<td>Unit cost covers work input of eight days per year, daily fee being EUR 1 200</td>
<td></td>
</tr>
<tr>
<td>4.2 Monitoring expenses</td>
<td>3750</td>
<td>3</td>
<td>11 250</td>
<td>Covering international flights, accommodation, per diems and other direct expenses</td>
<td></td>
</tr>
<tr>
<td>5 TOTAL</td>
<td>670 050</td>
<td>0.22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## COST ESTIMATE OF OPERATOR-BASED SYSTEM WITH NEW SOPHISTICATED SOFTWARE TOOLS

<table>
<thead>
<tr>
<th>Cost factor</th>
<th>Unit cost</th>
<th>No of units</th>
<th>Annual costs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR/unit</td>
<td>EUR</td>
<td>EUR/m³</td>
<td></td>
</tr>
<tr>
<td>Verification</td>
<td>95 000</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Inspectors</td>
<td>30 000</td>
<td>2</td>
<td>60 000</td>
<td>Covering all labor costs of new inspectors (assessment of management systems, field checks)</td>
</tr>
<tr>
<td>1.2 Field checks</td>
<td>300</td>
<td>50</td>
<td>15 000</td>
<td>Covers all operational costs (travel, accommodation, per diems etc.) related to field checks</td>
</tr>
<tr>
<td>1.3 Other expenses</td>
<td></td>
<td></td>
<td>20 000</td>
<td>Lump sum covering training of inspectors, additional office supplies, secretarial services etc.</td>
</tr>
<tr>
<td>Control and monitoring systems</td>
<td>5 050 000</td>
<td>1.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Hardware costs</td>
<td></td>
<td>420 000</td>
<td>Investment cost of EUR 2.1 million covering e.g. server station, rugged laptops, handheld computers, barcode printers, GPS devices, synchronization stations.</td>
<td></td>
</tr>
<tr>
<td>2.2 Software costs</td>
<td></td>
<td>30 000</td>
<td>Investment cost of EUR 0.3 million</td>
<td></td>
</tr>
<tr>
<td>2.3 System implementation</td>
<td></td>
<td>100 000</td>
<td>Implementation cost of EUR 1.0 million covering software configuration, design and implementation (&quot;consulting&quot;/&quot;professional services&quot;)</td>
<td></td>
</tr>
<tr>
<td>2.4 Service provision</td>
<td></td>
<td>4 350 000</td>
<td>Covering site licenses, transaction charges, support and maintenance</td>
<td></td>
</tr>
<tr>
<td>2.5 Human resources</td>
<td></td>
<td>150 000</td>
<td>Consultation with local communities, training, etc.</td>
<td></td>
</tr>
<tr>
<td>FLEGTS Licensing</td>
<td>110 000</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Personnel</td>
<td>40 000</td>
<td>2</td>
<td>80 000</td>
<td>Covering all labor costs of staff of FLEGTS licensing body</td>
</tr>
<tr>
<td>3.2 Expenses</td>
<td></td>
<td>30 000</td>
<td>Lump sum covering office expenses and issuance of export licenses</td>
<td></td>
</tr>
<tr>
<td>Independent monitoring</td>
<td>40 050</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1. Fees of monitors</td>
<td>9600</td>
<td>3</td>
<td>28 800</td>
<td>Unit cost covers work input of eight days per year, daily fee being EUR 1 200</td>
</tr>
<tr>
<td>4.2 Monitoring expenses</td>
<td>3750</td>
<td>3</td>
<td>11 250</td>
<td>Covering international flights, accommodation, per diems and other direct expenses</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5 295 050</td>
<td>1.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost factor</td>
<td>Unit cost</td>
<td>No of units</td>
<td>Annual costs</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>--------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>EUR/unit</td>
<td></td>
<td>EUR</td>
<td>EUR/m³</td>
</tr>
<tr>
<td><strong>COST ESTIMATE OF OPERATOR-BASED SYSTEM WITH EXISTING UPGRADED SOFTWARE TOOLS</strong></td>
<td></td>
<td></td>
<td>EUR</td>
<td></td>
</tr>
<tr>
<td>1 Verification</td>
<td></td>
<td></td>
<td>110 000</td>
<td>0.04</td>
</tr>
<tr>
<td>1.1 Inspectors</td>
<td>30 000</td>
<td>2</td>
<td>60 000</td>
<td></td>
</tr>
<tr>
<td>1.2 Field checks</td>
<td>300</td>
<td>100</td>
<td>30 000</td>
<td>Covers all operational costs (travel, accommodation, per diems, etc.) related to field checks</td>
</tr>
<tr>
<td>1.3 Other expenses</td>
<td></td>
<td></td>
<td>20 000</td>
<td>Lump sum covering training of inspectors, additional office supplies, secretarial services, etc.</td>
</tr>
<tr>
<td>2 Control and monitoring systems</td>
<td></td>
<td></td>
<td>760 000</td>
<td>0.25</td>
</tr>
<tr>
<td>2.1 Hardware costs</td>
<td>2 500</td>
<td>61</td>
<td>152 500</td>
<td>Annual investments of forest companies and FIS in computers, printers and other devices over the life time of the control and monitoring system</td>
</tr>
<tr>
<td>2.2 Software costs</td>
<td>1 500</td>
<td>61</td>
<td>91 500</td>
<td>Annual investments in software tools in ten years</td>
</tr>
<tr>
<td>2.3 System implementation</td>
<td>1 000</td>
<td>61</td>
<td>61 000</td>
<td>Implementation costs covering software configuration, design and implementation (&quot;consulting&quot; / &quot;professional services&quot;)</td>
</tr>
<tr>
<td>2.4 Service provision</td>
<td>5 000</td>
<td>61</td>
<td>305 000</td>
<td>Covering site licenses, transaction charges, support and maintenance</td>
</tr>
<tr>
<td>2.5 Human resources</td>
<td></td>
<td></td>
<td>150 000</td>
<td>Consultation with local communities, training, etc.</td>
</tr>
<tr>
<td>3 FLEGT Licensing</td>
<td></td>
<td></td>
<td>110 000</td>
<td>0.04</td>
</tr>
<tr>
<td>3.1 Personnel</td>
<td>40 000</td>
<td>2</td>
<td>80 000</td>
<td></td>
</tr>
<tr>
<td>3.2 Expenses</td>
<td></td>
<td></td>
<td>30 000</td>
<td>Lump sum covering office expenses and issuance of export licenses</td>
</tr>
<tr>
<td>4 Independent monitoring</td>
<td>40 050</td>
<td></td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>4.1 Fees of monitors</td>
<td>9 600</td>
<td>3</td>
<td>28 800</td>
<td>Unit cost covers work input of eight days per year, daily fee being EUR 1200</td>
</tr>
<tr>
<td>4.2 Monitoring expenses</td>
<td>3 750</td>
<td>3</td>
<td>11 250</td>
<td>Covering international flights, accommodation, per diems and other direct expenses</td>
</tr>
<tr>
<td>5 TOTAL</td>
<td></td>
<td></td>
<td>1 020 050</td>
<td>0.34</td>
</tr>
</tbody>
</table>
## GOVERNMENT SHARE

<table>
<thead>
<tr>
<th>Cost item</th>
<th>Consignment A</th>
<th>Consignment B</th>
<th>Operator A</th>
<th>Operator B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Verification</td>
<td>325 000</td>
<td>350 000</td>
<td>95 000</td>
<td>110 000</td>
</tr>
<tr>
<td>1.1 Inspectors</td>
<td>240 000</td>
<td>240 000</td>
<td>60 000</td>
<td>60 000</td>
</tr>
<tr>
<td>1.2 Field checks</td>
<td>60 000</td>
<td>60 000</td>
<td>15 000</td>
<td>30 000</td>
</tr>
<tr>
<td>1.3 Other expenses</td>
<td>25 000</td>
<td>50 000</td>
<td>20 000</td>
<td>20 000</td>
</tr>
<tr>
<td>2 Control and monitoring systems</td>
<td>1 420 000</td>
<td>20 000</td>
<td>243 385</td>
<td>10 000</td>
</tr>
<tr>
<td>2.1 Hardware costs</td>
<td>420 000</td>
<td>5000</td>
<td>14 385</td>
<td>2 500</td>
</tr>
<tr>
<td>2.2 Software costs</td>
<td>30 000</td>
<td>5000</td>
<td>1 500</td>
<td>1 500</td>
</tr>
<tr>
<td>2.3 System implementation</td>
<td>100 000</td>
<td>5000</td>
<td>10 000</td>
<td>1 000</td>
</tr>
<tr>
<td>2.4 Service provision</td>
<td>870 000</td>
<td>5000</td>
<td>217 500</td>
<td>5 000</td>
</tr>
<tr>
<td>2.5 Human resources</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3 FLEGT Licensing</td>
<td>110 000</td>
<td>110 000</td>
<td>110 000</td>
<td>110 000</td>
</tr>
<tr>
<td>3.1 Personnel</td>
<td>80 000</td>
<td>80 000</td>
<td>80 000</td>
<td>80 000</td>
</tr>
<tr>
<td>3.2 Expenses</td>
<td>30 000</td>
<td>30 000</td>
<td>30 000</td>
<td>30 000</td>
</tr>
<tr>
<td>4 Independent monitoring</td>
<td>40 050</td>
<td>40 050</td>
<td>40 050</td>
<td>40 050</td>
</tr>
<tr>
<td>4.1 Fees of monitors</td>
<td>28 800</td>
<td>28 800</td>
<td>28 800</td>
<td>28 800</td>
</tr>
<tr>
<td>4.2 Monitoring expenses</td>
<td>11 250</td>
<td>11 250</td>
<td>11 250</td>
<td>11 250</td>
</tr>
<tr>
<td>5 TOTAL</td>
<td>1 895 050</td>
<td>520 050</td>
<td>488 435</td>
<td>270 050</td>
</tr>
<tr>
<td>Per m(^3)</td>
<td>0.63</td>
<td>0.17</td>
<td>0.16</td>
<td>0.09</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>5 525 050</td>
<td>670 050</td>
<td>5 295 050</td>
<td>1 020 050</td>
</tr>
</tbody>
</table>

Government share, % | 34 | 78 | 9 | 26 |

Company’s share, %  | 66 | 22 | 91 | 74 |
### LAS COSTS SUMMARY

#### Table 1  LAS costs of additional options/ low-tech solution

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4a</th>
<th>Option 4b</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal assurance system</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regions covered</td>
<td>6 countries</td>
<td>12 countries (baseline) + 6 countries</td>
<td>All high/moderate risk countries</td>
<td>All non-EU</td>
<td>All non-EU + EU</td>
<td>All non-EU + EU</td>
</tr>
<tr>
<td><strong>Unit cost (EUR/m³)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.05</td>
<td>0.25</td>
<td>0.05</td>
<td>0.25</td>
<td>0.27</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.17</td>
<td>0.09</td>
<td>0.17</td>
<td>0.09</td>
<td>-</td>
<td>0.22</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Average annual cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.4</td>
<td>1.8</td>
<td>2.5</td>
<td>10.1</td>
<td>16.5</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>1.2</td>
<td>0.6</td>
<td>8.6</td>
<td>5.1</td>
<td>-</td>
<td>16.0</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Investment cost</strong> (EUR million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>-</td>
<td>5.3</td>
<td>-</td>
<td>38.7</td>
<td>32.4</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.3</td>
<td>2.0</td>
<td>-</td>
<td>-</td>
<td>2.9</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Table 2 LAS costs of additional options/ high-tech solution

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4a</th>
<th>Option 4b</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit cost (EUR/m³)</strong></td>
<td>Consign-</td>
<td>Operator</td>
<td>Consign-</td>
<td>Operator</td>
<td>Imports</td>
<td>EU roundwood</td>
</tr>
<tr>
<td></td>
<td>Consign-</td>
<td>Operator</td>
<td>Consign-</td>
<td>Operator</td>
<td>Imports</td>
<td>EU roundwood</td>
</tr>
<tr>
<td><strong>Annual recurrent cost</strong></td>
<td>(EUR million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.4</td>
<td>1.1</td>
<td>2.5</td>
<td>7.6</td>
<td>15.3</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>1.2</td>
<td>0.6</td>
<td>8.6</td>
<td>4.6</td>
<td>-</td>
<td>15.3</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Legal assurance system

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4a</th>
<th>Option 4b</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regions covered</strong></td>
<td>6 countries</td>
<td>12 countries (baseline) + 6 countries</td>
<td>All high/ moderate risk countries</td>
<td>All non-EU</td>
<td>All non-EU + EU</td>
<td>All non-EU + EU</td>
</tr>
<tr>
<td><strong>Unit cost (EUR/m³)</strong></td>
<td>Consign-</td>
<td>Operator</td>
<td>Consign-</td>
<td>Operator</td>
<td>Imports</td>
<td>EU roundwood</td>
</tr>
<tr>
<td></td>
<td>Consign-</td>
<td>Operator</td>
<td>Consign-</td>
<td>Operator</td>
<td>Imports</td>
<td>EU roundwood</td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>1.21</td>
<td>1.60</td>
<td>1.21</td>
<td>1.60</td>
<td>1.48</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>0.63</td>
<td>0.16</td>
<td>0.63</td>
<td>0.16</td>
<td>-</td>
<td>1.82</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Average Annual Cost</strong></td>
<td>(EUR million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>8.5</td>
<td>11.2</td>
<td>61.5</td>
<td>81.4</td>
<td>90.6</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unit cost (EUR/m³)</td>
<td>Baseline</td>
<td>Option 1</td>
<td>Option 2</td>
<td>Option 3</td>
<td>Option 4a</td>
<td>Option 4b</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Consign-</td>
<td>Operator</td>
<td>Consign-</td>
<td>Operator</td>
<td>Imports</td>
<td>EU roundwood</td>
</tr>
<tr>
<td></td>
<td>ment</td>
<td></td>
<td>ment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>4.4</td>
<td>1.1</td>
<td>32.0</td>
<td>8.1</td>
<td>-</td>
<td>132.7</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.4</td>
</tr>
<tr>
<td>Investment cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(EUR million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>-</td>
<td>7.5</td>
<td>-</td>
<td>54.4</td>
<td>65.5</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Government</td>
<td>7.9</td>
<td>0.4</td>
<td>57.5</td>
<td>3.1</td>
<td>-</td>
<td>82.4</td>
</tr>
<tr>
<td>- Non-EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Annual Recurrent Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(EUR million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-EU</td>
<td>8.5</td>
<td>8.5</td>
<td>61.5</td>
<td>61.5</td>
<td>78.9</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Government</td>
<td>3.2</td>
<td>2.6</td>
<td>22.9</td>
<td>18.8</td>
<td>-</td>
<td>120.3</td>
</tr>
<tr>
<td>- Non-EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- EU</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.4</td>
</tr>
</tbody>
</table>
TRANSFER OF ILLEGAL WOOD PRODUCTS FROM TROPICAL COUNTRIES TO THE EU VIA CHINA

China is considered one of the main transit countries for illegal wood products. The potential impact of circumvention is illustrated by assessing the significance of China as an indirect conduit to the EU for tropical timber products.

According to the International Tropical Timber Organization (ITTO) data, the average imports of tropical roundwood, sawnwood, and plywood & veneer to China between 2001-2005 were annually 13-14 million m³ (RWE); the total volume was more or less constant during this period. Anecdotal evidence suggests that imported hardwoods are mainly used for manufacturing furniture for exports. In 2005, the total volume of furniture exports from China was 9 million m³ (RWE) of which EU exports represent about 1.4 million m³ (RWE). In addition, according to ITTO statistics, in 2005 there were about 0.2 million m³ tropical plywood exported from China to the EU.

For illustration’s sake it is assumed that all furniture exports from China to the EU are made of tropical hardwood (obvious overestimate). Based on data from Turner & al. (2007) the exports of illegally harvested tropical plywood from China to the EU are estimated at 30 per cent of the total; a similar assumption is made regarding furniture exports. With these rather bold assumptions the volume of illegally harvested tropical wood products to the EU would be about 0.5 million m³ (RWE).

This is a fairly limited volume compared to the total imports of tropical timber products to China or total furniture exports from China. While it is true that Chinese exports to the EU have been, and still are, burgeoning (35 per cent increase in volume in 2006), the imports of tropical timber products to China have been constant suggesting that the relationship between imports of tropical timber products and furniture exports is not straightforward. It is possible that the expansion of furniture exports from China is based on other species than tropical ones.

It is likely that passing of illegal wood products to the EU via China will increase once the licensing scheme takes effect in baseline countries. The projected fall in the price of illegal goods in the partner countries and higher prices in the EU market would make this option increasingly attractive. However, a major escalation is still unlikely. Once the illegal goods arrive in China, there are several options to place the illegal goods on markets other than the EU. It is unlikely that exports of illegal timber to China would be motivated primarily with the specific objective of (processing and) shipping them to the EU.

There is, therefore, a risk that preventing circumvention through China would have limited impact on illegal logging in the countries of origin. If it were possible to implement, stopping consignments of illegal timber before they leave the country of origin, would be a more effective approach.
TRANSFER OF ILLEGAL WOOD PRODUCTS FROM RUSSIA TO THE EU VIA CHINA

Russia is the main source of imported wood and wood products in China. In 2005, the total volume of roundwood, sawnwood, veneer and plywood exports from Russia to China was 25 million m³ (RWE) according to official statistics. Imports of other products accounted for about 5 million m³ resulting in a total of 30 million m³ (RWE). In the last few years, the volume has been constantly increasing.

This trade has been particularly crucial for domestic consumption, with an estimated 79 per cent of Russian softwood logs consumed within China itself. About 80 per cent of this domestic consumption is used by China’s construction sector (Weiming et al. 2006).

In China, some 20 per cent of the 5 million m³ (RWE) of imports from Russia is estimated to be processed and then shipped for exports (Weiming et al. 2006). The export products are likely to include decorations and furniture. The principal export destinations are EU, Japan, the USA and Korea. Assuming that exports to the EU would account for 20-25 per cent of total exports, the export volume would be 1-1.25 million m³ (RWE).

Compared to the total volume of imports from Russia as well as the size of the domestic market (> 100 million m³), exports of illegal timber to the EU appear rather limited. If the licensing scheme were introduced, exports of illegal timber would probably be diverted to the rapidly expanding Chinese domestic market or other, less discernible export markets.

In this case as well, there is, therefore, a risk that preventing circumvention through China would have a limited impact on illegal logging in Russia. Stopping consignments of illegal timber before they cross the Russian border, would be a more effective approach.
IMPACTS OF THE LACEY ACT

In the USA, the Lacey Act prohibits the importing, exporting, transporting, selling, receiving, acquiring, or purchasing of "any fish or wildlife or plant taken, possessed, transported, or sold in violation” of a tribal, state, federal, or international law. The Lacey Act has a broad scope, even regulations at a lower level can be considered when evaluating compliance. The penalty regimes allowed by the Act are rather strict. A bill proposing to expand its coverage to wood products (so-called Legal Timber Protection Act) is being processed in the United States Senate.

The law enforcement agencies and legal experts generally consider the Lacey Act a useful tool (e.g. Webb 2000) even though few formal assessments of its impact are available. Fisher (2002) also sees the Lacey Act as a useful instrument of law enforcement but considers its implementation so far only a "moderate success". Its effectiveness is hindered by a lack of funding and human resources. The sentences handed down by the courts have also been relatively mild resulting in limited deterrence. Limitations of the Act are reflected in the continued prevalence of illegal wildlife trafficking in the USA; the Department of Fish and Wildlife has conservatively estimated that Americans pay USD 200 million annually for illegally caught domestic animals and USD 1 billion for illegal animals from abroad.

There is no experience on the effectiveness of the Lacey Act with respect to controlling the trade of wood and wood products. However, it is possible that producing evidence on illegal trafficking of wood products will be more complex than on other products that the Act has been commonly applied to. Potential hindrances include:

- Legality of wildlife can be assessed by analyzing the physical qualities of imported object (e.g. species, minimum length, etc.) whereas legality or illegality of wood products is usually determined on the harvesting site.

- With respect to fish catch, determining illegality has been relatively simple; the key piece of evidence is the vessel’s log book; should the vessel have been in an unauthorized position, the catch is considered illegal.
LEGAL FRAMEWORKS RELEVANT TO IMPORTS OF ILLEGAL TIMBER

The basic principle of legality demands that the criminalization and its components are clearly recognized in the domestic law of the EU Member States. As a rule, any country in the international sphere strives to maintain its own jurisdiction over its own citizens. It is unlikely that domestic criminal law sanctions could be made substantively, and openly depend on the criminal law regulation of another country. This would result in major problems concerning the application of the domestic criminal law on the basis of the principle of legal certainty i.e. that the person accused of a crime needs to be aware of provisions that apply.

The opportunities to harmonize legal frameworks within the EU are limited by the principle that regulation of the criminal law system is vested with the Member States. For the time being, the EU cannot regulate the field of criminal law and it cannot directly demand the Member States to change their national criminal rules. Consequently, it is conceivable that different Member States would have different penal frameworks and different definitions of “illegality”.

In this context, the recent ruling of the European Court of Justice (23 October 2007) has relevance. The Court reiterated its finding of two years ago that the Commission can oblige member states to introduce common penalties for environmental crime - in this case ship pollution - but said that the commission may not determine what criminal sanctions should be introduced for different environment crimes in member states. This ruling, in principle, allows different standards in different Member States.

International treaties/conventions may get significance in the interpretation of the national criminal law provisions even though the practice is not uniform across Member Countries. In Finland, for example, the provisions of international conventions may be taken into account, especially if through governmental proposals or if the treaties/conventions have interpretational value in the interpretation of criminal law provisions. In this case, clear, specific and unconditional provisions contained in treaties/conventions may be taken into account in the national court when interpreting the provisions of the national criminal law. However, in a number of Member States, the courts attach limited or no significance to international treaties/conventions in handling criminal cases.

Source: Kiikeri (pers. comm.)
TERMS OF REFERENCE

PART 1: TECHNICAL DESCRIPTION

1. Background

The Community policy on tackling illegal logging and related trade was set out in a Communication on a Forest Law Enforcement Governance and Trade (FLEGT) Action Plan (COM(251)2003). The Action Plan sets out a number of activities, amongst them a proposal for a voluntary but legally binding licensing scheme to ensure that imports of timber from countries entering the scheme have been legally harvested. Council Regulation 2173/2005 of 20 December 2005 provides the legal framework for the operation in the EU of the FLEGT Licensing scheme. A mandate for the Commission to negotiate FLEGT Partnership Agreements was agreed by the Council at the same time.

The FLEGT Action Plan recognized that the bilateral FLEGT Voluntary Partnership Agreements had a limitation, in that countries not covered by the scheme would not be bound by it, raising the possibility of circumvention. In this context over the course of the past 18 months, the Commission and Member States have considered the possibility of using existing Community or national legislation as well as potential additional measures to address this problem. At the same time a number of EU private sector timber trade federations and companies have increased their scrutiny of the sources of timber, though this has proven more difficult for processed wood products than for raw material.

On the basis of the work carried out to date the Commission has identified various potential options, the implications of which it now wishes to explore more deeply. The results of the Commission’s informed assessment will serve as key inputs for discussions and decisions within the Commission on the need for and possible form of additional legislative or other measures to prevent the importation of or placing on the EU market of illegally harvested timber or products derived from such timber. The Commission has decided to launch a call for tender to select a contractor to bring together relevant information and provide material to enable the Commission to make an assessment of the potential impacts of the various options.

2. Objectives

The study will present, in qualitative and — to the extent possible quantitative terms the likely economic (including administrative), social and environmental impacts of the options described in Section 3. The study will be an important input for the Commission to draw up its Impact Assessment of the options set out and will inform its decision on which option, if any, to develop further. Thus, rather than make recommendations on the various options, the study should list the pro’s and con’s, risks and potential associated costs without taking a final position on which option is considered to be best.

Bearing in mind the complexity of the issue of illegal logging and the globalized nature of forest products trade, the study will need to be rather wide-ranging and involve a number of disciplines.

3. Content / description of the tasks

3.1 General guidance

However it should be noted that the responsibility for the Impact Assessment rests with the EC and thus not all provisions of the Guidelines are directly applicable or relevant to the contractor.

3.2 Options for which assessment of impacts will be provided

The impacts of the following options will be assessed:

a) Continuation of FLEGT Voluntary Partnership Agreement (VPA) approach

Under this option two scenarios will be envisaged — one in which the majority of timber exporting countries with illegal logging problems negotiate FLEGT VPAs over the next four years, and one in which the uptake of FLEGT VPAs will be limited.

b) Voluntary measures by the private sector further developed

Under this option two scenarios can again be envisaged: one reflecting current trends in the EU with respect to sourcing and ensuring the legal origin of timber, and one involving an acceleration of efforts by the private sector to provide assurances concerning the origin and legality of timber and timber products.

c) Border Measures to Prevent the Importation of Illegally Harvested Timber

The study should examine the potential impacts of such a measure without pronouncing itself in detail on the WTO implications.

d) Prohibition on the Placing on the EU Market of illegally Harvested Timber

Under this heading the study will examine the potential impacts of new Community legislation to prohibit the placing on the EU market of illegally harvested timber. Such legislation could take the form of legislation requiring traceability of origin of all timber and forest products, as well as proof of legality. It could also take the form of legislation which would establish an offence of putting illegally harvested timber on the market but for which evidence would have to be produced that timber was illegally harvested on a case by case basis. The impact of both variants will be considered.

Should the study reveal other viable options they may also be assessed, subject to written confirmation from the task manager in the EC.

3.3 Further considerations

The impacts will be differentiated in terms of the EU forest sector, non-EU developed country forest product exporters and developing country forest product exporters to the EU, as well as presenting likely impacts on the forest sector globally. The study may identify further categories of countries affected and should also identify potential “winners” and “losers” within countries.

Bids should include a description of the methodology proposed to identify the impacts and to differentiate between the groups that could be affected by the measures. Bids should also indicate how stakeholders will be consulted.

The study will differentiate between short-term and medium to long-term impacts. It will take into account relevant factors such as the impact on the image of timber, on forest governance and on the use of competing materials.

The study should examine the social, environmental and economic impacts of the options, in the EU and third countries. Assessment of the economic impacts should be both from a broad economic perspective and the narrower financial perspective of the main stakeholders involved in the sector. The study should provide estimates of the
likely administrative costs under the options, based inter-alia on costs from voluntary forest certification and timber tracking schemes.

The Commission will conduct in early 2007 a public consultation on further options to combat illegal logging and associated trade, which will be posted on the “Your Voice in Europe” website. It is expected that the consultation will close in March 2007. Tenderers should indicate in their bid how information arising from the consultation exercise, as well as other relevant studies, will be taken into account in the impact assessment.

Provision should be made for the gathering of information for the impact assessment through interviews as well as through the use of published material. Such information gathering should take place within the EU as well as in 4-8 major exporting countries of forest products to the EU, including countries where illegal logging at significant levels is thought to occur.

In order to gather information for the impact assessment the contractor will be expected to hold six’ one-day stakeholder consultations in the EU including a meeting in Brussels for up to 80 people and five further consultation meetings in the EU for up to 40 people. The contractor will be responsible for hiring of the venues and for producing reports of the meetings and coordinating logistical arrangements, but not for travel costs of participants.

The contractor will also be expected to hold one-day stakeholder consultation meetings involving approximately 30 people in the 4-8 non-EU countries mentioned above, to gather relevant information for the impact assessment in three countries which are major timber exporters to the EU. The contractor will be responsible for hiring of the venues and for producing reports of the meetings and for coordinating logistical arrangements, but not for travel costs of participants.

The stakeholders to be consulted should include government bodies related to the forest sector (forest management and forest industries), the private sector, NGOs or community organizations with experience in the forest sector.
INDICATIONS ON MARKET CONDITIONS FOR FLEGT LICENSED TIMBER

Price premiums for legal wood and wood products on the EU market have not yet emerged. Based on interviews of timber traders, the buyers’ expectation, be they corporations or consumers, is that goods offered to them are legal. There is limited or no willingness to accept additional costs for proof of legality.

Based on the stakeholder survey (Technical Report 3) the private sector representatives saw FLEGT licensing to have some merit in giving timber products a better image and improving access to the EU market. A shift to substitute products was considered a minor risk, nor was it considered likely that FLEGT licensing would shift the demand to products available within the EU.

However, differing from the general trend, the Dutch and UK Timber Trade Federations showed cautious optimism. Moderate price premiums are considered possible for a small quantity of FLEGT products. The Dutch and UK markets show the highest promise.

There are no estimates available on the potential market for FLEGT products or their price premiums. For comparison, the demand for certified timber products is reported to represent about 10 percent of total demand in the UK, which is one of the most environmentally conscious consumer markets in the EU. Key product segments have price premiums of 2-7 percent when certified. The UK Timber Trade Federation reports that there is a steady but low demand for verified legal timber in the UK market (Roby, undated).
NEW MARKETS

Around 2020, India's population will reach some 1.25 billion people, of which nearly 70 percent will be in the age range of 16-65 years. It will have the world's largest working and consuming population. The outlook for economic growth is in the range of 6 to 7 percent a year. Combining these forecasts with the predicted continued rise in per capita income and the growth of the middle class, one can expect to see significant increases in consumption.

Within the next 20 years, India will probably overtake China in growth status, as its workforce continues to expand. It is estimated that industrial log consumption is currently 50 million m$^3$ and could grow to 90-120 million m$^3$ by 2020. Given the available information on the domestic wood supply, which is admittedly uncertain, there could be a deficit in India of 20-70 million m$^3$ by 2020 (White & al 2006). Unless the regulatory environment is improved and the control of imports is strengthened, there is a risk that India becomes another outlet of illegal timber.

The Middle East is another region with potential to become a major importer of wood products. With a population of nearly 200 million and high average income, imports of wood and wood products are expanding rapidly. Between 2000-2006, imports of primary forest products to the Middle Eastern countries expanded more than 13 million m$^3$ (RWE) according to official statistics.
European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent the Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 1
Voluntary Private Sector Schemes in EU Timber Trade

Helsinki
January 21, 2008
# Table of Contents

1. Introduction 1

2. Scope of Analysis 2

3. Industry and Trade Federations/Associations 3
   3.1.1 Wood Working Industry Federations 3
   3.1.2 Pulp & Paper Industry Federations 3
   3.2 Traders of Forest Products: Timber Trade Federations and Paper Publishers’ Associations 5
   3.2.1 Timber Trade Federations 5
   3.2.2 Publishers’ Associations 6

4. Responsible Timber Trade Networks 7
   4.1 Wood Processing Industry (Supply Oriented Networks) 7
      4.1.1 Global Forest Trade Network 7
   4.2 Traders of Forest Products (Demand Oriented Networks) 8
      4.2.1 Global Forest Trade Network 8
      4.2.2 Timber Trade Action Plan 9

5. Large Companies 11
   5.1 Wood Processing Industry 11
   5.2 Traders of Forest Products 12
      5.2.1 Retailers 12
      5.2.2 Paper and Packaging 13
      5.2.3 Construction 13

6. Conclusions 15
   6.1 Current Trends in the EU with Respect to Sourcing and Ensuring the Legality of Timber 15
       6.1.1 Industry and Timber Trade Federations/Associations 15
       6.1.2 Responsible Timber Trade Networks 15
       6.1.3 Large Companies 15
   6.2 Acceleration of the Efforts by the Private Sector to Ensure the Legality of Timber 16
       6.2.1 Industry and Timber Trade Federations/Associations 16
       6.2.2 Responsible Timber Trade Networks 16
       6.2.3 Large Companies 17

List of Boxes

Box 3.1 CEPI code of conduct principles 4
### ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEI-Bois</td>
<td>European Confederation of Wood Working Industries</td>
</tr>
<tr>
<td>CEPI</td>
<td>Confederation of European Paper Industries</td>
</tr>
<tr>
<td>EMAS</td>
<td>Eco-Management and Audit Scheme</td>
</tr>
<tr>
<td>EMS</td>
<td>Environmental Management System</td>
</tr>
<tr>
<td>ENGO</td>
<td>Environmental Non-governmental Organisation</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FEBO</td>
<td>European Timber Trade Federation</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement Governance and Trade</td>
</tr>
<tr>
<td>FSC</td>
<td>Forest Stewardship Council</td>
</tr>
<tr>
<td>FTN</td>
<td>Forest trade networks</td>
</tr>
<tr>
<td>GFTN</td>
<td>Global Forest Trade Network</td>
</tr>
<tr>
<td>ICFPA</td>
<td>International Council of Forest and Paper Associations</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>m³</td>
<td>Cubic meter</td>
</tr>
<tr>
<td>RTTN</td>
<td>Responsible Timber Trade Networks</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium-scale Enterprise</td>
</tr>
<tr>
<td>TTAP</td>
<td>Timber Trade Action Plan</td>
</tr>
<tr>
<td>TTF</td>
<td>timber trade federations</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreement</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wide Fund for Nature</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

The European Community policy on illegal logging and related trade was set out in the Forest Law Enforcement Governance and Trade (FLEGT) Action Plan in 2003. The Action Plan sets out a number of activities, amongst them a proposal for a voluntary but legally binding licensing scheme to ensure that imports of timber from countries entering the scheme have been legally harvested. Negotiations on these Voluntary Partnership Countries are underway with a number of timber producing countries.

However, the FLEGT Action Plan recognised that the bilateral FLEGT Voluntary Partnership Agreements (VPAs) may have a limitation in that they are vulnerable to circumvention. In this context, the Commission and Member States have considered the possibility of applying additional measures to address this problem.

Four options have been identified, one of which is further development of private sector voluntary schemes. This document analyses schemes that have been established by industry and trade federations, responsible timber trade networks (RTTN) and large corporations both across the wood processing industry and among traders of forest products in the European Union (EU).
2. **SCOPE OF ANALYSIS**

Voluntary schemes frequently incorporate codes of conduct or procurement policies to ensure the legality of timber. Code of conduct is a set of conventional principles and expectations that are set for companies who are members of a particular group. Procurement policy usually goes further than a code of conduct by demanding compliance on more specific requirements. However, procurement policy does not automatically result in better performance than code of conduct as the success of code of conduct and procurement policy is determined during their implementation. A well-implemented code of conduct can achieve more than a less rigorous procurement policy.

Code of conduct and procurement policy frequently include the principles and requirements such as: the origin of wood must legal and known; no wood from controversial sources, protected areas, and from intact natural forests is accepted; and preference for certified wood.

The analysis comprises of coverage, effectiveness and impacts of voluntary schemes and is conducted as follows:

- **The coverage** of the private sector schemes is determined through membership data of industry and trade federations/associations and responsible trade networks.
- **The effectiveness** of the private sector schemes is determined by looking into how current procurement policies and codes of conducts address the issue of legality i.e. what proof is required and how compliance is monitored (tracing systems, internal audits and third party audits).
- **The impacts** of the private sector schemes are assessed as well. The chapter considers economic, social, environmental, and governance impacts.

The document also asks the private sector their opinion on the best way to stop illegal timber entering into the EU market.

The information has been gathered through interviews of the following organisations: industry and trade federations/associations (12), responsible trade networks (8), large companies (11), and consultancies (2). Furthermore, the internet search has been used to obtain additional information as necessary.
3. INDUSTRY AND TRADE FEDERATIONS/ASSOCIATIONS

Several industry and trade federations have launched their codes of conduct to exclude illegal wood from their members’ supply chains. Pulp & paper industry and timber trade federations (TTFs) have been particularly active in their efforts to ensure the legality of timber whereas wood working industry federations have yet no immediate plans to establish codes of conduct in their sector.


3.1.1 Wood Working Industry Federations

The European Confederation of Wood Working Industries (CEI-Bois) is an umbrella organization representing the whole woodworking and furniture industries. CEI-Bois comprises of 27 national federations and 8 branch organizations.

In many European countries, forest industry federations represent both wood-working and pulp & paper industries, for example the Swedish Forest Industries Federation in Sweden. In addition, several branch organisations such as panel manufactures and saw mill industry federations represent their own sectors.

CEI-Bois does not have any code of conduct or procurement guidelines for responsible timber sourcing, and has yet no plans to establish one in the near future. National federations, excluding very few exceptions, do not have any code of conduct either. As the use of code of conduct or other voluntary initiatives is still very limited in the wood working industry federations, this paper is unable to analyse their coverage, effectiveness and impacts.

Regardless the lack of code of conduct at the federations, they promote responsible timber sourcing among the members. Also, the largest members often have procurement policies, and the use of procurement policies is definitely increasing at the company level.

Opinion on how to stop illegal timber trade. The federations fear that unless illegal logging is addressed at a global level, illegal wood might be channelled into non-EU countries, and also products made of illegal wood could be imported into the EU. The federations doubt that additional restrictive legislation could solve the problem of illegal timber, and therefore the EU should rather support good governance and law enforcement efforts in the producer countries.

3.1.2 Pulp & Paper Industry Federations

Confederation of European Paper Industries (CEPI) represents over 800 pulp, paper and board producing companies across Europe through its 17 national member federations.

CEPI has been actively engaged in the efforts to combat illegal logging and has demonstrated leadership among its national member federations. At the ENA-FLEG Conference of St Petersburg in 2005, CEPI launched a 6-principles code of conduct for legal logging, which has now been implemented nationally by the 17 member federations.
CEPI code of conduct includes the following principles:

**Box 3.1  CEPI code of conduct principles**

- Members commit to conduct logging operations legally.
- Members commit to purchase only legally logged wood.
- Members will have and implement procedures concerning wood procurement and compliance with law that correspond to the underlying principles of the Environmental Management System (EMS).
- Members shall make sure that the legality of purchased wood is correctly documented.
- Documents concerning wood procurement shall be properly maintained and made available upon request to any entitled authority.
- Members undertake to make their staff aware of the preceding principles and to train staff in this respect.

*Source: CEPI 2007*

In addition to the obligatory CEPI code of conduct, most of the CEPI members benefit from their own independently verified tracking systems that have been established prior to CEPI’s requirements.

**Coverage.** A total pulpwood consumption of CEPI members is 157,887,000 m$^3$ (2006), which is approximately 70-80 per cent of the European pulpwood consumption.

The majority of European pulp and paper manufacturers are CEPI members through their national federations and thereby obliged to the CEPI code of conduct implementation. In Finland and Sweden, for example, CEPI membership covers 100 per cent of pulp and paper industry.

To enhance wide acceptance and implementation, the code of conduct has been adapted to take into consideration the needs of small and medium-scale enterprises (SMEs) in regard to a full EMS compliance.

**Effectiveness.** The national federations report to CEPI after having themselves aggregated the information from the companies. At the moment, a third party verification is not required. The code of conduct implementation includes a sanction mechanism for non-complying companies. CEPI intends to report on the national implementation and the involvement of companies in its Sustainability Report 2007 that will be published in November this year. Since the implementation of code of conduct is meant to be a process, CEPI will regularly report on progress made in its implementation.

Various instruments at disposal of the pulp & paper producers - the CEPI code of conduct, EMS, national legislation, tracking systems, forest and chain of custody certification - have effectively contributed to reducing the procurement of illegally logged wood. It is also worth noting that the European pulp & paper industry procures only small amounts of wood or pulp from the most controversial countries.

Since the pulp & paper industry uses the CEPI code of conduct among other tools to ensure responsible wood sourcing, it is hard to assess its effectiveness as a single tool. Importantly, through the code of conduct CEPI and national federations have put the issue of illegal wood on the top of the industry’s agenda, and thus have made it a definite no-no for the pulp & paper producers.
Impacts. CEPI and national federations mentioned the following impacts of the code of conduct:

- Economic and social: any contribution to combat illegal logging increases the acceptance of wood imports in the EU.
- Governance: increased awareness of illegal logging and the need to combat it, both within the pulp and paper sector and along the supply chain.

Opinion on how to stop illegal timber trade. CEPI and national federations believe that additional restrictive legislation will not solve the problem. The EU should rather support the timber producing countries to progress towards good governance and efficient law enforcement.

3.2 Traders of Forest Products: Timber Trade Federations and Paper Publishers’ Associations

3.2.1 Timber Trade Federations

European TTFs actively promote responsible sourcing, and codes of conduct are commonplace at Central and Northern European TTFs. In Eastern and Southern Europe, responsible timber purchasing creates less interest. However, this is likely to change in the coming years as awareness of the issue slowly increases.

Coverage. Since many TTFs, for example European Timber Trade Federation (FEBO) and German TTF, have voluntary codes of conduct without any or little monitoring procedures in place, there is hardly any data on their coverage. A rationale for a voluntary approach is often that many members are SMEs with little resources to follow an obligatory code of conduct.

While codes of conduct are coming more commonplace across TTFs in Europe, procurement policies are still rare at the TTFs.

Effectiveness. Effectiveness of codes of conduct of TTFs varies greatly. A voluntary code of conduct without any compliance monitoring procedures in place can achieve very little compared to an obligatory code of conduct that is monitored by a respective TTF.

Current voluntary codes of conduct are not sufficiently effective on their own to ensure the legality of timber. Overall, European TTFs with few exceptions are not able to eliminate illegal timber in their members’ supply chains through existing codes of conduct.

There are few TTFs, such as the United Kingdom (UK) and Dutch federations that have been very proactive and effective in their efforts to ensure the legality of timber imports. They have introduced obligatory codes of conduct according to which members commit to buying only legal timber. In addition, the UK TTF has a voluntary procurement policy and supports the members in its implementation. The UK and Dutch TTFs members represent approximately 60-70 per cent of the timber trade in their countries. For these TTFs, a code of conduct is a reliable tool to ensure legality of timber or reduce purchase of illegal wood since they monitor compliance, for example, through complaints procedures, whereby other members can report on non-compliance.

Impacts. Codes of conduct have generated the following impacts:

- Social: the presence of European codes of conduct might have channelled illegal wood to countries with lax requirements.
• Governance: They are considered as an important first step to address the issue with increased awareness of legality and responsible sourcing issues in the European timber sector.

**Opinion on how to stop illegal timber trade.** The TTFs believe FLEGT legislation is needed to support the private initiatives. TTFs welcome VPAs, border measures and prohibition on illegal timber on the EU market.

### 3.2.2 Publishers’ Associations

Publishers’ associations are well aware of responsible paper sourcing and highlight the importance of legal wood usage in their members’ supply chains. However, publishers’ associations have seldom codes of conduct or guidelines in place for paper sourcing. They stated various reasons for the lack of codes of conduct including the following:

- The responsibility for paper sourcing lies on printers and paper producers.
- Paper producers are large companies, which have incorporated credible wood tracking systems into their independently verified EMS. This eliminates the need for publishers’ to trace the origin of wood used for their paper products.
- Many publishers are SMEs without any resources for code of conduct implementation.
- Publishers’ associations show little interest in launching their own codes of conduct as they feel their members can and should do their own decisions regarding the matter.

Many publishers’ associations co-operate with CEPI but do not follow their code of conduct for responsible paper sourcing. It is unlikely that publishers’ associations will launch any code of conduct or do any similar initiatives to promote legal paper sourcing.

However, a few large individual publishers have introduced their responsible paper purchase policies particularly in Germany and the UK. There is also a joint initiative by several UK publishers to buy paper responsibly (the Publishers Database for Responsible Environmental Paper Sourcing).
4. RESPONSIBLE TIMBER TRADE NETWORKS

The idea of RTTN is to work with both the wood processing industry and traders of wood products. RTTNs link timber suppliers and timber buyers together through trade networks that promote legal and sustainable timber sourcing. A team of timber trade and forestry professionals usually manages a RTTN and provides assistance to network members.

Supply oriented networks include forest industry, forest owners and managers, among others. RTTNs typically steer their resources into improving forest management practices in tropical countries with poor existing standards. Consequently, the majority of RTTNs are located in African, Asian and South American countries.

Most of the European RTTNs are demand-oriented networks of retailers, distributors, or importers who aim to influence timber suppliers in less developed countries to source legal and sustainable wood. Demand oriented networks have established timber procurement policies, which frequently encompass purchase requirements such as verification of legal origin and independent third party certification.

4.1 Wood Processing Industry (Supply Oriented Networks)

4.1.1 Global Forest Trade Network

Global Forest Trade Network (GFTN) is World Wide Fund for Nature’s (WWF) initiative to eliminate illegal logging and to improve the management of valuable and threatened forests. GFTN consists of supply and demand oriented national forest trade networks (FTN). GFTN operates by facilitating trade links between companies in these groups. Supply oriented FTNs aim to improve the management of forests by increasing credible certification of forests and curbing illegal logging, and to help communities have more control over their forests. (WWF web page, cited on September 16).

The participating companies of both supply and demand oriented FTNs commit to implement a three-year action plan, fulfil the requirements of the Responsible Purchasing Policy, and implement a stepwise approach for securing wood from legal, known and non-controversial sources. The companies are monitored based on the action plan agreed by both parties. In three years a company should move from known source to known licensed source, and then to source in progress to be certified, and finally credibly certified source.

Coverage. GFTN has thirteen supply-oriented FTNs in tropical and sub-tropical countries including Bolivia, Brazil, Cameroon, China, Congo Republic, Ghana, Honduras, Indonesia, Malaysia, Nicaragua, Panama, Peru, and Vietnam. In Europe, there are two supply oriented FTNs, in Sweden and Romania, and one FTN in development in Bulgaria.

All FTNs have a modest number of members varying from one participating company up to ten companies. The FTNs member companies represent approximately below five to ten per cent of the total wood use in their countries, with the exception of Sweden, where the national FTN covers the majority of the forest industry’s production.

The Indonesian and Brazilian FTNs are also significantly larger than an average FTN comprising of over twenty participants, nevertheless, their share of the national wood use remains modest.

The membership in Romanian and Bulgarian FTNs is approximately ten companies in each network. The production of the member companies represents less than 20 per cent of national wood production in Romania and Bulgaria.
Effectiveness. In general, the network is effective in reducing or eliminating illegal wood as it follows the guidelines of the GFTN and the members are monitored on a yearly basis.

The FTN in Romania has succeeded in reducing the amount of unknown and controversial wood. In Sweden, the members of the FTN are large companies, of which many had independently verified tracking systems in place prior to joining the FTN, nevertheless, the network has provided additional assurance on the legal origin of wood.

Impacts. One of the biggest impacts of the supply oriented FTNs is enhancement of Forest Stewardship Council (FSC) forest management and chain-of-custody certification worldwide:

- Due to the efforts of the Romanian FTN over one million hectares of state forests are now FSC certified.
- In Bulgaria 200,000 of state forests are certified according to the FSC standard, and the goal is to have 30 per cent of the state forests to be FSC certified by the end of 2012.
- In tropical countries, 2 million hectares of Asian forests, 1.5 million hectares of African forests, and 2 million hectares of South American forests are now managed according to the GFTN principles and are progressing to certification.

Opinion on how to stop illegal timber trade. The FTNs strongly believe that the EU legislation is needed to prevent the entry illegal timber into the EU. Private sector initiatives are helpful but on their own they cannot guarantee the legality of timber imports, for example many SMEs do not demand a proof of legality from their suppliers. Further, the FTNs argue that the EU legislation should make importers liable for legal origin of wood products, and FLEGT should apply to all wood imports.

4.2 Traders of Forest Products (Demand Oriented Networks)

4.2.1 Global Forest Trade Network

GFTN has demand oriented FTNs in Austria, Belgium, France, Germany, the UK, the Netherlands, Spain, and Sweden. Demand oriented FTNs influence forest companies or processors to source their forest products from well-managed forests.

Coverage. The FTNs’ membership is quite modest varying approximately from ten up to 40 companies in each national network. The member companies are estimated to represent less than 5 per cent of national timber and paper trade volumes in the above-mentioned countries. The figure is significantly higher in the UK, where the FTN has over 40 member companies.

The majority of the FTN members are large companies with corporate responsibility policies in place, which has facilitated the implementation of FTN requirements as well. The FTNs believe that rather than the costs but little need to demonstrate good corporate behaviour prevents the SMEs from joining the networks.

The membership of the FTNs is considered stable with a possible slight increase in the near future. This is partly explained by the strategy of GFTN to market the network to few leading companies of a sector including retail, paper, and construction sectors, among others. According to this strategy, a leading company creates awareness and shows an example in its own sector, making it easier for SMEs to join the network or follow similar purchase principles. The strategy has already resulted in the majority of retailers to purchase only FSC certified garden furniture. Another explanation for slowly expanding FTNs is that new members often require an intensive education period on responsible sourcing policy and its implementation. As FTNs are
Effectiveness. FTNs describe their member companies as highly motivated and committed to the FTN requirements. This enables a swift implementation and willingness to improve performance. Members' compliance is monitored yearly through reporting detailing amount traded and origin where possible, random checks to DIY members' shops, WWF's audits, and occasional third party audits. Also, close relationships between the national FTNs and their members make non-compliance unlikely.

The FTNs believe that their members have managed to significantly reduce or stop the amount of illegal wood entering into their supply chains.

Impacts. The FTNs have generated the following key impacts:

- Economic: increased prices for tropical wood with FSC chain-of-custody; more products with a FSC label in the retail sector; negative impact on the members' profits as they cannot buy illegal timber products, particularly garden furniture.
- Social: increased awareness of legality in the producer countries, e.g. some suppliers have switched to more reliable timber sources; some of the illegal wood is channelled to countries with lax requirements, and also to European companies who do not have similar requirements in place.
- Environmental: improved environmental quality in the forests which are FSC certified due the demand from the FTNs.
- Governance: increased awareness of responsible timber sourcing and FSC across the supply chain (in the timber trade sector in Europe and at suppliers in the producer countries).

4.2.2 Timber Trade Action Plan

Timber Trade Action Plan (TTAP) was developed in 2005 by a number of European TTFs as a response to the growing awareness of illegal logging and the need to harmonise the TTFs’ codes of conduct and procurement polices to ensure consistency. Currently the members include the Dutch, Belgian, UK, and French TTFs, and also FEBO and the European Hardwood Federation.

TTAP is the EU FLEGT Action Plan Project and is funded by the European Commission and the participating TTFs. The Tropical Forest Trust is managing the TTAP project on behalf of the participating TTFs.

TTAP works with members of European TTFs to achieve legally verified wood and wood products in their supply chains. TTAP operates as follows: TTFs and their members identify specific supply chains anchored in TTAP producer countries. Local TTAP teams then contact the timber suppliers, forests as well as factories, and assess their ability to become legally verified by identifying missing elements and developing an action plan to recommend how they can overcome the gaps in legality.

Coverage. Currently TTAP is working with 70 supply chains, providing training, financial support and helping companies put in place a timber tracking system.

TTAP aims to get more European TTFs to join the network. In the producer countries, TTAP markets the network to large companies whose membership would increase awareness and interest among smaller companies, and also across the timber sector.

Effectiveness. TTAP focuses on providing assistance on responsible sourcing, thus the network does not use traditional compliance monitoring tools such as audits.
However, if necessary, TTAP provides information on verification bodies to its members.

As a new network, TTAP has not yet stopped illegal timber entering into its members’ supply chains.

**Impacts.** TTAP has generated the following key impacts:

- **Social:** driver for discussion on legality and procurement policy harmonisation in Europe; created trust between European buyers and tropical country suppliers through sustaining the supply chain i.e. once controversial or illegal timber has been identified, the buyer allows the producer to address the problem instead of switching the supplier immediately.
- **Governance:** Increased awareness of legality in the producer countries

**Opinion on how to stop illegal timber trade.** TTAP believes voluntary schemes work as a further incentive for FLEGT legislation, which is necessary to eliminate the entry of illegal timber into the EU.
5. LARGE COMPANIES

Large corporations begun to introduce their own wood procurement policies in the late 1990s, and now procurement policies are commonplace among the leading companies of the forest industry, retail, paper and packaging, and construction sectors. The drivers for procurement policies have been various such as a need to communicate corporate responsibility to stakeholders, increased environmental awareness, environmental non-governmental organisation (ENGO) pressure, RTTN, trade and industry federations’ initiatives, and an example of other companies.

Rather than using wood procurement policies as a single tool to ensure responsible sourcing and legality of timber, large corporations frequently have a mix of instruments at their disposal, for example, forest and chain-of-custody certification, and ISO or Eco-Management and Audit Scheme (EMAS) certified EMS. Many procurement policies are integrated into corporate policies, and often they form an integral part of EMS.

5.1 Wood Processing Industry

The largest forest companies are typically integrates with a wide range of operations including logging, saw milling and/or other wood working divisions, and pulp & paper and carton divisions.

Coverage. All the interviewed large forest companies have established and implemented wood procurement policies. Procurement policies cover 100 per cent of the raw material used in their production including imported pulp.

Overall, the majority of large forest companies have already introduced procurement policies. The leadership of the largest companies together with the CEPI code of conduct has accelerated a launch of procurement policies among SMEs as well.

Effectiveness. Wood procurement policies of the large forest companies are no doubt effective of eliminating illegal wood in the forest industry’s supply chains. First, wood procurement policies compliment other responsible procurement tools such as forest and chain-of-custody certification. Second, wood procurement policies are integrated into the EMS that bring these principles into practice. Third, the EMS are often certified to independently verified standards such as EMAS or ISO.

The interviewed forest companies were convinced that procurement policies implemented together with other tools has stopped illegal wood from entering into their supply chains although they admitted that the effectiveness could be further improved by increasing internal and third party audits.

Impacts. The procurement policies have had the following impacts:

- Economic: Increased acceptance of wood imports to the EU; switch to more reliable wood suppliers in the non-EU countries, which has caused additional costs to the European producer.
- Social: improved image in the market and among ENGO community.
- Environmental: improved forest management practices.
- Governance: increased awareness of responsible wood sourcing among suppliers; enhanced transparency.

Opinion on how to stop illegal timber trade. While the forest industry believes that voluntary initiatives such as their procurement policies and forest and chain-of-custody certification are effective in eliminating illegal wood imports into the EU, they also welcome FLEGT legislation. It was stressed that FLEGT should address the problems
in the countries where they exist, therefore capacity building and other assistance in the producer countries is crucial.

5.2 Traders of Forest Products

5.2.1 Retailers

As a result of ENGO pressure and enhanced environmental awareness, the retailers have increasingly introduced their own wood procurement policies along other corporate responsibility policies. In addition to having their own procurement policies, many retailers belong to WWF’s FTNs, and consequently have ensured that their policies are in line with FTNs’ requirements.

**Coverage.** The majority of the largest home improvement and furniture retailers have wood procurement policies in place. The trend is definitely increasing in the existing segments and also to other retail operations such as supermarkets.

**Effectiveness.** Retailers monitor their suppliers’ compliance through timber tracking systems, annual reporting, and internal audits. Third party audits are seldom carried out due to their high costs, although retailers acknowledge that independent audits would increase the effectiveness.

Long supply chains with multiple suppliers and sub-suppliers operating in various countries pose a major challenge for policy implementation. Compliance across the supply chain requires intensive training and monitoring for which retailers sometimes fail to have adequate time and resources.

The effectiveness of procurement policies has suffered from the complexity of retailers’ supply chains rather than from the lack of efforts. Nevertheless, retailers believe that the introduction of procurement policies has significantly reduced the use of illegal wood in their supply chains. Currently voluntary schemes are not effective enough to eliminate illegal wood in retailers’ supply chains.

Retailers intend to improve the effectiveness by encouraging more suppliers to obtain chain-of-custody certification. Another trend in the retail sector is to simplify and harmonise procurement policies by aligning purchase requirements with other commonly used requirements such as FSC controlled wood requirements.

**Impacts.** Procurement policies have had the following impacts:

- Economic: demand and prices for certified timber, particularly for FSC, have increased in the retail sector.
- Social: smaller companies and competitors have followed the example by introducing wood procurement policies or similar purchase requirements; reduced illegal logging in tropical countries; illegal wood has been redirected to other countries - this is perceived as a problem in the short term but as procurement policies become commonplace globally, amount of illegal timber declines.
- Environmental: enhanced biodiversity in tropical countries
- Governance: increased awareness of responsible sourcing and transparency throughout the supply chains in the South East-Asian countries, Russia and Europe.

**Opinion on how to stop illegal timber trade.** While retailers are supportive of FLEGT legislation, they remain sceptical of its effectiveness to eliminate illegal timber imports. In order to be successful, FLEGT should align the EU requirements for a proof of legality with other commonly used requirements such as FSC and PEFC chain-of-custody, and FSC controlled wood requirements.
5.2.2 Paper and Packaging

The leading companies in the paper and packaging sector have increasingly joined the WWF’s Timber Trade Network, which has assisted them in paper procurement policy implementation.

Coverage. A few leading publishers, paper merchants, office paper suppliers and packaging companies have their own paper and carton procurement policies, though policies are more common in environmentally sensitive markets in the UK and Germany. Currently the majority of companies in publishing and packaging sectors do not have any policies in place.

The paper and packaging sector highlights the importance of co-ordinated procurement policies by the trade and industry federations in order to assure a wide coverage across the sector, in particular SMEs’ involvement, and to avoid free-riding. However, federations should not have the responsibility for policy implementation since this could result in poor effectiveness.

Effectiveness. Companies in the paper and packaging sector monitor their suppliers performance through various instruments including annual reporting, 3rd party audits, supplier visits, and FTN’s action plan (FTN members). Some innovative tools are also used such as publishing the names of suppliers on the Internet, where their performance in open to scrutiny of ENGOs and other interested parties.

The interviewed companies considered illegal wood not as a problem in their supply chains as paper and carton producers are very reliable suppliers i.e. they are large forest companies who benefit from forest and chain-of-custody certification and independently verified EMS.

Impacts. Paper and packaging sector stated the following impacts of their procurement policies:

- Economic (indirect): good corporate reputation guarantees undisturbed business and market confidence.
- Social: leadership in the own sector has accelerated the introduction of procurement policies.
- Environmental: more recycled paper usage
- Governance: increased awareness and transparency have.

Opinion on how to stop illegal timber trade. Companies in paper and packaging sector consider voluntary procurement policies as the most effective way to prevent use of illegal wood in their supply chains, although FLEGT legislation could compliment voluntary initiatives.

Voluntary schemes are highly valued as they are based on the principle of producer responsibility i.e. buyer companies assume the responsibility of legality and pass it onto producers. Further, the paper and packaging sector argues that state agreements, such as VPAs, cannot replace the company commitment without jeopardising the effectiveness.

5.2.3 Construction

The largest construction companies are often public multinationals, and thereby obliged to transparency. A few construction companies have joined the WWF’s Forest Trade Network to ensure the legality of timber products.

Coverage. The largest construction companies operating in Europe have wood procurement policies in place. Some companies are currently in a process of
expanding the scope of their procurement polices to cover all the divisions and subsidiaries.

**Effectiveness.** As most procurement policies in the construction sector demand the use of independently chain-of-custody certified timber products, illegal wood has been effectively eliminated from supply chains of the leading companies.

**Impacts.** Procurement polices have generated the following impacts:

- Economic: increase use of certified timber products at the construction sector.
- Governance: increased awareness of responsible sourcing in the own sector and among suppliers.

**Opinion on how to stop illegal timber trade.** The leading construction companies believe chain-of-custody certification is the best way to guarantee legality of timber imports, but the sector is also supportive of FLEGT legislation. It could be particularly useful for SMEs in the construction sector.
6. CONCLUSIONS

6.1 Current Trends in the EU with Respect to Sourcing and Ensuring the Legality of Timber

6.1.1 Industry and Timber Trade Federations/Associations

Within the wood processing industry, wood working industry federations have seldom established their own codes of conduct or procurement guidelines for ensuring legality of timber in their members’ supply chains. An important factor explaining the lack of co-ordinated initiatives for legal wood sourcing at the wood working industry federations is their membership composition i.e. many members are SMEs with little capacity for successful code of conduct or procurement policy implementation. On the other hand, SMEs could benefit from the co-ordinated sector efforts as they unlikely to act independently to ensure the legality of wood imports.

Pulp & paper industry federations, with CEPI’s leadership, have set up an obligatory code of conduct in order eliminate the use of illegal timber across the sector. All the federation member companies follow the CEPI code of conduct as well as their own wood procurement policies and other responsible sourcing tools.

On the wood products traders’ side, TTFs are increasingly active in promoting responsible and legal timber sourcing among their members and in the timber trade sector in general. TTFs’, particularly in Central Europe, have their own codes of conduct. In addition to codes of conduct, TTFs co-operate with other industry and trade federations and ENGOs to ensure legality and sustainability of timber trade.

Paper publishers associations are well informed of legality and other responsible wood sourcing issues. They consider that their suppliers, paper producers, have successfully managed wood procurement and thus eliminated illegal wood in the paper supply chains. Consequently, paper publishers associations have not felt the need to establish their own initiatives.

6.1.2 Responsible Timber Trade Networks

The largest RTTN operating in Europe is WWF’s Forest Trade Network. The coverage of WWF’s FTNs and other RTTNs is modest but their importance goes beyond the membership numbers. In addition to showing the leadership in responsible timber sourcing in the private sector, they have provided a forum for discussion on the issues surrounding the legality of timber for various stakeholders including government bodies, ENGOs, forest industry, forest owners, among others. RTTNs have also been successful in reducing or eliminating illegal timber in their members’ supply chains.

6.1.3 Large Companies

Within the wood processing industry, the largest forest companies are typically pulp & paper producers, or integrates encompassing both wood working and pulp & paper divisions. These corporations have own procurement policies in place that are implemented through a mix of tools including wood tracking systems, forest and chain-of-custody certification, and EMS. As a result, the leading forest companies have effectively eliminated illegal wood in their wood procurement.

On the wood product traders side, the largest companies in retail, paper & packaging, and construction sectors have increasingly set up their timber and paper procurement policies.

The leading retailers have often joined WWF’s FTN and consequently implemented timber procurement policies that are based on WWF’s guidelines for responsible
timber sourcing. Whilst the retailers are committed to procurement policy implementation, long supply chains have deterred their efforts to eliminate illegal wood in their timber procurement.

Paper and packaging sector is quite confident that their suppliers, paper producers, have traced the origin of wood to assure its legality. However, procurement policies are often a part of corporate policies among the leading companies in the sector.

Construction companies have procurement policies that rely on the requirement for chain-of-custody certification. This has enabled the leading companies to ensure the legality of their timber procurement.

6.2 Acceleration of the Efforts by the Private Sector to Ensure the Legality of Timber

6.2.1 Industry and Timber Trade Federations/Associations

On the wood processing industry side, wood working industry federations are slowly increasing their efforts to ensure the legality of timber. The federations focus on providing further information on legal and responsible sourcing to their members as they believe that this is the first step, particularly for SME members, to achieve legal timber procurement. Therefore, the woodworking industry federations have no immediate plans to accelerate the introduction of codes of conduct or other initiatives regarding legal timber sourcing. However, as many companies operating in the wood working industry excluding integrates are SMEs with few instruments at their disposal to ensure legality of timber, without any additional measures in place the risk remains that they procure illegal timber unknowingly.

In CEPI's leadership, national pulp & paper industry federations continue their efforts to ensure the legality of raw material. CEPI co-operates also globally, for example with the International Council of Forest and Paper Associations (ICFPA), to eliminate illegal logging. CEPI and ICFPA have established their joint action plan to curb the use of illegal timber. As most of the European pulp & paper producers have already implemented measures to combat illegal wood procurement, it is expected that European pulp & paper federations will increase their global activities to address the issue.

On the wood product traders’ side, the European TTFs will definitely increase the use of codes of conduct, procurement policies, and also co-operation between the TTFs and ENGOs in order to eliminate illegal logging. Also, the TTFs aim to harmonise their codes of conduct and procurement policies to create consistency, which would enhance their acceptance across the supply chain and thus ease policy implementation. Although the TTFs have demonstrated a good progress towards legal timber procurement, they are not likely to combat illegal logging through their own initiatives due to the complexity of the issue.

6.2.2 Responsible Timber Trade Networks

On the wood products traders’ side, demand oriented RTTNs are gradually increasing particularly in environmentally sensitive markets such as the UK, Germany and Benelux. Their main focus will be on ensuring legality of tropical timber. RTTNs coverage will remain quite modest in the near future, nevertheless, they provide the necessary leadership in legal timber procurement by attracting the leading companies in retail, construction, and paper and packaging sectors as their members. While RTTNs complement well other voluntary initiatives to curb illegal logging, the members of RTTNs would benefit from additional measures to ensure the legality of timber.
6.2.3 Large Companies

On the wood processing industry side, the trend among the leading forest companies is an intention to increase chain-of-custody certification to cover all the wood sources. In order to achieve this, they provide assistance for logging companies and forest owners in Europe and also in non-EU countries such as Russia.

The forest industry and the consultancies offering third-party verification services for forest and chain-of-custody certification and EMS, are convinced that chain-of-custody is the most effective instrument to curb procurement of illegal timber.

The consultancies argue that chain-of-custody is currently the only proven tool to guarantee the legality. Other benefits of chain-of-custody certification include its voluntary application, and market awareness of and consequent demand for chain-of-custody certification. Both the forest industry and consultancies doubt the effectiveness of legislation compared to voluntary measures such as chain-of-custody certification.

According to consultancies, other reliable instruments, for example bar codes and satellite pictures, are expensive with limited possibilities for wider use.

On the wood products traders' side, the leading companies in the retail, paper and packaging, and construction sectors are accelerating their efforts to ensure the legality of timber. The companies aim to increase chain-of-custody certification in their supply chains, and to simplify the procurement policies to ease the implementation. In addition, co-operation with ENGOs and joint sector initiatives to promote legal sourcing are increasing. For example, in July 2007, three biggest beverage carton packaging producers launched a commitment to achieve 100% traceability for all wood used in their manufacture worldwide.

Although the large corporations welcome legislative measures to combat illegal logging to complement voluntary initiatives, they believe that the active involvement and commitment of individual companies will remain crucial for ensuring the legality of timber.
Communicating and Reconciling Forest Values

Markets and Society

Industrial Forest Products
Environmental & Social Services

Biodiversity
Environment

Policy and Institutions

Industrial Processing

Strategic and Landscape-level Planning

Procurement and Transport

Sustainable Forest Management

Forest Products Harvesting

INDUFOR

Töölönkatu 11 A
FI-00100 Helsinki, FINLAND

Tel.: +358 9 684 0110, fax: +358 9 135 2552
indufor@indufor.fi
www.indufor.fi
European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent the Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 2
Legal Analysis

Indufor Oy, Finland

in association with
Markku Kiikeri Ky. Finland

Helsinki, Finland
January 21, 2008
DISCLAIMER

Indufor makes its best effort to provide accurate and complete information while executing the assignment. Indufor assumes no liability or responsibility for any outcome of the assignment.

Copyright © 2008 by Indufor Oy
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, but not limited to, photocopying, recording or otherwise.
TABLE OF CONTENTS

1. INTRODUCTION 3

2. COUNTRY CASE STUDY 4
   2.1 Finland 4
   2.2 Spain 4
   2.3 United Kingdom 4

3. LEGAL COMMENTS 6

4. INTERVIEWS 11
   4.1 Finland 11
      4.1.1 State Prosecutor 11
      4.1.2 Police Force 12
      4.1.3 Customs 13
   4.2 Spain 14
      4.2.1 State Prosecutor 14
      4.2.2 Customs 15
      4.2.3 Police Force 15
      4.2.4 Law Firm 17
   4.3 United Kingdom 17
      4.3.1 State Prosecutor 17
      4.3.2 Police Force 18
      4.3.3 Customs 19

5. CONCLUSIONS 21
   5.1 Finland 21
   5.2 Spain 22
   5.3 United Kingdom 22

6. REFERENCES 23

LIST OF ANNEXES

Annex 1 Spain - Importation System
Annex 2 Spain - Criminal Code
Annex 3 Spain - Ley Orgánica de Represión del Contrabando
### ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITES</td>
<td>Convention on International Trade In Endangered Species of Wild Fauna and Flora</td>
</tr>
<tr>
<td>COTES</td>
<td>Control of Trade in Endangered Species</td>
</tr>
<tr>
<td>CPS</td>
<td>Crown Prosecution Service</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>DUA</td>
<td>Documento Unico Administrativo</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>FC</td>
<td>Forestry Commission</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade</td>
</tr>
<tr>
<td>HMRC</td>
<td>HM Revenue &amp; Customs</td>
</tr>
<tr>
<td>m³</td>
<td>Cubic meter</td>
</tr>
<tr>
<td>NBI</td>
<td>National Bureau of Investigation</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
</tr>
<tr>
<td>NWCU</td>
<td>UK National Wildlife Crime Unit</td>
</tr>
<tr>
<td>PWCO</td>
<td>Police Wildlife Crime Officer</td>
</tr>
<tr>
<td>SEPRONA</td>
<td>Servicio de Protección de la Naturaleza</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreement</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

Illegal logging and associated trade is a major problem for many timber-producing countries in the developing world. This activity causes environmental damage, costs governments billions of dollars in lost revenue, promotes corruption, undermines the rule of law and good governance, and retards sustainable development. Given that timber is highly exported to the European Union (EU), the European Commission (EC) decided to take action and address these issues through the adoption of the Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT) in 2003.

The Action Plan blends measures in producer and consumer countries to facilitate trade in legal timber, and eliminates illegal sources from trade with the EU. One of the cornerstones of the FLEGT Action Plan, are Voluntary Partnership Agreements (VPAs) with producer countries suffering from problems of illegal logging and poor forest governance. These would provide for an export licensing system by exporting countries and empower EU border control agencies to deny access to unlicensed timber products from those countries. A series of VPAs are currently under negotiation and the most likely early signatories include Cameroon, Ghana, Indonesia and Malaysia.

However, given that VPA is not mandatory, and because this system is based on bilateral agreements, the problem remains of how to exclude illegal timber from nonparticipating producer countries, and also how to exclude illegal timber from partner countries that manages to evade the licensing controls by transshipment through non-partner countries, for example. In the later case, the EU could not take action against illegal timber imports from countries that choose not to enter into such agreements.
2. COUNTRY CASE STUDY

To address the loopholes in the VPAs’ license scheme, the FLEGT Action Plan contains a commitment that requires EU member states to examine their domestic legislation in order to assess if their current framework would enable them to act on illegal timber in their territories. To date, only some countries conducted such study: Estonia, the United Kingdom (UK), the Netherlands, Finland, Spain, Germany, and Italy.

The studies analyzed the effectiveness of domestic regulations on issues such as theft, receiving stolen goods and money-laundering to address illegal logging related crimes in foreign export countries. Below are some conclusions of the studies conducted in Finland, Spain and the UK.

2.1 Finland

The study concluded that its results do not differ much from those suggested by studies made in other EU member states.

The Ministry provided the following summary of its findings:

The Finnish study focused on four areas: (1) theft, (2) money laundering, (3) customs legislation, and (4) Convention on International Trade In Endangered Species of Wild Fauna and Flora (CITES). Problems regarding the usefulness/applicability of the Finnish legislation are much the same as in other countries which have so far carried out a similar review, even if there are some differences in detail between respective national laws. In principle the Finnish legislation offers some means to address the import of illegal timber into Finland, but in practice the chances are greatly reduced by various practical aspects related to the substantiation of crimes.

2.2 Spain

There are several legal diplomas in Spain to deal with the matter of illegal logging. The Spanish country case study of national legislation conducted by Martí & Associats, concluded that in spite of the existence of so many legal fundamentals, to be able to proceed to the suppression of such conduct, the efficacy of these are a long way from being ideal. The Firm asserts that the multiple factors, such as the elements of transnationality, the configuration of the Spanish Administration, the heterogeneous nature of the illicit behaviour and of the poor tradition in the prosecution of such conduct, are difficult to resolve. Therefore, the adoption of different measures could, in large part, optimise the efficacy in the suppression of the said conduct.

It also concludes that at the level of the criminal prosecution, specific legislative modifications are required, together with a greater international coordination (through bilateral or multilateral agreements in the legislative field such as execution or suppression - INTERPOL). According to them, these measures would undoubtedly contribute to a greater efficiency and ease in obtaining the necessary evidence in the criminal prosecution of such crimes.

2.3 United Kingdom

In the UK there have been several debates on the possibility to use legislations covering money laundering to address the issue of illegal logging imported to the country. Money laundering is the processing of proceeds of crime to disguise their illegal. Since illegal logging may result in transfer of financial and physical proceeds of a crime committed abroad to the UK, it has been argued that UK anti-money laundering legislation could provide a useful way to tackle it.
However, Mr. Hugh Speechly from the Department for International Development (DFID) in the UK, highlights that in practice there are several constraints to effective implement such rules. Some of them are: low level awareness within UK enforcement agencies of illegal logging issues and the possible links between wildlife crime and money laundering; limited experience within the enforcement agencies of investigation of similar cases.

The UK country case study concluded that, in theory, action against illegal timber produced overseas and imported into the UK could be taken under several different frameworks. The problems arise with the practical implementation of the legislation, with the complexity of cases, and the need to build effective cooperation with overseas authorities, and the fact that this topic is given very low priority by the enforcement agencies. The study also concluded that licensing system still best solution and that action under any legislation would have major demonstration effect; incentives to assure legality.
3. LEGAL COMMENTS

Even though the EU is one of the largest importers of timber and forest products, as of now disposes of no legal mandatory means to halt the import of those illegally-sourced with the exception of CITES (and the related EC Regulation 338/1997), which is only applicable if it concerns CITES species. The FLEGT Action Plan, as seen, was not written to be a mandatory diploma, therefore can have limited impact within the EU.

In this section we will analyze, through the legality lens, some aspects of the proposed options 3 and 4 of the Action Plan.

**Additional Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber**

This option would prohibit the importation of illegally harvested timber to the EU. From a practical point of view, this option would have to be accompanied with arrangements that allow the establishment of the legality of products in a shipment through a rapid procedure based on documentation. The responsibility for providing evidence on the legality would rest with the authorities in the exporting country.

**Additional Option 4: Prohibition on the Placing on the EU Market of Illegally Harvested Timber**

**Sub-option 4a**: Legislation which prohibits the trading and possession of timber and timber products harvested in breach of the laws of the country of origin (i.e. where trees harvested)

Evidence would have to be produced that timber was illegally harvested on a case-by-case basis. The importer would have the responsibility for proving the legality of timber products, while the suppliers would be required to provide necessary credible evidence. The burden of proof is on the one who claims that imported products are illegal i.e. goods are legal unless proven otherwise.

**Sub-option 4b**: Legislation which requires that only legally harvested timber and timber products be placed on the market

This sub-option would require suppliers to provide evidence of the origin of timber and evidence on legality of forest harvesting in the origin. The obligation to provide adequate evidence could be comprehensive for all deliveries. The burden on proof would be on the importer who would has to prove that goods are legal. Being unable to do so would constitute an offence.

**Criminal Law**

It has to be kept in mind that EU cannot directly demand changes in criminal law in any specific sense, but it may only demand efficacy regarding the implementing measures. Consequently, Member States may introduce criminalization and other supervising measures and it is for the follow-up to determine, whether the implementation has been efficient enough taking into consideration the aims and the clear and precise provisions in the EU legislation.

**Documentation**

Secondly, it seems that a system of documentation would be the way to go. However, here we have basically three alternatives to do that:

1. Documents presented and controlled by the customs;
2. Documents controlled by some administrative body when the product is placed into the market;
3. Documents controlled by private parties, when the product is placed into the market.
It seems that in any of the three cases described above, one has to have a possibility for a posteriori check of the validity of the documentation and the placing into the market of the product. This takes place in the first case with a normal criminal law procedure, which controls basically the authenticity of the documentation and the nature of the product. Here the threshold for criminal legal procedure is naturally higher. The second alternative needs the described check as well, but it is based more on the investigation of the product itself.

The mere criminalization on the basis of inability to present documentation seems to be disproportional, given that this must be connected to the nature of the importation as a whole. The measures related to the criminalization in cases 2 and 3 must be related also to the investigation of the nature of the product and directly based on the act of placing the product into the market.

It seems that the EU measures creating the documentation system is combined with the implementation (effective implementation) measures of the Member States. These two aspects go hand in hand in the whole system. What the EU may demand from MSs is to put efficiently in force the documentation system and to establish such a control and penalty system, which enforces the documentation system.

The control-system needs, of course, also standard custom strategies for follow-up of the imported wood within the EU. So, normal cooperation procedures would apply.

The actor

There are several aspects related to the actor dimension. First of all, Member States have to define who are the ones committing the act (assisting, producing documents, harvesting actors, importers, seller, buyer). The nature of these acts is related to the act itself to be criminalized or controlled in the country of importation. This is related also to the knowledge of the actors concerning the previous and consequent stages of the act. The act itself is the placing of the market or the presentation of the false documentation. However, can those harvesting the wood be accused too? On the other hand, what type of knowledge is required from the one buying the wood in the country of the importation or placing-into-the-market? As maintained, however, it is the Member State where the act is being undertaken to determine the criminal responsibility. EU hardly can harmonize the criminal law measures within the EU.

Regarding the options and their relationship

- In option 4 it is not the customs who are studying the nature of the wood.
- In option 3, the police and prosecutors would study the case as a breach of custom rules, but as well as a importation of the illegal wood. In a way, a production of the illegal documentation is only one question of proof of the illegality of the wood. They could study it in the first place only as a breach of customs rules regarding the documentation or a forgery of documentation. That would be an independent crime as such. It would be totally another crime to import illegally harvested wood, if that would be regulated in the national law.

The question of the workload

The question of workload of different actors is directly related to the demands of the formality of the documentation. If the request in law is to produce the authentic evidence from the state of harvesting that the timber is legally harvested, then the whole procedure and the investigations take as a presumption that the harvesting is legal, but also in the case of problems in the documentation that the timber is illegally harvested. Namely, if someone forges the documentation, it is very much assumed that the timber is “illegal”. If, on the other hand, the documentation is not demanded but “some kind of evidence” must be presented, the workload of the administration of these questions becomes more difficult and, consequently, more demanding.
However, the studying in a criminal case of the illegality of the action is at the same level in both alternatives. Namely, if the national law criminalizes the placing in the market of this kind “illegal” wood, the nature of this wood and the actions related to it must be studied thoroughly.

In this connection one must think the following question. It seems to be hard to think that a Member State would declare a criminal act a importation of wood, which has been illegally harvested in the country of origin. I would assume that when a Member State criminalizes an act, it has to have autonomous and very clear definitions of the action itself. The illegality cannot depend on the penal law of another country. The principle of legality demands that. Criminalizing only on the basis of the definitions of the law of another country (where the harvesting act has not been even investigated by the local authorities) is not possible. This means that whatever in the possible EC legislation on documentation of this type of importation is stated must aim also at independent and autonomous definition of the acts which it tries to criminalize. It is, consequently, also up to the Member states to take or not take those aims and definitions of the “illegality” into their criminal law. However, also the Member states consider autonomously the nature of the efficiency of the penal law control system and the EC-law efficacy demand. As maintained, EU cannot demand directly the criminalization of the act itself. It may, I assume, only make definitions, claim certain aims, create perhaps a system of customs documentation, and finally demand the efficiency of the application of this EU system.

Originality of the documentation

One should adopt the new system to all existing practices of assessing the authenticity of the documentation. It is clear that even now the importation documentation and the certificates vary from one country to another. Nevertheless, it is the EU system itself which has to clearly define for the importers the form and nature of the documentation to be provided, even a standard modules for that, etc. This is related to the declarations and the confirming the importer has to produce and for that there are many models in the EU system already. There seems to be assumption that the wrong information and declarations given to the public authorities is already a criminal conduct and presumption is that the failing in these functions as a full evidence for some type of crime relating to the importation and customs rules. Another question is whether more serious crimes (possibly defined in the national law) relating to more universalistic approach to environmental protection by criminal law. Certain crimes could become punishable universally in one member States, if it considers a part of its very basic values. This is a question of basic theory of the particular criminal law system and its concept of international criminal law.

Cooperation between authorities

One question relating to this issue is the cooperation between different authorities both inside and outside EU. The control of this type of placing of the items in the EC market would need many measures by the EU and national institutions. On the other hand, there would be, naturally, a need for international cooperation, even an international agreement, to regulate this issue. In fact, the EU program regarding this control would definitely work more efficiently within a framework of an international cooperation and possible treaty/agreement system. This type of international system would oblige Member States autonomously and EU too as far it concerns it. On the other hand, here some of the problems relating World Trade Organization (WTO) would be solved too.

The question of the threshold of starting the police investigation

It seems to be clear that the threshold to start the investigation relating to the “illegality” of the wood is lower where the rules regarding the documentation have been breached.
The question of the efficacy and the extent of the national measures

It seems to be totally up to the national law to decide, who are the ones to be accused within this context of illegality of the wood. namely, the Member State is absolutely free to criminalize any activity relating to this act and consider to whom the penal law applies. Consequently, there may be created differences between the Member States regarding this “illegality” depending on the general criminal law policy in force.

The study is from the EU point of view, in the end

Creating and planning the system EU does not have as much to say on many issues. The whole issue is about the definitions, aims an demand of the efficacy, in the end. The effectiveness is, however, always seen only from the point of view of the EC law in case measures have been adopted in the EU level. It cannot determine how, in concrete sense, a Member States exercise their implementation-power.

One specific question

Could EU demand in its legislation that all imported wood must have been produced in a legal way. Then it would refer to the illegality defined by the harvesting country. This means, in fact, that it is exactly because of this the certificates must become from the exporting country, the country of origin. Only they are competent in certifying the legal nature of the wood. In this sense, the only thinkable system must be based on very formal nature of the certificates, definition of the authorities from which the timber certificates come. This means that the whole system of control is, in fact, absolutely separate from the autonomous system of Member States, where the illegality of the wood and the criminal nature of the acts relating to the wood must be independently and autonomously estimated. In a way, the EU system and the system of Member States are autonomous in this sense.

Institutional changes?

This type of EU documentation system does not seem to demand any particular institutional changes. The work can be done very much within the existing customs system. On the other hand, there does not need to be any special EU specialist bodies working within the system, because basically the definition of the illegality is made by the exporting country.

Conclusions

It seems that the EU system should be a simple documentation system, where there is a demand for the certificate from the harvesting country that this particular timber has been legally harvested. Another question is, whether administratively a Member State of the EU has made this EU measure effectively in force. However, it seems to be totally up to the Member state to define its criminal law and other than customs measures to control the “illegality” (defined by itself) of the timber cut in its territory or in more global scale. The only agreement what this type of system demands from the Member States is the acceptance of this documentation system and administrative efficacy in its application. The system would be very formal.

In this way the workload of the customs does not seem to increase and the only extra burden for the police and prosecutors seems to relate to the forgeries and false documentation, which is controlled by the international cooperation in criminal matters.

By a simple and common documentation system one avoids also any particular measures by which Member States would use the system as a disproportional obstacle for the trade within the Union itself.

However, from the point of view of the internal market, this EU regulatory measures is good, because it encourages and makes more free the trade inside the EU by
abolishing the unnecessary and disproportional national measures relating to the “illegal” timber. As a motivation for the issuing this type of EU regulation is definitely the better functioning of the internal market (it pre-harmonizes the systems of the Member States). It functions also a common standard for the international protection of wood in a situation, where no common standards and common substantive principles of the nature of this wood are determined by the EU or in the international community.

It must be stated – comparing the alternatives 3 and 4b – that there does not seem to be any particular differences in the system of control – if the nature of the documentation is the same, EU determined. Control on the border just is easier and puts some administrative pressure on the custom. However, the placing-in-the-market and providing documentation on the same time (to authorities) just lets more alternatives for the abuse, because the control is not made on the border, furthermore, it makes it possible to take the timber also to other state where it "disappears". On the other hand, without EU wide customs control the control of this items takes place between the Member States and this way it may create some obstacles to the "normal" trade within the internal market, which is not desirable.

Furthermore, this 4b would need the Member States to create a new and “moving” system of control, because the importation control is lacking. It is also more based on the voluntary activity of the importers. It may be unclear, how to regulate then some actions like delays and neglecting of the presentation of the documents etc. This 4b system is definitely more complex and demanding.

Regarding the operator/transaction based systems – if I have understood correctly – the operator system need a system of preauthorization, it maintains the market more flexible but on the same time may create unnecessary licensing systems, which can be problematic from the point of view of the competition.
4. INTERVIEWS

In order to assess the feasibility and effectiveness of the proposed option 3 and 4, a number of interviews were carried out on the phone or through personal visits in the three countries we chose to analyze in this report: Finland, Spain and the UK.

This section of the report will summarize the content of the interviews, and give a brief description of the departments where the interviewees work.

4.1 Finland

4.1.1 State Prosecutor

Department: The Office of the Prosecutor General of Finland
Name: Mr. Ari-Pekka Koivisto
Title: State Prosecutor
Date: 19 of September 2007

Mr. Ari-Pekka Koivisto is a State Prosecutor, located at the Office of Prosecutor General in Helsinki, which is the headquarters of Prosecution services in Finland. There are around 30 people in this office and around 300 prosecutors spread around Finland.

His first note was to say that they had never handled any crimes related to illegal importation of timber. There are other crimes related to timber, but not importation of such. He also asserted that he never heard of FLEGT before this meeting, but considered the matter of great importance and believes it should be addressed somehow.

He then attempted to explain the Finnish system asserting that the prosecution office is not the one making the investigation, even though they cooperate with the responsible ones. Such activity is left to the three investigating powers: customs, frontier guards and police officials. In the matter of illegal importation of timber, he believes that customs officials are the ones responsible to conduct the investigations. He believes customs is making an excellent level of investigations. They normally hire into their body academics and lawyers to conduct such work. They are also hiring police officials to work on their force.

After the investigation is complete, the case reaches the prosecutors who will analyze the evidence and make the consideration of charges. A case can only reach the courts through the prosecutors.

Mr. Koivisto informed us that Finnish prosecutors have a free evaluation of evidence system, allowing them to utilize all kinds of evidence to build a case, with only minor restrictions, such as the need to talk to a witness, even if it is over the phone, rather than just accept their written statement. Therefore, he does not see any problems in trying to get information from exporting countries to build a case in Finnish courts. For this purpose, they submit a request through letter of rogatory to the foreign entity in order to receive information on the pre-trial phase.

Resources could be a problem if not well analyzed and specified. In case the system changes, they have to clearly determine within their structure, who will investigate the issue. But overall, he thinks that they can easily overcome the barriers of lack of resources to analyze these cases.

According to him, a deterrent factor would be just one case. Since the media has access to all information and documentation, it is likely that if one case is brought up to the court level, it will attract more attention.
When asked if the documentation scheme proposed on option 3 could follow the model already implemented by CITES, he responded positively. Even though they have never faced a CITES case concerning timber, they have already dealt with cases involving fauna. However, he believes that this option will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably. Also, one must have in mind that bribery and corruption are very high in most exporting countries, making the scheme more difficult to be implemented.

Concerning option 4a, he defends that the scheme will unfairly discriminate against products from high-risk countries because they need to develop costly tracking and verification systems whereas low risk countries can do without them. On the option 4b he noted that the general rule is that the burden of proof falls on the one who can and have access to the required evidence. Therefore, given that the private sector has the necessary resources to provide evidence, they should be required to do so. However, one must acknowledge that under the Finnish system it is often not too difficult to reach the required level of evidence.

4.1.2 Police Force

Department: Helsinki Police Department  
Name: Mr. Mika Pasanen  
Title: Chief Inspector / Head Unit  
Date: 27 of September 2007

The Chief opened the meeting saying that he is not familiar with the FLEGT system and he is not aware of the police force investigating such cases. He consulted their databank and no cases on illegal importation of fauna or timber appeared. He asserted that the police force focus more on domestic topics, so he advised us to speak to customs about these issues and also with the National Bureau of Investigation (NBI).

The NBI is a national police unit operating throughout the Finnish territory. The tasks of the NBI can be divided into two main categories: crime prevention and provision of expert services. In crime prevention, the main responsibility of the NBI is to fight the most serious, professional and organized crime. The focus of criminal investigation is in organized crime crossing both national borders and the borders of the State Local Districts. The most important specialist services produced by the NBI are related to: forensic laboratory analyses; international legal assistance; demanding technical intelligence; and criminal intelligence and operational analyses.

In order to inquire about the involvement of the NBI in illegal timber cases, the Chief contacted them during our meeting. His contact person informed that they have never investigated any case related to such subject.

When asked if it is difficult to gather evidence from foreign countries, he noted the existence of Interpol. The organism has in every nation a contact Unit. Within Finland it is the NBI. In case they need any information, it is easier to contact the assigned official in the foreign country. However, he highlighted that the fact that legislations and administrative structures are different in different countries can make the system somehow bureaucratic. Within the European level, they rely on the Europol, which promotes various seminars to integrate and train the police forces within the EU countries.

He also noted that there is very effective cooperation between the police force, customs and border patrol, which is not the case in most European countries, and confirmed that they currently have enough resources to undertake various types of investigations, but cannot estimate if these resources will be adequate to accommodate the new system.
4.1.3 Customs

Department: Finnish Customs
Name: Mr. Jarkko Keskinen
Title: Customs Restriction Adviser
Date: 28 of September 2007

Finnish Customs is a nation-wide authority for the internal and external trade of the EU with the tasks of collecting taxes, managing control and providing services, as well as implementing the customs policy of the EU. It is the duty of Finnish Customs to control international flows of goods in order to promote legal foreign trade and prevent illegal trade. In 2006, Customs collected about EUR 10.4 billion in taxes and charges, which amounts to almost a third of the total tax levy of Finland. Approximately 2 600 people work at Finnish Customs.

The Customs is subordinate to the Ministry of Finance. The central administration is formed by the National Board of Customs. The regional administration comprises five Customs districts. These are the Southern (direction in Helsinki), Western (Turku), Northern (Tornio), Eastern (Lappeenranta) and Åland Islands (Mariehamn) Customs districts. The Customs Laboratory is also part of Finnish Customs, and its operating range covers all of Finland. The Customs districts and the Customs Laboratory are subordinate to the Board of Customs.

Customs is responsible for controlling food and consumer goods for import. The control is focused on product groups, products and status of origin that, according to risk analysis, there is reason to believe are problematic. Laboratory examinations required by Customs’ food and consumer goods monitoring are conducted at the Customs Laboratory in Espoo. Laboratory analyses are also needed in the enforcement of the CITES convention signed in order to protect endangered species of animals and plants.

Mr. Keskinen works as a restriction adviser at the Finnish National Board of Customs office in Helsinki. On the issue of timber imports, he informed us that most of the wood entering the country is through the Russian border. These comprise around three different species, what makes identification very simple. There is very little tropical timber entering Finland; the total import per year is less than 1 000 m³.

After reading Options 3 and 4, he asserted that the legislation seems to mostly focus on the importation of tropical timber, which in the case of Finland will not have much impact. He also believes that the scheme is based on a sound approach in the sense that the development of verification and tracking systems need to be developed only where they are needed. Following this thought, he is against option 4b given that these requirements would cause significant but unnecessary costs by requiring evidence of legality and is unfair because the underlying assumption is that imported goods are illegal unless proven legal.

In case EU adopts the proposed measures, he defends that the workload of customs will increase significantly, because Finland imports 15-20 million m³ of wood per year, and the current system does not have many restrictions on importation of timber, except the need for a documentation filled out by the customs border patrol on the content of the consignment, and a phytosanitary declaration. Given that there are no other restrictions, even if the consignment is composed of illegally harvested wood according to Russian regulations, there is nothing the Finnish authorities can do. The only basis for denying the entry of the timber consignment is the lack of the documentation mentioned above.

He also informed us that they have a customs investigation department, which never dealt with importation of timber. Other types of illegal imports which are investigated are then submitted directly to the state prosecution office. The customs office never involves the Finnish police on these issues.
He also noted that the private sector is conducting voluntary certificates to prove the legal origin of the wood. This is not required for the timber to be imported to Finland; it is a market mechanism to prove to consumers that the companies are committed to act responsibly. In case the EU wants to implement new regulations, he recommends that it should take into account the already existing voluntary systems being utilized by the private companies. Also, they should take into consideration that customs is evolving to a paperless era, so a new system should also allow a computerized arrangement.

He mentioned that there is no control of how much wood is allowed to be imported every year into Finland. They do not need to show any documentation that the wood is legal. There are no regulations for the importer to show the legality of the wood according to the exporting country regulations. Russia, on the other hand, has a number of bureaucratic requirements to export its timber.

On a last note Mr. Keskinen defended that there should be some type of regulation to address the legality of wood in the exporting country, but on the customs level, they can only control the documentary level. He also stressed that new regulations should not require that all importers prove that the timber is legal. A high percentage of the imports are already legal, therefore, the burden of proof should not be placed on them for a matter of efficiency. Overall, from the customs point of wood, he believes that the EU proposed scheme is too burdensome for the imports coming from Russia.

4.2 Spain

4.2.1 State Prosecutor

Department: The Office of the Prosecutor General of Barcelona
Name: Mr. José Joaquin Perez De-Gregorio Capella
Title: State Prosecutor
Date: 26 of September 2007

Mr. Capella began the meeting highlighting the very advance status of the environmental legislation of the country. Therefore, regardless of the exporting country measures to tackle illegal timber, Spain has regulation to address the contraband of timber in the country’s courts. However, he noted that he has been working in the Prosecution for over 20 years and never heard of any case of illegal importation of wood in the courts, only some cases of illegal importation of fauna.

When asked about the proceedings, he informed that in case customs or police forces suspect the validity of the document, they can contact the authority of the exporting countries to verify the legality of the import. The investigation can be conducted by the customs or the police; it depends on the case. The contraband law is normally administrated by the customs, who contact the police forces if further examination is required. Then, either the Servicio de Protección de la Naturaleza (SEPRONA) or the judicial police, depending on the jurisdiction, carry the appropriate investigation. The next step is to communicate the State prosecutor who will analyze the evidence to see if it builds into a court case or not. If the actuation of the police is complete, there is little the prosecutors have to do. In case they need more evidence, they work together with the police to gather more information.

He believes that there are no problems in trying to identify the species, given that there are professional hired by the government to do so. The problem lies on the lack of notification by the customs on potential cases to the prosecutors office.

The problem they already faced on fauna cases was that the customs communicated a potential case to the prosecutors office very late in the process and with poor evidence. In a number of cases, they do so given that lack of technical professionals to appropriately id the spices, what is unacceptable given that there are available personnel to do so. This is one of the reasons why he believes no cases on illegal
timber reached the courts: the lack of notification from the customs officials. According to him, these officers have enough training to distinguish forged documents and potential illegal consignments and yet do not notify the competent authorities. The State Prosecutor can act de oficio, but if they have no indication where to start from, it will be a waste of resources. Therefore, he emphasized that there must be better communication between the institutes.

He also mentioned that there are enough resources available to conduct such investigations. So, even if the EU adopts options 3 and 4, the country will not face difficulties concerning available resources to implement the rules. In addition he said that even if the EU passes very good rules, it will be up to Spain to assure an effective implementation of the rules on the national level.

4.2.2 Customs

Department: Customs of Barcelona
Name: Maite
Title: Barcelona Customs employee - Information department
Date: 25 of September 2007

Even though the Valencia Port receives a greater amount of timber imports, when contacted, the authority there informed us that this topic - the implementation of FLEGT - is under the authority of the Barcelona Customs and directed us to them.

The Barcelona customs information department informed us that in order to control the timber imports to the country, they utilize a standard documentation called DUA (Documento Unico Administrativo) which is common to all EU countries and governed by the EU customs code. The system is completely computerized, which allows the incoming goods to be analyzed as quickly as 30 minutes. If the good is a timber species, it requires identification of such species through an international code. In case the species fall into the CITES regulation, the Barcelona Customs direct the document to the national CITES office to request authorization and release the imports to the country.

The customs officer interviewed informed that they often believe that the imports come from legal sources. In case any doubts are raised, they take the case to the customs monitoring department (Vigilancia Aduanera), which conducts the proper investigation. When asked to specify these procedures, she informed that she is not authorized to release this information since it is classified.

Concerning the implementation of new EU regulations, the officer informed us that she does not see any problems in implementing new requirements, as long as the new system comes accompanied with a new computer program which will continue to allow the rapid assessment process that they currently have.

She also informed that the sole role of Customs is to analyze the documentation. Any further investigation or phytosanitary analysis is conducted by other departments, including contacting export countries' authorities. They do not have the competence or authority to do so.

4.2.3 Police Force

The Organic Law 2/1986 in Spain delegated to the Guardia Civil the specific role of assuring the compliance of the environmental regulations of the country. To fulfill such task, a new and specialized department was created with sufficient resources to effectively contribute to the avoidance of environmental harms within the nation. This department was entitled SEPRONA.
We contacted the SEPRONA from Valencia to get more information on investigation of potential illegal timber imports to the EU. The authority there informed that the department is not authorized to release any information on this matter, and also asserted that a formal request should be directed to Foreign Ministry of Spain. Instead, we had a meeting with a SEPRONA officer from Barcelona. Below is an outline of the meeting.

Department: Police Department - Guardia Civil, SEPRONA, Barcelona
Name: Mr. Antonio Jiménez Navarro
Title: Sargento 1° Sección de Protección de la Naturaleza
Date: 26 of September, 2007

Mr. Navarro has been working at Seprona for about 12 years and never heard of a case involving illegal importation of timber into Spain. He informed us that the department which has the authority to investigate these issues is the Guardia Civil. Given that Spain is divided into 17 autonomous communities, not all Guardia Civil spread around the different autonomous communities have a SEPRONA department within it, or are organized in the same manner. Therefore, the same type of investigation could be performed by different departments of the police depending on where it is located in the country.

He also highlighted that even though this is an important topic, it is not a priority for the police, given the absence of cases and the complexity to identify the different type of species. The force mainly focuses and builds capacity on the most common and simple cases.

Mr. Navarro mentioned that SEPRONA works closely with the customs officials to try to identify the different species of timber. Even though the origin of the species is also very important, they do not have the resources to investigate that far.

When asked what would be necessary to have a case, he informed us that they need to have a very reasonable suspicion to compensate spending resources on that investigation. He is very aware of the CITES system because they often investigate fauna cases. Based on that, he believes that to regulate timber species that are not listed in CITES is a waste of resources. His main concern, then, is with endangered species rather than just illegally harvested. In addition, he defends that the CITES system is intended to regulate the trade of species rather than protect them, and is a very complicated with burdensome documentary scheme which allows for fraud.

On workload, he informed that it is hard to estimate. When asked the time spent to investigate CITES fauna species cases, he said between one and two months, but asserted that timber cases would necessarily take more time given the problem of identification of species, which is more complex than identifying a turtle species.

Mr. Navarro also informed that there is a great need to look for specialists to help in potential cases. The more information he can get on the consignment, the less time he will spend on the case. Therefore, operator-based and third party certified imports would considerably diminish his workload.

He also mentioned that if the documentation arrives in the country in a language other than Spanish, that can contribute to a delay in the investigation process as well. The current resources are not sufficient to investigate these type of activities, therefore, if the proposed system is implementing, which will considerably increase the workload, more resources will have to be allocated.

He believes that a suitable solution is to have a common and reliable data bank in all countries that import and export timber, because it is very burdensome and bureaucratic to try to contact authorities from exporting countries, especially because different nations have different administrative systems and one often does not know which department has the authority to deal with certain matters.
4.2.4 Law Firm

Department: Marti & Associates - Barcelona  
Name: Mr. Daniel Vidal  
Title: Lawyer  
Date: 25 of September 2007

Mr. Daniel Vidal believes that the effectiveness of the EU new scheme will depend on many issues, such as the regulatory body and the extent to which the large companies will be involved. It has worked with diamonds, so theoretically there are no obstacles to try to implement the same with timber.

Concerning the investigation level, he asserted that this matter is very complex in the country. Customs focus on the document and the assurance of the payment of the different taxes. They will not investigate too further. In addition, in Spain there are 17 autonomous regions with different schemes of police investigations; there is no one figure that would clearly have the role of investigating such issues all over the country, making it more difficult to build cooperation with other countries’ authorities.

He noted that timber is not largely regulated in Spain and is not a priority for most agencies. One can notice this on the lack of news about this topic on the newspapers in Spain, for instance. Therefore, the current resources will most likely not allow a new system to be implemented effectively. He also noted that there are several other difficulties in regulating this issue, such as the language utilized for the permitting systems and its format.

Mr. Vidal suggested that if there is an interest to criminalize this practice, one must use the already existent penal figures, given that the current legislation is very advanced, instead of creating a new regulatory body to address only timber. Also, he does not believe it is effective to make the regulation mandatory in the short term. He defends that we must first introduce a scheme which will cover the major producers of wood, the key people in the market. Once they comply with the regulations, it is likely that other smaller ones will follow.

Concerning the evidence accepted in the Courts of the country, he noted that it is unlikely that the courts will accept vague evidence on illegality of import. According to Vidal, the evidence must be that a very large importation of wood is manifestly illegal for the judges in courts to accept that as a reasonable case. The subject sometimes can be so complicated that the judge might even not understand the complexity of the issue.

4.3 United Kingdom

The interviews in the UK were carried with the help of Pamela Rogers and Roger Oxlade, both from HM Revenue & Customs (HMRC).

4.3.1 State Prosecutor

The Crown Prosecution Service (CPS) is the Government Department responsible for prosecuting criminal cases investigated by the police in England and Wales. As the principal prosecuting authority in England and Wales, they are responsible for: Advising the police on cases for possible prosecution; Reviewing cases submitted by the police; Where the decision is to prosecute, determine the charge in all but minor cases; Preparing cases for court; Presentation of cases at court.

Felixstowe is a North Sea seaport in Suffolk, England. It has the largest container port in the UK and one of the Haven ports. Felixstowe is also the main port of entry for tropical timbers in the UK.
We contacted the CPS from Suffolk, the county where the port is located and spoke with Stephen Colman, a local prosecutor, who informed us that they never handled any case related to this matter, and that these issues are often kept on the customs level.

4.3.2 Police Force

The following information was provided by an Intelligence Analyst, National Wildlife Crime Unit prompted by the kind approach by Mr. Hugh Speechly (DFID), September 2007.

The UK National Wildlife Crime Unit (NWCU) (www.nwcu.police.uk) is a police-led, stand-alone multi-agency unit with the UK-remit for Wildlife Crime and acts as a conduit for liaison between organizations tackling wildlife crime; offering support to UK Police Wildlife Crime Officers (PWCOs) and Customs Officers. They gather and analyze available intelligence to identify the key issues for UK wildlife crime law enforcement. They have a Strategy in place (overseen by a high-level group including ACPO/Defra) which yearly ascertains several topics which have a Priority focus (e.g. Hen harrier persecution, Caviar smuggling were included in 2006/07 priorities). To date, they are not actively addressing illegal logging given that it is not considered of high concern for the UK law enforcement.

Each UK Police force (there are over 50) has a varying number of PWCOs with a nominated force wildlife crime coordinator. A very small number of force areas can afford to have a full-time officer to do this, but most PWCOs fulfill this role on a voluntary basis in addition to normal policing duties.

He also added that the timber trade is a very large activity with very large volumes of commodities to monitor, which has great implications on resources. The main experience that NWCU has had with illegal timber involves CITES species (e.g. Gonystylus spp [Ramin]). The UK Police have responsibility for enforcing EU wildlife controls by offences under COTES (Control of Trade in Endangered Species (Enforcement) Regulations 1997), the main CITES-related offence being the illegal selling, buying, advertising and displaying for commercial purposes of species listed in Annex A. Such species can only be traded for commercial purposes if they are issued (by Defra) with an Article 10 exemption certificate.

Identifying illegal importation is a Customs role and the police have limited duties following importation. If the Police have doubts about the legal importation of a CITES II timber, they can make a written request to HMRC providing the necessary evidence for an Article 5 COTES notice to be issued and an authorization for the police to carry out a seizure may be issued; alternatively HMRC seize goods under Reg.1372 CEMA. It is normally on a case-by-case basis whether this occurs and can prove very difficult in practice.

Other considerations should be given to (i) corruption in source country, (ii) forgery of documents, (iii) miss-declaration of goods, (iv) quantities in excess of that on a permit, and (v) alternative species names used. In Option 3 for example, it would seem probable there may be inconsistencies due to evidence quality varying per exporting country. Successes may depend on the law that is in place in the country of origin.

Increased importer responsibility may be deemed as a good idea to create more concern-awareness about what is being imported. This may transfer further down the wholesale chain. Difficulties in proving that the wood is illegal once it has left the source country.

Mr. Roddie Burgess, Forestry Commission (FC) was able to confirm these points and added:
The FC’s powers in respect of controlling timber imports derive from the Plant Health Act 1967 and are set out in The Plant Health (Forestry) Order 2005 (SI 2005/2517). Only certain genera and species of timber is controlled, and only from specific countries.

Importers are required to pre-notify the FC of landings and we are required to carry out inspections to ensure compliance. If all is well then we issue a certificate of clearance, addressed to HMRC, which the importer submits with his entry. In the event of non-compliance, we can require under notice measures ranging from refusal of landing permission to destruction.

Inspectors have powers of entry without warrant (except private dwelling) for the purposes of the Order. The Order prescribes offences (not landing offences which are dealt with under CEMA) with penalties on level 5 of the standard scale.

4.3.3 Customs

Commentaries provided by high officials from HMRC on September 2007.

Concerning Option 3, the officials agree that the scheme would cover all imports, but will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably. They also acknowledge that if it is intended that imports be routinely accompanied by evidence of legality then the job of customs would be made easier if a competent authority in the UK could check this evidence and issue an import license.

A more balanced approach would be to assume that all imports were legal unless there was intelligence to suggest it had been illegally harvested. Only where such intelligence existed would it be necessary to require evidence from the source country.

They also highlight that the CITES experience cannot be transferred to this new system because the CITES regime has different aims and objectives and is based on species identification. The measures we are looking at there depend on definitions of legality/illegality and commercial arrangements.

Concerning Option 4a, they assert that UK customs authorities to do not regard controls on ‘placing on the market’ as proper to them. In the UK market controls are a matter for trading standards departments. Customs will only act on prohibitions on the import of goods though with strong intelligence and sufficient legal gateways etc. They may be able to detain goods for a few days while evidence of legality is gathered by the relevant enforcement authorities.

As far as UK criminal law is concerned, it is for the authorities to prove illegality rather than for a person to prove legibility. This requirement may be acceptable for determining whether or not goods can be placed on the market – that would be a matter for trading standards.

On the question regarding a possible discrimination against products from high-risk countries and low ones, they assert that this is not a matter for customs. They assume that it is the high-risk countries that would have the most to gain from any such scheme.

On the Option 4b, they disagree with the approach because according to UK criminal law, a person is innocent until proved guilty. In addition, such requirements would cause significant but unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low.

On the matter of workload, they believe it is not fair to compare the current workload they have dealing with CITES species with the new regulation because CITES controls apply on importation not on placing on the market. We would also comment
that only a small number of species of timber trees (mostly hardwood species) are regulated/controlled in International (third country) trade by CITES, within the EU we have broadly similar EU wildlife trade regulations (338/97 as amended and 865/2006) which implement CITES in all the 27 EU member states.

In addition to the import and export from third countries the wildlife trade legislation regulates the commercial intra EU movement of Annex A species, those timber species listed in Annex B require no movement certificates and is thus for all intents and purposes unregulated. It must be remembered that there are major non-CITES timber producers within the EU where illegal logging is thought to be rife.

In case the EU adopts the above mentioned options, we asked them what would be the potential workload of customs officials in case where the certificates:

1  **Are consignment or operator-based**

   *Response*: This would depend on the level of check required. In the case of an operator based license for regular trade the cost could be reduced by simply requiring a number to be quoted on the customs declaration. Where original licenses have to be checked, the costs are considerably higher. There would also be costs involved with setting and reviewing tariff measures and profiles.

2  **Are issued by local authorities in the exporting countries or by independent third parties?**

   *Response*: Again, this would depend on the level of check required. Generally, customs would not be prepared to check a plethora of different documents on a routine basis: we would require documents to be standardized. This is different when carrying out a formal investigation into a suspected offence when we would be prepared to examine and have verified any type of evidence but where the expense could run into tens of thousands of pounds.

3  **Legislation requiring traceability of origin of all timber and forest products as well as proof of legality or legislation establishing an offence of putting illegally harvested timber on the EU market exists**

   *Response*: It is not clear what this would mean in customs terms. If there was an import prohibition, we would both check standardized documents and deal with offences of importing goods without these documents, or we would investigate cases where there was strong intelligence to suggest an illegal importation. Costs could run into hundreds of thousands of pounds. UK Customs has a dedicated prosecution service and it has reservations about any requirements to prove a foreign element related to an offence. We can foresee possible enforcement, evidential and Human Rights Act difficulties. However, as stated previously, market controls are not matters for UK customs.

Concerning resources, we asked them if the current resources are sufficient to detect irregularities to the extent that the procedure would be an efficient deterrent to illegal imports of timber and wood products. They responded negatively, stating that this would be entirely new work and would require separate funding. Furthermore, controls that are not backed by effective enforcement and place undue burdens on legitimate trade do little to deter those bent on breaking the law.

On a last note they defended that the most effective means of addressing these issues would be in the source countries. Legislation implemented by the EU alone would not necessarily influence global activity. The options being considered, in practice, are unlikely to make any significant impact.
5. CONCLUSIONS

This study showed that if the EC decides to adopt options 3 and 4, it must take into account the legal comments in section 3. As mentioned, for instance, the EU does not have the authority to legislate on criminal issues. This is, instead, a duty of the member States. The EC can, however, demand that the member states regulations are designed in an effective manner to assure a successful implementation of the measures.

Interviews

Overall, the professionals interviewed did not have knowledge on the FLEGT scheme, and the issue of illegal importation of timber does not seem to be a priority for customs, police investigators or state prosecutors. To date, none of the interviewees have investigated or submitted a case of this nature to courts.

Given that there is not enough knowledge on this topic, the interviewees were unable to estimate how much their workload will increase if new legislation is adopted.

Concerning resources to implement the proposed Options 3 and 4, the answers vary. The State Prosecutors do not see this as obstacle, but at the customs level, the officials highlighted that they currently have a computerized system and are moving to a complete paperless era. Therefore, if the EC decides to approve a new scheme, this must come accompanied by a new computer program which will continue to allow the rapid process that they currently have. On the police side, Finland does not see this as a problem, but the UK and Spain defend that they would need more resources to conduct investigations.

On the difficulty to produce evidence, the interviewees mentioned that there must be better cooperation between countries. The fact that legislations and administrative bodies differ in different countries, it is often very difficult to identify the authority in a foreign country who is in charge of dealing with these issues. Interpol is a solution, but the system is still considered bureaucratic and slow. The Finnish prosecutor, on the other hand, did not consider this as a major impediment to bring a case to court.

5.1 Finland

Officials from Finland consider the subject of legality of timber very important especially because the country has an intimate relation with forest resources: 80% of the Finnish territory remains cover by forest. However, they stress that a potential new system must be effective and not bring a burdensome scheme to the authorities which might not have enough resources to deal with the issues.

The Finnish studies and interviews showed that the importation of illegal logging into the country must focus on Russian timber rather than tropical species, given that the amount of tropical species does not surpass 1,000 m³ per year compared to 15-20 million m³ coming from Russia.

Given that the country does not highly regulate the importation of timber into the country, imposing only a few restrictions such as a phytosanitary document, there is not much the enforcement authorities can do. The private sector, on the other hand, pressured by the civil society, built a voluntary certificate scheme to prove the legality of the wood in the country of origin of the incoming timber consignments.

Concerning evidence in Finnish courts, the State Prosecutor highlighted that the Finnish systems adopts the free evaluation of evidence system, allowing them to utilize all kinds of evidence to build a case, with only minor restrictions. Therefore, it would not be difficult to build a case in court.
On a last note, we must stress that even though the stakeholders highlighted the positive cooperation they have within the other interviewees in the country; some stressed the difficulty of dealing with foreign authorities given the lack of clarity concerning who has the authority to address this issue overseas. Even though institutes such as Interpol facilitate the process, it is still very bureaucratic and could be simplified to speed the investigation process.

5.2 Spain

The studies conducted in Spain and the results of the interviews showed that the country has in place very advanced legislation to address the issue of illegal logging. However, the system seems to be very fragmented due to various factors.

Spain is divided in 17 different autonomous regions and the police department in charge of investigations can have different duties in these different regions. SEPRONA, a department within the police created to focus on environmental cases, does not exist in all 17 regions and could be substitute by other body. Given that there is no one figure that would clearly have the role of investigating such issues all over the country, it becomes more difficult to build cooperation with other countries’ authorities.

Different from the Finnish case, the Spanish authorities seem to have communication difficulties. The State Prosecutor’s main complain was the lack of communication from the customs on potential illegal imports. He asserted that if they do not have knowledge of such cases, they will never be able to bring a case to the courts. Customs, on the other hand, believe that they are performing their tasks well and believe that new regulations can be implemented without major changes on their daily work.

5.3 United Kingdom

The UK has several legislations that could address the issue of illegal importation of timber, but in practice there are several constraints to effective implement such rules, such low awareness of the enforcement agencies, limited experience on investigating these issues, and lack of priority of these cases.

Given that the country imports high amounts of timber, a very strict regulation would require new resources to be allocated to the investigating powers, because this would be entirely new work and would require separate funding.

According to officials, the most effective means of addressing these issues would be in the source countries. Legislation implemented by the EU alone would not necessarily influence global activity. The options being considered, in practice, are unlikely to make any significant impact.
6. REFERENCES


Chatman House Lacey Act lessons to FLEGT
http://www.chathamhouse.org.uk/publications/papers/view/-/id/508/controlling illegal logging
http://www.chathamhouse.org.uk/research/eedp/current_projects/legallogging/
Assessment of additional measures to exclude illegal timber from EU markets

Ghana - EU VPA
Malaysia

VPA website
The Online Resource for Information on Voluntary Partnership Agreements

EU Forest Watch
http://www.loggingoff.info/


H.R. 1497: Legal Timber Protection Act.
http://www.govtrack.us/congress/billtext.xpd?bill=h110-1497


UK


http://www.defra.gov.uk/paw/publications/default.htm

http://www.cps.gov.uk/about/index.html


Spain

Guarda Civil Seprona.
http://www.guardiacivil.org/quesomos/organizacion/operaciones/seprona/


Agencia Tributaria.
http://www.aeat.es/wps/portal/Home?url=&channel=1af861cd949a1010VgnVCM100000d7005a80____&ver=L&site=56d8237c0bc1ff00VgnVCM100000d7005a80____&idioma=es_ES&menu=0&img=0

Spain - Customs regulations.
http://www.aeat.es/wps/portal/Listado?channel=23da843d019010VgnVCM100000d7005a80____&ver=L&site=56d8237c0bc1ff00VgnVCM100000d7005a80____&idioma=es_ES&menu=0&img=8

Pain and CITES. http://www.cites.es/citesapp/Portada__en_.htm?in=4


Finland


2006 Customs Report.
http://www.tulli.fi/en/02_Publications/04_Customs_Anti_Fraud/Customs_anti_fraud_07.pdf


Ministry of Agriculture and Forestry,

Greenpeace report on illegal logging in Russia entering Finland.
http://www.greenpeace.org/raw/content/international/press/reports/forest-crime-finland.pdf


National Bureau of Investigation.
CÓDIGO PENAL

(Art. 335)

Artículo 331.

Los hechos previstos en este Capítulo serán sancionados, en su caso, con la pena inferior en grado, en sus respectivos supuestos, cuando se hayan cometido por imprudencia grave.

CAPÍTULO IV

De los delitos relativos a la protección de la flora, fauna y animales domésticos

Artículo 332.

El que con grave perjuicio para el medio ambiente corte, tale, queme, arranque, recoja o efectúe tráfico ilegal de alguna especie o subespecie de flora amenazada o de sus propágulos, o destruya o altere gravemente su hábitat, será castigado con la pena de prisión de cuatro meses a dos años o multa de ocho a 24 meses.

Artículo 333.

El que introdujera o liberara especies de flora o fauna no autóctonas, de modo que perjudique el equilibrio ecológico, contraviniendo las leyes o disposiciones de carácter general protectoras de las especies de flora o fauna, será castigado con la pena de prisión de cuatro meses a dos años o multa de ocho a 24 meses.

Artículo 334.

1. El que cace o pesque especies amenazadas, realice actividades que impidan o dificulten su reproducción o migración, contraviniendo las leyes o disposiciones de carácter general protectoras de las especies de fauna silvestre, comerse o tráfico con ellas o con sus restos será castigado con la pena de prisión de cuatro meses a dos años o multa de ocho a 24 meses, y, en todo caso, inhabilitación especial para el ejercicio del derecho de cazar o pesca por tiempo de dos a cuatro años.

Artículo 335.

1. El que cace o pesque especies distintas de las indicadas en el artículo anterior,
Annex 3

SPAIN - LEY ORGANICA DE REPRESSION DEL CONTRABANDO

TÍTULO I

DELEGADO DE CONTRABANDO

Art. 2. Términos del cargo

1. El delegado de contrabando, siempre que el valor de las bi- nes, mercancías, productos o efectos sea igual o superior a 2.000.000 de pesetas, les que:

a) Impone a sus respectivos municipios el b) Impone a sus respectivos municipios el c) Impone a sus respectivos municipios el d) Impone a sus respectivos municipios el e) Impone a sus respectivos municipios el f) Impone a sus respectivos municipios el g) Impone a sus respectivos municipios el h) Impone a sus respectivos municipios el i) Impone a sus respectivos municipios el

1. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

2. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

3. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

4. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

5. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

6. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

7. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

8. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

9. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

10. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

11. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

12. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

13. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

14. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

15. Las decisiones sus respectivos munici- pios en los que se hubiera confirmado el

European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent the Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 3
Stakeholder Report

Helsinki
January 21, 2008
DISCLAIMER

Indufor makes its best effort to provide accurate and complete information while executing the assignment. Indufor assumes no liability or responsibility for any outcome of the assignment.

Copyright © 2008 by Indufor Oy
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, but not limited to, photocopying, recording or otherwise.
TABLE OF CONTENTS

1 INTRODUCTION 1

2 STAKEHOLDER CONSULTATION 2

3 RESPONSE FROM EU STAKEHOLDERS 3
  3.1 Consultation Process 3
  3.2 Respondents 3
  3.3 Results from the Survey 4
  3.4 Comments from the FLEGT Workshops/Stakeholder Interviews 21
    3.4.1 Finland 21
    3.4.2 France 22
    3.4.3 Germany 27
    3.4.4 Italy 31
    3.4.5 Netherlands 34
    3.4.6 Spain 37
    3.4.7 United Kingdom 38

4 RESPONSE FROM NON-EU STAKEHOLDERS 54
  4.1 Consultation Process 54
  4.2 Respondents 54
  4.3 Response from Non-EU Stakeholders 55
  4.4 Comments from the FLEGT Workshops/Interviews 74
    4.4.1 Brazil 74
    4.4.2 Gabon 75
    4.4.3 Indonesia 76
    4.4.4 Russia 77
    4.4.5 Vietnam 79

LIST OF ANNEXES

Annex 1 FLEGT Workshop Attendance Lists

LIST OF TABLES

Table 3.1 Summary of EU FLEGT workshop respondents 3
Table 3.2 Ranking of options by respondents in EU Member States, first variant 19
Table 3.3 Ranking of options by respondents in EU Member States, second variant 19
Table 4.1 Summary of non-EU FLEGT workshop respondents 54
Table 4.2 Summary of response option preferences in non-EU countries 72
Table 4.3 Ranking of options by respondents in non-EU Member States, second variant 72

LIST OF BOXES

Box 2.1 Questionnaire analysis 2
1 INTRODUCTION

The European Community policy regarding illegal logging and related trade was set out in a Communication on a Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan (COM(25 1)2003). The FLEGT Action Plan sets out a number of measures to ensure that timber and wood products imported to the EU have been legally harvested or manufactured from legally harvested timber.

One of the key measures proposed by the Action Plan is a licensing scheme aiming at the prevention of illegal logging and related trade to the European Union (EU). The licensing scheme would be implemented as part of Voluntary Partnership Agreements (VPAs) which are being negotiated with a number of countries.

The VPA approach is considered promising but it is recognized that it may have limitations. The EU FLEGT Action Plan therefore makes provisions for an analysis of additional measures which could enhance the EU efforts to eliminate imports of illegally harvested timber and timber products to the EU market. A total of four options have been identified.

(1) Continuation of FLEGT VPA approach
(2) Voluntary measures by the Private Sector further developed
(3) Border Measures to Prevent the Importation of Illegally Harvested Timber
(4) Prohibition on the Placing on the EU Market of illegally Harvested Timber

The EU Commission has contracted Indufor Oy, a Finnish consulting company, to conduct an impact assessment on the four options.
2 STAKEHOLDER CONSULTATION

The assessment included a consultation of stakeholders in workshops and through interviews of individual stakeholders. The consultations were conducted both in EU Member States as well as in non-EU countries that would potentially be involved in the implementation of additional options or be indirectly affected by them (list of countries in following chapters).

The consultation complemented the survey “Your voice in Europe” with respect to additional options conducted by the EU Commission in early 2007. The intention was to enable a comparative analysis of the views expressed by EU and non-EU stakeholders as well as to reach out to non-English speaking stakeholders. In addition, the feedback received in the workshops guided the assessment towards issues that were of interest to stakeholders. Stakeholder comments were also considered when evaluating the additional options.

The consultation was based on a questionnaire where the respondents were asked to indicate their (dis)agreement with some of the key arguments that have been brought up in the debate regarding additional options (Box 2.1). The stakeholders were also encouraged to express their options in a free from either verbally during the workshop or in writing in the space provided in the questionnaire. The questionnaire was translated in eight languages; workshops and interviews were conducted in the local language.

This report contains

- results of the questionnaire survey,
- summaries of workshop discussions (selected workshops), and
- written comments provided by stakeholders (unedited except for translation into English where necessary).

Box 2.1 Questionnaire analysis

The respondents were requested to indicate whether they agree, partially agree, partially disagree, disagree or do not know, to a number of statements on FLEGT in the questionnaire. The scale of response options is presented by indicating the following points for the level of agreement:

2 Agree
1 Partially agree
0 Do not know
-1 Partially disagree
-2 Disagree

The responses were entered into a database, which then aggregated the number of reposes for a particular level of agreement to each question. The average response is given by summing the number of responses across the levels of agreement for a particular statement to arrive at the average level of agreement, which is between -2 and 2. The average responses can be collected at a group level (government, private sector and civil society) as well as country level.

Several questions have no score, this could be for two reasons. Firstly, a strong majority of respondents may not know the answer to the question given, thereby indicating “0”. Secondly, if the respondents feel very differently about a question, where half of the respondents agree, and the other half of the respondents disagree, then the aggregated average will be 0. The second reason was the most common reason for the aggregated average results of 0, and indicates a strong division of agreement between the respondents from a certain group.
3 RESPONSE FROM EU STAKEHOLDERS

3.1 Consultation Process

The following results presented are based on questionnaires completed and collected during the consultation process. In the EU Member States, the following stakeholder workshops were held:

- Tallinn, Estonia, 11 October 2007
- Helsinki, Finland, 15 October 2007
- Rome, Italy, 15 October 2007
- London, the UK, 16 October 2007
- Bonn, Germany, 17 October 2007

In addition, complementary interviews were conducted or questionnaires were provided to individual stakeholders in France, Spain and the Netherlands. Lists of workshop participants as well as interviewed stakeholders are in annex 1.

3.2 Respondents

The respondents can be divided into three groups. Government representatives and other government officials (including customs, police and judiciary representatives) constitute the government respondent group, which accounts for about 21 per cent of the total responses. The private sector respondents include members from associations, which represent timber importers, wood processing industries, and forest owners associations, as well as timber import companies. Private sector respondents account for about 35 per cent of the total European respondents. Finally, civil society including representatives from NGOs and other interested people, where the largest group of respondents accounting for 44 per cent of the total European responses. A breakdown of the number of responses per group and country is presented below in the following table.

Table 3.1 Summary of EU FLEGT workshop respondents

<table>
<thead>
<tr>
<th>Country</th>
<th>Government</th>
<th>Private sector</th>
<th>Civil society</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>3</td>
<td>5</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>UK</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Belgium</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Estonia</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>26</td>
<td>33</td>
<td>74</td>
</tr>
</tbody>
</table>
3.3 Results from the Survey

The following analysis combines all responses for all EU Member States. The scores were calculated separately for each stakeholder group.

1) With the implementation of the VPAs in your country

a) Imports of illegal wood and wood products from the involved countries to the EU will be significantly reduced

b) Imports that have been illegal will be legalized, i.e, the proportion of legal imports will significantly increase

c) Imports of legal wood and wood products to the EU will significantly decrease because exporters/importers will consider that the cost of meeting the VPA requirements outweighs the benefits
2) The elimination of imports of illegal wood and wood products from VPA countries to the EU will

a) Reduce illegal logging in the country of origin

b) Leave illegal logging unaffected because exporters will reshuffle trade flows shipping available legal products to the EU and illegal products to other markets

c) Leave illegal logging unaffected because the involved countries will increase local processing of illegal timber and export these products to the EU
3) Reduction of illegal imports from the involved country to the EU will

a) Be compensated with legal imports from these countries

b) Be compensated with imports from countries not involved in VPA implementation

c) Shift demand towards timber products available within the EU
d) Shift demand towards substitute products (other than wood products)

![Diagram showing the impact of measures on different sectors]

-2 -1.5 -1 -0.5 0 0.5 1 1.5 2

Government
Private sector
Civil

e) Have a positive impact on the market share of wood products in the EU because of giving them a better image

![Diagram showing the impact of measures on different sectors]

-2 -1.5 -1 -0.5 0 0.5 1 1.5 2

Government
Private sector
Civil
4) From the standpoint of the private sector, the VPA scheme will

a) Benefit legal producers and traders by eliminating the unfair advantage enjoyed by illegal producers and traders

b) Lead to relocation of timber transformation activities outside of the EU

c) Favor large export companies at the expense of small and medium-sized ones
5) Even if technical arrangements to secure legality were effective, the VPA scheme would have a limited impact

a) Because it cannot effectively catalyze changes to factors underpinning illegal logging such as poor forest governance, poverty, corruption, inappropriate land tenure, etc.

b) Unless other major consumer countries such as China, Japan and the US join the scheme
6) Legal products from VPA countries will

a) Fetch higher prices in the EU market because reduction of overall supply in the EU will drive price level higher

b) Will enjoy a price premium of 10% or more in the EU market

c) Will have better access to the EU market, i.e., the main benefit is bigger market share rather than price premium
7) If Indonesia/Russia entered the VPA, the imports of your company from Indonesia/Russia would

a) Increase because of proof of legality is a major selling point on the EU market

![Bar graph showing the distribution of responses to the question about increased imports due to proof of legality. The bar graph shows a private sector rating of 0.5, indicating a slight agreement.]

b) Increase for another reason

![Bar graph showing the distribution of responses to the question about increased imports for another reason. The bar graph shows a private sector rating of 1, indicating strong agreement.]

c) Decrease because Indonesian/Russian products would become more expensive than competing products (e.g. products made of softwood or substitute materials)

![Bar graph showing the distribution of responses to the question about decreased imports due to increased costs. The bar graph shows a private sector rating of -1, indicating a slight disagreement.]
d) Decrease because Indonesian/Russian exporters would find VPA arrangements too costly and cumbersome and would divert their products to other markets or would process them locally before exports.

```
-2  -1.5  -1   -0.5  0    0.5  1    1.5  2

Private sector
```

e) Decrease for another reason

```
-2  -1.5  -1   -0.5  0    0.5  1    1.5  2

Private sector
```
Option 1: VPA implementation continued

a) Will make FLEGT implementation considerably more effective because of broader coverage of countries

b) Will be effective only if the coverage of the licensing scheme were expanded to all wood products (not only roundwood, sawn timber, veneer and plywood)

c) Will be effective only if circumvention (passing the goods through third countries) were effectively prevented
Option 2: Private sector schemes expanded

a) Is a cost-effective option

b) Is a more efficient approach than government-led measures

c) Is a useful but insufficient measure because of its voluntary nature
d) Is useful as complementary measure to be used in combination with other additional options
Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber

a) Are based on a sound approach in the sense that it eliminates the possibility of circumvention through third countries

b) Will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably

c) Cannot be implemented because it contradicts WTO rules requiring equal treatment for products originating from within and outside of the EU
Option 4a: Legislation which prohibits the trading and possession of timber and timber products harvested in breach of the laws of the country of origin

a) Is based on a sound approach in the sense that the verification and tracking systems need to be developed only when they are needed, i.e., in high risk situations

b) Will unfairly discriminate against products from high risk countries because companies in these countries need to develop costly tracking and verification systems to prove legality whereas companies in low risk countries may not need them
Option 4b: Legislation which requires that only legally harvested timber and timber products be placed on the market

a) Is based on a sound approach in the sense that the burden of proof is on the private sector which has the necessary resources to provide evidence

b) Causes unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low

c) Is unfair because the underlying assumption is that imported goods are illegal unless proven legal

Preferred options

The participants in the questionnaire survey were asked to rank the additional options from best to worst. The way in which the question was put caused some ambiguity in the identification of the best option; the results can be interpreted in two ways. On one hand, the most preferred option or combination of options across the EU are options 1 and 4b, and option 4b followed by option 1+2 and option 2 (Table 3.2).
Table 3.2  Ranking of options by respondents in EU Member States, first variant

<table>
<thead>
<tr>
<th>Option recommended as the best</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options 1 + 4b</td>
<td>8</td>
</tr>
<tr>
<td>Option 4b</td>
<td>8</td>
</tr>
<tr>
<td>Options 1+2</td>
<td>7</td>
</tr>
<tr>
<td>Option 2</td>
<td>7</td>
</tr>
<tr>
<td>Options 1+2+4a</td>
<td>6</td>
</tr>
<tr>
<td>Options 1</td>
<td>5</td>
</tr>
<tr>
<td>Option 1+2+3</td>
<td>4</td>
</tr>
<tr>
<td>Option 4a</td>
<td>3</td>
</tr>
<tr>
<td>Options 1+4a+4b</td>
<td>2</td>
</tr>
<tr>
<td>Options 1+2+4b</td>
<td>2</td>
</tr>
<tr>
<td>Options 1+2+3+4b</td>
<td>2</td>
</tr>
<tr>
<td>Options 1+3</td>
<td>2</td>
</tr>
<tr>
<td>Options 1 + 4a</td>
<td>1</td>
</tr>
<tr>
<td>Options 1+2+3+4a</td>
<td>1</td>
</tr>
<tr>
<td>Options 1+3+4b</td>
<td>1</td>
</tr>
<tr>
<td>Option 3</td>
<td>1</td>
</tr>
<tr>
<td>Option 1 + expanded product coverage</td>
<td>1</td>
</tr>
<tr>
<td>Options 3+2</td>
<td>1</td>
</tr>
<tr>
<td>Options 2+3+4b</td>
<td>1</td>
</tr>
</tbody>
</table>

Another possible ranking was done based on how many times each option was indicated either as the best option or was included it the favorite combination of options. Ranked in this manner, option 1 was referred to by 37 respondents or about half of all respondents. The second most frequently mentioned option was option 2 with 31 references. Option 4b ranked third with 24 indications and options 3 and 4 were mentioned by 13 respondents each.

Table 3.3  Ranking of options by respondents in EU Member States, second variant

<table>
<thead>
<tr>
<th>Individual option considered best or included in the favorite combination of options</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>38</td>
</tr>
<tr>
<td>Option 2</td>
<td>31</td>
</tr>
<tr>
<td>Option 3</td>
<td>13</td>
</tr>
<tr>
<td>Option 4a</td>
<td>13</td>
</tr>
<tr>
<td>Option 4b</td>
<td>24</td>
</tr>
</tbody>
</table>

In general, the Finnish private sector favored option 2. UK generally favored Options 1+2+4a or option 4b. Germany had the most diverse range of responses, covering most of the combinations in the above table. Private companies from Belgium and the Netherlands indicated that the expansion of the VPA is the best option. 4b was the most preferred option in Estonia, which had a relatively large response from government respondents. 30% of the French respondents generally noted that all countries and all products should be included in FLEGT, strengthening the Belgium/Netherlands comments for expansion.
The additional option you ranked best

a) Is a proportionate and cost-effective option

b) May not be fully effective but it sets an example that other countries will follow making it effective in the long run

c) Is worth implementing
3.4 Comments from the FLEGT Workshops/Stakeholder Interviews

3.4.1 Finland

General Comments

- In the development of the legal assurance systems the cost of new systems, which are based on existing systems, is considerably less.
- Additional bureaucracy and slowing down of activities would cause additional costs, as well.
- Finnish forest industry imports from Russia have been well tracked, but there are no general criteria for cases when actually the wood should not be accepted. This allows the importation of illegal wood. For example, the lack of a management plan on the site is a crime in Russia, but as long as the legality stamp is there, Finnish importers are happy.
- The increase in wood prices with FLEG tools in place in Europe was not approved by the participants without criticism.
- Illegal logging hinders forest investment, and EC’s final motivation in the fight against illegal logging was said to be trade and investment promotion in wood-producing countries, not nature protection or sustainable development (Art.-133).

Option 1

- Most of the questions are difficult to reply, since the final contents of the VPAs are not yet known.
- VPA would be efficient only if Japan, US and China joined a similar system.
- Legality requirement for logs exported from Russia to Finland also legalizes birch pulpwood, which is cut from the same LOT and exported elsewhere. So the effect is larger than just for European imports.
- Pulpwood from Russia is currently out of the FLEG discussion. This will distort the competition with European pulp producers in the long run.
- Big European importers will purchase from a group of small exporters in a VPA-country, so the benefit is not only for big companies. Multiplicative effect: local small producers would be brought into the legal wood production chain. They would become niche producers.
- Local legality stamp from Russia is “worth nothing”, and it is a scary concept for Finnish companies, which have established good tracking and monitoring systems. If e.g. a German importer can do with the Russian stamp only, this distorts the competition.
- VPA will be efficient only if it’s expanded to cover also further processed products.

Option 2

- Option 2 (private sector systems) is important for complementing any other option, but not sufficient alone.
- Any system to be put in place should fully benefit from the private sector systems already in place (tested, cost effective, etc.).
- Option 2 would truly increase wood importer’s environmental knowledge and awareness, instead of just requiring them to fill in forms.
- There are risks in Option 2: cheap system is not efficient, and the option would require common, thorough ecological and social criteria, and a verified chain of custody.
**Option 3**

- Option 3 (border controls) would never work with Russia since you can buy the right stamp.
- Option 3 would be best suitable for small importers,
- Option 3 may not be approved by WTO,

**Option 4a**

- Option 4a actually exists already for stolen goods, but not for other illegal goods.
- Option 4a will be a cost-effective complementary option. It is partly in place already (for stolen goods).
- Option 4a would block borders and cause complete chaos.

**Option 4b**

- Option 4b requires a EC-level standard, and would be equal to all producers and importers
- Option 4b requires the support of ecological and social criteria. Laws in the different countries should include these. Now the international agreements follow the minimum level of any national legislation.

**Additional Comments**

- Russian own satellite images based control seem promising,
- Russian export regulation is depending more on their national political preferences, for example Russia is aiming at increasing their own processing and therefore limiting exports is in their own interest. It has nothing to do with legality issues.
- Questionnaire was based on economy and VPA, not on environmental aspects,
- Many other sectors have stronger legality requirements and controls (for example food industry) and therefore strict FLEGT regulation would not treat forest/wood sector unfairly.
- Voluntary efforts by private companies cannot be the base, but strong public control is necessary,

**3.4.2 France**

**Government**

- A circular on the 5th of April 2005 was released dealing with taking into account sustainable forest management in public purchases of wood products.
- The rules cover the purchase of the following products:
  - Category 1: logs, sawn timber, veneer and plywood
  - Category 2: all other wood-based products (joinery, furniture, packaging, paper, etc.)
- To promote the scheme to public buyers (better knowledge of the scheme, training of buyers, support to implementation) and to establish a follow-up and evaluation system operate.
- The rules concern all the origins of wood (temperate, tropical, boreal…). The goal is that in 2010 100 % of wood products publicly purchased by the Government originate from legally managed forests, or from those that are committed to a sustainable management process.
• First by evaluating the efficiency of the scheme in order to improve it consequently.
• The circular considers the certificates of legality as documentary evidence. The rules concerning public markets consider this criterion as important as the price.
• At least in the beginning, there will be no change. We will continue to take into account the certificates of legality. When the first VPAs will be implemented in practice, information should be delivered to public buyers about the FLEGT licenses and about the participating countries.
• The scheme predicts that the guarantees of legality have to be supervised by third independent parties (e.g. forest certification, eco-label, code of best practices).
• We still haven’t evaluated the application of our scheme, because we still don’t have a follow-up/control system.
• It is not always simple for small companies to develop certification schemes. There is of course the direct cost of the certification, but in particular it’s the time resources dedicated to the process and the new competences and organisations to develop and implement, that hold back the small operators.
• It’s difficult to measure the impact, but it’s probably a modest one. However, we have given a signal to the operators. In France the private business operators have, for example, adopted an environmental responsibility chart for their own purchases. The importing companies feel more involved with these issues.
• We can think that it would increase the chances of Indonesian products, or products of other countries involved in the VPAs.
• A preference should be established in respect to wood originating from other common supplier countries that are not involved in the VPAs. One could suppose that the trade flows will be modified and that the wood originating from countries that have signed the VPA will be more present in the public markets.
• In the public markets the legality is one criterion of appreciation, but it’s not the only criterion taken into account in the decision-making. The French scheme already favours legal wood products. On the contrary, it’s not possible to favour one country over another in the public market.
• The concerned services of the Ministry, from a general point of view, support the FLEGT process, as well as its continuance and its extension. The direct and indirect impacts of the VPAs will of course have to be evaluated and if necessary, the scheme should be modified, in order to avoid existence of elements that would be against the FLEGT objectives.
• Therefore, the option 1 constitutes its first priority, in connection with the option 2 that makes it possible to give value to private parties engagement. On the contrary, the Ministry estimates that the option 3 is not feasible in any other respect than in view of international trade rules.
• The concerned members of the Ministry are not able to provide a classification between the other options. They consider them attractive in the first place, especially in dealing with wood originating from non-FLEGT countries, but the lack of concrete elements in their implementation makes it impossible neither to guarantee the proportionality of these measures nor to evaluate their efficiency and the positive or negative impacts that they would produce.
• It agrees to stick to the spirit of the FLEGT objectives, which consists of giving an advantage to wood originating from countries that have signed a partnership agreement.

Private Sector

• Favor especially expatriate companies and bring difficulties to national companies in producing countries.
• VPA has difficulties to tackle the basic reasons for poverty and bad governance.
• FLEGT has to be extended to all wood product imports and to a wider scale of countries.
• Awareness of regulations has increased in Indonesia.
• Problem in definition of legality (common level of definition with all countries) – link with TTAB.
• Definition has to match with national legislation but should take international level into account.
• EU has a rule on definition of legality.
• VPA countries good palette of countries to start with, but not enough to get permanent significant results.
• FLEGT needs to be strong and unfalsified system that is difficult get over with corrupted verification or licenses.
• Indonesia and Malaysia most challenging countries with regard to the verification of legal origin of timber. Forest tenure and use rights poorly documented and small local companies operating in timber procurement are not interested in these issues.
• No major impact on governance, corruption, some impact on land tenure.
• Rougier imports from Indonesia and Brazil – Indonesia biggest tropical timber exporter from native forests, 40 million m³/a, Brazil 30 million m³/a, Africa continent 14 mill m³/a.
• Indonesian government has made improvements, but circumvention of illegal timber through Indonesia is common, problems with own logging as well.
• Good governance is a problem.
• Problem with China; FLEGT baseline is not adequate because it allows and encourages circumvention.

Option 1
• Circumvention is a problem, demand for tropical timber is strong, the supplier can afford to loose the European client, e.g. illegal Okoume is exported to Morocco for processing and from there to EU markets as products.
• Good.

Option 2
• Company has introduced an environmental charter (2996, implemented 2007) scope of timber products is the same as FLEGT.
• Signatory companies agree to increase the share of certified imports third party legality (TLTV or OLB) or/and SFM certificate, audits every other year.
• Charter recognizes internationally recognized certification systems, FSC, PERF, MTCC, LEI.
• Documentation and justification of legality for ever import.
• Combination of private and government led processes needed.
• Need for national policy and private initiatives: market pressure does not work alone.
• Not effective along – goes in its own way despite FLEGT.
• Private sector more efficient than public sector.
• Supply chain to end markets is long, companies are not willing to trace back the origin.

Option 3
• Very strong control is required accompanied with training.
• Must apply to all countries.
• Quality of evidence is a real risk.
• Strong control required with capacity building.
Option 4a

- Assurance of legality will be implemented to all products anyway – when developed, chain of custody needed.
- This option increases suspicion to timber business – the legality, etc. Problem has to be tackled in the exporting country.

Option 4b

- Not an acceptable option.

Additional Comments

- All countries and all timber products must be included in FLEGT.
- FLEGT has to be a core to all factors affecting and enforcing the legality of timber. It must combine or integrate/consider:
  - labeling systems
  - private polices
  - local policies (supplier country)
  - local custom regulations, customs and rules

Challenge to discuss with private sector to make rules feasible and respectable (difficult to get around with). EU rules shall be applied in FLEGT assessment.

- VPA negotiations must include civil society in the producing country, it must include all sectors, private public, international and national and whole chain.
- FLEGT must be implemented, private initiative is not enough alone.
- Optimistic that during the French presidency of the EU (6/2008) environmental issues including FLEGT will be pushed forward.
- FLEGT implementation: EU commission must bring public and private together.
- Catastrophe if new bureaucratic administrative regulations are put onto private sector, existing tools (certificate of legality) must be recognized and incorporated into the control systems.
- Need to harmonize the existing controls and not introduce additional controls.
- FLEGT is based on confidence.
- VPA can open the door for corruption, bad governance (cf. FLEGT has to be strong). Need to combine the interests and measures private sector is and can implement with the administrative rules defined by the EU.
- Third party accredited verification (e.g. SGS, OLB? TVT? or other certification/verification bodies a good timber tracking option.
- FLEGT has not defined what the tracking option would be, this will strongly influence on how good and reliable the system is.
- Basic conditions for FLEGT:

  1. Common definition for legality required based a) on national legislation but b) parts of international conventions, laws must be intercorporated.

Legality schemes TVTL or OLB have set a level for legality in Africa that combine the above elements.

The existing legality verifications done by internationally recognized 3rd parties must be considered and recognized by FLEGT.

2. Control body

If control is not fully independent from local governments it is not reliable and pulls out all basis from the FLEGT – reliable control is crucial.
PAFC / FSC certification
- Keurhout certification
- ISO 14001 certification
- Legality /traceability (OLB/BVeritas; TLTV/SGS)
- Baseline for FLEGT legality: country specific VPAs can exceed the baseline

EU initiation is good. It brings a definition for legality and provides a frame for private initiatives and public initiatives (procurement policies).

If FLEGT fails – back to current situation where ENGOs put pressure to markets.

FSC certification is difficult to get. Highly controlled by ENGOs who set additional requirements and criticize certification decisions with the result that issued certificates are withdrawn.

- FLEGT is a good help
- modifies attitudes
- illegal logging is only one angle to deforestation or lack of SFM, FLEGT is not efficient in tackling poverty and governance issues – development component should be strong
- e.g. Cameroon 40% of logging based taxes should be allocated to local communities and 10% to local villages – money remains at regional or national level (in somebody’s pocket) no investments are made in local level – corruption
- FLEGT will raise awareness and help to put pressure to internal processes (bad governance, corruption) etc. in the country
- If FLEGT is too bureaucratic (administrative and puts new inefficient procedures) there is a risk for substitution to other products in EU and increased circumvention
- If FLEGT fails the pressure on SFM and legality will remain and has to be tackled by private sector
- These Views Were Shared With ATIBT

Civil Society

- Quality of VPAs is decisive. ENGOs require that civil society in the exporting country must be able to influence the VPA – if not it has no chance of being efficient. It must be large in scope – legality must cover enforcement, social issues and international laws.
- Reduction of illegal logging will only occur if it covers furniture (China).
- Chinese products need special regulations.

Option 3

- Key issue to prevent inconsistency in the quality of evidence from exporting countries. FLEGT must tackle the problem, otherwise it is useless.
**Option 4b**

- Depend on the FLEGT support and action plans. Companies should be responsible for their timber.
- For high risk countries there shall be strong tracking systems in low risk countries proof of origin is enough, proof depends on the country.
- International cooperation is necessary to reach legality

**Additional Comments**

- If FLEGT is not achieved, wood will be shipped to China for processing
- European wood sector will loose in competition when illegal timber products enter the market and set the price level.
- FLEGT strong law/ EU normative regulation, support to governance and implementation is needed and normative responsibilities to companies that includes all parties in the harvesting, export, import and processing chain.
- Countries need true improvements in policy development and governance + land tenure issues – scope of LEGALITY MUST be large to tackle the underlying issues.
- International pressure can be developed when international organizations (IFIA etc. companies and ENGOs strive for the same objective).
- Quality and uniformity of VPAs and prevention of circumvention are important issues
- Quality and uniformity of VPAs and prevention of circumvention are important issues
- FLEGT is not a new initiative: Cameroon was forced by WB 8 years ago to accept an observer independent that reported annually on legality? Issues – despite the reports, the government has not changed anything – true commitment from governments is needed in FLEGT (how?)
- In future good law and enforcement should be adequate for sustainable forest management – certification is a transitional stage.

3.4.3 Germany

3.4.3.1 **Summary of Discussion in the Workshop**

After a brief introduction of participants Mr. Jyrki Salmi, Indufor, presented the background, process and scope of the study and the various potential options, including some preliminary findings from the background studies undertaken by Indufor, especially some results on the implications of different scenarios on the timber trade flow under the various options for additional FLEGT measures, using the Timber Trade Flow Model of the European Forest Institute (EFI).

He also explained that as part of the process there will be a final stakeholder workshop in Brussels on 13th November 2007 where stakeholder groups again have the opportunity to comment on the results of the study and on further steps to be taken. Participants were then asked to complete the questionnaire to give their feedback on the different options and their assessment of the implications.

During the discussion, concern was raised that not all stakeholders were present and especially the timber trade association was missing. NGOs had expected the consultation much earlier and warned that EU is running out of time in taking measures. Earlier attempts for developing specific German legislation had been withdrawn in expectation of EU legislation. It was demanded that Member States should pressure EU to decide on measures as soon as possible.
Regarding the options, it was stated that Option 2 is not a real option as voluntary agreements have never worked. Option 4 would be best, especially 4b in combination with VPAs and support (TA) to partner countries. VPAs are considered to be not sufficient in regard to countries and products, as there are too many loopholes. Modern legislation is required.

The organizers explained that more than 60 stakeholders and stakeholder groups had been invited and every effort had been taken to ensure adequate participation. However, many invitees could not come due to other commitments, and time and personnel constraints.

WWF complained that there was no new background information and especially detailed information on the implication of various options was missing. It was explained that the Indufor Inception Report includes some tentative results on the implication of options which will be made available to all stakeholders. More specific information will be provided before the final stakeholder workshop in Brussels on 13th of November. The representative of the Ministry of Finance asked for more information on the cost of each option and related implications on the timber industry. Otherwise, it would be difficult to fill in the questionnaire.

The representative of a timber importing company stated that option 4b as a long-term option would be feasible, as long as companies are given enough time to adapt to the requirements. In the short term, however, it would be difficult to prove the legality for each origin. This would result in a loss of business from timber imports from high-risk countries. He warned about a market shift to China (already today, 50% of African timber goes to China) which will have tremendous impact on European companies. All measures at EU level would probably be circumvented via China.

WWF informed that EU legislation may not be expected before 2011 or 2012. The representative of the German forest owners association stated that all options would only address the problem superficially, while the root causes for illegal logging remain unabated. Therefore, measures are needed to eliminate the root causes such as poverty, bad governance, unclear property rights, etc.

It was explained that the VPA approach includes measures to support countries in addressing these root causes, but that technical assistance linked to VPAs alone cannot reduce poverty and other root causes. Concerted action at a broader front would be needed.

NGO representatives agreed that fighting illegal logging is a broad issue and needs to address root causes. VPAs are adequate measures with the key element to improve governance in producer countries. A two-way approach needs to be applied including measures in consumer and in producer countries. Control of logging must come first (insuring legality and sustainability) and then the trade issue needs to be addressed. It was remarked that preliminary findings of the Indufor study showed that even with VPA-6 and VPA-12, logging of timber will increase. Therefore, it is necessary to watch global consumption of wood.

Stakeholders voiced their concern about the tremendous influence of China on the global timber market, and that the various options should outline the implications of the involvement of China. It was explained that the study already includes the role of China in different scenarios, but that other countries such as Japan and US are also major players in the game and should be included in considerations.

WWF stated that EU should focus on where wood comes from, not where the products come from. Therefore, option 4b would be the best. Participants agreed that China should be included in all considerations on legislations and agreements.
Greenpeace pointed at a report on the impact of China on the world timber trade. Any EU legislation will have to specify the scope, so that specific products will have to be mentioned specifically, which may not be an easy task. At present, the products to be included are not defined.

It was suggested to analyze options 4a and b in the context of continuation of VPAs. Then it was outlined that no option excludes VPAs, and VPAs and additional measures should be considered as a complementary package. It was also stated that EU legislation is not the best solution but must be part of a package of more comprehensive measures.

Greenpeace pointed out that there are other schemes already in place such as forest certification that can be used as part of the package so that the scheme does not have to start from scratch.

There was concern that accompanying measures to VPAs e.g. support to countries to introduce licensing systems could be considered unfair advantages under WTO. Indufor explained that this seems to be a bit far fetched and explained that WTO issues were specifically excluded from the terms of reference for the study and will be analyzed separately by the EU.

The timber industry mentioned that option 4 needs to be more differentiated, e.g. in a way that imports from low-risk countries would be automatically declared legal and those from high-risk countries would need to be accompanied with proof of legality. It was explained that the existing four options had been given by EU and that other options may be challenged under WTO.

It was mentioned that option 4b includes all wood products, even those produced in the EU member states. Indufor also explained that measures to eliminate illegal logging would target the major players first and that the political reality needs to be taken into account.

WWF stated that the option of regulations on public procurement was not mentioned as an important way to assist in sustainable forest management and fight against illegal logging. Indufor explained that public procurement as an option was not included in their terms of reference, but there is a discussion of EU Member States on public procurement in a parallel process and related measures of EU Member States are part of the EU FLEGT package. It was also stated that regulations on public procurement are not in reach of EU legislation but subject to individual member states legislation.

### 3.4.3.2 Comments in Writing

**Government**

**Option 1**

- In particular, China’s participation would help

**Option 4a**

- The practical implementation of this option is very questionable
Private Sector

Option 1

- Limited product coverage
- Risk of laundering via third countries
- Limited geographical scope

Option 2

- Will have a positive impact on market demand for legally verified wood.
- It is better to do something voluntarily instead of being forced to do.

Option 4a

- Need to be implemented in other importing countries.
- Positive impact on legal imports.

Option 4b

- Is a very positive approach for larger companies, but difficult to implement for smaller companies.
- Would help companies who are already implementing a tracking system.
- Should be grounded as availability of proof of origin is usually lacking and will ask a large input.

Additional Comments

- If any legislation will be implemented, China, USA and Japan should be included in order to prevent unfair competition.
- For any legislation to be implemented, a reasonable timeframe is needed for the companies to adapt. Five years is a minimum, seen from practical experience.
- Knock out effect in other markets to consider.
- With options 1 and 4b, positive economic effects on employment and competitiveness, developing countries would get support from EU.
- 4b should be implemented as fast as possible.

Civil Society

Option 1

- Other impacts that would be different from those of the baseline scenario include China as one of the major third country would be committed as well.
- Current loopholes in the VPAs have to be addressed e.g.: restricted product range, only bilateral and regional agreements, circumvention and laundering.

Option 2

- More influence by consumer using the information by enterprises.
- By promoting voluntary certification systems, illegal logging is not only fought, but rather sustainable forestry is promoted.

Option 3

- Big gap is that the EU has to take steps against illegal logging in the EU itself and not only outside borders.
Option 4a

- Disproportionately high bureaucratic expense on window-dressing
- Investments should be made in introduction of voluntary certification systems

Option 4b

- Disproportionately high bureaucratic expense on window-dressing
- Investments should be made in introduction of voluntary certification systems

Additional Comments

- The questionnaire could have some major improvements. I agree and refer to the remark during the filling out period (i) questions are misleading, and (ii) on some questions the background knowledge should be provided prior to filling out (e.g. costs of the different options), black and white picture you are trying to receive
- You should also consider illegal logging without concession is already illegal in many countries e.g. Indonesia, there is a death penalty for illegal harvesting. It is often the very concept minor government authorities, which play a major role in such harvesting activities. So if these authorities can … the legality of wood, the VPA will be a toothless tiger.
- I am missing the … of climate change and the CO₂ problem.
- It is very difficult to get …. against illegal logging. Mankind is not able to stop the hunger in the world. This problem is much bigger than that of illegal logging, therefore I am very sceptic.
- Some questions are really misleading and are questioned from a very one-sided view. It is very important that the process is done in a participatory way. Crucial stakeholders have not participated in the meeting, e.g. customs, timber associations, etc.

3.4.4 Italy

3.4.4.1 Summary of Discussion in the Workshop

Lillo Testasecco from Forest Department explained briefly in the beginning of the meeting the contents of FLEGT Plan of Action and the different steps in negotiations. The issue of export permits from different countries to the EU was discussed – it is recognized that permits can vary considerably from one country to another and there should be some kind of minimum requirements, obligatory reporting issues, applied to everybody.

The presentation of preliminary study results by Mr. Jyrki Salmi was very much appreciated and the participants requested to get a copy of the presentation (it was sent to them 16th of October 2007).

While going through the additional options and the statements, some of the following questions were presented:

- Should we trust your preliminary results or not – if we trust them, it would obviously be the best option to expand to the VPA-12 instead of VPA-6. Mr. Salmi’s answer: use your own judgment.
- Is this a short-term or a long-term scenario? Mr. Salmi’s answer: we expect that it would take 2-3 years for the impacts to realize.
- Statement 10, private sector measures: would the tracking and verification system mean any certification, IKEA (do their own just like many other companies), Castorama, FSC, PFEC? Is it a 2nd or 3rd party tracking system? Answer: any system.
• Additional option 3: comment about the proof, which would be even more difficult to obtain than the exporting license and would hence cause lots of stress to exporters. The requirements for proof and their validity may change day-by-day, and government by government in many countries. It is not realistic to expect any computerized systems in most countries, and thus electronic license may not at all be a feasible and viable system.
• Additional option 4: what does “possession” mean here? Mr. Salmi’s answer: for example if I construct a house and somebody knows that my timber or my parquet comes from illegal sources, I could be punished for that.

Also the issues of certifying the whole chain of custody from harvesting to the final product, as well as the importance of providing technical assistance to the producing countries for democracy development and awareness on legality were discussed.

3.4.4.2 Comments in Writing

Government

Option 1

• The biggest problem is that when products arrive in Europe we cannot trace them anymore and don’t know for example the chain of custody of for example of furniture made in Europe. – Tracking is only to EU border. Much of Italian production is delocalised. – Also the final product should be included in the FLEGT.
• Reduction of illegal imports depends much on public and private demand (not aware, not sensitive).
• In public tendering in Italy the need for legal and certified products is already appearing.
• Relocation of industries is already happening.

Option 3

• Unfortunately many of the additional options presented in this questionnaire have serious implications for civil and penal responsibility. Accordingly we are very doubtful about the possibility to introduce measures that – starting from expressions that can certainly be shared but that are extremely generic – do not consider the problem in all its nuances.

Option 4a

• The same as said earlier applies here. Outside a Voluntary Partnership Agreement the additional options would create more complications than they could resolve for civil and penal responsibilities. Moreover, both in the European Commission and member countries of the EU nobody wants the institution of a control and verifying structure (like for example the CITES Secretariate in Geneva) which should take care of the tighter additional measures than those introduced in enforcing the law 2173/2005.

Option 4b

• Here applies the same as said earlier.
Private Sector

- FLEGT is backed by German and French companies and it is purely cosmetic; big companies will continue their ugly business in Africa, Asia etc. and FLEGT will give their products a polished “legal” appearance. As a company we trust FSC.
- Legal imports will stop if FLEGT is taken seriously.
- Not interested in participating in the workshop because FLEGT is anyway driven by big European companies who spend money lobbying it, wanting to make their illegal business legal. They have big sawmills in Africa etc. and if this continues at the end small suppliers will become sub-suppliers to the big ones.

Option 4a

- Such a system is in fact based on the general assumption that timber is illegal and suggests that one will get away with it only if interested parties are able produce evidence of such illegality.
- This would actually be a system creating uncertainty for the importer who on one hand is not required to develop control systems but on the other he would subject himself to the possibility of being tried in European courts, among others, not for his own fault but that of the producer.

Option 4b

- The responsibility for producing evidence on the legality of imported goods can rest nowhere else but entirely with the producing country or the producers of raw material.
- In any case the importer cannot be responsible for anything that is not within his reach.
- The burden of verifying the evidence of legality must be placed on the government and its competent authorities, task which should not be delegated to the private sector. Should one ask the private sector to do something that the Government is apparently assumed to be incapable of doing?

Additional comments

- The only instrument to make the FLEGT system effective is to extend it to all importing countries united to develop transparent governance in producing countries. We emphasize again that the only way to combat illegal logging is to develop a uniform system at the global level under the aegis of the United Nations.

Civil Society

- The EU has to take a position even if others don’t. Implementation of option 4b would have a positive effect also on other markets (China) as well as an economic effect in terms of enhancing competitiveness and employment in the forest sector.
- A combination of 4b and VPA would help developing countries in their commitment to develop and conserve their own resources while creating development opportunities.
- Only the adoption of 4b would enable the EU meet the objectives set.
- The destruction of forest and illegal logging is a problem of economic responsibility (industries, corporations, agencies) as well as of poor governance on the part of rich countries in terms of forest sector.
- Preference should be given to development of forest certification systems at the national level, i.e. to instruments that enable development of systems providing security of legality and sustainability to those who harvest and trade timber.
3.4.5 Netherlands

Private Sector

- Company favor very simple CoC system and ban of log export. Log export ban, when implemented seriously, is the most cost-efficient way to hurt illegal wood trade.
- FSC is considered as good but as an expensive solution for most players.
- It is quite possible that the majority of EU tropical wood trade just goes down if the business regulations are too stiff. EU trade is not needed in global scale in this business. China, Malaysia, Brazil and other can handle the trade and manufacturing and EU would become just a consumer region – this is a realistic scenario. A “real wood” will not be off the fashion ever, but the EU players may be seriously hurt in the future by the regulations.
- China is the key player – without China there is no way to really stop the illegal log trade of processing of those logs. China–US axel can easily handle all the tropical wood with any EU companies in between. FLEGT without the US and China involvement is not efficient.
- Situation in Indonesia has improved a lot this year. The stiff legislation really stops the illegal wood trade in big scale, boosted with the threat of death penalty.
- The product scope should not be solely wood products but also some other products, so no one sector in EU would be hurt.
- China must be involved with one way or another. China is the key consumer of illegal or suspected wood in global scale. Without China the effectiveness of any attempts is limited.
- A legal system may in some degree compete against the certification schemes, although legal is not always a proof for sustainability.
- Any legal system fighting against the problem must be at EU-level not solely in the level of Netherlands.
- China-USA axel is an important one in global scale. EU is just a medium sized player in the wood trade from the tropics. Without the negotiations with USA and China the effectiveness cannot be excellent.
- Not only tropical wood is controversial. Also Russians have problems and perhaps Russia should be linked to the system also
- The whole discussion of “sustainable” should still be discussed further. LCI, LCA should be included into the discussions concerning sustainable materials.
- Company is dealing with most tropical countries time-to-time, but at the moments the key suppliers are Indonesia, Brazil, and Ivory Coast. Ivory coast is supplying abachi wood for sauna construction uses.
- Official control may be efficient, when implementing by the real powers in the countries. Example of this is the border control in Burmese Northern border, where the army has controlled the illegal log trade very efficiently. Thus there is hope in implementing new measures against illegal wood trade.
- In global context the axel tropics–China–USA is the key. Without US, China and Russia the system cannot stop the illegal harvesting in the tropics.
- If the system against the illegalities would work, it would benefit their own business as a legally oriented company.
- As a whole the furniture business always needs basically three optional species for processing. Oak, from the US or Europe, low cost beech from Europe, and some reddish tree species. So the industry can survive without most of the tropical species if necessary. Oak, and beech are the “volume-species”, and in addition, some reddish tropical species are needed. Not more.
Civil Society

- The credibility and efficiency of FLEGT depends very much on the quality of Voluntary Partnership Agreements. In the current scope the VPAs include severe loopholes due to the fact that they do not cover all timber products and do not provide an efficient tool to prevent circumvention or laundering of legal requirements.
- EU should define the minimum level of legality (scope and content) to ensure that VPAs can tackle the economic, social and environmental issues related to legal timber procurement.
- An international minimum level on the scope and content of legality also contributes to the prevention of laundering where a country lowers the legal requirements after signing of a VPA agreement.
- Product coverage should be coherent and cover a broad range of timber products. A higher number of countries should be involved in the VPA negotiations because the current nine countries supply only 3.4% of the timber imports to EU. A high risk for circumvention is evident if the major timber processing countries and major selection of timber products is not covered by the VPAs.
- VPAs must put a true effort to improve good governance in the partner country and it shall rely on credible third party certification as a means of legality verification.
- In the current setting there is a risk that VPAs turn out to be very different between countries which makes them a discriminatory tool allowing privileges to some countries and denying them from other depending on the level of national legislation and outcome of the negotiations.
- It is extremely important to ensure that the civil society truly can participate in the negotiations and that the documents are open to public for comments. In many countries civil society is formally a partner in negotiations but their possibilities to attend the meetings and possibilities to influence the decision making is restricted.

Option 1

- Extension of the current VPA approach to six new countries including China improves the credibility but will still preserve the severe loopholes related to limited coverage of the product range that open the way for large scale circumvention if the processing is done in a non-VPA country. The outcome of agreements defines very much the impacts of the option 1 in practice.

Option 2

- Increase in private sector initiatives to assure the legality of timber and timber products will not increase significantly the efficiency of VPAs. Self regulation options have been in place in timber business for a long time and their positive impact on a regional or global level has been very limited.
- Self regulatory approaches (e.g. Codes of Conduct) oblige only the committed companies and their enforcement is weak. There are also cases where the performance requirements of the Codes of Conduct have been lowered due to economic or other business related reasons.
- Legal requirements e.g. through FLEGT and VPAs complement the private sector initiatives and reward or punish the companies according to their performance.
- Third party certification against a public standard provides a better evidence on the compliance to an private sector performance standard. However, often the certification standards for legality assessment are too narrow in scope or low in performance requirements setting very little emphasis e.g. on social
issues related to timber procurement. Also the quality of the independent audits is not good in all cases.

- Private sector initiatives are essential but not adequate measures to combat against illegal logging.

**Option 3**

- The option 3 where the exporting of illegal timber should be prevented by the border measures is not preferred because of the bad governance and high risk for corruption in some exporting countries. Often exported timber has all the required licenses despite of the fact that it is from illegal origin.
- Only if EU sets the minimum requirements for the legality and its documentation covering the whole timber procurement chain, could the option 3 provide somewhat credible evidence on legal origin at the export point.

**Option 4a**

- Option 4a prohibits the selling of illegal timber on EU markets but sets the burden of proof on the illegal origin to the party that claims the imported products are illegal. Thus the burden is most likely on the shoulders of civil society. The option is not preferred.
- The scale of illegal logging is so huge that it is impossible to claim case by case that illegal timber is traded in EU markets.
- There is also evidence from earlier cases that public prosecutors in EU countries usually do not take up the cases partly because they have very limited means to get reliable information of the delivery chain due to the limited resources and absence of judicial treaties with the producing countries.
- In this option the court decisions will set the standards for legal origin case by case which provides no common rules and playing field for timber importing and processing business and increases the inequality in the business.
- If the legality is defined based on the court cases the focus will be in high risk countries and imports from other lower risk countries are not controlled at all. This may result in legalizing timber originating from illegal sources in these countries.

**Option 4b**

- The option requires that importers provide evidence of legal origin for all timber deliveries and it is punishable if they fail to do so. The burden of proof lies on the timber importer. This is the preferred option among the ENGOs because the timber importers have the means and resources to provide the evidence.
- The option does not bring unnecessary costs because company policies and their consideration in a good chain of custody verification system provides a cost efficient way to guarantee the legal compliance.
- This option can be applied to all timber and timber products including imports from non-EU and EU countries.
- The option could have significant impact through leveling the playing field for timber processing business in different countries and using different supply chains. It develops the opportunity to set real and fair prices for timber products originating from different sources because the illegal products with lower prices should not enter into the market.
- Verification is based on a good chain of custody system and on the provisions for legal compliance, which paves the way for forest certification contributing to sustainable management of forests in the world.
- The option 4b complements and stimulates the VPAs. The approach can decrease corruption and favor small and medium size timber suppliers and
also have positive implications in living conditions among forest dependent people in the producing country (e.g. through the potential certification)

- The importers’ evidence on the legal origin will also increase the confidence and image of tropical timber in EU countries.

### 3.4.6 Spain

**Civil Society**

- I don’t trust that Indonesia can reduce the illegal logging (more than 50%) in a short time. Probably this country will need more than ten years, if government and companies agree to halt the forest conversion to palm oil and eucalyptus and acacia plantation. VPA with Indonesia will not stop the EU imports of illegal products from this country. The corruption and non-governance in the custom service will achieve to put their products in the EU market.

- What about paper? EU imports a lot of paper coming from Indonesian paper companies involved in illegal logging practices.

- This would be a failure of VPA and I do not think it is going to happen. I think it is a mistake to think that illegal wood is going to be legalized. It would be a failure of the system and it is not the VPA’s objective.

- The six VPA candidate countries are only 1% of the total of the imports of the EU. There could be changes in the origins and a readjustment of the market but there will not be a descent of imports.

- You should not forget that the wood market, with or without codes of good practices, looks for a market which has the most cheapest wood, not the most legal.

- VPA will have a positive effect when reducing illegal tree felling but this effect would be greater if the VPA included all the local production and also products derived from wood, including paper.

- It could be but for this there are bilateral negotiations of EU with the six countries. This should be included in the VPA terms. If this occurred it would be unacceptable.

- But these six countries are to be positively affected by the VPA because the forest companies of these countries will be forced to adapt to the requirements of the new situation with the EU. This adaptation and reform process will have a positive impact on the reduction of illegal tree felling.

- To complement the measure the EU should adopt an additional legislation (option 4b) in order to eliminate the trade risk and prevent that the illegal wood would enter the EU through third countries, or as a manufactured product.

- This is very important. The illegal wood is a “scar” which marks the wood sector’s good name. The VPAs and the future legislation will help that more wood is consumed and that this would have a better image.

- This is true only for the countries with VPA. For the six countries this could be positive.

- But the VPAs are clearly insufficient to achieve this objective though the companies which are worried about banishing the illegal practices will have a clear benefit when acceding to the European market.

- From EU’s point of view, the VPA agreements could not be withdrawn from the illegal wood market of the rest of the countries which are not covered under VPA.

- You cannot blame the VPA or FLEGT process of this problem. It is a problem which is being produced in other sectors but which is not dependant on the environmental control of the increase of measures

- Exactly, the low wood prices of other countries are producing abandonment of forest activity in Spain. The control of illegal wood could help the Spanish producers.
VPA is much more than a verification system of legislation. Greenpeace and other NGO ecologists have established requirements for the VPAs that would implicate a public participation process between different interest parties, a process that would catalyze better governance and would make the sustainable management possible.

VPA is much more than a problem in wood tractability.

Of course, the impact would be greater if China and other countries joined. But the experience of EU’s history is that their decisions could lead into worldwide changes. The EU action in other international agreements has been crucial for changing the history, even when other important countries are opposing.

And the adoption of the new legislation, option 4b, including the manufactured forest products, could help to end the illegal tree felling and help countries like China to change towards this direction.

This is not a probable prediction. These six countries cover only a small part of the wood imports and by-products in the EU. And it is not shown that they have to rise the prices of the legally originated products.

Option 1

- It is a good way but there are countries that have already shown their rejection to agree VPA with the EU, as in the case of Brazil. If some countries like Brazil or India oppose, the VPAs will only be part of the solution, never THE SOLUTION.
- Of course. Fabricated paper including illegal tree fellings in Indonesia is entered to Spain. And if the VPA’s cover all the forest-origin products the effect against the illegal tree felling is greater. But yet this is insufficient.

Option 2

- The experience in Spain is very clear about it. Companies belongs to timber and paper Federation (i.e. Importers Federation, Pulp and Paper Federation) was involved in importing products coming from illegal activities. This companies and this federations had a good practices code.
- I am not against encouraging the strengthening of private voluntary schemes and codes of conduct on illegal logging, but we state clearly that these measures alone will not prevent illegal and destructively logged timber from entering the EU market place.

3.4.7 United Kingdom

3.4.7.1 Summary of Discussion in the Workshop

Mr. Esa Puustjärvi presented some of the preliminary results of the draft report. The presentation of the results generated various comments of which the majority surrounded the issues relating to the scope and methodology of the project. The key comments were as follows:

- The Impact Assessment of the Additional Measures fails to assess the impacts of these measures adequately in the current VPA countries. Thus the assessment is being carried out from trade perspective instead of a more balanced approach with an equal focus on the impacts in the producer countries.
- Processed timber products such as joinery, floor panels, and furniture, among others should be included in the study.
- Ideally the project/and VPAs in general should include timber products relevant to a producer country i.e. coverage could vary according to the needs of the producer countries.
• New emerging countries, for example in Middle East and Asia, should not be overlooked as they can rapidly replace or compete with China as a new timber exporting destination that reprocesses timber and then sell products to the EU market. Thus a possibility for a rapid change in timber trade flows should be considered in the final analysis.

• High-risk countries that are excluded from the VPA negotiations also export timber for further processing to China. This is a loophole that the project should consider.

• It is important to clarify how illegal timber trade is defined in this study.

• The project presents scenarios for circumvention of illegal timber. This can be interpreted as it assumes that VPAs will not be successful.

• The slide number 43 was heavily criticized on its assumption that reduced export demand may result in reduced harvesting in the producer countries. The participants argued that the opposite might be happen i.e. logging could increase and forests could be conversed to other land-uses.

• A conclusion that reduction of tropical wood imports to the EU would result in lower export prices in the producer countries was challenged. It was emphasized that tropical wood can often not be substituted and thus export prices would increase in the producer countries.

• A long-term scenario would be useful to include into the study, as there are many factors such as higher timber prices and competition for land-use that will affect forest management and timber trade in the future.

The questionnaire was explained by Mr. Esa Puustjärvi and the following comments emerged relating to the questions:

• It is crucial to define the content of a VPA, for example in Ghana, a VPA includes both domestic and foreign timber trade. (Question 2).

• Some participants could not understand the rationale for the assumption that forest industry might relocate outside of the EU. (Question 4 b).

• Question 5 a is (wrongly) based on the assumption that VPAs do not incorporate forest governance, which is misleading as both forest trade and governance should be included in VPAs.

• The objective/s of FLEGT should be made clear. Does it include just illegal logging, or illegal logging together with progression towards sustainable forestry? The answer for the question 14 depends on the objective/s.

Some other comments made during the discussion are as follows:

• Some participants were concerned about stakeholders’ opportunities for participation in the workshops outside of Europe i.e. how the project management has ensured correct identification of relevant stakeholders and assisted their participation.

• FLEGT should also address illegal logging within Europe, for example in Romania, among other countries. This would enhance the acceptance of FLEGT requirements in the tropical producer countries.

• Next steps raised some questions as well. Participants requested the information on (i) dissemination of a draft report on the Internet, (ii) a publication of the final report, (iii) and the intentions of the EC once it has received the final report.
3.4.7.2 Comments in Writing

Government

- Elimination of illegal imports will reduce illegal logging in countries of origin IF ACCOMPANIED BY GOVERNMENT REFORMS. The VPA is more than just the LAs

Option 3

- Experience shows that the source of timber/timber products that have been laundered into a third transit country and inherently dishonest in order to continue the profit stream.

Option 4b

- Legal action vv Cites usually only taken where illegality is proven (in UK).

Additional Comments

- If the law is changes, resources need to be made available to train law enforcement officers and the law needs to be written so that it is enforceable. The easiest way to get around illegal logging restrictions is to turn the timber into finished products outside the source countries.

Private Sector

- The VPA is promising but may have limitations. Assuming all exports are covered, the VPA could reduce illegal logging in the countries of origin.
- Legal products from VPA countries fetch higher prices in the EU market assuming there is a reduction in supply, but will also depend on the number of VPAs. If lots of countries join the VPA, then the price premium will disappear.
- Everything depends on how the VPA functions. Elimination of illegal wood from VPA countries will leave illegal logging unaffected because some of it will end up in China, etc.
- The VPA scheme will most likely favor large companies, as SMEs are more likely to be using illegal timber.

Option 1

- VPA countries need to license all their exports, not just to EU, to make the system effective.
- But all this control of international trade does not solve the root causes – corruption, poverty, tenure issues.

Option 2

- B2B us generally quicker and more effective.
- Private sector initiatives could have a much wider range of supply in a wider range of countries.
- Private sector initiatives are generally more feasible and efficient.
- Depends on existing rigour. i.e. rigour of many UK of the private sector is already high.

Option 3

- Can only work if applied to all products of timber.
• Too vague a concept. What sort of information is acceptable as evidence of legality? If it requires traceability to place of origin, it could never be implemented. Major suppliers, e.g. US that derives much wood from small non-industrial owners would be strongly opposed.

**Option 4a**

• Greatly extend incentives for due diligence throughout the EU private sector. Baseline scenarios do not do anything to encourage private sector action in EU. Encourage widespread application of risk assessment. The most efficient and effective response which complements will existing baseline approach will apply to illegal harvesting within the EU as well as external trade.

**Option 4b**

• This will be a potential barrier to legitimate trade in timber and may have the perverse effect of discriminating against timber.
• Impossible at point of import. Once goods have gone through several importer/merchants in Europe, the information is lost.
• This approach is unworkable. How do importers “prove” legality when sources in USA hardwood, which derives mainly from small family forest owners. Seriously discriminating against producers from non-industrial forests. Disproportionate to the scale of the problem. Most wood imports into the EU are legal – seems ludicrous now to… proof with every shipment.
• FLEG should check legislation at point of import, i.e. customs.

**Additional Comments**

• Some of these questions are difficult to answer without knowing what a functioning VPA looks like.
• The tracking and auditing requirement for VPA’s may well be significantly higher than for forest certification schemes in many high-risk countries.
• Risk assessment needs to be at the core of policy response.
• Response needs to be proportionate to the real scale of the problem – that is, a minority of imported timber is bound to be illegal.

**Civil Society**

• On the assumption that all countries sign a VPA, will include all exports as well as domestic market. Such as the case in Ghana and hopefully will be the case in the other countries.
• The implementation of the VPAs in the six candidate countries will reduce the imports of illegal wood and wood products in the EU, but it is difficult to say in what proportions.
• If VPA scheme were to reduce “significantly” illegal imports, they would have to be rolled out across the entire VPA countries to include all domestic production of wood and wooden products, including secondary-processed products, such as paper and packaging as well as biomass, and cover all exports, not only direct exports to the EU.
• These measures would limit the risk of circumvention of the VPA scheme whether it is the local processing of illegal timber into secondary processed products destined for the EU market or the laundering via third countries.
• It is mistaken to say that “illegal imports will be legalized”. The objective of the VPAs is not to “legalize” but to exclude illegal and destructive timber from the exports to the European market and to support partner countries in their efforts to move towards sustainable forest management.
• In proportion legal imports from the six countries will increase.
• In volume total imports will decrease (as an immediate result of the exclusion of illegal and destructive wood from the chain of custody), whilst the value increase.

• The value of wood products imported from VPA countries will increase even more once green public procurement policy (GPPP) for wood will be effective across the EU. (GPPP is expected to offer large market share for FLEGT licensed products and for certified products from VPA countries).

• It is hard to believe that the ratification of VPAs with just six countries, whose actual exports of roundwood, sawn timber, veneer and plywood to the EU market represent just a small percentage of the total imports of wood and wood products to the EU, will lead to a decrease of the imports of legal wood and wood products to the EU. Most likely these six VPAs will have a relatively small impact on the variation patterns.

• Regarding the risk that importers, searching for the cheapest prices, switch their sources of supply in tropical timber from VPA to non-VPA countries, this risk would be avoided if the EU was adopting new legislation (4b) that creates a level playing field and ensure fair competition between FLEGT licensed and non-licensed products.

• VPAs are expected to have a beneficial impact in terms of reducing illegal logging, but this impact could significantly increase if the coverage of the VPA scheme was expanded to all domestic production of wood and wooden products, including secondary-processed products, and all exports.

• It is conceivable that illegal timber might be partially diverted towards other marketplaces. But it would be mistaken to say that illegal logging in partner countries will be left totally unaffected because of this. The EU is a significant timber export market for the six candidate countries (less so for Indonesia), which means that the ratification of the VPAs and the implementation of the VPA scheme will certainly force the forest companies in these countries to adapt their entire production system to the new requirements. This reform process will certainly have an impact in terms of reducing illegal logging.

• The EU should adopt additional legislation (option 4b) to completely remove the risk of trade diversion and prevent the laundering of illegal wood via third countries specialized in wood processing and the manufacturing of furniture. The coverage of the VPA scheme should also be extended to all exports from partner countries.

• It is conceivable that local processing of illegal timber might increase, but it would be mistaken to say that illegal logging will be left unaffected just because of this. A solution to this worse case scenario would be to roll out the VPA scheme across the respective VPA country to include all domestic production of wood and wooden products, including secondary-processed products, such as paper and packaging as well as biomass.

• It is probable, as a cause-effect reaction, that the exclusion of illegal and destructive timber from the chain of production, will lead to a reduction of the total volume of imports from respective partner countries to the EU, and to an increase in value of these same imports.

• In this case scenario, the EU will have to look for alternative sources of supply to compensate the reduction of imports from partner countries.

• There is a risk that European timber traders raise imports of tropical wood from high-risk countries not involved in VPA in order to compensate the reduction of imports from VPA countries. This could lead to an increase in the volume of imports of illegal wood and wood products from these countries, which in turn would aggravate the ecological and social situation in the field. As a solution to this worse case scenario, the EU should adopt new legislation (4b) which would require companies to only place in the EU market, wood and wood products from legally sourced and well managed forests, regardless of whether the supplier is based in a VPA country or not.

• Such a legislation would have the benefit of creating a level playing field and ensuring fair competition between FLEGT licensed and non-licensed products.
• Another benefit which would be derived from the adoption of such a legislation, is that the demand for legally safe products from European timber traders, added to the competitive advantage given to VPA countries, would create a strong incentive for high risk non-partner countries to join rapidly the VPA scheme.

• These countries would be confronted with the choice between responding to the growing rebuff of European timber traders, or joining the VPA scheme to secure a safe access to the EU market whilst benefitting from financial and technical assistance to adapt their production systems to the new requirements.

• The EU domestic production of wood could partly compensate the reduction of illegal wood products from partner countries (and from other high risk countries once legislation 4b is adopted). Other forest owners, outside of the EU, who can demonstrate legal and safe wood sources, could also increase their supply to fill the gap in the EU market. However, one must also admit that the substitution of supply sources has its limits. For certain rare tropical tree species, which can only be found in high risk countries, the reduction of the volume imported will not be compensated by alternatives.

• It has not been demonstrated that the VPA scheme (or legislation) would lead to an increase of the end consumer price. Costs of compliance with the requirements of the scheme (or legislation) could be absorbed by all supply chain participants without affecting the price of the end product.

• Even if end price were to increase, that does not necessarily mean that wood products would lose competitiveness and automatically be substituted by alternative products: (i) Consumers can accept there are good ecological and social reasons to pay a little bit more for wood products, (ii) price is just one criteria for motivating purchase and consumer behavior, and (iii) wood products have certain characteristics which do not make them easy to substitute in all cases.

• The implementation of VPAs and the adoption of legislation will eliminate illegal timber from the market which in turn will improve the image of the whole sector. This is likely to have a positive impact in terms of market share of wood products, but it is difficult to estimate in what proportion, given that image is only one criteria motivating consumer purchasing.

• The impact of the implementation of the VPA scheme will vary between the EU and partner countries.

• Given that in partner countries, VPAs are likely to result in the exclusion of a large proportion of illegal timber from the market, those companies which have already invested in legality verification systems are likely to benefit from a competitive advantage compared to other less progressive companies in partner countries.

• At EU level, VPAs with just these six candidate countries will be insufficient to entirely remove illegal timber from the market. Unless the number of VPAs is increased, and additional legislation is introduced to limit the risk of circumvention and establish a level playing field between FLEGT licensed and non-licensed products, unscrupulous companies will still be able to trade in illegal timber and benefit from an unfair competitive advantage.

• It is the inaction of the EU public authorities, not the implementation of VPAs or the adoption of legislation, which might lead to a relocation of timber transformation activities outside of the EU.

• Responsible forest owners and progressive companies are suffering from price depreciation caused by the illegal timber trade and from the environmental and social dumping of emerging countries specialized in wood processing. Unless rules are established to create a level playing field and ensure sustainable markets, these companies will increasingly be put at a competitive disadvantage which threatens to undermine their economic viability and investment in sustainable forest practices.

• VPAs do not only consist of the implementation of a legality verification system. The ratification of a VPA must come after the establishment of a national
stakeholder process, involving all parties, including the national parliament, with the aim of identifying, and where necessary, rectifying weaknesses in the legislative and governance framework. The ultimate goal of this process is the adoption of new legality definition which should be a catalyst for improving forest management and environmental governance. The EU has an obligation to provide financial, technical and political support to ensure the success of this reform process.

- The impact of the scheme would be higher if other major consumer countries decided to join. However, as a major market for wood products, it would be mistaken to assume that action taken by the EU alone, would only have a limited impact. The adoption of standards agreed between the EU and partner countries is likely to have some knock on effect on companies operating in the global market. The adoption of new legislation (4b) would magnify this effect.
- The imports of roundwood, sawn timber, veneer and plywood from the six candidate countries represent just a small volume of the total consumption of the EU. Therefore it is very unlikely that the measures applied to these imports would have any significant effect on the variation of EU market prices.
- Furthermore it has not been demonstrated that the VPA scheme (or legislation) would lead to an increase of the end consumer price. Costs of compliance with the requirements of the scheme (or legislation) could be absorbed by all supply chain participants without affecting the price of the end product.
- FLEGT licensed products would benefit from even better market access if legislation was adopted which would establish a level playing field with non-licensed products, and if a green public procurement policy for wood products was rapidly implemented across the EU.

Option 1

- Will make uptake by other countries (Japan, USA) more likely.
- If VPAs contain measures leading to improved forest governance, as foreseen, this will have a major impact on reducing illegal logging and improving sustainable forest management in these countries. Trade is a tool, not an end goal, to achieving efficient VPAs.
- VPA’s alone face limited product coverage.
- Even if the geographical scope of the VPA approach is extended to the six countries above, this would not resolve the problem of circumvention as new emerging countries (i.e. India) could decide to stay outside of the FLEGT regime whilst specializing in the processing of wood in the global market.
- The extension of the product coverage of the licensing scheme would increase its effectiveness, but would still be insufficient to prevent the marketing of illegal wood products in the EU for the same reasons as above.

Clarification/Additional comments about option 1

- We are supportive of the VPAs, however we think they will not be sufficient alone to control illegal timber imports into the EU.
- VPAs present an opportunity within producing countries to drive change in the forest sector with regards to strengthening governance, improving and better implementation of forest and environmental laws, as well as enabling dialogue between government and civil society. Furthermore, they would provide the building blocks for a trade regime with the EU that is based on legality and sustainability through the implementation of the FLEGT licensing scheme. From this perspective, VPAs can be a useful tool for forest law reform and better law enforcement, thereby addressing some of the root causes of illegal logging.
- However, VPAs alone do not provide the “silver bullet” to curb illegal logging at a global level, or to address problems in each country. Furthermore, they have potential shortcomings that could undermine, or even contravene, the original intentions of the EU to control illegal timber imports.
• Some of these are highlighted in this questionnaire, some others not: (i) Risk of circumvention, (ii) limited product coverage, (iii) risk of laundering via third countries, (iv) limited geographical scope, (v) risk of entrenched environmentally and socially destructive practices, and (vi) long timeframe.

• We do not see how the continuation of the VPAs approach alone would create a situation that ensures only timber from legal source and well-managed forest is placed on the EU market. Adopting further legislation (4b) will help to fill the gaps in the European regulatory framework. We do not believe this action would be premature, because if a legislative proposal were submitted to European governments in 2008, it would only be adopted and implemented by some time before 2010/11.

Option 2

• May encourage similar behavior amongst private sector in other countries.

• Would be valuable since it would extend outside the VPA (6) area and have he potential to create global legality system. It could provide a market mechanism.

• Option 2 could potentially be envisaged as useful complementary measures if combined with option 4b and 1.

Clarification/Additional comments about option 2

We are not against encouraging the strengthening of private voluntary schemes and codes of conduct on illegal logging, but we state clearly that these measures alone will not prevent illegal and destructively logged timber from entering the EU market place. Although certain private initiatives have merits, some of them have serious shortcomings with regards to their reliability, performance and enforcement.

We consider that the self-regulation approach of the forestry sector that the EU has been encouraging for more than a decade, has not proven to be an effective policy in limiting illegal and destructive timber products from entering the EU market, and it is unlikely to do so in the future. Firstly, many private instruments do not have the scope or the clout to ensure compliance, and secondly it seems unfair to place additional burden and extra costs on only the responsible actors.

Adopting further legislation is the only way to create a level playing field and to reward the efforts undertaken by environmentally progressive companies. This opinion is shared by over 70 progressive companies including B&Q, UK TTF, Habitat (UK), Castorama (France), IKEA and Skanska International (Sweden), Unital (Union of Italian Industries of Wood Furniture), JYSK Nordic (Denmark), VVN (The Netherlands) and Puertas Luvipol (Spain). These companies have called on the Commission to introduce legislation that will lead to clear rules in Europe on fair competition and sustainable markets.

If the European Commission were to choose an alternative option, we believe that a negative signal would be sent especially to the private sector in countries that trade and export timber and timber products to the EU, that the Commission condones an unclear and unfair situation, which penalize and increase costs for the more responsible companies.

Option 3

• In order to remedy this problem and enhance enforcement, the US is envisaging as part of the proposed amendment of the Lacey Act to require companies to provide a basic declaration for every shipment of timber imported in the US, of the species, country of origin, quantity and value.

• However this measure risks to be insufficient. The most effective solution would be for the EU to set standardized requirements and specify the documentation that companies can use in order to gain access to the EU market.
• This depends on whether the documentation and requirements set by the EU for border control is judged as constituting an unnecessary burden and technical barrier to trade by a WTO panel.

Option 4a

• This will discriminate, but this is justified.
• It is absolutely right to discriminate against illegal and unsustainable practices as these practices themselves are discriminatory towards irresponsible trades.
• EU ENU strategy should work on producer responsibility, i.e. up to producer or importer to prove legality.

Option 4b

• Likely to increase costs in general and lead to substitution.

Clarification/Additional comments

We believe that the EU could potentially achieve far more in regulating the illegal and destructive timber trade by developing legislation option 4B (mandatory proof of legality for all timber and timber products placed on the market), than 4A (prohibition of the trading and possession of timber and timber products harvested in breach of the laws of the country of origin).

WHY DO WE SUPPORT OPTION 4B OVER 4A

(i) Burden of proof with the company will facilitate enforcement.

With whom should the burden of proof rest is the first question that needs to be answered, as the answer will determine how the future legislation will be designed and implemented.

Under 4B, the burden of proof is on the company. This is our preference.

The importer or retailer will have to prove that goods are legal before they are allowed onto the market. The burden of proof of legality will relate to the harvesting, transport, processing and sale in all countries. To demonstrate the legality of their products, companies will be required to implement a traceability system for timber products to ensure the legality of timber through the whole chain of custody.

Under 4A, the burden of proof is on government enforcement agencies who have to prove that timber is illegal through investigations and court cases. In practice, this means that enforcement will depend on the willingness and ability of governments to prosecute and to co-operate with competent authorities in other countries. A task that has proven difficult in practice. Even with political will, conviction of an offence will still depend on the ability of the agencies to find evidence of illegalities, and to illustrate this evidence throughout the chain of custody.

(ii) Standardized requirements for verification of legality will ensure effectiveness and consistency

Under 4b it is assumed that the EU will set out standardized requirements for traceability schemes, legality verification systems and related documentation in order to enhance legal certainty and consistency, and in order to ensure clearer administrative procedures. These requirements will enable authorities to differentiate effectively between legal and illegal timber and thereby increase the effective implementation of the law.
The fact that option 4a does not oblige companies to implement a traceability and legality verification system, nor specify the requirements a company has to fulfill to operate responsibly, or the documentation required to prove legality, will make it much more difficult to highlight illegalities, determine the chain of responsibilities and, more importantly, to guarantee replicability of results. Furthermore, European courts will not have a common basis to judge what a sufficient ‘proof of legality is, and this will mostly likely result in conflicting court rulings being made. This would certainly increase legal uncertainty for companies and probably increase their costs because they have to adapt their operations in response to changes in jurisprudence.

(iii) Clarification of what exactly is legally produced timber will provide legal certainty for companies and speed up progress towards sustainable forest management

Under 4b, it is assumed that the EU will set out a list of principles and minimum requirements to clarify what is legal in terms of harvesting, processing and marketing of wood and wood products. These principles and requirements would be based on existing national and international laws, taking into account of the three pillars of sustainable forest management.

This clear delineation between legal and illegal wood products, backed up by environmental and social safeguards, would provide legal certainty for companies and support progress towards sustainable forest management.

Under 4a, the absence of clarity on the definition of legally or illegally produced timber will increase legal uncertainty for companies placing wood products in the EU market. Furthermore the absence of safeguards could lead to the entrenchment of environmentally destructive and socially unjust practices, that contravene the objectives of international agreements signed by the EU.

TO BE EFFECTIVE IN STOPPING ILLEGAL TIMBER AND CONTRIBUTE TO THE IMPROVEMENT OF ENVIRONMENT, ANY FUTURE EU TIMBER LAW SHOULD FULFILL THE FOLLOWING CONDITIONS:

- Put the onus on companies to prove legality. All companies importing into and operating within the EU should demonstrate legality of their timber/timber products, including evidence of the geographical origin of raw material and its Latin name. Evidence should be provided at the border and at any sales place in the EU.
- Cover all wooden products. This includes secondary-processed products, paper and packaging as well as biomass, whether produced in or outside of Europe.
- Include standardized requirements. This should address traceability schemes, legality verification systems and related documentation. This will provide a degree of legal certainty, enable authorities to differentiate effectively between legal and illegal timber and accommodate clearer administrative procedures.
- Include a common set of principles and requirements for the harvesting, processing and marketing of timber and timber products that companies will have to comply with. These principles and requirements should be based on the three pillars of ‘sustainable’ forest management (ecological, economic and socio-cultural considerations) and take into account national and international laws in terms of the protection of biodiversity, conservation and the equitable sharing of forest resources, climate change and indigenous peoples rights. This valuable safety net would provide legal certainty for companies whilst reducing the risk of “environmental dumping” - i.e. - some countries laxing requirements for legal timber. It would also create a level playing field that ensures a fair competition between FLEGT licensed and non-licensed products.
- Acknowledge the efforts of progressive companies and countries. It should be advantageous towards progressive companies that have responsible
purchasing policies in place, or those countries who have signed VPAs. Existing
high standard private schemes as FSC, and the FLEGT Licensing Scheme,
should be accepted as proof of legality.

Additional Comments

- Depending on assumptions made, answers may be very different. As long
  assumptions are made, clear data can be interpreted, otherwise it is difficult.
- Pulp and paper also needs to be included.
- It should be noted that illegal logging is not a problem in itself but a symptom of
  lack of governance etc. and by addressing forest governance, you will address
  both illegal and unsustainable logging.
- It should be noted that there is substantial illegal logging within the EU that has
  not been addressed by this assessment.

THE EU MUST TAKE ACTION EVEN IF THE OTHERS DON’T

Europe has a particular responsibility for deforestation and illegal logging. Economic
development and consumption in the European Union is dependent upon natural
resources from other parts of the world, in particular some of the poorest countries.
According to WWF, the EU has 7 per cent of the world’s population but relies on 17
per cent of the world’s resources – a footprint which is almost two and a half the size
of its own biological capacity. This is particularly true for timber. Most of the logging in
tropical and boreal regions focuses on high-value trees that are exported for
consumption in Europe and Asia. While China’s import of tropical timber is
skyrocketing, only half of it is actually consumed in China, the other half is re-exported
to the EU and US markets in the form of wood products (plywood, flooring, furniture,).

As a global consumer, trade partner and investor, the EU has an obligation to consider
the impact of its policies and actions on sustainable development. It also has the
responsibility to promote equity in the use of forest resources. We believe the adoption
of EU timber legislation would have immediate and positive knock-on effects globally.
Within China, it would stimulate and expedite adaptation to EU requirements and lead
to improvements in this country’s timber import requirements and enforcement. The
EU has at times had a strong influence on China’s regulatory framework in, for
example, the case of the RoHS (Restriction of Hazardous Substances) and WEEE
(European Waste from Electrical and Electronic Equipment) Directives, where China
replicated much of the legislative requirements. We believe an environmental
legislation on timber would bring the same positive effects.

THE ADOPTION OF AN EU TIMBER LAW (4B) WOULD HAVE POSITIVE KNOCK
ON EFFECTS IN OTHER MARKETPLACES (i.e CHINA)

At the moment, China is one of the biggest importers of roundwood and it is also one
of the world’s biggest exporters of timber and timber products. After the U.S. Europe is
the region with the second highest consumption of sawnwood, panels and paper &
paperboard¹. This makes the U.S. and the EU two of the main markets for China’s
timber products. As the U.S. is debating on legislation to combat illegal timber trade
within the U.S., China would have to further adopt systems to prove the legality of its
timber to operate on this market in any case. In addition, other OECD countries like
Japan are considering measures against illegal logging as well, which could ideally
feed into a multilateral approach in the future. Therefore the risk of a diversion of trade
flows can be considered as rather low.

¹ See: UNECE /FAO Forest Products Annual Market Review.
THE ADOPTION OF AN EU TIMBER LAW (4B) WOULD HAVE A POSITIVE ECONOMIC IMPACT ON COMPETITIVENESS AND EMPLOYMENT IN THE FOREST SECTOR

Legislation will beneficial to business generally as it will.

- **Establish a level playing field, ensure fair competition and reward best practices:** A legislation based on the principles set out above would establish a level playing field, guaranteeing fair competition for companies operating on the European market. In particular, the legislation would give an advantage to companies who have invested in best practices and chain of custody system and are already controlling the proper enforcement of high social and environmental standards on the ground. These companies are currently being penalized by the lack of EU legislation on timber, as their products face unfair competition from cheap illegal timber sold on the European market.

- **Guarantee fair price, enhanced product image and increased consumer confidence:** An EU law would stop the depreciation of prices for timber and timber product, enhance healthy economic development and increase the economic viability of the forest sector within and outside the EU, especially for small businesses and forest owners. The image of wood as an ecologically and socially responsible material against other products, e.g. steel, would be enhanced. The customer's confidence would be raised. The impact on price in stores would be limited as the price of timber is often a small proportion of the price of the finished product.

- **Rule out black sheep companies:** It would have a deterrent effect on black sheep companies and free riders, which continue to operate in breach of codes of conduct, and have based their economic model on illegal and destructive practices or have not invested in effective mechanisms to control their responsible purchase of timber. Legislation would strengthen the corporate image and the economic base of those companies that have scrupulously respected the codes of conduct and best forest management standards.

- **Better coordination among small scale forest owners:** Legislation at EU level could help to address the problem of small scale forest ownership and the resulting problem of availability of wood within Europe as it would put the European Forest Owners that are already under independent third party verification in an advantageous position towards suppliers outside Europe that don’t fulfill the requirements. Legislation could stimulate better coordination between the forest owners.

- **Support of Small/Medium sized Businesses:** Legislation on the EU level would have positive effects on small and medium sized businesses inside and outside the EU. They will benefit from a fairer trade regime as they are mostly affected by undercutting of companies selling illegally logged timber/timber products. Through VPAs, technical and financial assistance will be given to companies to adjust to new market demands, which are already met within Europe, where most companies and forest owners are already familiar with forest management plans, traceability systems and certification. Furthermore, awareness-raising on illegal logging within these businesses will help to improve their business practice and lead to better and more sustainable use of their resources. Increased customer trust will eventually lead to a higher turnover.

- **Stop price depreciation and benefit forest owners:** An EU timber law would stop the depreciation of prices for timber and timber products. Initially, reducing production capacity would force a few companies and mills in timber producing countries outside the EU to make substantial changes, but the rapid increase in value and prestige of production, through legality licensing and voluntary eco-
labeling, should restore the competitiveness of the forest sector. A study of the European Forest Institute stated that a reduction of potentially illegal wood from Russian and EU markets could increase round wood prices in both regions. Within the EU these consequences would be most strongly felt in Nordic countries, especially Finland. Higher round wood prices would also be beneficial for the main non-EU forest owners as well as logging and transport contractors. Similarly, also forest owners and contractors in the EU would benefit from higher prices.

**LEGISLATION CAN BE LIGHT ON “RED TAPE” WHilst REWARDING BEST PRACTICE**

Forest owners and companies, especially in Europe, are already familiar with instruments for forest management and chain of custody certification, so for the EU producers, systems would only need to be adjusted rather than totally overhauled. To be light on “red tape” and reward best practices, the legislation could acknowledge efforts already undertaken by companies. If specific documents containing information on origin and legality are currently being used in certain countries, these would be treated in the same way as the documentation recommended by the Commission, including the FLEGT licensing scheme, as long as they fulfill all the requirements set by the new law.

Existing private traceability and verification schemes that have a thorough approach and have been proven to be successful, such as FSC, could be accepted as proof of legality. It would require the institution of an independent transparent mechanism to assess these documents and to make sure that they comply with the requirements of the law. This mechanism, involving stakeholder representatives would rely on strict principles and criteria, and include evaluation of the performance on the ground.

**THE COMBINATION OF EU TIMBER LAW (4B) AND VPAS WOULD HELP POOR COUNTRIES IN THEIR EFFORTS TO REGULATE AND CONSERVE FOREST RESOURCES WHilst INCREASING DEVELOPMENT OPPORTUNITIES**

Substantiated information is becoming available that puts the alleged long term net benefits of the timber sector into a broader perspective. In particular, the idea that industrial logging and trade in timber creates long-term economic growth has so far proved to be false.

- The industrial logging model in many regions of the world is often characterized by lack of governance, lack of transparency, corruption and no return of added value to the forest communities. Profits from the illegal exploitation of forests (and of other natural resources) have often been used to fund and prolong these conflicts (Burma, Liberia, Sierra Leone, Guinea and the Democratic Republic of Congo).

- In these regions, the expansion of industrial logging has not contributed in any significant way to poverty reduction. While logging companies have often cited the importance of tax revenues for needy governments, the enormous economic losses that these same governments suffer due to illegal logging and tax evasion are not addressed. Estimates by the World Bank suggest that illegal logging costs timber-producing countries worldwide up to €10-15 billion per year in lost revenues, which could otherwise be spent on the provision of better healthcare, education and other public services, as well as the implementation of environmentally sustainable economic alternatives to industrial logging and other unsustainable extractive activities.

- The extraction of high value timber by logging companies has been responsible for the destruction and degradation of forest eco-systems which provide vital environmental services (e.g.: water purification, soil stability, rainfall regulation) for the sustainable human development in the region and on a global level.
• Currently there are regions where it is seen as more profitable to cut down whole forest areas, than to leave the forests standing and manage them sustainably. For a number of forest rich countries often forest conversion is much more profitable than forest management. If considering the economic value of forest ecosystem services, including carbon storage, the unscrupulous players of the timber industry are depriving existing and future generations in these countries from secure and ecologically sustainable long term income by destroying their forests.

The combination of EU Timber Law (4b) and FLEGT partnership agreement would increase development opportunities.

• The application of principles of responsible forest management will lead to a significant improvement of the working conditions in the forest sector, as well as the living conditions of the local population and forest dependent people, in line with the Millennium Development Goals (MDGs). The impact could be extremely important if we consider that 90% of the 1.2 billion people living in extreme poverty are directly or indirectly affected by deforestation (World Bank).
• Legal and sustainable forest logging will cut tax evasion and increase tax revenues in developing countries, which added to the increased financial assistance and economic incentives of the EU and international community, will allow such governments to invest more resources into developing sustainable alternatives to large scale industrial logging, thus creating more employment and safeguarding the long-term economic interests of the country.
• This would seem particularly appropriate for countries like Indonesia. At this moment, many wood processing companies rely on timber from unknown (illegal) sources because their own concessions do not provide sufficient amounts of timber. There is a huge gap between supply and demand. This is not an economically viable situation; companies already fall short on timber supplies and this situation is expected to deteriorate in the coming years.

It can be resolved by shifting from a « boom and bust » forestry model (intense logging activity for a few years and then the logged over area is abandoned) to ecologically and socially responsible forest practices, and by investing in alternative economic activities compatible with sustainable development. The combination of EU law and FLEGT partnership agreement could contribute to promoting this model, although they are not “silver bullet”.

THE ADOPTION OF AN EU TIMBER LAW (4B) WOULD SPEED UP NEGOTIATIONS AND CREATE NEW INCENTIVE FOR VPAs

As long as the requirements of the legislation are consistent and complementary to those of the current VPAs, we don’t think it would undermine progress or interest by timber-producing countries in the VPA negotiations. In fact we believe that current and prospective partner countries would speed up negotiations in anticipation of the law, in order to benefit from EU technical/financial assistance of the EU, and would thus get a comparative advantage as “first movers”.

THE UNDERLYING PRINCIPLES OF LEGISLATION 4B ARE COMPLIANT WITH WTO RULES

The legislation would not represent an obstacle to international trade rules, as it will be non-discriminatory, treating domestic and foreign products and EU imports and exports the same. Furthermore, we believe that requesting evidence from companies to demonstrate that timber or timber products originate from legal source and responsibly managed forest is compatible with the “good faith principle” under the WTO agreements. Given the seriousness of the problem, we think the EU has the right and the obligation to adopt certain regulatory measures to ensure and guarantee that European
consumers are not unwitting recipients of illegal goods. The WTO purports to protect fairness and equity in international trade and cannot be assumed to protect trade in illegally harvested or produced goods. Besides, there is a worldwide political and scientific consensus on the negative impact of deforestation, compounded by illegal logging and associated trade, on climate change and biodiversity loss.

THE ADOPTION OF LEGISLATION 4B IS PROPORTIONATE TO WHAT THE EU SEeks TO ACHIEVE.

Given the wide range and impact of illegal and destructive logging, the adoption of legislation (4b) is necessary to prevent the placing in the EU market of wood resulting from these practices.

Range: Illegal logging is a global problem and not related only tropical countries. Boreal countries and even countries within the EU are facing challenges due to illegal and destructive logging.

Economic impact: It is estimated that illegally harvested logs can be as much as 50% cheaper than legal logs. A large share of these logs is exported to major consuming countries specialized in wood processing, such as China and India. These trade flows, which account for more than 6% of the total value of the international trade in timber products, have a significant economic impact on the forest sector. They contribute to a depreciation of around 7 to 16% depending on the category of the product (OECD, 2007). Once legislation is adopted, the market will of course have to adapt to the new rules established by the European authorities and one can expect short-term transitions costs. But these costs are expected to be small compared to the significant losses caused by illegal and destructive logging, which are substantial across many sectors of the forestry industry, also including forest owners in Europe.

It is possible that some companies operating in developing countries where law enforcement and tracking is less established will have to make larger financial and technical efforts to demonstrate the legality and origin. The EU should provide financial and technical assistance to help establish the necessary technical and bureaucratic infrastructure. The EU has already made an important first step in this respect by proposing to developing countries support in capacity building through the FLEGT partnership agreements.

Environmental and social impact: Biodiversity and habitat loss from deforestation and the consequences of global warming and climate change for humans, animals and plants are both serious and irreversible. These facts have been scientifically established. The long term costs of ecosystem collapse and climate change will impact us all, concluded the World Millennium Ecosystem Assessment and the more recent IPCC WGII Fourth Assessment Report. The worst hit will be the poorest people, who are the most vulnerable and rely most directly on forest ecosystem services. These indirect economic costs must form part of the equation of any cost-benefit and proportionality analysis, when considering the need for further measures. In particular, European decision makers have to consider seriously the costs that a failure to act would imply.

ILLEGAL AND DESTRUCTIVE LOGGING IS A PROBLEM OF CORPORATE RESPONSIBILITY AS WELL AS ONE OF WEAK GOVERNANCE IN FOREST RICH COUNTRIES

The trade of timber takes place between companies (or companies and the government when referring to public procurement). Today industry often does not take responsibility for its existing practices. Industry often influences policy decisions, and companies involved in timber trade should give a good example by ensuring responsible company policies and trading practices. In countries which have recently experienced violent conflicts and upheavals, it is difficult to expect stable conditions.
The industry operating in those countries can help to increase governance structures, e.g. by applying the FSC certification which includes social and environmental aspects. Bad governance is a problem but it will not be changed within a short timeframe, and it is wrong to assume that the entire burden for change should be put on the government. Industry has to acknowledge its own responsibility and opportunity to drive positive change.
4 RESPONSE FROM NON-EU STAKEHOLDERS

4.1 Consultation Process

In non-EU countries, the following stakeholder workshops were held:

- St. Petersburg, Russia, 10 October 2007
- Belem, Brazil, 24 October 2007
- Jakarta, Indonesia, 30 October 2007 (in connection with another FLEGT workshop)

Complementary interviews were conducted or questionnaires were provided to individual stakeholders in Brazil, Gabon, Russia and Vietnam. Lists of participants as well as interviewed stakeholders are available in annex 1.

4.2 Respondents

The proportion of Non-EU FLEGT workshop and questionnaire participants is summarized below. In general, Russia had the most number of respondents accounting for 34 percent of the total respondents. Government respondents accounted for 17 percent of responses from the 5 selected non-EU countries, while the private sector accounted for 35 percent and civil society accounted for 48 percent of responses (Table 4.1).

<table>
<thead>
<tr>
<th>Country</th>
<th>Government</th>
<th>Private sector</th>
<th>Civil society</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>Gabon</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Russia</td>
<td>2</td>
<td>5</td>
<td>21</td>
<td>28</td>
</tr>
<tr>
<td>Brazil</td>
<td>1</td>
<td>13</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Vietnam</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>29</strong></td>
<td><strong>40</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

Table 4.1 Summary of non-EU FLEGT workshop respondents
4.3 Response from Non-EU Stakeholders

The following analysis combines all responses for all Non-EU Member States. The scores were calculated separately for each stakeholder group.

1) With the implementation of the VPAs in your country

a) Exports of illegal wood and wood products from your country to the EU will be significantly reduced

b) Exports that have been illegal will be legalized, i.e., the proportion of legal exports will significantly increase

c) Exports of legal wood and wood products to the EU will significantly decrease because exporters/importers will consider that the cost of meeting the VPA requirements outweighs the benefits
2) Reduction of illegal exports from your country to the EU will

a) Reduce illegal logging in your country

b) Leave illegal logging unaffected because exporters will reshuffle trade flows shipping available legal products to the EU and illegal products to other markets

c) Leave illegal logging unaffected because the involved countries will increase local processing of illegal timber and export these products to the EU
3) Reduction of illegal imports from your country to the EU will

a) Be compensated with legal exports from your country

b) Be compensated with exports from countries not involved in VPA implementation

c) Shift demand towards timber products available within the EU
d) Shift demand towards substitute products (other than wood products)

![Chart showing the percentage of disagreement or agreement among government, private sector, and civil stakeholders regarding the shift in demand towards substitute products.]

e) Have a positive impact on the market share of wood products in the EU because of giving them a better image

![Chart showing the percentage of disagreement or agreement among government, private sector, and civil stakeholders regarding the positive impact on market share.]
4) From the standpoint of the private sector, the VPA scheme will

a) Benefit legal producers and traders by eliminating the unfair advantage enjoyed by illegal producers and traders

b) Lead to relocation of timber transformation activities outside of the EU

c) Favor large export companies at the expense of small and medium-sized ones
5) Even if technical arrangements to secure legality were effective, the VPA scheme would have a limited impact

a) Because it cannot effectively catalyze changes to factors underpinning illegal logging such as poor forest governance, poverty, corruption, inappropriate land tenure, etc.

b) Unless other major consumer countries such as China, Japan and the US join the scheme
6) Legal products from VPA countries will

a) Fetch higher prices in the EU market because reduction of overall supply in the EU will drive price level higher

b) Will enjoy a price premium of 10% or more in the EU market

c) Will have better access to the EU market, i.e., the main benefit is bigger market share rather than price premium
7) The main benefits of having unhindered access to the EU market is that

a) Wood and wood products fetch higher prices in the EU market than in other markets

b) There is more demand for high value added products in the EU market than in other markets
8) The main environmental benefits of the VPA scheme are that it will

a) Help decrease the overall level of logging in natural forests

b) Help eliminate unlawful forest conversion

c) Help eliminating unsustainable and wasteful harvesting practices associated with illegal logging
9) The main social impacts of the VPA scheme are that it will

a) Help ensuring the welfare of forest-dependent people by securing the enforcement of existing regulations concerning distribution of benefits, access to non-wood forest products, protection of watersheds etc.

b) Help improve work safety in logging and processing of timber

c) Reduce local employment in the short run by reducing illegal logging
d) Secure long term employment by providing a sustainable basis for forest management

10) The main impacts of the VPA scheme with respect to governance are that it will

a) Help make law enforcement more effective by providing technical assistance and capacity building

b) Help eliminate corruption by requiring transparency
c) Help make the court system more effective by providing technical assistance and capacity building.

d) Further erode respect for law because the VPA scheme cannot be enforced effectively.
Option 1: VPA implementation continued

a) Will make FLEGT implementation considerably more effective because of broader coverage of countries

b) Will be effective only if the coverage of the licensing scheme were expanded to all wood products (not only roundwood, sawn timber, veneer and plywood)

c) Will be effective only if circumvention (passing the goods through third countries) were effectively prevented
Option 2: Private sector schemes expanded

a) Is a cost-effective option

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>-2</td>
</tr>
<tr>
<td>Private sector</td>
<td>-1,5</td>
</tr>
<tr>
<td>Civil</td>
<td>-1</td>
</tr>
</tbody>
</table>

b) Is a more efficient approach than government-led measures

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>-2</td>
</tr>
<tr>
<td>Private sector</td>
<td>-1,5</td>
</tr>
<tr>
<td>Civil society</td>
<td>-1</td>
</tr>
<tr>
<td>Civil</td>
<td>-0,5</td>
</tr>
</tbody>
</table>

b) Is a useful but insufficient measure because of its voluntary nature

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>-2</td>
</tr>
<tr>
<td>Private sector</td>
<td>-1,5</td>
</tr>
<tr>
<td>Civil society</td>
<td>-1</td>
</tr>
<tr>
<td>Civil</td>
<td>-0,5</td>
</tr>
</tbody>
</table>
d) Is useful as a complementary measure to be used in combination with other additional options

**Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber**

a) Are based on a sound approach in the sense that it eliminates the possibility of circumvention through third countries

b) Will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably
c) Cannot be implemented because it contradicts WTO rules requiring equal treatment for products originating from within and outside of the EU.

**Option 4a: Legislation which prohibits the trading and possession of timber and timber products harvested in breach of the laws of the country of origin**

a) Is based on a sound approach in the sense that the verification and tracking systems need to be developed only when they are needed, i.e., in high risk situations.

b) Will unfairly discriminate against products from high risk countries because companies in these countries need to develop costly tracking and verification systems to prove legality whereas companies in low risk countries may not need them.
Option 4b: Legislation which requires that only legally harvested timber and timber products be placed on the market

a) Is based on a sound approach in the sense that the burden of proof is on the private sector which has the necessary resources to provide evidence

b) Causes unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low

c) Is unfair because the underlying assumption is that imported goods are illegal unless proven legal

The following combinations of options to reduce illegal wood imported into the EU were identified by correspondents as listed below as the most preferable (Table 4.2).
Table 4.2  Summary of response option preferences in non-EU countries

<table>
<thead>
<tr>
<th>Option recommended as the best</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>9</td>
</tr>
<tr>
<td>Option 4a</td>
<td>8</td>
</tr>
<tr>
<td>Options 1+2</td>
<td>6</td>
</tr>
<tr>
<td>Option 4b</td>
<td>6</td>
</tr>
<tr>
<td>Option 2</td>
<td>5</td>
</tr>
<tr>
<td>Options 1+2+3</td>
<td>5</td>
</tr>
<tr>
<td>Options 1 + 4b</td>
<td>4</td>
</tr>
<tr>
<td>Options 1+2+4b</td>
<td>4</td>
</tr>
<tr>
<td>Options 1 + 4a</td>
<td>3</td>
</tr>
<tr>
<td>Option 3</td>
<td>3</td>
</tr>
<tr>
<td>Options 1+3+4b</td>
<td>2</td>
</tr>
<tr>
<td>Options 1+2+3+4a</td>
<td>2</td>
</tr>
<tr>
<td>All options</td>
<td>2</td>
</tr>
<tr>
<td>Option 2+4b</td>
<td>2</td>
</tr>
<tr>
<td>Option 4a+4b</td>
<td>1</td>
</tr>
<tr>
<td>Options 4+3</td>
<td>1</td>
</tr>
<tr>
<td>Options 3+4a+4b</td>
<td>1</td>
</tr>
<tr>
<td>Options 1+3</td>
<td>1</td>
</tr>
<tr>
<td>Options 1+3+4a</td>
<td>1</td>
</tr>
<tr>
<td>Options 1+4a+4b</td>
<td>1</td>
</tr>
<tr>
<td>Options 1+3+4a+4b</td>
<td>1</td>
</tr>
<tr>
<td>Options 2+3+4a+a+4b</td>
<td>1</td>
</tr>
<tr>
<td>Options 1+3+4a+4b</td>
<td>1</td>
</tr>
<tr>
<td>Options 2+3+4a</td>
<td>1</td>
</tr>
</tbody>
</table>

Another possible ranking was done based on how many times each option was indicated either as the best option or was included it the favorite combination of options. Ranked in this manner, option 1 was referred to by 41 respondents or a little more than half of all respondents. The second most frequently mentioned option was option 2 with 28 references. Option 4b ranked third with 24 indications and 21 and 23 respondents each mentioned options 3 and 4a respectively.

Table 4.3  Ranking of options by respondents in non-EU Member States, second variant

<table>
<thead>
<tr>
<th>Individual option considered best or included in the favorite combination of options</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>41</td>
</tr>
<tr>
<td>Option 2</td>
<td>28</td>
</tr>
<tr>
<td>Option 3</td>
<td>21</td>
</tr>
<tr>
<td>Option 4a</td>
<td>23</td>
</tr>
<tr>
<td>Option 4b</td>
<td>25</td>
</tr>
</tbody>
</table>

In general, there were a variety of responses on options preferences from the non-EU country stakeholders. From Gabon, a combination of options including either options 4a or 4b was preferable. Indonesia stakeholders had varying responses between themselves. The private sector respondents strongly favored options 4a and 4b. Government respondents favored a combination of options 1+2 with either options 3 or 4, while civil society respondents strongly preferred the combination of options 1, 4a and 4b. Brazil’s private sector respondents preferred option 2, 4a or 4b. NGOs preferred a combination of 1 and 4b, and the government respondents preferred 4b. From respondents in Russia, generally a combination of options including option 1 was the most preferred. Finally, government respondents from Vietnam favored options 1 and 4a. The private sector respondents also preferred options 1 and 4a.
The additional option you ranked best

a) Is a proportionate and cost-effective option

b) May not be fully effective but it sets an example that other countries will follow making it effective in the long run

c) Is worth implementing
4.4 Comments from the FLEGT Workshops/Interviews

4.4.1 Brazil

Government

- The answers provided are from the personal view of the agent interviewed. It does not bind the government in any way. The agent mentioned that in more than 20 years working for the government he never saw a documentation system which was not forged. He defended that there are insufficient resources for enforcement and the worst problem in the Amazon is land tenure, which directly contributes to illegal logging. He also defended that they lack good communication with other governmental departments. According to him, to diminish the share of illegal logging the exporting regulations should require chain of custody which currently is only required to certain species.

Private Sector

- The rules need to be further specified. They are currently too general to be analyzed. – An idea given by one of the participants was to create a system to analyze and study the main species which are traded to determine the "DNA" of the wood. Then, map the regions and analyze if the different regions can be classified as "free zones" for trading the wood. The, analyze samples to certify the origin of the products.
- We are missing technical and scientific information on which these measures were based to be written. – The plan sounds interesting, but likely to be hard to implement, especially because it requires action from the government, which is currently not able to fulfill its duties.
- The questions are very suggestive, and we need a better estimate of the share of illegal logging and export to answer these questions. – We need laws that allow a more rapid approval of management plans and that increase fiscalization of the allowed plans. This will increase the share of legal operations in the country.

Civil Society

- It is not possible to know how much will effectively be reduced. If the VPA intend to drastically reduce legal importations, they will have to consider all the domestic production of wood products and sub-products such as paper, flooring, doors, windows, etc. They should also take into account the indirect exports to the EU, which pass through third countries in the Caribbean, for example, used to “wash” illegal timber. Such measures would improve the VPAs.
- There are already in place, chain of custody systems to control the origin of the wood in Brazil. The system is well designed but not well enforced.
- We expect a positive impact in the control of illegal wood exports (legalized) to the EU. But, it is hard to assure that it will eliminate illegal wood because it will depend on the control and chain of custody monitoring system to be adopted, as well as the efficiency of the enforcement and punishment of the illegal activities.
- It will depend on the level of the agreement and on the chain of custody system to be adopted. Companies that already have chain of custody systems in place will benefit.
- In Brazil, there are small and medium size companies which have FSC certification. These could benefit. Obviously, larger companies have the better ability to accommodate changes.
- In Brazil, the judiciary and the executive powers are independent. It is up to the executive power to control the wood sector in the Amazon. The judiciary has...
little involvement in the production of wood, limiting itself to judge the application of fines applied to environmental crimes.

- It is necessary to unify efforts of all sectors in society to effectively combat illegal logging and related trade. Therefore, a combination of options is the best approach.
- In the case of Brazil, it will be necessary a VPA which binds EU Members States financially towards meeting the goals of the agreement. Otherwise, there is a high risk that the Brazilian government will sign but not effectively implement the agreement.
- The VPA has another flaw: it only covers forest chain, when a large lump of illegality and deforestation in the Amazon is related to the agribusiness, such as cattle and production of biofuels.
- The VPA is not only about implementation of a verification and control of chain of custody system. To ratify such agreement, there should be a large national process of public consultations (hearings) to discuss issues related to legality, efficiency and governance. It should be a participatory and transparent process aiming to have the society committed to eliminate illegal timber in the Amazon and willing to increase forests management.
- The EU has the obligation to contribute to this process financially, technically and politically.

4.4.2 Gabon

General comments

- Utopic, hypothetic in the current stakeholder scenery.
- Min. de l'Econ. Forestiere, Eaux, Pêche, Parcs Nationaux does not have a focal point on FLEGT.
- EU delegation Gabon does not have a focal point / facilitator on FLEGT.
- Access to the FLEGT concepts is restricted due to absence of French website/materials.
- National workshop and action plan needed on FLEGT instead of regional one.
- Definition of legality needs to be established in Gabon first (definitions differ on various levels).
- FLEGT is only good if all countries participate, not just a few tropical ones.
- Letter of intent by Government was influenced by the French and sent to the wrong body:
  - European Development Fund at Min. of Planning, not EU Ambassador as should have lacking coordination between funding channels for legality/sustainability work.
  - Government drags its feet on FLEGT in the hope that it will evaporate before becoming implemented larger co's implement sustainability measures of wide range.
- Coupe familiale (banned in 2007) was a major source of illegal wood.
- Small permits need to be re-grouped so that they are strong enough to prepare forest management plans (whose making is not properly enforced anyway).
- Small permits commonly in the hands of former civil servants/politicians.

Stakeholder comments on the VPA

- Comment on question 2c: Like in Cameroon: The large European companies will change their behavior and will switch to legal production, but the demand of wood is so big that other companies will be created and they will continue the illegal wood trade.
- Comment on question 4a: Hopefully!
- Comment on question 7c: If the global market becomes less good, at least there will be access to EU market.
• Comment on question 9c: Not exactly, but it will reduce the « gifts » given by the illegal producers to the villages.
• Comment on question 10b: Not eliminate but reduce.

**Option 1**

• Good option, because the competition essentially favors the trade.

**Option 2**

• Comment on question 12a: Not cost-effective in short-term but in log-term yes.
• Comment on question 12b: Both governmental and private sector measures are needed.
• This is the most realistic option in cases of lack of good governing and while waiting for the VPA implementation.

**Option 4a**

• Forests should not be harvested in high risk countries or countries in war.
• Comment on question 14b: I don’t agree. It’s a fair discrimination. The countries that have taken the trouble to control well their resources, offer to companies a favorable business climate.

**Option 4b**

• Comment on question 15a: I agree in the case of high-risk countries.
• Comment on question 15d: Yes, the need to introduce similar systems in other importing countries (USA, Japan, etc.)

**Additional Comments**

• While waiting for the high-risk countries to start to control their forest resources, the only reliable system is the legal origin certification. The illegal production is economically more attractive, so in order to encourage the companies to move towards the certification of legal origin, the market should refuse all other wood.

**4.4.3 Indonesia**

**Government**

**Additional Comments**

• In order to combat illegal logging, there are issues what needs attention:
  - Illegal logs that are harvested from legal concession areas but the logs are harvested from outside the annual allowable cut.
  - Logs that are harvested from conversion areas for plantation or conversion for other purposes through timber utilization permits
  - Logs harvested without permits
• It is not clear that the activities are illegal for No. 3. For No.s 1 and 2, which have now increased to fulfill demand from the plywood industries

**Civil Society**

• Implementation of the VPA needs some improvement in Indonesia.
• Impacts and incentives are not clear.
Option 1

- Producer countries and trader ones should be treated in a different manner, as they have specific issues to overcome in each type.
- Indonesia’s producers still see the EU as a prestigious market but it depends on what kind of incentive is offered by each market.
- Provided that there will be a simple mechanism on licensing and legality standards adopted in different countries are comparable, it could be viable.
- Domestic market of exporter countries will be more overflowed by illegal timber.

Option 2

- In terms of law enforcement, it will be very difficult as Indonesia’s law institution (police are not professional enough to define legal/illegal in various schemes of legal verification.
- Although some retailers are already implementing a legal purchase policy, they tend to have an exclusivity to their supplier but can not pay more or give incentive to the suppliers or producers.
- This will discourage partners in producing countries to comply with the scheme.
- This is likely to be implemented as another trade/business politics to get benefits at the expense of producing companies.
- Will shift the demand of timber towards substitution goods.

Option 4a

- Unfair and consumes a lot of funding, because every simple country could be put “in” and “out” of the risky country list every year/period.
- EU itself needs to develop the local/domestic market mechanism on how to define legal and illegal timber.
- High risk country status is not prevalent, so it is not entirely fair treatment.

Option 4b

- This may encourage trading partners in producing countries to respond positively – should have more concrete commitment of consuming countries, this will be a good incentive.
- Evidence provided by the importer eventually will be a burden for exporter. Small exporter and producers will face difficulties.

Additional Comments

- European consumers should be consistent in consumption of timber, and not discriminative. “Black market” should be eliminated.

4.4.4 Russia

Stakeholder Comments

- EU should stimulate all the countries to commit in reduction of illegal logging, not some members yes, others not. Position of some state, e.g. Great Britain, is ambiguous, sometimes they apply the EU Treaty, sometime it seems that they do not care. Also, EU should not consider only border countries for such issue (not only Russia), because there are e.g. South European countries importing timber illegally logged from very long distances.
- There is a need for a law, a binding document that will oblige all EU countries to implement measures.
• EU should consider that there is a supply, but also a “demand” side. In this
game there are two side players, the exporters of illegal cut timber, and the
importers. Responsibilities are shared by the seller and by the buyer.
• A combination of options presented will be the best option. Also, should one
remember that the options have to evolve, and the solution today will not apply
for the situation tomorrow.
• The end of illegal logging will signify, at least on the short term, a worst life for the
forest workers, because their firms will start to pay taxes, and by consequence,
the salaries will be lowered. On the other hand, if there is not export of illegal
timber, and the price of timber decreases, therefore the timber purchasers may
be in a good position, it depends how much they will process the timber.
• If there are less illegal cuttings, therefore the State will have more money,
because more firms will pay their taxes; thus, the State will have more
resources to pay people in the villages, such staff working in educational or
health systems. So, less illegal logging may be also better life in rural
communities.
• Environmental effects are all of them positive, there is no need to detail, it is
obvious. If the laws are respected, a sustainable forest management is
implemented.
• The impact of concomitant process of increasing trade taxes should be consider
in the analysis; yet, the Russian forest industry has not the capacity to process
all the timber produced in Russia.
• Monitoring of legality by State or companies is costly, but necessary. Private
companies should have advantages granted from the State for implementing
monitoring systems. They can be facilitated by lower taxation or other financial
incentives to practice auditing on the origin of timber produced or traded.
• It is great that the foreign companies involved themselves in the auditing and
checking of the timber origin. But it should be applied by all companies, not a
voluntary process, because there are so many companies who do not check
where the timber is coming from. The companies should provide, by law, a
minimum of guaranties that prove that they are not using illegally cut timber.
• In our region, our association of timber exporters is looking to implement
monitoring systems to check timber origin. However, we cannot find support in
the local authorities and administration, because there are a lot of people
supporting Ilim Pulp Corporation. The firm is powerful. 30% of the timber they
use is illegally cut; in the case of pulpwood, that may arrive at 60%. In these
conditions, it is difficult to find a way to influence the process. Ilim Pulp was
bought by International Paper: probably the new firm will be more interested in
adopting measures against illegal logging.
• Is there real the system practiced by the private companies? They can check
only the papers, on papers everything may be ok, but not necessarily in the
field. Firms are doing their own monitoring system because is good for image,
but it is not trustfully. If you want to discover illegal, you can. E.g., what about
the tax? If a firm provides you with timber at cheaper prices because they will
not pay tax, this timber is legal or not? If you want to find something, you will
find it, this is a matter of willingness. A better system is the auditing by a third
party. Our firm (from Arhangelsk region) pays early some EUR 5 700 euro on
auditing (some 150 000 ruble on direct costs and some other 50 000 on indirect
costs for auditing). From the eight enterprises we have, five are certified and the
sixth is ongoing. 50% of our products are certified, and we want to increase this
percentage. We have our own sawmills, but 90% of the sawmill production is for
export, very few quantities are traded on the domestic market. From
Arhangelsk, the transportation costs are too high for us for a profitable trade
with roundwood.
• Sometime Greenpeace or other ecologists exaggerate: if one enterprise cut
timber in one area where since 40 years harvesting is done, how they can claim
that this area, even if it is contingent with an old forest, represent “undisturbed”
forests?
• Border stop? The documents can be always provided, invented, modified, this is not a realistic measure. A better system should have government and private sector working together to fight illegal logging.

4.4.5 Vietnam

Government

• This is kind of technical barrier to prevent products from developing countries.
• FLEG without T should be introduced to help export countries in institutional strengthening and improving capacity for 'Chain of Custody' implementation thus to assure legally harvested timber and timber products.

Private sector

• Why Thailand, Myanmar are not included in the VPAs?
• Why China is not included in the first round of VPA?
• Roundwood export is forbidden in Vietnam; Vietnam does not export sawnwood either.
• 80% of raw material is imported.

Civil Society

• If this is effectively implemented, fair trade environment is created.
ANNEX 1

FLEGT Workshop Minutes and Participants
# List of respondents to the questionnaire from Brazil

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juliana Carvalho</td>
<td>Technician - Rede Brasileira de Centros Internacionais de</td>
</tr>
<tr>
<td></td>
<td>Negocios - Centro Internacional de Negocios do Para</td>
</tr>
<tr>
<td>Wandreia Baitz</td>
<td>Environmental Manager - CIKEL</td>
</tr>
<tr>
<td>Mauricio Amim</td>
<td>Export Manager - Tramontina</td>
</tr>
<tr>
<td>Juliana Afonso Pinto</td>
<td>Technical Assessor - ABIMCI</td>
</tr>
<tr>
<td>Guilherme dos Santos Carvalho</td>
<td>Director - Aimex</td>
</tr>
<tr>
<td>Rubens Coutinho</td>
<td>Floresteca</td>
</tr>
<tr>
<td>Fernando Alves</td>
<td>Executive Secretary - Uniflor</td>
</tr>
<tr>
<td>Divino Fagundes</td>
<td>IBL Izabel Madeiras do Brasil LTDA</td>
</tr>
<tr>
<td>J. Teodoro Neufeld</td>
<td>Director - Trading Madeiras LTDA</td>
</tr>
<tr>
<td>Nagib Matni</td>
<td>Environmental Manager - Nordisk Timber LTDA</td>
</tr>
<tr>
<td>Arnold Hardus</td>
<td>Export Manager - Real Timber Group Brasil</td>
</tr>
<tr>
<td>Jose Marcio Furlaneto</td>
<td>Director - Indufet</td>
</tr>
<tr>
<td>Deryck Martins</td>
<td>Executive Secretary - COEMA</td>
</tr>
<tr>
<td>Joao Araujo Pinto Neto</td>
<td>CEO - Abimovel</td>
</tr>
<tr>
<td>Heloiza da Silva Cardeal</td>
<td>Principal Assistant - Abimovel</td>
</tr>
<tr>
<td>Paulo Tavernard</td>
<td>Environmental Analyst - IBAMA</td>
</tr>
<tr>
<td>Estevão Braga</td>
<td>WWF Brasil</td>
</tr>
<tr>
<td>Marcelo Marquesini</td>
<td>Greenpeace</td>
</tr>
<tr>
<td>Marcelo Arguelles</td>
<td>IUCN</td>
</tr>
</tbody>
</table>
### FLEGT Seminar, 11 October 2007, Tallinn, Estonia

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaupo Kohv</td>
<td>Estonian Fund for Nature</td>
<td>Forest Specialist</td>
</tr>
<tr>
<td>Urmas Larven</td>
<td>NOR EST WOOD, wood processing enterprise</td>
<td>Deputy Director</td>
</tr>
<tr>
<td>Tii Tammsaar</td>
<td>Baltic Panel Group OÜ, wood processing enterprise</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Mait Tint</td>
<td>Environmental Protection Agency</td>
<td>Environmental Protection Senior Specialist</td>
</tr>
<tr>
<td>Kristjan Tõnisson</td>
<td>State Forest Enterprise</td>
<td>Consultant</td>
</tr>
<tr>
<td>Rauno Reinberg</td>
<td>Forestry Department, Ministry of Environment</td>
<td>Leading Specialist</td>
</tr>
<tr>
<td>Aavo Sempelson</td>
<td>Environmental Protection Agency</td>
<td>Environmental Protection Senior Specialist</td>
</tr>
<tr>
<td>Arvo Lall</td>
<td>Environmental Protection Agency</td>
<td>Environmental Protection Senior Specialist</td>
</tr>
<tr>
<td>Elika Brosman</td>
<td>Tax and Customs Office</td>
<td>Customs Control Leading Specialist</td>
</tr>
</tbody>
</table>
## Finland FLEGT Workshop Participants and Interviewees

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blästen Anni</td>
<td>Indufor Oy</td>
</tr>
<tr>
<td>Harkki Sini</td>
<td>Greenpeace</td>
</tr>
<tr>
<td>Hirvelä Ville-Veikko</td>
<td>Friends of the Earth</td>
</tr>
<tr>
<td>Islander Anu</td>
<td>Finnish Forest Industries Federation</td>
</tr>
<tr>
<td>Jantunen Helena</td>
<td>Stora Enso Oy</td>
</tr>
<tr>
<td>Kaivola Auvo</td>
<td>Finnish Forest Certification Council</td>
</tr>
<tr>
<td>Karjalainen Harri</td>
<td>WWF Finland</td>
</tr>
<tr>
<td>Kienanen Timo</td>
<td>Ministry for Foreign Affairs, Finland</td>
</tr>
<tr>
<td>Koipijärvi Terhi</td>
<td>Metsäliitto Group</td>
</tr>
<tr>
<td>Leivo Rauno</td>
<td>Puukeskus</td>
</tr>
<tr>
<td>Lintunen Kai</td>
<td>Finnish Forest Association</td>
</tr>
<tr>
<td>Lounasvuori Jussi</td>
<td>Indufor Oy</td>
</tr>
<tr>
<td>Malmberg Ossi</td>
<td>Ministry for Foreign Affairs, Finland</td>
</tr>
<tr>
<td>Marjomaa Jari</td>
<td>UPM-Kymmene Oy, OOO UPM-Kymmene Forest Russia</td>
</tr>
<tr>
<td>Puukko Olli</td>
<td>Metsähallitus</td>
</tr>
<tr>
<td>Puustjärvi Esa</td>
<td>Indufor Oy</td>
</tr>
<tr>
<td>Salo Olli</td>
<td>Consultant</td>
</tr>
<tr>
<td>Saari Ritva</td>
<td>Puukeskus</td>
</tr>
<tr>
<td>Turunen Olli-Pekka</td>
<td>The Finnish Association for Nature Conservation</td>
</tr>
<tr>
<td>Veistola Tapani</td>
<td>The Finnish Association for Nature Conservation</td>
</tr>
<tr>
<td>Viitanen Jussi</td>
<td>Ministry for Foreign Affairs, Finland</td>
</tr>
</tbody>
</table>
## List of Participants from France

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eric Boilley</td>
<td>Le Commerce du Bois</td>
<td></td>
</tr>
<tr>
<td>Marc-Antoine Malleet</td>
<td>Rougier</td>
<td></td>
</tr>
<tr>
<td>Pierrick Mangeais</td>
<td>Wolseley;</td>
<td></td>
</tr>
<tr>
<td>Pierrick Mangeais</td>
<td>BOIS DES TROIS PORTS</td>
<td></td>
</tr>
<tr>
<td>M. Dominik Mohr</td>
<td>CID</td>
<td>Chairman</td>
</tr>
<tr>
<td>M-Paul-Emmanuel Huet</td>
<td>ATIBT</td>
<td>Secretary General</td>
</tr>
<tr>
<td>Josée Vincent</td>
<td>ONF Organisation national de Foret</td>
<td></td>
</tr>
<tr>
<td>Anne Bossy</td>
<td>Public procurement</td>
<td>Director</td>
</tr>
<tr>
<td>Sylvain Angerand</td>
<td>Amis de la Terre</td>
<td></td>
</tr>
<tr>
<td>Benjamin Beaussant</td>
<td>Ministry of Agriculture</td>
<td></td>
</tr>
<tr>
<td>Arnaud Brizay</td>
<td>FLEGT</td>
<td></td>
</tr>
<tr>
<td>Alain Chaudron</td>
<td>FLEGT</td>
<td></td>
</tr>
</tbody>
</table>
List of Participants from Gabon

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaqueline van de Pol</td>
</tr>
<tr>
<td>Ogoula-Ogari</td>
</tr>
<tr>
<td>Serge Rufin Okana</td>
</tr>
<tr>
<td>Rene Adiaheno</td>
</tr>
<tr>
<td>Dominique Paget</td>
</tr>
<tr>
<td>Nathalie Nyare Essima</td>
</tr>
<tr>
<td>Marcelin Nziengui</td>
</tr>
</tbody>
</table>
### List of Participants in the FLEGT Workshop Germany

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dieter Matthias</td>
<td>Bundesforschungsanstalt für Forst und Holzwirtschaft</td>
</tr>
<tr>
<td>Geldbach Jürgen</td>
<td>Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz</td>
</tr>
<tr>
<td>Griesshammer Nina</td>
<td>World Wildlife Fund Deutschland</td>
</tr>
<tr>
<td>Groger Michael</td>
<td>Klausner Nordic Timber GmbH</td>
</tr>
<tr>
<td>Heuer Eckhard</td>
<td>Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz</td>
</tr>
<tr>
<td>Horn Ursula</td>
<td>Bundesministerium für Wirtschaft und Technologie</td>
</tr>
<tr>
<td>Hornig Karin</td>
<td>Bundesamt für Naturschutz</td>
</tr>
<tr>
<td>Hufnagl-Jovy Natalie</td>
<td>Arbeitsgemeinschaft DeutscherWaldbesitzverbände</td>
</tr>
<tr>
<td>Kaiser Martin</td>
<td>Greenpeace</td>
</tr>
<tr>
<td>Klein Manfred</td>
<td>Bundesamt für Naturschutz</td>
</tr>
<tr>
<td>Maraz Laszlo</td>
<td>Pro REGENWALD</td>
</tr>
<tr>
<td>Metz Rosmarie</td>
<td>Gesellschaft für Technische Zusammenarbeit GmbH</td>
</tr>
<tr>
<td>Pistorius Till</td>
<td>Institut f. Forst-u. Umweltpolitik Uni Freiburg</td>
</tr>
<tr>
<td>Reiche Matthias</td>
<td>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung</td>
</tr>
<tr>
<td>Schulmeister Anke</td>
<td>World Wildlife Fund EU Forest</td>
</tr>
<tr>
<td>Schütte Stephan</td>
<td>Deutscher Forstwirtschaftsrat</td>
</tr>
<tr>
<td>Tyczewski Dinah</td>
<td>Verband dt. Papierfabriken</td>
</tr>
<tr>
<td>van Loon Tom</td>
<td>Danzer Services Europe GmbH</td>
</tr>
<tr>
<td>von Scheliha Stefanie</td>
<td>Gesellschaft für Technische Zusammenarbeit GmbH</td>
</tr>
<tr>
<td>Zahnen Johannes</td>
<td>World Wildlife Fund Deutschland</td>
</tr>
<tr>
<td>Liss Bernd-Markus</td>
<td>AEGEG Consultants</td>
</tr>
<tr>
<td>Neumeyer Beate</td>
<td>AEGEG Consultants</td>
</tr>
<tr>
<td>Salmi Jyrki</td>
<td>Indufor Oy</td>
</tr>
</tbody>
</table>
List of Participants from Indonesia

Jakarta, 30 October 2007

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hadi S. Pasaribu</td>
<td>Director General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>2.</td>
<td>Hadi Daryanto</td>
<td>Secretary of Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>3.</td>
<td>Harry Budhi P</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>4.</td>
<td>Wahyu Andayani</td>
<td>Facility of Forestry, University of Gajah Mada, Yogyakarta</td>
</tr>
<tr>
<td>5.</td>
<td>A. Edi Nugroho</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>6.</td>
<td>Roni Saefullah</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>7.</td>
<td>Syamsu Alam</td>
<td>Faculty of Forestry, University of Hassanudin, South Sulawesi</td>
</tr>
<tr>
<td>8.</td>
<td>Abdurrahi Muin</td>
<td>Faculty of Forestry, University of Tanjungpura, West Kalimantan</td>
</tr>
<tr>
<td>9.</td>
<td>Asep Jalaludin</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>10.</td>
<td>Agus Isnanto</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>11.</td>
<td>Budi Suharto</td>
<td>Directorate General Custom and Excise, Ministry of Finance</td>
</tr>
<tr>
<td>12.</td>
<td>Bambang D. Adji</td>
<td>Center for Forestry Development Regional III (Kalimantan island)</td>
</tr>
<tr>
<td>13.</td>
<td>B. Murdiono</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>14.</td>
<td>A. Dahlan</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>15.</td>
<td>A. Yani</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>16.</td>
<td>Haidir</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>17.</td>
<td>Zahidi Putra</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>18.</td>
<td>Laksmi B</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>19.</td>
<td>Cucung S</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>20.</td>
<td>Suhendroyono</td>
<td>Center for Forestry Development Regional III (Kalimantan island)</td>
</tr>
<tr>
<td>21.</td>
<td>Usman</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>22.</td>
<td>Jansen</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>23.</td>
<td>Yulinda</td>
<td>Directorate General of Land Rehabilitation and Social Forestry, Ministry of Forestry</td>
</tr>
<tr>
<td>24.</td>
<td>Widayaka D</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>25.</td>
<td>Haris S</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>26.</td>
<td>Aryan MD</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>27.</td>
<td>Rita P</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>28.</td>
<td>Andi Sarmah</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>29.</td>
<td>Chandra C</td>
<td>Directorate general of Directorate General of Forest Protection and Nature Conservation</td>
</tr>
<tr>
<td>30.</td>
<td>Tri Meinartin</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>31.</td>
<td>Wawan Kurniawan</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>32.</td>
<td>Deny K</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>33.</td>
<td>Sri Wahyuningsih</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>34.</td>
<td>Bambang Edi</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>35.</td>
<td>Effi Fitriyani</td>
<td>Directorate general of Directorate General of Forest Protection and Nature Conservation</td>
</tr>
<tr>
<td>36.</td>
<td>Agustina</td>
<td>Law and Organization Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Institution</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>37.</td>
<td>Ahmad Darmawan</td>
<td>CIFOR</td>
</tr>
<tr>
<td>38.</td>
<td>M.A. Sardjono</td>
<td>University of Mulawarman, East Kalimantan</td>
</tr>
<tr>
<td>39.</td>
<td>Bramasto Nugroho</td>
<td>Faculty of Forestry, University of Agriculture, Bogor, West Java</td>
</tr>
<tr>
<td>40.</td>
<td>Sudarsono Sudomo</td>
<td>Faculty of Forestry, University of Agriculture, Bogor, West Java</td>
</tr>
<tr>
<td>41.</td>
<td>Rudy Haryo</td>
<td>Facilitator</td>
</tr>
<tr>
<td>42.</td>
<td>Melya Gustini</td>
<td>French Embassy</td>
</tr>
<tr>
<td>43.</td>
<td>Agus Setyarso</td>
<td>National Forestry Council (DKN)</td>
</tr>
<tr>
<td>44.</td>
<td>Mulia Adidjaja</td>
<td>Forest concession association</td>
</tr>
<tr>
<td>45.</td>
<td>Bambang</td>
<td>TVRI (state TV station)</td>
</tr>
<tr>
<td>46.</td>
<td>Nurcahyo Adi</td>
<td>WWF-Indonesia</td>
</tr>
<tr>
<td>47.</td>
<td>David</td>
<td>Forest concession association</td>
</tr>
<tr>
<td>48.</td>
<td>Arief</td>
<td>EU-TTAP</td>
</tr>
<tr>
<td>49.</td>
<td>Reena Balding</td>
<td>Australian Embassy</td>
</tr>
<tr>
<td>50.</td>
<td>Harry P</td>
<td>Forest concession association</td>
</tr>
<tr>
<td>51.</td>
<td>Thesis</td>
<td>EU-TTAP</td>
</tr>
<tr>
<td>52.</td>
<td>Wawan</td>
<td>Kompas (national printed news)</td>
</tr>
<tr>
<td>53.</td>
<td>Suryanto</td>
<td>Indosiar (private tv station)</td>
</tr>
<tr>
<td>54.</td>
<td>George B</td>
<td>APKINDO (plywood association)</td>
</tr>
<tr>
<td>55.</td>
<td>Zulfikar</td>
<td>BRIK (forest industry revitalization body)</td>
</tr>
<tr>
<td>56.</td>
<td>Andini</td>
<td>BRIK (forest industry revitalization body)</td>
</tr>
<tr>
<td>57.</td>
<td>John JS</td>
<td>Sinar Harapan (national printed news)</td>
</tr>
<tr>
<td>58.</td>
<td>Deni A. Novendi</td>
<td>PT. Mutu Agung (consulting company)</td>
</tr>
<tr>
<td>59.</td>
<td>Ruslan AR</td>
<td>TPI (private tv station)</td>
</tr>
<tr>
<td>60.</td>
<td>Arief</td>
<td>ANTARA (state printed news)</td>
</tr>
<tr>
<td>61.</td>
<td>Fenny Budiman</td>
<td>Agro Indo (national printed news)</td>
</tr>
<tr>
<td>62.</td>
<td>Akbar</td>
<td>Metrotv (private tv station)</td>
</tr>
<tr>
<td>63.</td>
<td>Hamzirwan</td>
<td>Kompas (national printed news)</td>
</tr>
<tr>
<td>64.</td>
<td>Pater</td>
<td>Kontan (national printed news)</td>
</tr>
<tr>
<td>65.</td>
<td>Tommy P</td>
<td>Investor daily (national printed news)</td>
</tr>
<tr>
<td>66.</td>
<td>Minangsari</td>
<td>Telapak (NGO)</td>
</tr>
<tr>
<td>67.</td>
<td>Yudi Iskandar</td>
<td>TNC (NGO)</td>
</tr>
<tr>
<td>68.</td>
<td>Takeshi Toiwa</td>
<td>FFPRI, Japan</td>
</tr>
<tr>
<td>69.</td>
<td>Miyatomo Motoe</td>
<td>FFPRI, Japan</td>
</tr>
<tr>
<td>70.</td>
<td>Cininta</td>
<td>Jurnal Nasional (national printed news)</td>
</tr>
</tbody>
</table>
List of Participants from Italy

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susanna Kloehn</td>
<td>University of Padova</td>
<td></td>
</tr>
<tr>
<td>Chiara Campione</td>
<td>Greenpeace Italy</td>
<td>Resp. Campagna foreste</td>
</tr>
<tr>
<td>Massimiliano Rocco</td>
<td>WWF Italy</td>
<td>Resp. Programma Specie, TRAFFIC &amp; Timber Trade</td>
</tr>
<tr>
<td>Giorgio Cavalleri</td>
<td>Corpo Forestale dello Stato</td>
<td>Resp. Degli affari internazionali</td>
</tr>
<tr>
<td>Lillo Testasecca</td>
<td>Corpo Forestale dello Stato</td>
<td></td>
</tr>
<tr>
<td>Cristina Avanzo</td>
<td>Corpo Forestale dello Stato</td>
<td>Funzionaria</td>
</tr>
<tr>
<td>Luisa Corbetta</td>
<td>Corpo Forestale dello Stato</td>
<td>Funzionario del servizio CITES</td>
</tr>
<tr>
<td>Marco Alesi</td>
<td>Corpo Forestale dello Stato</td>
<td>Stagista</td>
</tr>
<tr>
<td>Marco Mei</td>
<td>Corpo Forestale dello Stato</td>
<td></td>
</tr>
<tr>
<td>Bruno Petrucci</td>
<td>Ministero dell'Amiente</td>
<td></td>
</tr>
<tr>
<td>Renata Mirula</td>
<td>Ministero dell'Amiente</td>
<td>Green public procurement</td>
</tr>
<tr>
<td>Sergio Saporetti</td>
<td>Ministero dell'Amiente</td>
<td>Assistenza tecnica</td>
</tr>
<tr>
<td>Lara Malucelli</td>
<td>Federlegno</td>
<td></td>
</tr>
<tr>
<td>Maurizio Magni</td>
<td>Consulta Nazionale</td>
<td>Segretario</td>
</tr>
<tr>
<td>Stefano Vinciguerra</td>
<td>Assocarta</td>
<td></td>
</tr>
<tr>
<td>Massimo Ramunni</td>
<td>Assocarta</td>
<td></td>
</tr>
<tr>
<td>Cinzia Caradini</td>
<td>Assocarta</td>
<td></td>
</tr>
<tr>
<td>Carmela Cascone</td>
<td>APAT</td>
<td>Direttore Generale</td>
</tr>
<tr>
<td>Mauro Masiero</td>
<td>FSC Italy</td>
<td>Segretario Generale</td>
</tr>
<tr>
<td>Antonio Brunori</td>
<td>PEFC Italy</td>
<td>Segretario Generale</td>
</tr>
<tr>
<td>Lidia Capparelli</td>
<td>CONSIP S.p.A.</td>
<td>Public procurement</td>
</tr>
<tr>
<td>Antonio Lumicisi</td>
<td>Ministero dell'Amiente</td>
<td></td>
</tr>
<tr>
<td>Liviu Amariei</td>
<td></td>
<td>Consulente</td>
</tr>
<tr>
<td>Cristina Masia</td>
<td>Agenzia Dogane</td>
<td>Funzionaria</td>
</tr>
<tr>
<td>Roberto Serra</td>
<td>Confagricoltura</td>
<td></td>
</tr>
<tr>
<td>Roberta Pasi</td>
<td>Ministero per lo Sviluppo Economic</td>
<td></td>
</tr>
</tbody>
</table>
## List of Participants from the Netherlands and Belgium

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danielle van Oijen</td>
<td>Friends of the Earth Netherlands</td>
<td>Forest Campaigner Milieudefensie</td>
</tr>
<tr>
<td>Mrs Standaert Geneviève</td>
<td>Vandecasteele</td>
<td>Export Manager</td>
</tr>
<tr>
<td>Mr. Paul A van den Heuvel</td>
<td>VVNH</td>
<td>Deputy Director</td>
</tr>
</tbody>
</table>
### List of Participants from Russia

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lilia Shevlyakova</td>
<td>CJSC Lesosibirsk Sawmill No. 1, Krasnoiarski Krai</td>
</tr>
<tr>
<td>Tatiana Voronova</td>
<td>CJSC Lesosibirsk Sawmill No. 1, Krasnoiarski Krai</td>
</tr>
<tr>
<td>Victoria Bezrukh</td>
<td>CJSC Lesosibirsk Sawmill No. 1, Krasnoiarski Krai</td>
</tr>
<tr>
<td>Serghei Pautov</td>
<td>Mondi Business Paper Syktyvkar, Pulp and paper mill, Mondi Group, Komi Republic</td>
</tr>
<tr>
<td>Ekaterina Osipova</td>
<td>Mondi Business Paper Syktyvkar, Pulp and paper mill, Mondi Group, Komi Republic</td>
</tr>
<tr>
<td>Margarita Zemtzovskaia</td>
<td>Ust-pokshengskii, Titan Group, Arkhangelsk</td>
</tr>
<tr>
<td>Alexandru Rudakov</td>
<td>CJSC Arkhangelsk Sawmill No. 3, Arkhangelsk</td>
</tr>
<tr>
<td>Dimitri Liubimkov</td>
<td>Zelennikovskoe Company, Arkhangelsk</td>
</tr>
<tr>
<td>Alexei Klochihin</td>
<td>NepCon, Syktyvkar</td>
</tr>
<tr>
<td>Nicolai Tochilov</td>
<td>NepCon, Arkhangelsk</td>
</tr>
<tr>
<td>Tigran Martirosian</td>
<td>NepCon, Vologda</td>
</tr>
<tr>
<td>Vasily Bakaev</td>
<td>Irkutsk, Association of ...</td>
</tr>
<tr>
<td>Andrei Laletin</td>
<td>NepCon, Krasnoiarsk</td>
</tr>
<tr>
<td>Anna Nemchinova</td>
<td>University of Kostromskaya Oblast</td>
</tr>
<tr>
<td>Constantin Rogov</td>
<td>Titan, Arkhangelsk</td>
</tr>
<tr>
<td>Valeri Malshev</td>
<td>Forest Institute, Arkhangelsk</td>
</tr>
<tr>
<td>Vladimir Soldatov</td>
<td>Academy of St Petersburg</td>
</tr>
<tr>
<td>Serghei Moroz</td>
<td>Academy of St Petersburg</td>
</tr>
<tr>
<td>Olja Golovina</td>
<td>Academy of St Petersburg</td>
</tr>
<tr>
<td>Kulikova Elena</td>
<td>WWF-Russia</td>
</tr>
<tr>
<td>Vladimir Dmitriev</td>
<td>WWF-Russia</td>
</tr>
<tr>
<td>Mikhail Kreindlin</td>
<td>Greenpeace-Russia</td>
</tr>
<tr>
<td>Anna Yakovleva</td>
<td>Greenpeace-Russia</td>
</tr>
<tr>
<td>Alexey Yaroshenko</td>
<td>Greenpeace-Russia</td>
</tr>
<tr>
<td>Anna Komarova</td>
<td>Greenpeace-Russia</td>
</tr>
<tr>
<td>Mikhail Karpacevsky</td>
<td>Biodiversity Conservation Center</td>
</tr>
<tr>
<td>Andrey Ptichnikov</td>
<td>FSC-Russia</td>
</tr>
<tr>
<td>Alexey Grigoriev</td>
<td>IUCN-Russia</td>
</tr>
<tr>
<td>Andrey Laletin</td>
<td>NEPCon</td>
</tr>
</tbody>
</table>
List of participants from Spain

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ricardo Llorente</td>
<td>ENCE</td>
<td>Director, Forestry Division</td>
</tr>
<tr>
<td></td>
<td>Greenpeace</td>
<td></td>
</tr>
</tbody>
</table>
### List of Participants from United Kingdom

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris Beeko</td>
<td>Ghana, VPA</td>
</tr>
<tr>
<td>Liz Betser</td>
<td>Timber Trade Federation TTF</td>
</tr>
<tr>
<td>Niel Bird</td>
<td>Overseas Development Institute ODI</td>
</tr>
<tr>
<td>Duncan Brack</td>
<td>Chatham House</td>
</tr>
<tr>
<td>Jon Buckrell</td>
<td>Global Witness</td>
</tr>
<tr>
<td>Mika Clark</td>
<td>PEFC Council</td>
</tr>
<tr>
<td>Jez Cutler</td>
<td>Travis Perkins Plc</td>
</tr>
<tr>
<td>Faith Doherty</td>
<td>Environmental Investigation Agency, EIA</td>
</tr>
<tr>
<td>Owen Espley</td>
<td>Friends of the Earth</td>
</tr>
<tr>
<td>Emily Fripp</td>
<td>Tropical Forest Trust (TFT)</td>
</tr>
<tr>
<td>Tobin Gordon</td>
<td>BM Trada Certification Ltd</td>
</tr>
<tr>
<td>Madeleine Groves</td>
<td>Royal Botanic Gardens, Kew</td>
</tr>
<tr>
<td>Anna Koivisto</td>
<td>Indufor OY</td>
</tr>
<tr>
<td>Peter Kelly</td>
<td>Howarth Timber Group Ltd</td>
</tr>
<tr>
<td>Jenny McInnes</td>
<td>Defra</td>
</tr>
<tr>
<td>Rupert Oliver</td>
<td>Forest Industries Intelligence Ltd.</td>
</tr>
<tr>
<td>Robert Oxlade</td>
<td>HMRC H.M. Revenue &amp; Customs</td>
</tr>
<tr>
<td>Saskia Ozinga</td>
<td>FERN</td>
</tr>
<tr>
<td>Anouska Plasmeijer</td>
<td>IUCN - The World Conservation Union</td>
</tr>
<tr>
<td>Esa Puustjärvi</td>
<td>Indufor Oy</td>
</tr>
<tr>
<td>Beatrix Richards</td>
<td>WWF UK</td>
</tr>
<tr>
<td>Sebastien Risso</td>
<td>Greenpeace</td>
</tr>
<tr>
<td>Andy Roby</td>
<td>Timber Trade Federation TTF</td>
</tr>
<tr>
<td>Sheam Satkuru-Granzell</td>
<td>Malaysian Timber Council, MTC</td>
</tr>
<tr>
<td>Andrew Venman</td>
<td>Jewson</td>
</tr>
</tbody>
</table>
## List of Participants from Vietnam

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tran Van Cong</td>
<td>Programme officer, ICD</td>
</tr>
<tr>
<td>Le Van Bach</td>
<td>Head of Legal unit, DoF</td>
</tr>
<tr>
<td>Dam Van Mai</td>
<td>Deputy director, Agro-forest Products Processing Dept.</td>
</tr>
<tr>
<td>Nguyen Phi Truyen</td>
<td>Head of Special Task Force, FPD</td>
</tr>
<tr>
<td>Mr. Le Dinh Thang</td>
<td>Ministry of Industry and Trade, Export unit</td>
</tr>
<tr>
<td>Le Thien Duc</td>
<td>WWF, senior forestry officer</td>
</tr>
<tr>
<td>Le Khac Coi</td>
<td>WWF, senior forestry officer</td>
</tr>
<tr>
<td>Mr. Le Tien Phong</td>
<td>ActionAid Vietnam, Southern Programme Manager</td>
</tr>
<tr>
<td>Mr. Nguyen Van San</td>
<td>Senior programme manager, IUCN (Vietnam office)</td>
</tr>
<tr>
<td>Phan Manh Cuong</td>
<td>Designing manager, International Furniture Corporation Scansia Pacific</td>
</tr>
<tr>
<td>Dang Quoc Hung</td>
<td>Director, Wood and handicraft company</td>
</tr>
<tr>
<td>Tran Quoc Manh</td>
<td>Director, Sadaco company</td>
</tr>
<tr>
<td>Nguyen Van Vy</td>
<td>Head of office, Handicraft and Wood Processing Association of HCMC (HAWA)</td>
</tr>
<tr>
<td>Do Thi Bich Sam</td>
<td>Director, Bao Hung Furniture</td>
</tr>
</tbody>
</table>
Communicating and Reconciling Forest Values

Markets and Society

Industrial Forest Products

Environmental & Social Services

Pulp & Paper Wood Products

Biodiversity

Environment

Policy and Institutions

Strategic and Landscape-level Planning

Sustainable Forest Management

INDUFOR

Töölönkatu 11 A
FI-00100 Helsinki, FINLAND

Tel.: +358 9 684 0110, fax: +358 9 135 2552
indufor@indufor.fi
www.indufor.fi
European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 4
Country Case Study on Brazil

Helsinki
January 21, 2008
DISCLAIMER

Indufor makes its best effort to provide accurate and complete information while executing the assignment. Indufor assumes no liability or responsibility for any outcome of the assignment.

Copyright © 2008 by Indufor Oy
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, but not limited to, photocopying, recording or otherwise.
# TABLE OF CONTENTS

1. **BACKGROUND INFORMATION**
   1.1 Forest Resources 1
   1.2 Tropical Resources 2
   1.3 Land Tenure 3
   1.4 Production of Roundwood and Wood Products 4
   1.5 Trade in Roundwood and Wood Products 5
   1.6 General Institutional Framework in Forest Sector
      - 1.6.1 Public Administration 7
      - 1.6.2 Research and Development Institutes 8
      - 1.6.3 Private Sector 8
      - 1.6.4 Non-governmental Organizations 9

2. **ILLEGAL TIMBER PRODUCTION AND EXPORTS** 10

3. **MAIN DRIVERS BEHIND ILLEGAL LOGGING IN BRAZIL** 11

4. **BENEFITS OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATION** 12

5. **INITIATIVES TAKEN SO FAR TO COMBAT ILLEGAL FOREST ACTIVITIES IN BRAZIL** 13
   5.1 International Commitments and Actions Taken so Far 13
   5.2 Initiatives Taken So Far by the Brazilian Government 13
   5.3 Legislation in Brazil 14

6. **CURRENT FOREST LAW ENFORCEMENT SYSTEM AND ITS EFFECTIVENESS** 15

7. **CURRENT STATUS OF LOG TRACKING IN THE BRAZILIAN PRIVATE SECTOR** 16

8. **SCOPE TO INCREASE LEGAL TIMBER PRODUCTION** 17

9. **SCOPE TO INCREASE TIMBER PROCESSING** 18

10. **CURRENT CONDITION IN FOREST SECTOR OF BRAZIL** 19
    10.1.1 Government Revenue from Forest Sector 19
    10.1.2 Employment in the Forest Sector 19
    10.1.3 Access to Forests and Share of Benefits to Local Population 19
    10.1.4 Structure of Industries 19
    10.1.5 Status of Corruption in Brazil 20

11. **STAKEHOLDER VIEWS** 21
    11.1 General Information 21
    11.2 Option 1: Voluntary Partnership Agreement (VPA) Scheme 22
    11.3 Option 2: Private Sector Voluntary Scheme 23
    11.4 Option 3: Broader Measures to Prevent the Importation of Illegally Harvested Timber 23
    11.5 Option 4: Prohibition on the Placing of the EU Market of Illegally Harvested Timber
        - 11.5.1 Option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws of the Country of Origin 23
        - 11.5.2 Option 4b: Legislation which Requires that Only Legally Harvested Timber and Timber Products Be Placed on the Market 23
LIST OF ANNEXES

Annex 1  Brazil Exports of Round Sawnwood, Plywood & Veneer to Various Countries
Annex 2  EU Tropical Boards & Panels (RWE) Imports from Various Countries
Annex 3  EU Tropical Paper (RWE) Imports from Various Countries
Annex 4  EU Tropical Plywood & Veneer (RWE) Imports from Various Countries
Annex 5  EU Tropical Roundwood (RWE) Imports from Various Countries
Annex 6  Tropical Sum of RW, SW, P & V (RWE) Imports from Various Countries
Annex 7  EU Sum of RW, SW, P & V (RWE) Imports from Various Countries
Annex 8  EU Tropical Sawnwood (RWE) Imports from Various Countries
Annex 9  EU Tropical Sum of All Products (RWE) Imports from Various Countries
Annex 10  EU Sum of All Products (RWE) Imports from Various Countries
Annex 11  EU Tropical Wood Furniture (RWE) Imports from Various Countries
Annex 12  EU Tropical Wood Manufactures (RWE) Imports from Various Countries
Annex 13  EU Tropical Wood Pulp (RWE) Imports from Various Countries
Annex 14  Additional Brazilian Regulations on Forestry
Annex 15  List of Respondents to the Questionnaire
Annex 16  Analysis of Responses

LIST OF FIGURES

Figure 1.1  Annual wood production in Brazil, share of volume 1
Figure 1.2  Brazilian Amazon 3
Figure 1.3  Manufacturing of wood products in Brazil in 2004, share of volume 5
Figure 1.4  Destinations of Amazonian wood products in 2004, share of volume 6
Figure 1.5  Brazil export, share of volume 6
Figure 1.6  Expansion of the logging frontier in the Brazilian Amazon, 2004 9
Figure 11.1  Ranking of different options 21
Figure 12.1  Casual model 24

LIST OF TABLES

Table 1.1  Land tenure shares in the Amazon 4
Table 1.2  Roundwood production in Brazil in 2004 4
**LIST OF ABBREVIATIONS AND ACRONYMS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>Associação Brasileira de Ciências</td>
</tr>
<tr>
<td>ABEAS</td>
<td>Associação Brasileira de Educação Agrícola Superior</td>
</tr>
<tr>
<td>ABIMCI</td>
<td>Associação Brasileira de Madeira Compensada e Industrial</td>
</tr>
<tr>
<td>ABIMOVEL</td>
<td>Associação Brasileira das Indústrias do Mobiliário</td>
</tr>
<tr>
<td>ABRAF</td>
<td>Associação Brasileira de Produtores de Florestas Plantadas</td>
</tr>
<tr>
<td>ARESB</td>
<td>Associação dos Resinadores do Brasil</td>
</tr>
<tr>
<td>AUTEX</td>
<td>Autorização de Exploração Florestal</td>
</tr>
<tr>
<td>CADIN</td>
<td>Federal Public Sector Unpaid Credits</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biodiversity Diversity</td>
</tr>
<tr>
<td>CEPEA</td>
<td>Centro de Estudos Avançados em Economia Aplicada</td>
</tr>
<tr>
<td>Cerflor</td>
<td>Brazilian Program of Forest Certification</td>
</tr>
<tr>
<td>CIFOR</td>
<td>Center for International Forestry Research</td>
</tr>
<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
</tr>
<tr>
<td>COEMA</td>
<td>Conselho Estadual de Meio Ambiente</td>
</tr>
<tr>
<td>CONAMA</td>
<td>Conselho Nacional do Meio Ambiente</td>
</tr>
<tr>
<td>DIFLOR</td>
<td>National Forest Programme Direction</td>
</tr>
<tr>
<td>e-ATPF</td>
<td>Electronic wood transport documents</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Investigation Agency</td>
</tr>
<tr>
<td>EMBRAPA</td>
<td>Empresa Brasileira de Pesquisa Agropecuária</td>
</tr>
<tr>
<td>ENGO</td>
<td>Environmental Non-governmental Organization</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade</td>
</tr>
<tr>
<td>FSC</td>
<td>Forest Stewardship Council</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning System</td>
</tr>
<tr>
<td>GRRAD</td>
<td>Head of Reforestation and Recovery of Degraded Area</td>
</tr>
<tr>
<td>GUSRF</td>
<td>Head of Forest Resources Sustainable Use</td>
</tr>
<tr>
<td>ha</td>
<td>hectare</td>
</tr>
<tr>
<td>IBAMA</td>
<td>Brazilian Institute of Environment and Renewable Natural Resources</td>
</tr>
<tr>
<td>IF</td>
<td>Instituto Florestal do Estado de São Paulo</td>
</tr>
<tr>
<td>IMazon</td>
<td>Amazon Institute of People and the Environment (Instituto do Homem e Meio Ambiente da Amazônia)</td>
</tr>
<tr>
<td>INCRA</td>
<td>Instituto Nacional de Colonização e Reforma Agrária</td>
</tr>
<tr>
<td>INPA</td>
<td>Instituto Nacional de Pesquisa da Amazônia</td>
</tr>
<tr>
<td>IPAM</td>
<td>Instituto de Pesquisa Ambiental da Amazônia</td>
</tr>
<tr>
<td>IPEF</td>
<td>Instituto de Pesquisas e Estudos Florestais</td>
</tr>
<tr>
<td>IPT</td>
<td>Instituto de Pesquisas Tecnológicas de São Paulo</td>
</tr>
<tr>
<td>ISA</td>
<td>Instituto Socioambiental</td>
</tr>
<tr>
<td>ITTO</td>
<td>International Tropical Timber Organization</td>
</tr>
<tr>
<td>IUCN</td>
<td>The World Conservation Union</td>
</tr>
<tr>
<td>m³</td>
<td>cubic meter</td>
</tr>
<tr>
<td>MMA</td>
<td>Ministerio do Meio Ambiente</td>
</tr>
<tr>
<td>MTE</td>
<td>Ministério do Trabalho e Emprego</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-government Organization</td>
</tr>
<tr>
<td>PEFC</td>
<td>Programme for the Endorsement of Forest Certification</td>
</tr>
<tr>
<td>SBF</td>
<td>Biodiversity and Forests Secretariat (Secretaria de Biodiversidade e Florestas)</td>
</tr>
<tr>
<td>SBPC</td>
<td>Sociedade Brasileira para o Progresso da Ciência</td>
</tr>
<tr>
<td>SBS</td>
<td>Sociedade Brasileira da Silvicultura</td>
</tr>
<tr>
<td>Sebrae</td>
<td>Brazilian Micro and Small Business Support Service</td>
</tr>
<tr>
<td>SFB</td>
<td>Serviço Florestal Brasileiro</td>
</tr>
<tr>
<td>SIF</td>
<td>Sociedade de Investigações Florestais</td>
</tr>
<tr>
<td>SIRMAT</td>
<td>Sistema de Rastreamento de Madeira em Toras</td>
</tr>
<tr>
<td>UNFCC</td>
<td>United Nations Convention on Climate Change</td>
</tr>
<tr>
<td>UNFF</td>
<td>United Nations Forest Forum</td>
</tr>
<tr>
<td>USA</td>
<td>The United States of America</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreement</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wide Fund for Nature</td>
</tr>
</tbody>
</table>
1. BACKGROUND INFORMATION

1.1 Forest Resources

Brazil has a land area of 846 million ha. A recent forest resources assessment of Food and Agriculture Organization of the United Nations (FAO) indicates a total area of native and planted forests of 470 million ha. However, since no systematic national forest inventory was carried out in the country, the estimates on Brazilian forest resources vary significantly. Consequently, the research institutes estimate that the forest cover varies from 350 to 540 million ha.

The planted eucalyptus and pine forests that are significant wood raw material sources for the pulp and paper industry, pig iron industries and heat production account only for about 1.0-1.5% of the country’s total forest cover and are mostly located in southern Brazil, outside of the Amazon area.

The forest related vegetation formations of Brazil are divided into four main categories:

- The Amazonian basin with world’s largest tropical rainforests
- Semiarid scrub forest in the northeast of Brazil (Caatinga)
- Narrow coastal zone originally covered with Atlantic Rainforests (Mata Atlântica). A great majority of Atlantic Rainforests has been converted to other land use
- South and Central Brazilian highlands/plateau with dry forests and savannah (Cerrado)

The natural tropical rainforests and eucalyptus/pine plantations are the main industrial wood sources in Brazil. Annually, about 235-240 million m$^3$ of wood is harvested from natural and planted forests for industrial purposes and as fuelwood (Figure 1.1)

Figure 1.1 Annual wood production in Brazil, share of volume
1.2 Tropical Resources

Industrial wood from natural forests predominantly originates from tropical forests in the Amazon basin and is mainly used by sawmills and related further processing plants as well as for plywood production. Pig iron industries uses also charcoal that originates from natural forests. The latter wood is mainly extracted from areas that are cleared for pasture and agriculture. This report we will focus mainly on the Brazilian Amazon, rather then in all ecosystems.

The whole Amazon basin totals approximately 640 million ha, of which 63% are located in the territory of Brazil. The other countries possessing areas in the Amazon region are Peru, Colombia, Bolivia, Venezuela, Guyana, Suriname, Ecuador and French Guiana. The Brazilian Amazon makes up 59% of the land area of Brazil and includes ten states: Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, Tocantins, Mato Grosso, part of Maranhão and a portion of Goiás (Figure 1.2).

In practice, the public forests are currently not used for production of commercial wood, even though legislation allows certain exploitation, and thus the private holdings are the main legal sources of industrial wood in the Amazon. However, we must stressed that the 2006 legislation on public forests allows concession of public forests to private individuals for the purpose of sustainable exploitation once all the requirements in the law are met.

The forests have originally covered 73% of the whole Amazon. In average, the forests account for 48% of the private properties. Agricultural (e.g., pasture and crop lands) and abandoned lands occupy the remaining 52%. According to the Amazon Institute of People and the Environment (IMAZON), the annual deforested area was somewhere between 233 000 and 272 000 ha between 2002 and 2004, the legal conversion of forests to agricultural and other use being the main reason for the development pattern. The Amazon has lost 13-14% of its forest cover during the past three decades.

---

1 Significant share of fuel wood is processed to charcoal, which is further used by pig iron industries. Practically all carbon used by pig iron industries is charcoal. It is estimated that 20-30% of that charcoal is still coming from natural forests mainly in the North (source: expert opinion).
1.3 Land Tenure

According to most stakeholders\(^2\) the land tenure is the most serious issue in the Amazon. The lack of clarity concerning ownership has led to serious violent episodes and is considered the main driver of illegal logging in the area.

The land tenure data of Brazilian Amazon is currently inaccurate. IMazon has estimated that 43\% of the total area is in public ownership, including lands of indigenous people and local communities. The private ownership covers 24\% and the remaining 33\% are unsettled public lands and private lands under dispute (Table 1.1).

\(^2\) Based on research institutes (IMAZON), NGOs and private sector representative interviews.
Table 1.1  Land tenure shares in the Amazon

<table>
<thead>
<tr>
<th>State</th>
<th>Protected areas</th>
<th>Special areas (a)</th>
<th>Private lands</th>
<th>Unclear ownership (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acre</td>
<td>48</td>
<td>11</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Amapá</td>
<td>55</td>
<td>10</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>Amazonas</td>
<td>41</td>
<td>3</td>
<td>2</td>
<td>54</td>
</tr>
<tr>
<td>Maranhão</td>
<td>11</td>
<td>25</td>
<td>38</td>
<td>26</td>
</tr>
<tr>
<td>Mato Grosso</td>
<td>17</td>
<td>7</td>
<td>55</td>
<td>21</td>
</tr>
<tr>
<td>Pará</td>
<td>32</td>
<td>12</td>
<td>18</td>
<td>38</td>
</tr>
<tr>
<td>Rondônia</td>
<td>45</td>
<td>18</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Roraima</td>
<td>56</td>
<td>11</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Tocantins</td>
<td>13</td>
<td>12</td>
<td>61</td>
<td>14</td>
</tr>
<tr>
<td>Average</td>
<td>33</td>
<td>10</td>
<td>24</td>
<td>33</td>
</tr>
</tbody>
</table>

(a) For example, indigenous lands and areas managed and used by local communities.
(b) Unsettled public lands and private lands under dispute.

1.4 Production of Roundwood and Wood Products

The utilization of Amazonian forest resources has started from the estuary zone already in the 17th century. The area, however, was exposed to intensive cuttings only in the 1960s. From the estuary zone, the intensive cuttings moved to the South and Southeast Amazon, where the existing infrastructure facilitated access to the natural resources. Gradually the active cuttings have expanded toward the North.

According to Forest Facts in the Brazilian Amazon 2005 (IMAZON), the roundwood production volumes of 2004 were 24.5 million m$^3$ and the respective gross income of the industry USD 2.31 billion (Table 1.2). Compared to the previous years, the production has had a somewhat decreasing pattern.

Table 1.2  Roundwood production in Brazil in 2004

<table>
<thead>
<tr>
<th>State</th>
<th>Enterprises</th>
<th>Production volume</th>
<th>Gross income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>million m$^3$</td>
<td>USD million</td>
</tr>
<tr>
<td>Acre</td>
<td>52</td>
<td>420</td>
<td>41.6</td>
</tr>
<tr>
<td>Amapá</td>
<td>73</td>
<td>130</td>
<td>9.3</td>
</tr>
<tr>
<td>Amazonas</td>
<td>48</td>
<td>490</td>
<td>55.9</td>
</tr>
<tr>
<td>Maranhão</td>
<td>45</td>
<td>430</td>
<td>31.7</td>
</tr>
<tr>
<td>Mato Grosso</td>
<td>872</td>
<td>8 010</td>
<td>673.9</td>
</tr>
<tr>
<td>Pará</td>
<td>1 529</td>
<td>11 150</td>
<td>11 113.6</td>
</tr>
<tr>
<td>Rondônia</td>
<td>422</td>
<td>3 700</td>
<td>368.9</td>
</tr>
<tr>
<td>Roraima</td>
<td>28</td>
<td>130</td>
<td>15.9</td>
</tr>
<tr>
<td>Total (a)</td>
<td>3 232</td>
<td>24 460</td>
<td>2 310.7</td>
</tr>
</tbody>
</table>

(a) Excluding Tocantins.

The production of wood processing industry was 10.4 million m$^3$ in 2004 (Forest Facts in the Brazilian Amazon 2005, IMAZON). The shares of product groups are presented in Figure 1.3.
The Amazonian wood processing industry consists of a total number of approximately 3,200 enterprises. The sawmills make up over 90% of the number of wood industry companies, the rest being veneer and plywood mills as well as other plants manufacturing products for construction purposes, pre-fabricated houses, flooring, furniture and decoration.

1.5 Trade in Roundwood and Wood Products

Roundwood is entirely processed within the Amazon. The trade in wood products (2004) is divided between national sales and exportation as follows:

- National sales 6.6 million m³ or 64%
- Exports 3.7 million m³ or 36%

The southeast of Brazil is the main destination of wood products from the Amazon (Figure 1.4). The state of São Paulo is the most important individual consumer region of tropical hardwood products in Brazil.
Regarding the figure of 36% on exports, Figure 1.5 shows that the European Union (EU) receives 25% of the total volume of exports of roundwood, sawnwood, plywood and veneer from Brazil.

Figure 1.5  Brazil export, share of volume
The figures above were based on volume. In terms of value, the Amazon is estimated to constitute 2-3% of world's exports of wood products. The total value of exports was over USD 940 million in 2004, according to IMAZON. In terms of value of the exports, the shares of buyer countries are as follows:

- United States 31%
- China 12%
- France 11%
- Netherlands 7%
- United Kingdom 5%
- Belgium 5%
- Spain 4%
- Others 25%

100%

1.6 General Institutional Framework in Forest Sector

1.6.1 Public Administration

There are several departments within the Brazilian public administration to govern forests within the country.

The National Forests Program is an inter-ministerial program (involving 11 Ministries) coordinated by the Ministry of the Environment. The Decree (Decree nº 3.420/2000) to articulate public policies was created in year 2000. It promotes sustainable development and conciliates utilization and conservation of the Brazilian forests.

The recognition of the importance of the Forest sector in the country led to the creation of the Biodiversity and Forests Secretariat - Secretaria de Biodiversidade e Florestas (SBF) - in 1999 under the Ministry of Environment. Within the SBF, there are several departments in charge of different aspects related to forestry: National Forest Programme Direction (DIFLOR); Head of Reforestation and Recovery of Degraded Areas (GRRAD); Head of Forest Resources Sustainable Use (GUSRF); among others.

In addition, there are several other Ministries connected to the Forest sector, such as the Ministry of Agriculture, of Science and Technology, of Rural Development, of Development, Industry and Trade, of Education, of National Integration, among others.

IBAMA, the Brazilian Institute of Environment and Renewable Natural Resources, is the Brazilian Ministry of the Environment's enforcement agency. The agency also has the authority to approve the management plans of private properties, issue the exploitation authorization, and approve exports. According to the new concession law on public forests mentioned above, the agency will share its responsibility of assuring compliance with state agencies, which will mostly focus on state public forests.

The Brazilian federal states also have rules governing state forests, which must not contradict with federal legislation. These legislations are enforced different by the state environmental agencies.
1.6.2 Research and Development Institutes

In Brazil, there are several research institutes focusing on forestry. They publish extensively on this subject and are very active on promoting sustainable forest management. Some of them are listed below:

- Associação Brasileira de Ciências - ABC
  Brazilian Association of Science
- Associação Brasileira de Educação Agrícola Superior - ABEAS
  Brazilian Association of Superior Agricultural Education
- Centro de Estudos Avançados em Economia Aplicada - CEPEA
  Advance Center of Studies in Applied Economy
- Empresa Brasileira de Pesquisa Agropecuária - EMBRAPA
  Brazilian agro-forestry research institute
- Instituto de Pesquisas e Estudos Florestais - IPEF
  Institute of Research and Forests Study
- Instituto Florestal do Estado de São Paulo - IF
  Forests Institute of the State of São Paulo
- Instituto Nacional de Pesquisa da Amazônia - INPA
  National Institute of Research of the Amazon
- Instituto de Pesquisa Ambiental da Amazônia - IPAM
  Environmental Institute of Research of the Amazon
- Instituto de Pesquisas Tecnológicas de São Paulo - IPT
  Technology Research Institute of São Paulo
- Instituto do Homem e Meio Ambiente da Amazônia - IMazon
  Man and Environmental Institute of the Amazona
- Sociedade Brasileira para o Progresso da Ciência - SBPC
  Brazilian Society for Progress and Science
- Sociedade de Investigações Florestais - SIF
  Forests Investigation Society

1.6.3 Private Sector

Brazilian Amazon is home to the most of the operations on natural forests, leaving monoculture plantations to southern areas in Brazil. The number of forest companies that process wood operating in the Brazilian Amazon increased from 2,570 (in 1998) to 3,132 (in 2004). Most of these companies (> 80%) were sawmills, and the rest consisted of veneer and plywood mills. The proliferation of companies occurred mainly in the most recent logging centers (< 10 years old), such as Novo Progresso and Castelo de Sonho in western Pará, and Colniza and Aripuanã in northwest Mato Grosso.

These companies are often organized in Associations. The main ones are listed below:

- Associação dos Resinadores do Brasil - ARESB
- Associação Brasileira de Produtores de Florestas Plantadas - ABRAF
- Fórum Nacional de Base de Atividade Florestal
- Sociedade Brasileira de Silvicultura - SBS
- Associação Brasileira de Madeira Compensada e Industrial - ABIMCI
- Sociedade Brasileira de Engenheiros Florestais
- Associação Brasileira das Indústrias do Mobiliário - ABIMÓVEL
- Borracha Natural Brasileira
1.6.4 Non-governmental Organizations

Brazil also counts with a very well organized civil society. The NGO are especially very active on forest issues. Some of the main ones are listed below:

- Ambiente Global
  Global Environment
- Amigos da Terra - Programa Amazônia
  Friends of the Earth - Amazon Program
- Associação Mineira de Defesa do Meio Ambiente
  Mineira Association of Environmental defense
- Associação Ituana de Proteção Ambiental
  Ituana Association of Environmental Defense
- Conservation International do Brasil
- Instituto Socioambiental - ISA
  Socio-environmental Institute
- Fundação Biodiversitas
  Biodiversitas Foundation
- Fundação Floresta Tropical
  Tropical Forests Foundation
- SOS Mata Atlântica
- World Wide Fund for Nature - WWF
2. ILLEGAL TIMBER PRODUCTION AND EXPORTS

According to Forest Facts in the Brazilian Amazon 2005 (IMAZON), the total area covered by forest management plans in the Amazon was 342,300 ha in 2004. The respective authorized wood production volume was slightly less than 6.9 million m$^3$. In addition, the authorized deforestation produced 33,000 m$^3$ of wood.

The IMAZON has estimated the total harvesting volume in 2004 was 24.5 million m$^3$, of which authorized deforestation and wood originating from forest estates with valid forest management plans account only for 26%. Consequently, the rate of illegal logging would be 74%\(^3\). The FAO and Center for International Forestry Research (CIFOR) have estimated the rate of illegal logging to be 68%.

According to a survey among the Amazonian producers of hardwood products, the product quality, competitive prices and deliveries on time are the most important factors that the buyers emphasize while making decisions on product suppliers. The legality of wood production or sustainable forest management seems to be a less important factor to be considered.

\(^3\) Concerning the share of illegal logging exported from Brazil, Paulo Adário from Greenpeace estimates that 70% of the exports are illegal, while Paulo Barreto from IMAZON defends that it is very hard to estimate, but it is likely to be a high percentage, like Adário suggested.
3. MAIN DRIVERS BEHIND ILLEGAL LOGGING IN BRAZIL

Listed below are the main factors which drive illegal logging and other illegal forest activities in Brazil.

- Land Tenure
- Poverty
- Inadequate Law Enforcement
- Insufficient number of permits emitted by the government approving management plan for harvesting
- High barriers to process management plans/high transaction costs
- High profitability of illegal logging compared to legal logging
- Weak and/or under-resourced financial auditing of public forest administration and enterprises.
- Low level of transparency of governmental agencies
- Corruption
  - ranging from fraudulent legalization of illegal operations to the inability to punish violators
  - in the forestry and other sectors of economy in the country
- Impunity of environmental crimes
- Poor efficiency of the environmental crimes law, including (i) lack of personnel, and (ii) agreements made between IBAMA and the violators to substitute reparations of environmental damages for payment of fines
- Lack of adequate legislation to address the needs of the local communities regarding intellectual property and access to biodiversity
- Lack of a sustainable development model defined in Brazilian laws
- Lack of public policies encouraging development combined with natural resources preservation
- Insufficient means to collect fines applied to illegal operations
- Low level of interaction among the agencies responsible for enforcing environmental responsibility
- Low linkage between the penalties and the crimes practiced and insufficient monitoring of the negotiated terms
4. BENEFITS OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATION

To establish a legal harvesting right over any forestland in Brazil, one needs to have a management plan approved by either IBAMA or the State Agency and an authorization to exploit the area, in addition to observe several other legal diplomas and pay a number of fees and taxes. Therefore, wood harvest is considered illegal if any of these fees or taxes is not paid or the legislations are not respected.

Therefore, the benefit of illegal logging in Brazil in comparison to the legal one is not paying any or all of the above-mentioned taxes and fees and the unfair advantage from not having complied with the different laws on labor rights, environmental protection and management, among others.

In addition, the benefits are related to avoiding the high transaction costs in the bureaucratic process of getting the management plans approved. The illegal wood is simply cheaper considering the logistic reality in the Amazon. It is quite impossible to cover the whole area with efficient law enforcement.

Given that there is not an accurate number on the share of illegal operations in the country, it is difficult to estimate potential governmental losses in tax revenue and a precise figure of the unfair advantage of illegal logging over legal operations.
5. INITIATIVES TAKEN SO FAR TO COMBAT ILLEGAL FOREST ACTIVITIES IN BRAZIL

5.1 International Commitments and Actions Taken so Far

Forestry is a very important subject in Brazil. Therefore the government engages in various international forums to discuss the theme.

In 1992 Brazil hosted the United Nations Conference on Environment and Development (Rio 1992). Forestry was among the most controversial themes and was highly debated. In addition, Brazil has an active role on the United Nations Forest Forum (UNFF); on the International Tropical Timber Organization (ITTO) debates; and at the FAO. This Latin American country also engages actively under the United Nations Convention on Biodiversity Diversity (CBD) and Climate Change (UNFCCC), and was key on the implementation of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The most recent commitment taken by the government to reduce deforestation concerns the highly discussed theme of avoided deforestation. Brazil is hosting in 2007 two pilot projects financed by the World Bank on this issue.

5.2 Initiatives Taken So Far by the Brazilian Government

Since illegal logging and deforestation are serious problems in the Amazon, the government has initiated various programs and other measures to combat illegalities. The Ministry of Environment often updates on its website the innumerable programs it promotes.

One of the initiatives of the government is to give support to forest certification which promotes legal compliance and sustainable forest management in the tropical Brazil. At present, approximately 1.7 million ha of the Amazonian forests are certified according to the Forest Stewardship Council (FSC) scheme. A total of 22 forest management units, including industrial companies operating with natural forests and tree plantations and community forestry units, are involved in the FSC certification.

There are also several State initiatives in partnership with civil society to target illegal logging. For instance, for nearly six years, the state government of Acre, in a partnership with the Brazilian Micro and Small Business Support Service (Sebrae) and international NGOs like WWF Brazil and The World Conservation Union (IUCN) are managing to increase awareness amongst businessmen to use only woods that have been certified by the FSC, which has the FSC stamp, also known as the "green stamp", globally renown as an environmental preservation guarantee.

---

4 http://mma.gov.br/index.php?id=conteudo.monta&idEstrutura=5&idMenu=1175
5.3 Legislation in Brazil

The following are the legislation, which are or can be used to combat illegal logging in Brazil either directly or indirectly:

- **Constitution**
  - Constituição da República Federativa do Brasil, de 05 de outubro de 1988.

- **Laws**
  - LEI Nº 6.938, DE 31 DE AGOSTO DE 1981 - Environmental National Policy Law
  - LEI Nº 7.509, DE 4 DE JULHO DE 1986 - Floating Transportation of roundwood
  - LEI Nº 7.754, DE 14 DE ABRIL DE 1989 - Measures to protect existant forests on Springs
  - LEI Nº 10.650, DE 16 DE ABRIL DE 2003 - Free Access to information
  - LEI Nº 10.711, DE 5 DE AGOSTO DE 2003 - National system of seedling
  - LEI Nº 11.428, DE 22 DE DEZEMBRO DE 2006 - Utilization and Protection of the Atlantic Rain Forest
  - LEI Nº 11.516 DE 28 DE AGOSTO DE 2007 - Creation of Instituto Chico Mendes of Biodiversity Conservation

There are also decrees and resolutions from different governmental bodies. A list of these can be found in Annex 3.
6. CURRENT FOREST LAW ENFORCEMENT SYSTEM AND ITS EFFECTIVENESS

The enforcement of the environmental crimes law in the Amazon forestry sector is largely done by the Environmental Brazilian Institute called IBAMA, the Public Prosecution office called Ministério Público and the Brazilian courts. According to Brito & Barreto (2006), up to 2004, the state environmental and environmental policy agencies were doing little in this sector in the region.

Verification of an environmental infraction or crime may occur through denunciation to IBAMA or to the Ministério Público or also through IBAMA enforcement operations.

Brito & Barreto explain that upon verifying an environmental infraction, the IBAMA agent issues a record of the infraction describing the illicit act and forwards this document to the IBAMA Executive Agency overseeing the area where the infraction took place. The infraction record leads to an administrative proceeding at IBAMA and if the act practiced is also considered a crime according to law, IBAMA communicates that occurrence to the Ministério Público. The Ministério Público evaluates the occurrence and proposes one of the following options in the Court: the dismissal of the case when the act of the alleged violator is considered insignificant; a kind of plea-bargaining prior to any judicial decision; a criminal action.

In the collection process for the fines issued by IBAMA, the violator may present a defense in up to four stages. The violator may also contest the fine issued by IBAMA in the Federal Courts, which we call a judicial defense. If the fine is upheld and is not paid within the appropriate period, the collection phase begins and the name of the violator is recorded in a registry of Federal Public Sector Unpaid Credits (CADIN in Portuguese). Next, the violators name is listed in another registry – Active Federal Debts (Dívida Ativa da União) – which makes judicial collection of the debt possible.

During the court proceedings when plea-bargaining is possible, the Federal Court must locate the alleged violator and set a date for the settlement hearing. Next, if the negotiation takes place, there is a deadline for the compliance of the negotiated terms during which the Ministério Público and the judge should oversee performance of the agreed-upon activities. If the violator complies with the terms of the negotiated agreement, there is no finding of guilt and the record of criminal liability is expunged. If the agreement is violated, the Ministério Público may bring a criminal action against the alleged violator.

According to Brito & Barreto, the challenges for increasing the effectiveness of the environmental crimes law at the administrative level involve insufficient human resources, low control over payment of the fines in installments, insufficiency of the current means of collection and a low level of transparency in IBAMA’s action. At the judicial level, there is a low level of interaction among the agencies responsible for enforcing environmental responsibility, low linkage between the penalties and the crimes practiced and insufficient monitoring of the negotiated terms.
7. CURRENT STATUS OF LOG TRACKING IN THE BRAZILIAN PRIVATE SECTOR

The private sector log tracking is mainly done through certification. Today, there are two major forest certification schemes that both have their own chain-of-custody certification requirements, namely the FSC and Programme for the Endorsement of Forest Certification schemes (PEFC). Although the certification and labeling requirements of these schemes are different, the tracking methods, however, are practically identical or – rather – universal.

The private sector in the Amazon is constantly looking into improving their tracking system to provide to their customers reliable evidence of the legality of the wood. One of the systems tested is called Sistema de Rastreamento de Madeira em Toras (SIRMAT).

SIRMAT is a very sophisticated high-technology system for controlling the wood supply chain and origin of wood was tested by four major forest enterprises in the states of Amazonia and Pará between years 2003-2005. In the technological sense, the system draws on electronic “logging credits”, data transfer via satellites and on-line tracking of transport vehicles. It has three main modules:

- Mobile communication terminals
- Processing and database center
- Monitoring and control center

The mobile communication terminals that are Global Positioning System (GPS) integrated are installed in the transport equipment (e.g., truck or barge). The personnel of terminals fill in electronic wood transport documents (e-ATPF), which are submitted via satellite to the processing and database center for checking and approval.

At the processing and database center, the data of submitted e-ATPF is compared to the AUTEX specifying volumes and species that the producer is allowed to cut. If compatibility is found: The wood transportation document is authorized; The “logging credit” of forest management unit is automatically debited by the volumes and species identified in the e-ATPF; The authorized e-ATPF is submitted to the monitoring and control center.

The monitoring and control center supervises via a satellite system the transport equipment throughout their journey. The monitoring and control center has fielded control teams that have on-line access to the databases of processing and database center. The monitoring system can also include alarm protocols if the equipment departs from its most logical transport route.

The SIRMAT system has been considered to applicable to large capital-intensive companies that are already at a high technological level and have skilled labor in information technology. At present, the system would be financially feasible, only if the annual wood production volumes and number of transportation cargos are large enough. A SIRMAT-type system is foreseen to be the future solution for controlling the wood flows in Brazil.

---

5 Brazilian Program of Forest Certification, Cerflor, was endorsed by the PEFC Council on 19 October 2005 with the condition that the Cerflor Brazil uses the PEFC International Chain of Custody standard (Annex 4 of the PEFC Technical Document) for the purposes of chain of custody certification.

6 According to the companies present in the FLEGT Brazilian Workshop promoted as part of this study.

8. **SCOPE TO INCREASE LEGAL TIMBER PRODUCTION**

The rate of illegal wood produced in Brazil is estimated to be very high, what should encourage the government to take more action towards legalizing the production.

The laws in place allow for the control of illegal activities, even though some experts suggest that they have to be adapted. However, Brazil is currently unable to enforce the present legal framework. Experts, such as Paulo Tavernard from IBAMA and Paulo Barreto from Imazon, defend that the country should allocate more resources towards enforcement in order to guarantee higher rates of legal wood.

Barreto also suggests that to increase effectiveness of the regulations, and therefore increase legality, the government must enhance the control over the payment of fees applied by IBAMA, and increase transparency of the governmental actions. Barreto adds that several other measures must be adopted: some simple others more complex. For instance, to validate the suspension of services and issuance of documents for violators, the approval of a federal law would be necessary.

The private sector adds that the poorly structured environmental agencies are hindering their ability to produce legal wood. The tardiness in approving management plans and the lack of enforcement has highly impacted their businesses. The sector argues that there is definitely room to increase legal production, as long as the government re-structuralize its agencies.

The Brazilian government defends itself demonstrating its firm determination in combating destruction in the Amazon through a 180% increase in enforcement efforts from 2001 to 2004. However, deforestation has increased and there was little decrease in illegal harvesting because of the predominance of impunity.
9. SCOPE TO INCREASE TIMBER PROCESSING

In the Amazon, the planned harvesting volumes are usually at a level of 30-40 m³/ha. In practice the actual cuttings have been less than 20 m³/ha in many cases due to market restrictions. This is due to the fact that the markets of tropical hardwood are conservative to accept new tree species. However, the active efforts taken to broaden the sales have been recently successful to increase the number of harvestable tree species. At present, approximately 150 species are harvested for commercial purposes in the Amazon. There would be still space intensive market promotion, since the forest resources would be able to provide more species with commercial potential and sustainable harvesting volumes up to 70-90 m³/ha.

A study conducted by IMAZON comparing the years of 1998 and 2004 revealed that the consumption of roundwood decreased from 28.3 million m³ in 1998 to 24.5 million m³ in 2004. This reduction seems to be associated with three main factors: (i) there was increased enforcement against illegal logging by Brazil’s environmental agency, IBAMA; (ii) at the same time, the land tenure crises in the Amazon worsened, culminating with the cancellation of hundreds of forest management permits beginning in 2003; and (iii) between 1998 and 2004 there was improved efficiency in the conversion of roundwood into processed wood – such as sawnwood, veneer, plywood and finished products. In addition, the average timber yield in 1998 was 38% while in 2004 it jumped to 42%, contributing to a significant save of raw material. From this we conclude that the efficiency of wood processing improved.

IMAZON argues that the forest sector in the Brazilian Amazon highly contributes to the local economy, but suffers serious problems related to low quality of operations, which lead to the degradation and destruction of the forest. Therefore, wood harvesting must be done in a more sustainable manner as well as the processing of the wood.

Even though forest management has been a focus of the National Forest Program, few companies in the Amazon adopted any measures. A study conducted by CIFOR, IMAZON, EMBRAPA and IFT showed that the forest industries have very similar characteristics regarding their activities and applied technology. Generally, they adopt obsolete techniques, which leave room to improve processing.

Figure 1.6 shows the different logging frontiers in the Brazilian Amazon. Based on this knowledge the companies situated in old frontiers show a higher level of operations compared to the ones located in new frontiers. Therefore, if one had to invest in promotion of sustainable management, the target companies would be the ones in the old frontier given that they have better access to information, there is higher governmental control in these areas, and more access to specialized services to promote sustainability, and consequently increase the efficiency of timber processing.

The CIFOR study concluded that the companies that operate in a more selective manner - exploit areas with lower volume stocks - manage the forest better. This could indicate that the more specialized companies in exploitation, processing and trade of just some selected species are also more responsible on their forest operations. Also, given that the quality of operations is better in certified companies, one must promote certification if he wishes to see the efficiency of the processing increasing.

The private sector, on the other hand, states that the environmental agencies approve less management plans and exploitation authorizations than the necessary to supply the processing industry with the necessary raw material to operate. The sector also argues that the illegal wood apprehended by the authorities is not used, but wasted. They suggest that such raw material should be in some form legalized and processed instead of being left for decay.

---

8 According to IMAZON.
10. CURRENT CONDITION IN FOREST SECTOR OF BRAZIL

10.1.1 Government Revenue from Forest Sector

In 2005, the Forest gross domestic product (GDP) accounted for 4% of the national GDP, resulting in USD 21 billions. Out of these, the wood and furniture sector contributes to USD 9.3 billions. Concerning exports, the sector contributes to 10%, which is equivalent to USD 5.8 billions per year.

In particular, exports had an extremely significant increase, from USD 381 million in 1998 to USD 943 million in 2004.

10.1.2 Employment in the Forest Sector

IMAZON estimates that the Forest sector in the Amazon was responsible for generating 380,000 direct and indirect jobs in 2004. While 124,000 were directly related to the processing and forests exploitation, 255,000 were indirect - in the areas of sale of processed wood, and industrial equipment, transport, technical consultancy, equipment maintenance, and other specialized jobs. IMAZON estimate that, currently, at least 5% of the economic active population in the Brazilian Amazon works either directly or indirectly in the logging activity.

10.1.3 Access to Forests and Share of Benefits to Local Population

As mentioned above, the land tenure data of Brazilian Amazon is currently inaccurate; therefore it is hard to estimate the current access to forests and share of benefits to local population. IMAZON has estimated that 43% of the total area is in public ownership, including lands of indigenous people and local communities. The private ownership covers 24% and the remaining 33% are unsettled public lands and private lands under dispute.

Another set of data on harvesting provided by IMAZON can give the reader an idea of land distribution and its productivity: in 2004, most of the roundwood (41%) was harvested in large properties (> 5,000 ha). Medium-size properties (between 500 and 5,000 ha) provided 31% of the wood, and only 28% came from small-size properties (< 500 ha).

10.1.4 Structure of Industries

As mentioned previously in 2004, there were 3,132 wood industries operating in the Legal Amazon. Most of these industries (60%) were sawmills, which consumed in average 8,600 m³ of roundwood per year. The smaller sawmills (32% of the industries) consumed in average 1,500 m³ of roundwood per year. The rolling mills (6%) consumed around 15,000 m³ and the plywood sector (2% of the companies) consumed 28,000 m³ of roundwood per year.

In 2004, the average cost for producing one cubic meter of sawnwood in the Legal Amazon was USD 34. The smaller sawmills, with very low quality, had a cost of USD 17. The rolling mills faced a cost of USD 24, while the plywood had a cost of USD 69 per m³.

The smaller sawmills are family companies, mostly located in the States of Pará and Amapá. These companies own very obsolete equipments and therefore produce low quality products to the civil construction and housing sectors. In 2004, there were 732

---

9 Figures provided by IMAZON.
10 Exploitation of Natural Forests.
small sawmills distributed through the Amazon, generating 4,600 jobs. In average, these companies function between five and seven months per year and employ six to eleven workers each. Sixty three percent of the exploitation is done manually, while 37% utilize a piece of electric equipment. The roundwood dragging is 53% manually and 36% mechanically, while the remaining 11% utilize animal force. The average distance between the forest and the mill is 30 kilometers.

The social impacts are many. We must emphasize that the nature of industry is labor intensive - even the risk is that labor impact is temporary due to the unstable nature of operations and high share of illegalities.

10.1.5 Status of Corruption in Brazil

According to the Transparency International Corruption Perception Index 2007, Brazil ranks 72 out of 150. This implies that the degree of corruption among the public officials, which include people from public forestry sector, is quite high.
11. STAKEHOLDER VIEWS

11.1 General Information

To assess the views of stakeholders in Brazil concerning the acceptability of the four options, and potential leverage impact of these four options and also the Forest Law Enforcement, Governance and Trade (FLEGT), a survey with a structured questionnaire was carried out involving 18 respondents. Among the respondents, 15 were from the private sector, two from two leading environmental non-governmental organizations (ENGOs) working in Brazil, viz. Greenpeace, and WWF Brazil, and only one from the Brazilian Government (see also Annex 15). They were asked whether they agreed or not to different propositions related to the four options and FLEGT, and to what degree they agreed or disagreed with each proposition. The degree of agreeeness or disagreeeness is measured with five options, viz. fully disagree, partially disagree, do not know, partially agree and fully agree. For the analysis of the results, the options are given weights of \(-2, -1, 0, 1\) and \(2\), respectively and then weighted averages are calculated for each proposition. A positive weighted average means the overall agreeeness while the negative means the overall disagreeeness of the stakeholders over a proposition.

The full result is presented in Annex 16. According to the result, the stakeholders in Brazil have generally accepted the four options. In their opinion, the Option 4b is the best option among four options and hence it is worth implementing it in Brazil, while Option 2 is the worst (Figure 11.1). Nevertheless, a number of stakeholders defend that it is necessary to unify efforts of all sectors in society to effectively combat illegal logging and related trade, and therefore, a combination of options would be the best approach.

Figure 11.1 Ranking of different options

<table>
<thead>
<tr>
<th>Best</th>
<th>Worst</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td></td>
</tr>
<tr>
<td>4b</td>
<td></td>
</tr>
</tbody>
</table>

0 = The best
6 = The worst

The stakeholders’ views regarding each of the four options are presented in the following chapters.
11.2 Option 1: Voluntary Partnership Agreement (VPA) Scheme

The general view of the Brazilian stakeholders who responded to the questionnaire is that the VPA scheme will have positive impacts on the Brazilian forest sector particularly in combating illegal forest activities. According to them, this option will help Brazil reduce illegal logging given that illegal timber and products derived from such timber will not be allowed to enter into EU markets. Stakeholders also defend that the VPA scenario will not shift EU’s demand from Brazilian products towards timber products available within Europe or towards substitute products. Rather, the export of legal forest products from Brazil will increase and they will fetch higher prices in EU markets. As a result of this increase in price and export quantity of legal products, the loss in export revenue due to the reduction in illegal exports will be compensated.

In addition, the stakeholders think that the VPA scheme will bring some positive environmental, societal and governance related benefits to Brazil. They generally agree that joining in a VPA will help Brazil to eliminate unlawful forest conversion and unsustainable and wasteful harvesting practices associated with illegal logging. However, they disagree with the proposition that this measure will help to decrease the overall level of logging in natural forests in Brazil.

The positive societal impacts that the stakeholders think will be resulted by the VPA scheme are helping Brazil to ensure the welfare of forest-dependent people by securing the enforcement of existing regulations concerning distribution of benefits, access to non-wood forest products, protection of watersheds etc. and to improve work safety in logging and processing of timber. They also think that the VPA will help create more employment opportunities in the forestry sector in the long run although that in the short run may decrease due to the reduction in illegal logging activities.

The stakeholders of all groups agree that VPA will help make law enforcement more effective in Brazil by providing technical assistance and capacity building and eliminate corruption by requiring transparency. However, they do not think this option will help make the court system more effective by providing technical assistance and capacity building. They also believe that the VPA scheme will further erode respect for law in Brazil if it cannot be enforced effectively.

However, the stakeholders suspect that the VPA would have only a limited impact on Brazil forest sector unless other major consumers such as Japan and the USA join the scheme. In their opinion, the limited impact may also result from the fact that it cannot effectively catalyze changes to factors underpinning illegal logging such as poor forest governance, poverty, corruption, inappropriate land tenure, etc.

They all, in the end, generally agree that to make the VPA more effective the coverage of the licensing scheme should be expanded to all wood products beyond roundwood, sawntimber, veneer and plywood and circumvention, i.e. passing goods through third countries, should be effectively prevented.

Some stakeholders suggested that a potential VPA should bind EU Members States financially towards meeting the goals of the agreement. Otherwise, there is a high risk that the Brazilian government will sign but not effectively implement the agreement.

There is also an argument defending that the VPA is not only about implementation of a verification and control of chain of custody system. Therefore, to ratify such an agreement, there should be a large national process of public consultations (hearings) to discuss issues related to legality, efficiency and governance. It should be a participatory and transparent process aiming to have the society committed to eliminate illegal timber in the Amazon and willing to increase forests management. In addition, the EU would have the obligation to contribute to this process financially, technically and politically.
11.3 **Option 2: Private Sector Voluntary Scheme**

The Brazilian stakeholders consider this option cost-effective, which is more efficient than the government led measures. However, they believe that its voluntary nature makes it an insufficient measure. They considered it as useful only when this option is used as a complementary measure to other additional ones.

11.4 **Option 3: Broader Measures to Prevent the Importation of Illegally Harvested Timber**

The stakeholders in Brazil generally agree with the proposition that this option is based on a sound approach in the sense that it eliminates the possibility of circumvention through third countries. However, they suspect that it might face problems on its implementation due to potential conflicts with World Trade Organization (WTO) rules which require equal treatment for products originating from within and outside of the EU. They also suspect that this option will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably.

11.5 **Option 4: Prohibition on the Placing of the EU Market of Illegally Harvested Timber**

11.5.1 **Option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws of the Country of Origin**

According to the Brazilian stakeholders, this sub-option is not based on a sound approach in the sense that the verification and tracking systems need to be developed only when they are needed i.e. in high-risk situations. Furthermore, they think that it may unfairly discriminate against products from high-risk countries because companies in these countries need to develop costly tracking and verification systems to prove legality, whereas companies in low risk countries may not need them.

11.5.2 **Option 4b: Legislation which Requires that Only Legally Harvested Timber and Timber Products Be Placed on the Market**

The Brazilian stakeholders are of the opinion that this sub-option, unlike the Option 4a, is based on a sound approach in the sense that the burden of proof is on the private sector which has the necessary resources to provide evidence. Moreover, according to them, it is a fair measure despite having an underlying assumption that all imported goods are illegal unless proven legal. But they think that this option may incur unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low.
12. CAUSAL MODEL ON THE IMPACTS OF FOUR OPTIONS

Based on the stakeholders’ workshop responses, we were able to produce the casual model as shown in Figure 12.1.

**Figure 12.1 Casual model**
13. LIST OF REFERENCES

ABRAF. Estatísticas. www.abraflor.org.br


IBAMA. http://www.ibama.gov.br/


Annex 1

BRAZIL EXPORTS OF ROUND SAWNWOOD, PLYWOOD & VENEER TO VARIOUS COUNTRIES
EU TROPICAL SUM OF RW, SW, P & V (RWE) IMPORTS FROM VARIOUS COUNTRIES

Brazil
Paraguay
Nicaragua
Guyana
Honduras
Cameroon
Gabon
Côte d’Ivoire
Congo
Ghana
Indonesia
Malaysia
Myanmar
Singapore
Thailand
Other

cubic meters (RWE)

0
1,000,000
2,000,000
3,000,000
4,000,000
5,000,000
6,000,000
Annex 7

EU SUM OF RW, SW, P & V (RWE) IMPORTS FROM VARIOUS COUNTRIES
EU TROPICAL SUM OF ALL PRODUCTS (RWE) IMPORTS FROM VARIOUS COUNTRIES
EU TROPICAL WOOD MANUFACTURES (RWE) IMPORTS FROM VARIOUS COUNTRIES
EU TROPICAL WOOD PULP (RWE) IMPORTS FROM VARIOUS COUNTRIES

- Brazil
- Neth Antilles
- Norway
- USA
- Canada
- Switzerland
- Other

EU: EU TROPICAL WOOD PULP (RWE) IMPORTS FROM VARIOUS COUNTRIES

cubic meters (RWE)
ADDITIONAL BRAZILIAN REGULATIONS ON FORESTRY

- Decrees
  Decreto nº 76.623, de 17 de novembro de 1975
  Decreto nº 97.628, de 10 de abril de 1989
  Decreto nº 99.274, de 6 de junho de 1990
  Decreto nº 750, de 10 de fevereiro de 1993
  Decreto nº 1.298, de 27 de outubro de 1994
  Decreto nº 2.661, de 8 de julho de 1998
  Decreto nº 2.707, de 4 de agosto de 1998
  Decreto nº 3.179, de 21 de setembro de 1999
  Decreto nº 3.420, de 20 de abril de 2000
  Decreto nº 3.607, de 21 de setembro de 2000
  Decreto nº 4.593, de 13 de fevereiro de 2003
  Decreto nº 4.722, de 5 de junho de 2003
  Decreto nº 4.802, de 7 de agosto de 2003
  Decreto nº 5.153, de 23 de julho de 2004
  Decreto nº 13 de fevereiro de 2006
  Decreto nº 5.795, de 5 de junho de 2006
  Decreto nº 5.875, de 15 de agosto de 2006
  Decreto nº 5.975, de 30 de novembro de 2006
  Decreto nº 6.063, de 20 de março de 2007

- Conama resolutions
  Resolução Conama nº 001 de 1986
  Resolução Conama nº 13 de 1990
  Resolução Conama nº 237 de 1997
  Resolução Conama nº 278 de 2001
  Resolução Conama nº 302 de 2002
  Resolução Conama nº 303 de 2002
  Resolução Conama nº 369 de 2006
  Resolução Conama nº 378 de 2006
  Resolução Conama nº 379 de 2006
  Resolução Conama nº 388 de 2007
  Resolução Conama nº 391 de 2007
  Resolução Conama nº 392 de 2007

- Intruções normativas e normas de execução
  Instrução Normativa Ibama nº 5, de 25 de outubro de 1999
  Instrução Normativa Ibama nº 3, de 4 de maio de 2001
  Instrução Normativa Ibama nº 17, de 19 de outubro de 2001
  Instrução Normativa Ibama nº 2, de 16 de janeiro de 2002
  Instrução Normativa MMA nº 3, de 4 de março de 2002
  Instrução Normativa Ibama nº 30, de 31 de dezembro de 2002
  Instrução Normativa MMA nº 1, de 23 de abril de 2003
  Instrução Normativa Ibama nº 6 de 22 de agosto de 2003
  Instrução Normativa Ibama nº 7, de 22 de agosto de 2003
  Instrução Normativa MMA nº 8, de 24 de agosto de 2004
  Instrução Normativa Ibama nº 31, de 27 de maio de 2004
  Instrução Normativa Ibama nº 40, de 2 de julho de 2004
  Instrução Normativa MMA nº 11, de 17 de maio de 2005
  Instrução Normativa Ibama nº 74, de 25 de agosto de 2005
  Instrução Normativa Ibama nº 75, de 25 de agosto de 2005
  Instrução Normativa Ibama nº 77, de 7 de dezembro de 2005
  Instrução Normativa MMA nº 1, de 16 de janeiro de 2006
• Resolutions from the Brazilian environmental ministry

Portaria Normativa Ibama nº 118-n, de 12 de novembro de 1992
Portaria Ibama nº 44-n, de 06 de abril de 1993
Portaria Ibama nº 113, de 29 dezembro de 1995
Portaria Ibama nº 01, de 18 de agosto de 1998
Portaria Ibama nº 50-n, de 17 de abril de 1998
Portaria Ibama nº 51, de 17 de abril de 1998
Portaria Ibama nº 71, de 5 de junho de 1998
Portaria Ibama nº 94-n, de 9 de julho de 1998
Portaria Ibama nº 9, de 11 de dezembro de 2000
Portaria MMA nº 183 de 10 de maio de 2001
Portaria MMA nº 203, de 30 de maio de 2001
Portaria Ibama nº 4, de 16 de outubro de 2001
Portaria Ibama nº 9, de 23 janeiro de 2002
Portaria MMA nº 94, de 4 de março de 2002
Portaria Ibama nº 144, de 6 de novembro de 2002
Portaria MMA nº 303, de 30 de julho de 2003
Portaria Ibama nº 19, de 11 de abril de 2003
Portaria Ibama nº 56, de 7 de outubro de 2003
Portaria Ibama nº 3, de 8 de janeiro de 2004 - CITES related
Portaria MTE nº 86, de 3 de março de 2005
Portaria MMA nº 85, de 31 de março de 2005
Portaria MMA nº 103, de 5 de abril de 2006
Portaria MMA nº 253, de 18 de agosto de 2006
Portaria MMA nº 337, de 1º de dezembro de 2006
Resolução SFB nº 1, de 12 de maio de 2007
Resolução SFB nº 2, de 06 de julho de 2007
### List of respondents to the questionnaire

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private sector</strong></td>
<td></td>
</tr>
<tr>
<td>1  Juliana Carvalho</td>
<td>Technician - Rede Brasileira de Centros Internacionais de Negocios - Centro Internacional de Negocios do Para</td>
</tr>
<tr>
<td>2  Wandreia Baitz</td>
<td>Environmental Manager - CIKEL</td>
</tr>
<tr>
<td>3  Mauricio Amim</td>
<td>Export Manager - Tramontina</td>
</tr>
<tr>
<td>4  Juliana Afonso Pinto</td>
<td>Technical Assessor - ABIMCI</td>
</tr>
<tr>
<td>5  Guilherme dos Santos Carvalho</td>
<td>Director - Aimex</td>
</tr>
<tr>
<td>6  Rubens Coutinho</td>
<td>Floresteca</td>
</tr>
<tr>
<td>7  Fernando Alves</td>
<td>Executive Secretary - Uniflor</td>
</tr>
<tr>
<td>8  Divino Fagundes</td>
<td>IBL Izabel Madeiras do Brasil LTDA</td>
</tr>
<tr>
<td>9  J. Teodoro Neufeld</td>
<td>Director - Trading Madeiras LTDA</td>
</tr>
<tr>
<td>10 Nagib Matni</td>
<td>Environmental Manager - Nordisk Timber LTDA</td>
</tr>
<tr>
<td>11 Arnold Hardus</td>
<td>Export Manager - Real Timber Group Brasil</td>
</tr>
<tr>
<td>12 Jose Marcio Furlaneto</td>
<td>Direcstor - Indufet</td>
</tr>
<tr>
<td>13 Deryck Martins</td>
<td>Executive Secretary - COEMA</td>
</tr>
<tr>
<td>14 Joao Araujo Pinto Neto</td>
<td>CEO - Abimovel</td>
</tr>
<tr>
<td>15 Heloiza da Silva Cardeal</td>
<td>Principal Assistant - Abimovel</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td></td>
</tr>
<tr>
<td>16 Paulo Tavernard</td>
<td>Environmental Analyst - IBAMA</td>
</tr>
<tr>
<td><strong>NGO</strong></td>
<td></td>
</tr>
<tr>
<td>17 Estevão Braga</td>
<td>WWF Brasil</td>
</tr>
<tr>
<td>18 Marcelo Marquesini</td>
<td>Greenpeace</td>
</tr>
</tbody>
</table>
### ANALYSIS OF RESPONSES

<table>
<thead>
<tr>
<th>1)</th>
<th>With the implementation of the VPAs in your country</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Exports of illegal wood and wood products from your country to the EU will be significantly reduced</td>
</tr>
<tr>
<td>b)</td>
<td>Exports that have been illegal will be legalized, i.e., the proportion of legal imports will significantly increase</td>
</tr>
<tr>
<td>c)</td>
<td>Exports of legal wood and wood product to the EU will significantly decrease because exporters/importers will consider that the cost of meeting the VPA requirements outweighs the benefits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2)</th>
<th>Elimination of imports of illegal wood and wood products from your country to the EU will</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Reduce illegal logging in your country</td>
</tr>
<tr>
<td>b)</td>
<td>Will leave illegal logging unaffected because exporters will reshuffle trade flows shipping available legal products to the EU and illegal products to other markets</td>
</tr>
<tr>
<td>c)</td>
<td>Will leave illegal logging unaffected because local processing of illegal timber will increase and these products will be exported to the EU</td>
</tr>
</tbody>
</table>
### 3) Reduction of illegal exports from your country to the EU will

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>be compensated with legal exports from your country</td>
<td><img src="chart" alt="Bar chart for a)" /></td>
</tr>
<tr>
<td>b)</td>
<td>be compensated with exports from countries not involved in VPA implementation</td>
<td><img src="chart" alt="Bar chart for b)" /></td>
</tr>
<tr>
<td>c)</td>
<td>shift demand towards timber products available within the EU</td>
<td><img src="chart" alt="Bar chart for c)" /></td>
</tr>
<tr>
<td>d)</td>
<td>shift demand towards substitute products (other than wood products)</td>
<td><img src="chart" alt="Bar chart for d)" /></td>
</tr>
<tr>
<td>e)</td>
<td>have a positive impact on the market share of wood products in the EU because of giving them a better image</td>
<td><img src="chart" alt="Bar chart for e)" /></td>
</tr>
</tbody>
</table>

### 4) From the standpoint of private sector the VPA scheme will

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>benefit legal producers and traders by eliminating the unfair advantage enjoyed by illegal producers and traders</td>
<td><img src="chart" alt="Bar chart for a)" /></td>
</tr>
<tr>
<td>b)</td>
<td>lead to relocation of timber transformation activities outside of the EU</td>
<td><img src="chart" alt="Bar chart for b)" /></td>
</tr>
<tr>
<td>c)</td>
<td>favor large export companies at the expense of small and medium-sized ones</td>
<td><img src="chart" alt="Bar chart for c)" /></td>
</tr>
</tbody>
</table>

### 5) The VPA will be effective only if

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>the coverage of the licensing scheme were expanded to all wood products (not only roundwood, sawntimber, veneer and plywood)</td>
<td><img src="chart" alt="Bar chart for a)" /></td>
</tr>
<tr>
<td>b)</td>
<td>circumvention (passing goods through third countries) were effectively prevented</td>
<td><img src="chart" alt="Bar chart for b)" /></td>
</tr>
<tr>
<td>Question</td>
<td>Agree</td>
<td>Disagree</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>6) Even if technical arrangements to secure legality were effective, the VPA scheme would have limited impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) because it cannot effectively catalyze changes to factors underpinning illegal logging such as poor forest governance, poverty, corruption, inappropriate land tenure, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) unless other major consumer countries such as Japan and USA join the scheme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Legal products from VPA countries will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) fetch higher prices in the EU market because reduction of overall supply in the EU will drive price level higher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) will enjoy a price premium of 10% or more in the EU market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Will have better access to the EU market, i.e., the main benefit is bigger market share rather than price premium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) The main benefits of having unhindered access to the EU market is that</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) wood and wood products fetch higher prices in the EU market than in other markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) there is more demand for high value added products in the EU market than in other markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) The main environmental benefits of the VPA scheme are that it will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) help decrease the overall level of logging in natural forests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) help eliminate unlawful forest conversion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
c) help eliminating unsustainable and wasteful harvesting practices associated with illegal logging

c) help eliminating unsustainable and wasteful harvesting practices associated with illegal logging

c) help eliminating unsustainable and wasteful harvesting practices associated with illegal logging

c) help eliminating unsustainable and wasteful harvesting practices associated with illegal logging

c) help eliminating unsustainable and wasteful harvesting practices associated with illegal logging

c) help eliminating unsustainable and wasteful harvesting practices associated with illegal logging

10) The main social impacts of the VPA scheme are that it will

a) help ensuring the welfare of forest-dependent people by securing the enforcement of existing regulations concerning distribution of benefits, access to non-wood forest products, protection of watersheds etc.

b) help improve work safety in logging and processing of timber

c) reduce local employment in the short run by reducing illegal logging

d) secure long term employment by providing a sustainable basis for forest management

11) The main impacts of the VPA scheme with respect to governance are that it will

a) help make law enforcement more effective by providing technical assistance and capacity building

b) help eliminate corruption by requiring transparency

c) help make the court system more effective by providing technical assistance and capacity building

d) further erode respect for law because the VPA scheme cannot be enforced effectively
<table>
<thead>
<tr>
<th>Option 2: Private sector schemes expanded</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) is a cost-effective option</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>b) is a more efficient approach than government-led measures</td>
<td>a)</td>
<td></td>
</tr>
<tr>
<td>c) is a useful but insufficient measure because of its voluntary nature</td>
<td>b)</td>
<td></td>
</tr>
<tr>
<td>d) is useful as complementary measure to be used in combination with other additional options</td>
<td>c)</td>
<td>d)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) is based on a sound approach in the sense that it eliminates the possibility of circumvention through third countries</td>
<td>a)</td>
<td></td>
</tr>
<tr>
<td>b) will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably</td>
<td>b)</td>
<td></td>
</tr>
<tr>
<td>c) cannot be implemented because it contradicts WTO rules requiring equal treatment for products originating from within and outside of the EU</td>
<td>c)</td>
<td></td>
</tr>
<tr>
<td>d) Will there be any other impacts that would be significantly different from those of the baseline scenario (e.g., impact on legal imports, need to introduce similar schemes in other major timber importing countries, such as Japan and USA)</td>
<td>c)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 4a: Legislation which prohibits the trading and possession of timber and timber products harvested in breach of the laws of the country of origin</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Is based on a sound approach in the sense that the verification and tracking systems need to be developed only when they are needed i.e. in high risk situations</td>
<td>a)</td>
<td></td>
</tr>
</tbody>
</table>
b) Will unfairly discriminate against products from high risk countries because companies in these countries need to develop costly tracking and verification systems to prove legality whereas companies in low risk countries may not need them.

| 15) Option 4b: Legislation which requires that only legally harvested timber and timber products be placed on the market |
|---|---|---|---|
| a) is based on a sound approach in the sense that the burden of proof is on the private sector which has the necessary resources to provide evidence | -2 | -1 | 0 | 1 | 2 |
| b) causes unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low | a) |
| c) is unfair because the underlying assumption is that imported goods are illegal unless proven legal | b) |
| d) Will there be any other impacts that would be significantly different from those of the VPA scheme (e.g., impact on legal imports, eliminating advantages enjoyed by illegal traders, etc.) | c) |
| | d) |
Commission Européenne
Direction Générale de l’Environnement

Evaluation de l’impact des mesures potentielles susceptibles d’empêcher l’importation ou la mise sur le marché des bois de provenance illégale ou de produits dérivés de tel matériau

Rapport Technique 5
Etude de cas sur le Gabon

Helsinki
Janvier 21, 2008
DENEGATION

Indufor développe ses meilleurs efforts pour fournir des informations précises et complètes quand il exécute sa mission. Indufor n'assume aucune responsabilité de n'importe quels résultats de cette mission.

Copyright © 2008 Indufor Oy
Tous droits réservés. Aucune partie de cette publication ne peut être reproduite ou transmise sous aucune forme ou par aucun moyen, électronique ou mécanique, mais n’être limitée qu’au photocopie, ou autre moyen de sauvegarde.
TABLE DES MATIERES

1. INTRODUCTION 1
   1.1 Contexte 1
   1.2 Les différentes options objet de l’étude 1
   1.3 Objectif de l’étude de cas 1

2. SECTEUR FORESTIER AU GABON 3
   2.1 Organisation générale institutionnelle 3
      2.1.1 Administration publique 3
      2.1.2 Les services forestiers professionnels 3
      2.1.3 Les exploitants forestiers 3
      2.1.4 Les associations 3
      2.1.5 La SNBG 4
      2.1.6 Les ONG 4
   2.2 Terres et ressources forestières 5
   2.3 Types de permis d’exploitation 7
   2.4 L’Okoumé 8
   2.5 Production des bois ronds 9
   2.6 Industries de transformation du bois 10
   2.7 Transformation plus poussée 10

3. COMMERCE EXTERIEUR DU BOIS 12
   3.1 Exportation de grumes 12
   3.2 Exportation de bois d’ouvres 13

4. PRINCIPAUX FACTEURS DU COMMERCE ILLEGAL DU BOIS 14

5. INITIATIVES PRISES JUSQU’ICI POUR COMBATTRE L’ILEGALITE DES ACTIVITES FORESTIERES 15
   5.1 Engagements internationaux et mesures prises jusqu’ici 15
   5.2 Initiatives jusqu’ici prises par le gouvernement 15
   5.3 Réglementation 16

6. SYSTEME ACTUEL D’APPLICATION DE LA LOI FORESTIERE ET SON EFFICACITE 17

7. REFORME DU SECTEUR FORESTIER, TRANSPARENCE ET CAPACITE INSTITUTIONNELLE DE MISE EN ŒUVRE DU FLEGT 18
   7.1 Transparence du secteur forestier et agenda des réformes 18
   7.2 Progrès du FLEGT au Gabon 18

8. EVALUATION DES IMPACTS POUR LES QUATRE OPTIONS 20
   8.1 Impact économique 20
      8.1.1 Revenu de l’Etat 20
      8.1.2 Fiscalité 20
      8.1.3 Emploi 21
   8.2 Impact environnemental 22
   8.3 Impact social 22

9. VUES DES PARTIES PRENANTES 24
   9.1 Introduction 24
   9.2 Option 1: Schéma APV 24
   9.3 Option 2: Schéma du secteur privé volontaire 24
   9.4 Option 3: Mesures d’accompagnement visant à empêcher l’importation des bois récoltés illégalement 25
   9.5 Option 4a: Législation interdisant la commercialisation et la détention de bois et produits dérivés récoltés en marge du respect des lois du pays d’origine 25
9.6 Option 4b: Législation exigeant que seuls les bois et produits dérivés récoltés légalement soient placé sur le marché 25
9.7 Autres commentaires 25

2. LITTERATURE CITÉE: 27

LISTE DES FIGURES

Figure 2.1 Zones du domaine forestier permanent du Gabon 6
Figure 2.2 Production des bois ronds au Gabon 2003-2006 9

LISTE DES TABLEAUX

Tableau 2.1 Permis d’exploitation du bois au Gabon 8
Tableau 7.1 Avancées notoires à processus du FLEGT au Gabon 19
Tableau 8.1 Evolution de la valeur ajoutée de la filière bois au Gabon 20
Tableau 8.2 Evolution du chiffre d’affaires de la filière bois: marché extérieur et marché local 20
Tableau 8.3 Evolution de la Fiscalité de la filière bois (par mois Décembre 2004-2006) 21
Tableau 8.4 Evolution des effectifs employés dans la filière bois 21
ABREVIATIONS

AFD  Agence Francaise de Développement
AFLEG African Forest Law Enforcement and Governance
AIBT Accord International des Bois Tropicaux
ANPN Agence National Parcs des Nationaux
APV Accord de Partenariat Volontaire
CARPO Programme du Bureau Afrique Centrale du WWF
CBD Convention sur la Diversité Biologiques
CE Communauté Européenne
CEB Compagnie Equatoriale du Gabon
CEMEC Société Nationale Chinoise d’Importation et d’Exportation de Machinerie et d’Equipement
CF Coupes familiales
CFAD Concessions forestières d’aménagement durable
CIB Congolaise Industrielle des Bois
CITES Convention sur le commerce international des espèces de faune et de flore sauvages menacées d’extinction
CNPN Conseil National des Parcs Nationaux
COMIFAC Conférence des Ministres des Forêts de l’Afrique Centrale
DDICB Direction du Développement des Industries et du Commerce du Bois
DFPE Domaine forestier permanent
DFR Domaine forestier rural
DGEF Direction Générale des Eaux et Forêts
DIARF Direction des Inventaires, de l’Aménagement et de la Régénération des Forêts
DNV Det Norske Veritas
DTS Droits et taxe de la sortie
ECOFAC Ecosystèmes Forestiers d’Afrique Centrale
FAO Food and Agricultural Organization of the United Nations
FCFA Franc Communauté Financière Africaine
FLEGT Forest Law Enforcement Governance and Trade
FOB Free on Board
FORCOMS Forest Concession Monitoring System
GEF Facilité Mondiale Environnementale
GIB Gabonaise Industrielle des Bois
ha hectare
IBRD International Bank for Reconstruction
INC Institut National de Cartographie
IUCN World Conservation Union
m³ cubic meter
MEFEPPN Ministère de l’Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux
OAB Organisation Africaine du Bois
OIBT Organisation Internationale des Bois Tropicaux
OLB Origine légale du bois
OMC L’Organisation mondiale du commerce (World Trade Organization)
ONG L’Organisation non-gouvernemental (Non-governmental Organization)
PARC Gestion de Parcs Nationaux et la Biodiversité
PCI Principles, criteria and indicators
PEFC Programme for the Endorsement of Forest Certification
PFBC Partenariat des Forêts pour le Bassin du Congo
PI Permis industriels
PIB Produit intérieur brut (Gross Domestic Product)
PNUD Le Programme des Nations Unies pour le développement (United Nation Development Programme)
PSFE Programme Sectoriel Forêts Pêches Environnement
PTE Permis temporaires d’exploitation
PZACF Permis de la zone d’attraction du chemin de fer
<table>
<thead>
<tr>
<th>Acronyme</th>
<th>Explication</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSID</td>
<td>Honoraires pour les déclarations de l’exportation (Redevance utilisation</td>
</tr>
<tr>
<td></td>
<td>du system informatique)</td>
</tr>
<tr>
<td>RWE</td>
<td>Roundwood equivalent</td>
</tr>
<tr>
<td>SGS</td>
<td>Societe General de Surveillance</td>
</tr>
<tr>
<td>SNBG</td>
<td>Société Nationale des Bois du Gabon</td>
</tr>
<tr>
<td>SRD</td>
<td>Taxe d’exportation des grumes</td>
</tr>
<tr>
<td>SYNFOGA</td>
<td>Syndicat des Producteurs et Industriels du Bois du Gabon</td>
</tr>
<tr>
<td>TRAFFIC</td>
<td>The Wildlife Trade Monitoring Network</td>
</tr>
<tr>
<td>TVA</td>
<td>Impôt sur la valeur ajoutée (Value-added tax)</td>
</tr>
<tr>
<td>UE</td>
<td>Union Européenne</td>
</tr>
<tr>
<td>UFIGA</td>
<td>Union des Forestiers Industriels du Gabon et Aménagistes</td>
</tr>
<tr>
<td>UNCCD</td>
<td>Convention des Nations Unies sur la lutte contre la Désertification</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>Convention Cadre des Nations Unies sur les Changements Climatiques</td>
</tr>
<tr>
<td>WWF</td>
<td>Worldwide Fund for Nature</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

1.1 Contexte

La politique communautaire de lutte contre l’exploitation forestière illégale et son commerce dérivé est définie dans la Communication de la CE (COM(25 1)2003) pour un Plan d’Action FLEGT (Forest Law Enforcement Governance and Trade). Le Plan d’Action prévoit un certain nombre d’activités, telles que la mise en place d’un système volontaire mais juridiquement contraignant d’attestation de légalité pour assurer que le bois importé des pays adhérant au système a été légalement exploité.

Le Règlement du Conseil européen n° 2 173/2005 du 20 Décembre 2005 fixe le cadre juridique à l’entrée en vigueur dans l’UE du système d’attestation de légalité FLEGT. Ce Règlement donne également mandat à la Commission européenne pour négocier les Accord de Partenariat FLEGT.

Le Plan d’Action FLEGT reconnaît lui-même les limites et le possible échec de l’approche bilatérale des Accord de Partenariat Volontaire FLEGT, en ce sens que les pays n’adhérant pas au processus ne seront liés par aucune obligation en terme de respect de la légalité.

Dans ce contexte, la Commission européenne et les Etats membres de l’UE réfléchissent aux autres possibilités offertes par la législation existante à niveaux communautaire et national, ainsi qu’à d’éventuelles mesures additionnelles qui permettraient de lutter contre l’exploitation forestière illégale.

1.2 Les différentes options objet de l’étude

Les impacts des options suivantes seront évalués:

(a) Poursuite de l’approche d’accord de partenariat volontaire (FLEGT APV)

Sous cette option deux scénarios seront envisagés – l’un dans lequel la majorité des pays exportateurs de bois avec des problèmes d’exploitation illégale négocie des APV FLEGT au cours des quatre années à venir, et l’autre dans lequel très peu d’APV seraient concrétisés dans les années à venir.

(b) Mesures volontaires du secteur privé


(c) Mesures aux frontières de l’UE visant à empêcher l’importation du bois illégalement récolté

L’étude devrait examiner les impacts potentiels de cette mesure sans se prononcer en détail sur ses implications au regard de l’OMC.

(d) Interdiction de la mise sur le marché de l’UE du bois illégalement récolté

1.3 Objectif de l’étude de cas

Cette étude se concentre sur une évaluation plus détaillée de l’efficacité des quatre options pour combattre le commerce illégal du bois au Gabon. L’évaluation s’appuie sur les données quantitatives collectées, les consultations réalisées par des entrevues et des réunions ciblées.
Les réunions ont été organisées avec acteurs suivant à Libreville :

- Délégation de la Commission européenne au Gabon (M. Francois Sordet, M. Didier Nils, Mme. Foumilayo Anguilet Kombila)
- M. Alain Pénelon, Conseiller Technique Régional AFLEG/FLEGT
- M. Jean-Christophe Besacier, Conseiller Régional des Forêts, Ambassade de France
- M. Serge Rufin Okana, Directeur Général Adjoint, Société Nationale des Bois du Gabon (SNBG)
- M. Michel Minko, Inspecteur Principal de Impôts, Directeur Général Adjoint, Direction Générale des Impôts, Ministère de l’Économie, des Finances, du Budget et de la Privatisation
- M. Hervé Bourguignon, Secrétaire Général, Inter Africane Forest Industries Association (IFIA)
- Mme. Viviane Nguema-Magnagna, Conseiller Economique, Ministère de l’Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux
- M. René Hilaire Adiahéno, Secrétaire Permanent, Conseil National des Parcs Nationaux (CNPN)
- M. Dominique Paget, Resp. Aménagement / Environnement, CIB/GIB Gabon (TT / DLH Group)
- M. Erwan Chapuis, Chargé de Projets, Groupe Agence Française de Développement (AFD)
- Mme. Jacqueline van de Pol, Rougier Gabon
- M. Antoine Ndongou, Directeur Général Adjoint, Ministère de l’Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux
- M. Jean-Jacques Ogoula-Ogari, Inspecteur Principal des Douanes, Directeur Général Adjoint Chargé des Services Techniques, Ministère de l’Économie, des Finances, du Budget et de la Privatisation
- Mme. Brigitte Carr-Dirick, Senior Conservation Finance Advisor, WWF Central Africa Programme Office (CARPO)
- Mme. Nathalie Nyare Essima, Forest Officer, WWF Central Africa Programme Office (CARPO)
- M. K.S. Priyan, Head of OLAM Gabon
- M. Olivier Fremond, Banque Mondiale
- M. Gérard Moussu, Union des Forestiers Industriels du Gabon et Aménagistes, CEB / Bois précieux
- M. Jean Pierre Georget, Syndicat des Producteurs et Industriels du Bois du Gabon
- M. Marcelin Nzengui, Directeur de la Production Forestière, Direction de la Production Forestière, Ministère de l’Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux
- M. Jürgen Heimann, Chef de la Section Economie, Délégation de la Commission européenne au Gabon
2. SECTEUR FORESTIER AU GABON

2.1 Organisation générale institutionnelle

2.1.1 Administration publique

L'administration forestière du Gabon est dirigée par le Ministère de l'Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux (MEFEPPN). Elle a la mission de protection des forêts, assure le respect de la législation en matière de développement durable.

2.1.2 Les services forestiers professionnels

La Direction des Inventaires, de l'Aménagement et de la Régénération des Forêts (DIARF) est un département technique du Ministère de l'Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux. Ses activités contribuent à une meilleure gestion forestière par la mise à disposition des informations de base sur la forêt Gabonaise ainsi que le développement des outils techniques et la formation du personnel.

L'Institut National de Cartographie (INC), créé en 1983, est sous la supervision du Ministre de l'Habitat et du Développement Urbain. Sa mission est de produire et distribuer les cartes, les photographies aériennes et autres produits cartographiques. Les nouvelles méthodes de production de carte basées de plus en plus sur la numérisation facilitent le développement d'information géo référencée qui peuvent être spécifiquement appliquées pour les besoins de gestion et de préservation des ressources forestières.

2.1.3 Les exploitants forestiers

Les exploitants forestiers peuvent être scindés en deux groupes:

1. Les grandes entreprises, à capitaux étrangers, concessionnaires de superficies allant jusqu'à 1 million ha. La majorité œuvre dans la légalité et tente d'appliquer les deux axes de la politique gabonaise: aménagement durable et industrialisation locale. La superficie concernée couvre 6 à 7 millions d'hectares.

2. Un grand nombre de petits permis forestiers (moins de 50.000 ha), totalisant 80% des entreprises et 50% des emplois. Leur attribution relève le plus souvent d'une logique de partage de la rente forestière. Les titulaires sont essentiellement des nationaux qui confient l'exploitation à des fermiers. La superficie concernée couvre 3,5 à 4 millions d'hectares.

Les petits permis forestiers restent très difficiles à aménager individuellement et il est acquis de longue date que leur regroupement en concessions forestières d'aménagement durable (CFAD) demeure un préalable incontournable.

2.1.4 Les associations

Les associations respectives qui veillent aux intérêts des deux groupes différents d'exploitants sont:

1. UFIGA

L'union des Forestiers Industriels du Gabon et Aménagistes représente les plus grands opérateurs internationaux dans la l'exploitation forestière et le commerce du bois au Gabon. Ceux-ci détiennent les grandes concessions forestières.
2. SYNFOGA
Le Syndicat des Producteurs et Industriels du Bois du Gabon représente les petites et moyennes industries de transformation et les exploitant forestiers enregistrés au Gabon.

2.1.5 La SNBG
La Société Nationale des Bois du Gabon (SNBG) a été créée en 1975 avec trois missions:

a) Commercialiser les grumes et les produits à base de bois
b) Développer l’industrie forestière Gabonaise et faciliter la mise sur les marchés de leur production
c) Maintenir les prix des grumes et des produits à base de bois Gabonais fermes et en augmentation.

Le rôle et les principes d'exploitation de la SNBG ont été très débattus durant les années passées. Il a été établi comme une agence de commercialisation de bois d'œuvre détenant le monopole sur les marchés d'Okoumé et d'Ozigo. Les autres entreprises d'exploitation forestières du Gabon vendent leurs grumes d'Okoumé et d'ozigo à la SNBG, qui les vend par la suite au marché international. Des bois divers peuvent être directement commercialisés par les sociétés forestières. Récemment, l’avenir de la SNBG a été débattu contre le processus en cours de désengagement de l'état de la production aux marchés. En décembre 2004, le Gouvernement a décidé d'enlever le monopole de la SNBG à partir de janvier 2006 pour libéraliser le commerce de bois d'œuvre dans le pays et lever sa compétitivité réelle.

Le récent aménagement de la SNBG a montré que la diversification de leurs activités est nécessaire ainsi que l'augmentation du niveau de transformation locale avant l'exportation est un objectif à atteindre. Mais les étapes concrètes vers la fabrication de tels changements sont actuellement difficiles à observer et à quantifier.

Il apparaît cependant, clair que la SNBG a graduellement perdu son monopole du passé en matière d'exportation de grumes gabonaises. Il y a environ 20 sociétés qui peuvent exporter des grumes du Gabon à l'heure actuelle. La SNBG est en concurrence, par exemple, avec les exportateurs français et ceux d'autres nationalités sur les mêmes marchés de grumes à l'étranger. Du point de vue des concurrents, la SNBG n'a apporté que très peu de valeur ajoutée ; cependant a augmenté ces honoraires de 25 FCFA/m³.

2.1.6 Les ONG
La société civile n'a pas encore joué un rôle efficace en matière de formation, d'exécution et de surveillance de la politique nationale du Gabon. C'était seulement avec l'instauration du multipartisme dans le pays que le mouvement de société civil a effectivement pris forme. Depuis lors, il y a eu une prolifération d'associations, des organisations non gouvernementales et des syndicats. Selon les différentes décomptes, entre 800 et 1 000 organisations dans le pays aujourd'hui. Cependant, l'État est toujours peu disposé d'accepter la société civile comme un réel partenaire au développement.

Les O.N.G. et organismes internationaux tels que WWF, Greenpeace, IUCN et Global Forest Watch et quelques ONG locales travaillent en complémentarité ou en parallèle avec l’administration forestière pour combattre les activités forestières illégales et le développement du secteur forestier.
Par exemple, Le WWF Gabon fonctionne à travers le Programme du Bureau Afrique Centrale du WWF (CARPO), qui a son Bureau à Libreville. Le WWF a annoncé qu'au récent Sommet Union Européenne-Chine les chinois ont promis de travailler ensemble avec l'UE sur les critères communs pour la légalité dans le secteur du bois d'œuvre. Il y a aussi eu quelques forme de participation chinoise dans le Partenariat du Bassin du Congo (PFBC), bien que ce ne soit pas un membre officiel.

Le WWF Gabon a commencé un dialogue constructif avec les importateurs de bois d'œuvre chinois actifs dans le pays et travaille sur l'élaboration d'une définition des normes nationales de légalité en matière d'exploitation forestière. Le WWF a développé une série de critères et indicateurs sur la légalité par des consultations appropriées avec le secteur privé, l'administration des forêts et les organisations non gouvernementales. Il vise la recherche d’une mention spéciale à l’issue des résultats de l’atelier avec les parties prenantes en février 2008. Les vérifications croisées ont lieu avant que le travail ne soit soumis à la consultation publique.

Aussi, le rôle du WWF a été important dans l'amélioration des problèmes de communication entre les Ministères, les organisations non gouvernementales et les opérateurs étrangers présents au Gabon. Un incident a été signalé: le Ministère des Mines a accordé à une société chinoise les droits d'exploitation dans un secteur appartenant à un parc national, sans avoir informé le Ministère de l'Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux, ni le Ministère de l'Environnement ni les organisations non gouvernementales.

2.2 Terres et ressources forestières

Le Gabon est situé dans le bassin du Congo, le deuxième plus grand massif forestier dans le monde après la forêt Amazonienne. Le bassin du Congo est occupé par six pays Africains: la Guinée Equatoriale, le Cameroun, la République Centrafricaine, la République Démocratique du Congo, la République du Congo et le Gabon. Le Gabon compte pour 10% en surface forestière du bassin du Congo. Le Gabon a une surface totale de terre évaluée à 26,8 millions de hectares. Environ 22 millions d'hectares de celle-ci est constituée de forêts, divisé parmi le domaine forestier permanent (DFPE) avec 14 millions d’ha; et domaine forestier rural (DFR) avec 8 millions d’ha. Environ 10 millions hectares sont forêts de production et 4 millions de hectares sont aires protégées. Le Gabon a été considéré comme un modèle de pays forestier avec une couverture de plus de 85%. L'apparition de l'industrie pétrolière dans les années 80 a porté au second rang la contribution de l'industrie forestière dans l'économie nationale du Gabon. Cependant pendant que les réserves pétrolières sont en diminution, les ressources forestières contribuent de plus en plus aux sources de revenu importantes.

Le potentiel ligneux du Gabon est estimé à 2,6 milliards de m³ tandis que le potentiel commercialisable est estimé à 1,5 milliard de m³ (y compris les 130 millions de m³ d'okoumé). La végétation forestière du Gabon est classée dans trois types principaux: (i) les forêts tropicales semi-caducifoliées, (ii) les forêts tropicales décidues et semi-décidues, et (iii) les savanes boisées.

Le domaine forestier permanent est divisé en deux zones d’exploitation (figure 2.1).
La zone 1 couvre environ 5 millions d'hectares. C'est essentiellement les riches zones côtières d'Okoumé. Ces forêts sont plus facilement accessibles. Les autorisations de coupe de la zone sont réservées aux exploitants de nationalité Gabonaise. La zone 2 est située à l'intérieur du pays et couvre approximativement 17 millions d'hectares. Elle a été attribuée en 1956. A l'intérieur de ces deux zones, une zone intermédiaire est identifiée comme zone d'attraction du chemin de fer. Elle se compose de grandes concessions de forêt attribuées en 1972 et 1973 pour aider au financement du Transgabonais.

Pour conclure, de vastes étendues de forêt au Gabon sont demeurées dans un état relativement intacte parce que le pays a une faible densité de population et d'importants gisements de pétrole et de minerais qui ont réduit des pressions économiques sur les forêts. Comme les réserves de pétrole du Gabon diminuent, on note cependant une expansion rapide de l'exploitation forestière. Presque la moitié de la forêt du pays est actuellement sous des baux de bois d’œuvre et cela pourrait augmenter à plus de 75% de la forêt restante pendant la prochaine décennie (Laurance et al., 2005). Le défi pour Gabon est d’accroître les bénéfices de la forêt pour les populations tout en maintenant la récolte de bois à un niveau durable en conformité avec les plans d’aménagement forestier.

L'influence croissante des sociétés forestières et minières chinoises est clairement visible dans le pays. Il y a au moins quatre scieries Chinoises, une usine de placage
et une grande activité d'exportation de grumes pour alimenter l'industrie de transformation du bois de Chine. Il y a une énorme usine de 450 millions d'Euro de projet d'investissement destiné à l'exploitation du fer de Belinga et la construction des infrastructures nécessaires (chemins de fer, port en eau profonde à Santa Clara, centrale hydro-électrique et barrage sur le fleuve Ivindo, voir la carte). Au début de 2006 le gouvernement a accordé à la Société Nationale Chinoise d'Importation et d'Exportation de Machinerie et d'Equipement (CEMEC) le droit unique d'exploiter les énormes réserves de minerai de fer inexploitées dans les collines de forêt éloignées de Belinga à 500 kilomètres à l'est de Libreville.

Le gouvernement gabonais désire considérer des stratégies alternatives d'augmenter le développement économique, incluant la promotion d'écotourisme. Cette obligation est faite la preuve par la désignation récente du gouvernement de treize nouveaux parcs nationaux qui comprennent à un dixième du secteur de terre du pays (en 2002). Les efforts de développement de l'écotourisme font face aux défis substantiels, cependant, incluant la haute rentabilité d'utilisations de terre exploitatrices comme l'exploitation du bois, l'implétement illégal de bûcherons et des chasseurs dans des réserves naturelles, l'instabilité politique dans la région d'encerclement et l'infrastructure limitée pour le tourisme. Néanmoins, ceux-ci et ceux-là efforts de promouvoir le développement plus durable doivent être fortement soutenus, comme des forêts gabonaises ont parmi les niveaux les plus hauts de diversité d'espèce endémique en Afrique tropicale et sont probablement pour jouer un rôle critique futur en conservation de la biodiversité.

L'importance des activités de parcs nationales est annoncée par le fait que des Conseil National Parcs Nationaux (CNPN) fonctionne comme une agence autonome pour la gestion du parc national directement sous la Présidence de la République. La création des nouveaux parcs nationaux par le Président Bongo Ondimba en 2002 a été explicitement présentée comme un mouvement vers la diversification de l'économie, destinée pour stimuler l'eco-tourisme et des activités de secteur privées.

Le secteur de parcs continue à recevoir de financement international abondant pour les suivantes années, parmi lesquels la Facilité Mondiale Environnementale (GEF) de 10 millions d'Euro (Renforcement des capacités pour la Gestion de Parcs Nationaux et la Biodiversité - PARC), la remise de dette Française de 50 millions d'Euros en échange de la gestion durable des forêts, 8 millions d'Euros de l'AFD et 3,8 millions d'Euros d'ECOFAC sont au moins en partie canalisés dans les parcs nationaux. Le CNPN est probablement destiné à être transformé en Agence National Parcs des Nationaux (ANPN) et une fondation doit être établie pour la gestion des fonds octroyés par le GEF.

2.3 Types de permis d'exploitation

Il existe quatre principaux types de permis d'exploitation au Gabon qui ont été reconnus par la loi forestière de 1982. Ceux-ci sont:

- Les permis temporaires d'exploitation (PTE), d'une durée inférieure à 15 ans, de surface comprise entre 500 et 20.000 hectares. Les grumes exploitées sous ce type de permis n’ont pas besoin d’être transformées localement, plus de la moitié de ces permis sont attribués aux ressortissant gabonais.
- Les permis industriels (PI), de durée maximale 30 ans, d'une superficie comprise entre 20.000 et 250.000 hectares. 75% des grumes extraites sous ce permis doivent être transformées localement, mais ceci s'applique seulement en théorie.
- Les permis de la zone d’attraction du chemin de fer (PZACF). La durée de ces permis est variable. La majeure partie des grumes extraites sous ce permis sont destinées à l’exportation.
Les permis de coupes familiales (CF). Ce type de permis est valable pour une durée maximale d'une année et est accordé aux citoyens gabonais uniquement. Ce permis permet à son titulaire de ne pas couper plus de 100 arbres sur pied. Les permis de coupes familiales appartiennent généralement aux fonctionnaires locaux de haut niveau, mais en pratique seule une minorité de grumes extraites sous ce permis est fait par les détenteurs du permis, mais en général ces permis sont loués aux industries forestières. Le volume coupé sous ces permis excède dans la plupart des cas à celui correspondant aux prescriptions de 100 arbres sur pied. Ceci est dû au manque de système approprié de suivi. Cependant, seulement un nombre limité de coupes familiales pour chaque province est autorisé chaque année.

Tableau 2.1  Permis d'exploitation du bois au Gabon

<table>
<thead>
<tr>
<th>Type de permis</th>
<th>Nombre de permis</th>
<th>Superficie (ha)</th>
<th>Porcion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permis temporaires d'exploitation (PTE)</td>
<td>306</td>
<td>3 514 347</td>
<td>26</td>
</tr>
<tr>
<td>Permis industriels (PI)</td>
<td>126</td>
<td>8 120 315</td>
<td>60</td>
</tr>
<tr>
<td>Zone d'attraction du chemin de fer (PZACF)</td>
<td>25</td>
<td>1 564 669</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>457</td>
<td>13 181 331</td>
<td>100</td>
</tr>
</tbody>
</table>

L'exécution de législation forestière (Loi 1/82) reste difficile, avec presque 75 pour cent de décrets d'application pas encore écrits et avec plusieurs concessions forestières de la liste du gouvernement de 1997 de permis d'exploitation valide permettent d'arriver dans des secteurs protégés. L'analyse des données du commerce de bois de l'OIBT montre les déséquilibres de plus de 25 pour cent entre les exportations de grumes annoncées de Gabon et les importations de grumes annoncées par la Chine pour la période 1998 et 2000.

2.4 L'Okoumé


On a autrefois pensé que l'Okoumé peut facilement résister à une exploitation de courte durée, en raison de la croissance rapide et des bonnes propriétés de régénération. Cependant, les nouvelles données mettent en évidence que les taux de succès de croissance et de régénération de tiges peuvent être plus lents. On a également suggéré que les coupes sélectives d'arbres de meilleures propriétés (longueur, diamètre etc.) affectent la qualité des futures générations d'Okoumé du Gabon. Récemment la part d'Okoumé, de toutes les exportations de grumes, avait diminué.

Comme preuve de diminution des ressources d'Okoumé, il y a eu déclin remarquable dans la part des exportations des grumes d'Okoumé de 67% en 2000 à 49% de 2006. On estime même qu'avec le taux d'extraction courant, les ressources en Okoumé seraient entièrement exploitées dans peu d'années.

Bien que l'importance de l'Okoumé ne puisse pas être sous-estimée, il y a beaucoup d'autres espèces de bois dans les forêts gabonaises. Les résultats de l'inventaire du PNUD-FAO placent l'Okoumé en troisième position avec une proportion de 12,65%. L'essence de bois la plus courante a été le Sogho (*Scyphocephalium ochocoa*), avec plus de 22%. L'importance de l'Okoumé est plus grande, quand sa part est estimée
parmi les essences de bois à valeur marchande (environ 15 espèces en bois). Dans ce groupe, la part de l’Okoumé varie entre 50-60% en zone 1 à 30-40% en zone 2.

2.5 Production des bois ronds

La production industrielle annuelle des grumes du Gabon est estimée approximativement à 3,27 millions de m³ en 2006. Les raisons de baisse de production entre 2003-2004 sont diverses :

- La perte de compétitivité sur les marchés asiatiques, due au renchérissement de l’euro, et à l’accroissement de la concurrence avec la production d’Okoumé en provenance du Congo-Brazzaville et de la Guinée équatoriale sur les marchés chinois.
- Plusieurs exploitants forestiers ont été forcés à réduire leurs activités en raison du manque de moyens financiers, dû aux difficultés financières de la Société Nationale des Bois du Gabon (SNBG).
- La demande pour produire le plan d’aménagement forestier pour obtenir les permis d’exploitation, accompagnée de la réduction de surface totale de la superficie exploitabile, des volumes par essences.

Figure 2.2 Production des bois ronds au Gabon 2003-2006

La production a progressé de nouveau de 4% entre 2005 et 2006, sous l’effet combiné de l’augmentation des exportations des grumes et de livraisons aux industries du bois.
2.6 Industries de transformation du bois

La transformation du bois a augmenté au Gabon ces dernières années. La majeure partie de la capacité de transformation industrielle est centrée sur les scieries (53 en 2006). 

La plupart des scieries sont techniquement peu développée en ce concentrant essentiellement sur le sciage d’Okoumé sciant, et donc elles ne sont pas rentables. Cependant, il semble que de plus en plus les compagnies opèrent dans ce secteur. En outre une transformation plus poussée du bois scié devient plus compatible. Par exemple, la menuiserie a quitté le Gabon pour des marchés comme l’Afrique du Sud. Le développement d’une transformation plus poussée et d’une production des produits à valeur ajoutée d’Okoumé est nécessaire, parce que ceci peut diminuer la pression et assurer la régénération des forêts déjà exploitées.

Tableau 2.4 Production des produits transformés 2002-2006

<table>
<thead>
<tr>
<th>Matière</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciages</td>
<td>176</td>
<td>231</td>
<td>133</td>
<td>230</td>
<td>235</td>
</tr>
<tr>
<td>Placage</td>
<td>71</td>
<td>140</td>
<td>120</td>
<td>145</td>
<td>150</td>
</tr>
<tr>
<td>Contreplaqué</td>
<td>98</td>
<td>101</td>
<td>103</td>
<td>146</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>345</td>
<td>472</td>
<td>356</td>
<td>521</td>
<td>485</td>
</tr>
</tbody>
</table>

Tableau 2.5 Sociétés de transformation du bois

<table>
<thead>
<tr>
<th>Filière bois</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciage</td>
<td>20</td>
<td>30</td>
<td>34</td>
<td>41</td>
<td>45</td>
<td>37</td>
<td>53</td>
</tr>
<tr>
<td>Déroulage</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>- placage</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>- tranchage</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Contreplaqué</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>42</td>
<td>46</td>
<td>56</td>
<td>61</td>
<td>49</td>
<td>65</td>
</tr>
</tbody>
</table>

2.7 Transformation plus poussée

Le gouvernement s’est fixé comme objectif d’augmenter la capacité de transformation du bois, en vue d’une augmentation en volume de bois transformé. Les instruments de politique pour atteindre ce but sont (i) des allégements d’impôts sur le bois transformé exporté comparé aux exportations de grumes, (ii) l’introduction des quotas de transformation plus poussée (m³ par an), et (iii) la facilitation de contrats d’exploitations.

En vue de réaliser son objectif de transformation plus poussée, le gouvernement Gabonais privilégie le dialogue et la persuasion, plutôt qu’à l’utilisation des mesures contraignantes. Par exemple les quotas-parts de transformation plus poussée présentées dans la loi 016/01 sont plus employées comme directives. Cependant, les ventes aux enchères prévues de concession donnent la chance de récompenser les points additionnels aux compagnies qui présente une « offre technique », incluant des plans d’installations pour encourager la transformation du bois.

La part de RWE du bois traité de la production industrielle totale de grumes était de 38% en 2004, selon le DGEF. Cette part a augmenté de 10% en 1990. Il convient noter que, selon DDICB, plus de 80% des exploitations sont constituées d’Okoumé. Ceci montre clairement, comment une utilisation domestique dégrossie les ressources de la forêt du Gabon, et c’est aussi une manière d’augmenter une transformation plus poussée d’autres essences de bois, pour l’utilisation durable des forêts.
Bien que la transformation plus poussée ait augmenté, certaines principales contraintes doivent trouver des solutions:

- L’insuffisance d’infrastructure de transport et de services
- Les stratégies des compagnies multinationales basées sur des transferts intra-entreprises
- Le manque de personnel qualifié et expérimenté en matière de planification, de gestion et de marketing des produits
- La limite du marché de biens locaux et les importations étrangères
- Le manque de conformité aux textes légaux par les opérateurs

La majeure partie des unités de transformation se trouve dans les provinces de l’Estuaire et de l’Ogooué Maritime où se concentrent les principaux points d’évacuation de produits. Près de 74% des unités implantées sont la propriété des expatriés contre 26% pour les nationaux (petites entités du secteur semi industriel, etc.).

Les acteurs du secteur estiment que la production totale des industries du bois s’est raisonnablement améliorée, en raison de la forte demande internationale de bois d’œuvre, et d’autre part, de la construction d’un nombre très important de nouvelles usines dans le pays. Elles ont été créées en premier lieu dans la province de l’Estuaire, pour des raisons de rapidité d’évacuation des produits transformés.
3. COMMERCE EXTERIEUR DU BOIS

3.1 Exportation de grumes

Les exportations de grumes au Gabon sont demeurées stables au cours des dernières années, elles sont de 1,8 million de m³ en 2006. Les exportations ont augmenté seulement de 3% entre 2003 et 2006 après une chute drastique de 33% enregistrée entre 2000 et 2002.

Tableau 3.1 Exportation des grumes 2000-2006

<table>
<thead>
<tr>
<th>m3</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Okoumé</td>
<td>1 721 854</td>
<td>1 504 188</td>
<td>1 240 354</td>
<td>1 105 862</td>
<td>848 701</td>
<td>814 189</td>
<td>861 856</td>
</tr>
<tr>
<td>Asie</td>
<td>1 208 207</td>
<td>982 527</td>
<td>857 178</td>
<td>765 357</td>
<td>481 570</td>
<td>562 529</td>
<td>617 084</td>
</tr>
<tr>
<td>Europe</td>
<td>413 234</td>
<td>404 176</td>
<td>296 390</td>
<td>243 621</td>
<td>249 328</td>
<td>185 208</td>
<td>164 793</td>
</tr>
<tr>
<td>Afrique</td>
<td>100 413</td>
<td>117 485</td>
<td>86 786</td>
<td>96 884</td>
<td>117 803</td>
<td>66 452</td>
<td>79 979</td>
</tr>
<tr>
<td>Autres</td>
<td>857 278</td>
<td>802 877</td>
<td>683 744</td>
<td>606 836</td>
<td>668 062</td>
<td>771 954</td>
<td>906 224</td>
</tr>
<tr>
<td>Asie</td>
<td>425 301</td>
<td>356 857</td>
<td>360 720</td>
<td>321 336</td>
<td>308 942</td>
<td>470 588</td>
<td>673 010</td>
</tr>
<tr>
<td>Europe</td>
<td>422 552</td>
<td>435 586</td>
<td>314 208</td>
<td>278 671</td>
<td>349 226</td>
<td>294 190</td>
<td>226 599</td>
</tr>
<tr>
<td>Afrique</td>
<td>9 425</td>
<td>10 434</td>
<td>8 816</td>
<td>6 829</td>
<td>9 894</td>
<td>7 176</td>
<td>6 615</td>
</tr>
<tr>
<td>Total</td>
<td>2 579 132</td>
<td>2 307 065</td>
<td>1 924 098</td>
<td>1 712 698</td>
<td>1 516 763</td>
<td>1 586 143</td>
<td>1 768 080</td>
</tr>
<tr>
<td>Asie</td>
<td>1 633 508</td>
<td>1 339 384</td>
<td>1 217 898</td>
<td>1 086 693</td>
<td>790 512</td>
<td>1 033 117</td>
<td>1 290 094</td>
</tr>
<tr>
<td>Europe</td>
<td>835 786</td>
<td>839 762</td>
<td>610 598</td>
<td>522 292</td>
<td>598 554</td>
<td>479 398</td>
<td>391 392</td>
</tr>
<tr>
<td>Afrique</td>
<td>109 838</td>
<td>127 919</td>
<td>95 602</td>
<td>103 713</td>
<td>127 697</td>
<td>73 628</td>
<td>86 594</td>
</tr>
</tbody>
</table>

Il y a eu un changement important de la part des exportations de grumes d’Okoumé qui ont chuté de 67% en 2000 à 49% de 2006. La Chine était la destination principale des grumes du Gabon, avec une part de 61%, suivie de la France (12%) et de l’Inde 7% (figure 2.3).

Figure 3.1 Exportation des grumes par pays 2006

![Diagram](chart.png)
Tableau 3.2   Evolution des exportations des grumes par entreprise

<table>
<thead>
<tr>
<th>Exportateur</th>
<th>2005</th>
<th>2006</th>
<th>Part de 2006</th>
<th>Var. 05/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNBG</td>
<td>605 529</td>
<td>499 940</td>
<td>28,3</td>
<td>-17,4</td>
</tr>
<tr>
<td>Rougier</td>
<td>106 306</td>
<td>164 583</td>
<td>9,3</td>
<td>54,8</td>
</tr>
<tr>
<td>CBG</td>
<td>86 000</td>
<td>111 966</td>
<td>6,3</td>
<td>30,2</td>
</tr>
<tr>
<td>Olam</td>
<td>75 121</td>
<td>89 947</td>
<td>5,1</td>
<td>19,7</td>
</tr>
<tr>
<td>BSO</td>
<td>52 276</td>
<td>75 559</td>
<td>4,3</td>
<td>44,5</td>
</tr>
<tr>
<td>CIB</td>
<td>64 741</td>
<td>64 576</td>
<td>3,7</td>
<td>-0,3</td>
</tr>
<tr>
<td>Bordamur</td>
<td>58 503</td>
<td>62 970</td>
<td>3,6</td>
<td>7,6</td>
</tr>
<tr>
<td>Autres</td>
<td>537 551</td>
<td>698 539</td>
<td>39,5</td>
<td>29,9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 586 027</strong></td>
<td><strong>1 768 080</strong></td>
<td><strong>100,0</strong></td>
<td><strong>11,5</strong></td>
</tr>
</tbody>
</table>

3.2   Exportation de bois d’ouvrages

L’importance des exportations de bois scié a été limitée, mais reste constamment en hausse. En 2006 55% du volume de bois traité exporté était le bois scié. La quantité d’exportations de bois scié était 207 000 m³ en 2006. Les plus grandes cibles d’exportation étaient l’Italie (31,6%), la Chine (10,2%) et la France (6,3%). Les exportations de placage se sont élevées à 125 000 m³ et les principaux pays principaux de destination étaient la France (58,5%) et le Mexique (28,9%).

Tableau 3.3   Exportation des produits transformés

<table>
<thead>
<tr>
<th>Produit</th>
<th>1 000 m³</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawnwood</td>
<td>89</td>
<td>124</td>
<td>124</td>
<td>207</td>
<td>207</td>
<td></td>
</tr>
<tr>
<td>Veneer</td>
<td>55</td>
<td>81</td>
<td>88</td>
<td>112</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>Plywood</td>
<td>67</td>
<td>101</td>
<td>103</td>
<td>146</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>211</strong></td>
<td><strong>306</strong></td>
<td><strong>315</strong></td>
<td><strong>465</strong></td>
<td><strong>432</strong></td>
<td></td>
</tr>
</tbody>
</table>

Il n’y a aucune évaluation précise du niveau de production et exportation illégale de bois d’œuvre au Gabon. C’est une situation compréhensible, en raison des mauvaises interprétations de la réglementation qui fait qu’on arrive pas à faire la part entre ce qui est légal de ce qui ne l’est pas. Le WWF (2002) a estimé que 70% de toute la exports de grumes sont illégale. Cependant, il n’y a aucune estimation valable de la quantité de grumes illégale transformée dans les unités de transformation locales. Ni l’estimation de l’exploitation illégale, ni celle des produits ligneux exportés n’ont été disponibles.

Des superficies réellement aménagées (CFAD) ne constituent encore que 31% de la forêt de production en 2006.
4. PRINCIPAUX FACTEURS DU COMMERCE ILLEGAL DU BOIS


Lois moins élaborées:

- **Confusion d’ans l’interprétation de la loi, à cause des contradictions entre les dispositions ministérielles et administratives:** Manque d’une définition précise de ce qui est légal et de ce qui ne l’est pas en forsterie. Le conflit et la législation peu claire ne permettent pas une distinction claire entre les activités forestières légales et illégales ainsi que les produits. De telles législations gênent l’identification et la suppression des activités illégales.

- **Mesures législatives non contraignantes:** Les pénalités pour des activités illégales sont souvent si négligeables et n’ont pas un caractère dissuasif.

Procédures d’exploitation illégale:

- **Exploitation au-delà des limites légales**
- **Excès de volume exploitable légal**
- **Sous-traitance de la concession (Fermage)**

Application limitée de la loi:

- **Faible et/ou sous-application de la loi en matière de gouvernance forestière**
  - Manque de main-d’oeuvre dans les inspections forestières.
  - Manque de véhicules et de logement pour les agents de l’administration forestière en charge des inspections.

- **Corruption dans le secteur forestier et les autres secteurs de l’économie du pays**
  - Cette corruption permet non seulement à l’exploitation illégale de se réaliser, mais aide également ce types d’activités non réprimées ou impunies. La corruption cause également les échecs institutionnels, du marché et de politiques, ce qui renforce les activités illégales en forêt.
  - Les bas salaires des employés publics. Des employés de gouvernement au Gabon sont sous payés. Par conséquent, ces derniers sont facilement corruptibles par les illégaux à travers les pots de vin. Aussi, ils seraient aidés par ces exploitants si jamais ils venaient à être sanctionnés.
5. INITIATIVES PRISES JUSQU'ICI POUR COMBATTRE L'ILEGALITE DES ACTIVITES FORESTIERES

5.1 Engagements internationaux et mesures prises jusqu'ici

Les initiatives jusqu'ici prises par l'organisation internationale pour combattre l'exploitation illégale et l'amélioration des lois forestières et la gouvernance au Gabon sont énumérées ci-dessous:

- L'Accord International des Bois Tropicaux (AIBT)
- Le Partenariat du Bassin du Congo
- La Déclaration de Yaoundé, qui a créé la Commission des Forêts d'Afrique centrale (COMIFAC)

Le Gabon est aussi membre de l'Organisation Internationale des Bois Tropicaux (OIBT) et l'Organisation Africaine du Bois (OAB), et respecte leurs buts, objectifs et engagements.

5.2 Initiatives jusqu'ici prises par le gouvernement

À la fin des années 90 le gouvernement du Gabon a décidé de favoriser la gestion durable des forêts. Les actions les plus importantes pour réaliser cet objectif étaient les suivantes:

- Stratégie sur la gestion durable des forêts et des industries forestières
- Soutien des procédures d'exploitation durable en partenariat avec les organisations internationales
- Préparation d'un nouveau cadre législatif pour évaluer la stratégie et les procédures

En plus de ces actions, le Gabon a ratifié des engagements internationaux, par exemple:

- La déclaration de Rio sur le Développement et l'Environnement en 1992
- Convention sur la Diversité Biologiques (CBD)
- La Convention sur le commerce international des espèces de faune et de flore sauvages menacées d'extinction (CITES)
- Convention Cadre des Nations Unies sur les Changements Climatiques (UNFCCC)
- Convention des Nations Unies sur la lutte contre la Désertification (UNCCD)


Le Partenariat des Forêts pour le Bassin du Congo (PFBC) a été créé au Sommet Mondial pour le Développement Durable en 2002 pour promouvoir la gestion durable des forêts, de la faune et de la flore du Bassin du Congo en améliorant la communication, la coopération et la collaboration parmi les partenaires. Les objectifs principaux incluent la conservation de la biodiversité et l'écologie de la forêt, la faune et la flore, plaçant leur protection et utilisation sur une base durable pour l'avantage à long terme des habitants de la région. Les exemples de cibles d'appui incluent la gestion participative et durable de la forêt et de la faune sauvage, la meilleure exploitation du bois, les technologies de transformation, l'écotourisme, l'accroissement des capacités des secteurs publics et privés, l'amélioration de la législation et de ses infrastructures d'exécution, en tenant compte de leurs contributions à l'allègement de pauvreté. Un plan cadre mis à jour régional fournissant des thèmes cibles ayant été développé par le COMIFAC.
5.3 Réglementation

Les plus importantes lois et règlements sur l'utilisation des ressources forestières en vigueur au Gabon sont les suivantes:

- La loi 16/93, signée le 26 août 1993, concernant la protection de l'environnement
- La loi 016/01, signée le 31 décembre 2001, concernant la forêt

Adopté en décembre 2001, le code forestier porte sur deux priorités:

1. L'aménagement durable des exploitations: sur un domaine forestier permanent de 12 mill. ha, environ 60% sont aménagés ou en cours d’aménagement.

2. L’industrialisation de la filière, avec un objectif de 75% en 2012.

La législation a été correctement amendée et fournit une structure suffisante pour le développement du secteur de l'exploitation forestière durable, mais les ressources pour son exécution et la mise en application sont inadéquates jusqu'ici (voir le chapitre suivant).

Depuis 2002, Ministère de l'Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux a initié d’un programme de réformes et d’investissement dénommé PSFE (Programme Sectoriel Forêts Pêches Environnement) ayant pour but:

- le passage d’une économie de rente basée sur l’exploitation de la matière première et la vente de produits bruts à une économie moderne où l’industrie et les services sont les activités dominantes ;
- la production de richesse sous forme d’emplois qualifiés, de revenus accrûs des salariés, des entreprises et de l’Etat;
- la conciliation des impératifs de développement et de conservation des écosystèmes dans le respect des règles d’aménagement et de gestion durable des ressources naturelles renouvelables ;
- l’implication forte des nationaux, en particulier les populations locales.

6. **SYSTEME ACTUEL D’APPLICATION DE LA LOI FORESTIERE ET SON EFFICACITE**

Le Ministère de l’Économie Forestière, des Eaux, de la Pêche et des Parcs Nationaux est l’autorité principale en matière de gestion des forêts au Gabon. Il a la mission de protection forêts, assure le respect de la législation en matière de développement durable. Il est facile de constater qu’il y a un manque de renforcement de capacité en matière d’application de loi au Gabon. Le gouvernement manque également de la volonté et des ressources pour conduire des inspections appropriées en vue d’arrêter l’exploitation illégale. Cet état de chose se manifeste de diverses manières:

- Plus de la moitié des agents sont assignés au bureau d’administration centrale et travaillent dans les divers services techniques du ministère et seulement 40 pour cent d’agents sont dans les inspections et dans les services de terrain.
- Les agents du ministère inspectent approximativement 900 km2 de concessions d’exploitation.
- Les agents du ministère sont limités par les moyens de transport, car il y a en moyenne un véhicule pour plus de cinq agents de ministère. Dans les provinces où la situation est la plus alarmante, il peut y avoir seulement un véhicule par 20 agents. Les véhicules, semblent également se concentrer dans le chef lieu, car presque 70% des véhicules circulent dans ce secteur.
- Dans la plupart des provinces, le logement fourni aux agents de ministère est insuffisant et il y a même des provinces où la possibilité d’accommodation manque complètement.

Par rapport au processus FLEGT au Gabon, les objectifs de légalité suivants sont appropriés:

- Lutte contre la pauvreté et la sécurité juridique en milieu forestier: implémentation du code forestier (Loi 16/01).
- Traçabilité de la filière bois appui au respect de la réglementation forestière, optimisation des opérations de contrôle sur le terrain et aussi permettre un bon recouvrement et une liquidation efficace des taxes par la DGI (Finances).
- Stratégie de contrôle et de vérification: respect des principes définis par la législation locale et les exigences du marché de bois.
- Système de licence FLEGT: délivrance des certificats d’origine légale du bois (OLB).
- Observatoire indépendant pour restauration de la confiance entre acteurs.
7. REFORME DU SECTEUR FORESTIER, TRANSPARENCE ET CAPACITE INSTITUTIONNELLE DE MISE EN ŒUVRE DU FLEGT

7.1 Transparence du secteur forestier et agenda des réformes

Au cours des dernières années, le Gouvernement a pris des mesures audacieuses et concrètes pour améliorer la transparence et l'efficacité dans le secteur forestier.

Les faits marquants des dernières réformes comprennent notamment:

- Passage à un nouveau Code Forestier en 2001;
- Création de 13 parcs nationaux couvrant 10% de la superficie totale en 2002;
- Simplification du régime fiscal au cours de la loi de finances 2004;
- Approbation d'une lettre de politique du secteur en Mai 2004 expliquant la priorité de la reforme et la feuille de route avec un accent sur la transparence et l'application de la loi de base;
- Ordonnance d'un décret établissant un moratoire en assignation discrétionnaire d'enregistrer droits en août 2004;
- Ordonnance d'une décision de supprimer le monopole de longue date en commercialisation et exportation de bois par la société de commercialisation publique (SNBG) en janvier 2006; et
- La révélation de la liste des permis d'exploitation et non docile permet dans le journal local et sur Internet en 2005.

Les récents succès marque une importante rupture avec le passé, les performances de ce secteur qui se caractérise par un manque de transparence, l'ingérence d'intérêts acquis, et les distorsions dans le cadre d'incitation. Ce sont des premiers pas importants qui ont besoin d'être suivis avec la poursuite des réformes dans le même sens.

Le programme de réformes dans le secteur forestier, tel que décrit dans la lettre de politique de développement de May 2004, est beaucoup trop loin et prévoit des crédits pour le développement de zonage participatif des forêts, le suivi des plans de gestion durable et de l'exploitation illégale du bois, le développement de la forsterie communautaire, la rétrocession d'une part des recettes à des entités locales, et le développement des utilisations non extractives des forêts. Par le biais d'incitations fiscales le gouvernement encourage également l'expansion de la transformation intérieure tant en termes de quantité et de qualité.

Les récentes réformes créent en principe un terrain fertile pour l'enracinement des mécanismes FLEGT dans le pays.

7.2 Progrès du FLEGT au Gabon

L'évaluation suivante décrit le progrès fait jusqu'à présent sur FLEGT à Gabon (juillet 2007):
### Tableau 7.1 Avancées notoires à processus du FLEGT au Gabon

<table>
<thead>
<tr>
<th>Thème</th>
<th>Progrès</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Légalité</td>
<td>- Promulgation de la loi forestière (16/01)</td>
</tr>
<tr>
<td></td>
<td>- Instructions écrites du Ministre en direction des services techniques pour la réalisation d'études spécifiques sur les systèmes de légalité, certification, labellisation des produits etc.</td>
</tr>
<tr>
<td></td>
<td>- Contacts pris par le Ministre et la société SGS pour le contrôle de l'application des quotas de vente libre des grumes à l'export au port d'Owendo</td>
</tr>
<tr>
<td></td>
<td>- Présentation au Ministère de la défense nationale d'un prototype de système de surveillance intégré des ressources</td>
</tr>
<tr>
<td></td>
<td>- Existence d'un référentiel technique des PCI issus de OIBT/OAB nationaux</td>
</tr>
<tr>
<td></td>
<td>- Ateliers nationaux pour l'ancrage institutionnel des initiatives WWF/TRAFFIC/FORCOMS</td>
</tr>
<tr>
<td>2. Traçabilité</td>
<td>- Acquisition par le Ministère d'une solution logicielle suite à l'appel d'offre diffusé</td>
</tr>
<tr>
<td></td>
<td>- Différentes expérimentations (projets OIBT) pour documenter le savoir et orienter le choix du système optimal</td>
</tr>
<tr>
<td>3. Stratégie de contrôle et de vérification</td>
<td>- Instructions de Ministre en direction des services techniques</td>
</tr>
<tr>
<td></td>
<td>- Brigade mobile mixte opérationnelle depuis 2 ans</td>
</tr>
<tr>
<td></td>
<td>- Projet de création de 4 nouvelles brigades mobile (étude de faisabilité en cours)</td>
</tr>
<tr>
<td>4. Mise en œuvre système licence FLEGT</td>
<td>- Lettre d'intention adressée par le Ministre à la Délégation de l'UE (d'après infos recueillies au Cabinet du Ministre)</td>
</tr>
<tr>
<td>5. Observatoire indépendant</td>
<td>- Synthèse documentaire des rapports produits par l'observateur indépendant (au Cameroun)</td>
</tr>
</tbody>
</table>
8. EVALUATION DES IMPACTS POUR LES QUATRE OPTIONS

8.1 Impact économique

8.1.1 Revenu de l’État

Le Gabon a 22 hectares de forêt par personne, une des proportions les plus grandes dans le monde. Cependant, la contribution du secteur à l’économie nationale reste au-dessous de son potentiel aux termes d’emploi, des revenus et de développement de communauté. L’exploitation forestière et l’industrie de bois de construction fournissent aujourd’hui environ 15.000 emplois directs, tandis qu’ils pourraient probablement fournir deux fois plus l’emploi, dans un contexte de développement local, du commerce et des transports, sans augmenter le niveau de transformation du bois (IBRD, 2005).

Le rôle du secteur forestier en termes de PIB est important et il s’est élevé pour 192,1 milliards de FCFA en 2007 (estimée); (3,4% de tout le PIB). Le secteur de forêt est également la deuxième industrie d’exportation importante au Gabon.

Tableau 8.1 Evolution de la valeur ajoutée de la filière bois au Gabon

<table>
<thead>
<tr>
<th>Milliards de FCFA</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007E</th>
<th>Var.05/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valeur ajoutée de la filière bois</td>
<td>155,9</td>
<td>176,8</td>
<td>183,1</td>
<td>192,1</td>
<td>3,5%</td>
</tr>
<tr>
<td>PIB total du pays</td>
<td>3792</td>
<td>4571</td>
<td>4990</td>
<td>5164</td>
<td>9,2%</td>
</tr>
<tr>
<td>Filière bois/PIB total, %</td>
<td>4,3</td>
<td>3,8</td>
<td>3,7</td>
<td>3,4</td>
<td></td>
</tr>
<tr>
<td>Hors pétrole, %</td>
<td>7,9</td>
<td>8,0</td>
<td>7,7</td>
<td>6,7</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Direction Générale des Impôts, Direction Générale de l’Economie, Janvier 2007

Les produits de forêt exportés s’élèvent plus de 350 milliards de FCFA. En outre les produits forestiers non ligneux représentent les capitaux économiques très importants, particulièrement en zones rurales, mais également parmi la population urbaine.

Tableau 8.2 Evolution du chiffre d’affaires de la filière bois: marché extérieur et marché local

<table>
<thead>
<tr>
<th>Milliards de FCFA</th>
<th>2005</th>
<th>2006</th>
<th>Var. 05/06 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recettes d’exportation de grumes</td>
<td>160</td>
<td>159</td>
<td>-1,2</td>
</tr>
<tr>
<td>Recettes d’exportation de bois ouvrés</td>
<td>90</td>
<td>103</td>
<td>14,0</td>
</tr>
<tr>
<td>Négoce international</td>
<td>103</td>
<td>96</td>
<td>-6,8</td>
</tr>
<tr>
<td>Recettes du marché local</td>
<td>9</td>
<td>15</td>
<td>66,6</td>
</tr>
<tr>
<td>Total chiffre d’affaires de la filière bois</td>
<td>362</td>
<td>372</td>
<td>2,8</td>
</tr>
</tbody>
</table>

Sources: Direction Générale des Douanes, Direction Générale des Impôts, Avril 2007

8.1.2 Fiscalité

Les principaux bénéfices d’opérations d’exploitation illégales des bois sont enregistrés sous forme de fraude fiscale. Le Ministère de l’Économie Forestière, des Eaux, Pêche de la et des Parcs Nationaux a estimé le manque à gagner par l’État à 6 milliards FCFA par an à cause de l’exploitation illégale des bois et des commerces connexes.

Les objectifs de la réforme d’impôts étaient de simplifier la structure fiscale et d’inciter l’aménagement durable des forêts. Dans le nouveau système de taxation, la plupart des impôts importants prenant en compte l’exploitation et la sylviculture incluent:
- Taxe sur la superficie: entre 200-400 FCFA par ha selon la forêt et/ou type de permis d’exploitation.
- Taxe d’exploitation: 2-9% de la valeur marchande des grumes, selon la zone de forêt.
- Taxe d’exportation des grumes (SRD): 17% de la valeur FOB des grumes.
- Honoraires pour les déclarations de l’exportation (RUSID): environ 1 000 FCFA par m³ sur les grumes, 4 000 FCFA par m³ sur les bois transformés.

Au niveau du recouvrement des impôts en amont, la taxe de superficie croit. Les impôts sur le revenu et les retenues sur salaires marquent également une tendance à la hausse.

En plus des taxes présentés dans la tableau ci-dessous, il y a le DTS (Droits et taxe de la sortie) qui a été recueillis pour un montant de 24.735 millions de FCFA en 2006. Les DTS sont en progression de 5,1%, avec une variation de 23,5 à 24,7 milliards de FCFA entre 2005 et 2006, en raison du relèvement du taux de prélèvement effectif de 14,75% à 15,57%.

Tableau 8.3  Evolution de la Fiscalité de la filière bois (par mois Décembre 2004-2006)

<table>
<thead>
<tr>
<th>Fiscalité en amont mill. FCFA</th>
<th>Dec. 2005</th>
<th>Dec. 2006</th>
<th>Var. 05/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxe de superficie</td>
<td>3 708</td>
<td>4 168</td>
<td>12,4</td>
</tr>
<tr>
<td>Taxe d’abattage</td>
<td>4 657</td>
<td>3 762</td>
<td>-19,2</td>
</tr>
<tr>
<td>Transactions forêts</td>
<td>175</td>
<td>235</td>
<td>34,3</td>
</tr>
<tr>
<td>Impôts sur le revenu</td>
<td>3 562</td>
<td>3 923</td>
<td>10,1</td>
</tr>
<tr>
<td>Retenues sur salaire</td>
<td>2 362</td>
<td>2 455</td>
<td>3,9</td>
</tr>
<tr>
<td>TVA payée</td>
<td>5 377</td>
<td>3 930</td>
<td>-26,9</td>
</tr>
<tr>
<td>Autres</td>
<td>689</td>
<td>1 040</td>
<td>50,9</td>
</tr>
<tr>
<td><strong>Total encaisse</strong></td>
<td><strong>20 530</strong></td>
<td><strong>19 513</strong></td>
<td><strong>-5,0</strong></td>
</tr>
</tbody>
</table>

Source: Direction Générale des Impôts, 10 Janvier 2007

8.1.3 Emploi


Tableau 8.4  Evolution des effectifs employés dans la filière bois

<table>
<thead>
<tr>
<th>Filière</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2006 Part en</th>
<th>Var. 05/06</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploitation forestière</td>
<td>9 083</td>
<td>9 085</td>
<td>9 200</td>
<td>60,0</td>
<td>1,3</td>
</tr>
<tr>
<td>Sciage</td>
<td>2 200</td>
<td>2 300</td>
<td>2 500</td>
<td>16,3</td>
<td>8,7</td>
</tr>
<tr>
<td>Placage</td>
<td>1 330</td>
<td>1 330</td>
<td>1 440</td>
<td>9,4</td>
<td>8,3</td>
</tr>
<tr>
<td>Contreplaquê</td>
<td>965</td>
<td>970</td>
<td>970</td>
<td>6,3</td>
<td>0</td>
</tr>
<tr>
<td>Tranchage</td>
<td>125</td>
<td>130</td>
<td>100</td>
<td>0,7</td>
<td>-23,1</td>
</tr>
<tr>
<td>Menuiseries etc.</td>
<td>770</td>
<td>850</td>
<td>877</td>
<td>5,7</td>
<td>3,2</td>
</tr>
<tr>
<td>Négoce international</td>
<td>300</td>
<td>270</td>
<td>250</td>
<td>1,6</td>
<td>-7,4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14 773</strong></td>
<td><strong>14 935</strong></td>
<td><strong>15 337</strong></td>
<td><strong>100</strong></td>
<td><strong>2,7</strong></td>
</tr>
</tbody>
</table>

Source: Direction Générale de l'Economie, Direction Générale des Eaux et Forêts, Janvier 2007
8.2 Impact environnemental

Le Gabon est toujours un pays tropical relativement bien préservé, où le taux de déboisement est bas par comparaison à ce qui se passe sur le plan international (0,12%/an). Etant donné que le secteur pétrolier et du gaz est en baisse, le centre d'intérêt sera beaucoup plus orienté vers les secteurs non pétroliers de l'économie. Cela met les forêts sous la grande pression, qui est, de loin, renforcée par l'entrée d'opérateurs chinois et d'autres pays importateur de bois de construction.

Les grands projets d'infrastructures comme la société d'exploitation de minerai de Belinga ouvrira de nouvelles frontières à la forêt Gabonaise en exploitation. Une grande partie des grumes exploitées et récupérées trouveront une porte de sortie sur les marchés asiatiques et les mesures de FLEGT ne peuvent pas nécessairement influencer un commerce si inévitable de bois, qui arrivera comme une conséquence des grandes infrastructures de développement.

La viande de brousse est déjà en danger dans beaucoup de parties de Gabon et le pays possède sans aucun doute des valeurs élevées de diversité biologique dans la faune et la flore qui ont une importance mondiale. Puisque les pistes ou routes forestières facilitent le braconnage de la faune sauvage gabonaise, elles sont une menace non négligeable.

La certification forestière n'est pas encore très avancée au Gabon. Le Gabon compte environ 1.2 million d'hectares de forêts certifiées et 4 système de certification. Tous ces certificats sont approuvés par Keurhout et deux systèmes de certification sont aussi approuvés par le PEFC. Principalement quelques-uns des plus grands industriels internationaux (Thanry-CEB / Bois Précieux) ont certifié des forêts sous le système Keurhout et certifié par la DNV-FRANCE. Ces exemples rares montrent que l'importance relative de certification dans la direction de la justesse environnementale d'opérations forestière est limitée au Gabon. Dans ce contexte, les FLEGT-APV et les mesures complémentaires produiraient un impact positif régulateur sur les standards environnementaux d'activités forestières au Gabon.

8.3 Impact social

L'exploitation forestière et les industries de transformation du bois sont les deuxième plus gros employeurs après le secteur pétrolier "économie moderne". Les activités d'exploitation forestière et de production de grumes emploient la plus grande partie pour un total de 9.200 ouvriers (2006). Les industries de transformation emploient 5.010 ouvriers par comparaison et le secteur de la menuiserie et autres 877 personnes. Une partie de la transformation est naturellement dans l'économie semi industrielle (grise). Le commerce du bois a donné 250 emplois directs. Au total, 15.337 employés ont été dénombrés dans le secteur en bois dans les statistiques du travail de 2006. Tenant compte des membres de famille et des effets multiplicateurs par la consommation de biens et de services, ainsi que les communautés tributaires des forêts, la population vivant indirectement sur le secteur forestier est de nombreuse fois plus grande.

Le travail est variablement divisé entre le Gabonais et des expatriés dans les industries de transformation. Dans les scieries, les locaux représentent 83% de la main-d'oeuvre, tandis que les Asiatiques (4%) et les Européens (3%) sont moins importants que d'autres ressortissants Africains (9%). Cela montre que Gabon importe les gestionnaires qualifiés en provenance d'Europe et d'Asie et la main d'oeuvre en provenance d'autres pays, y compris ses pays voisins. Dans le secteur du contreplaqué, qui est produit à partir des machines plus modernes que celles utilisées pour le sciage, seulement 64% de main-d'oeuvre identifié était gabonaise.
En termes d'investissements dans les industries de transformation du bois, les expatriés ont un contrôle de la majeure partie des industries. Sur le nombre total d'unités de transformation à l'échelle industrielle, 35% sont détenus par les Français, 25% par les Gabonais et 11% par les Malaisiens. Les Libanais en ont 9% et les Chinois 8% des scieries dans le pays.
9. **VUES DES PARTIES PRENANTES**

9.1. **Introduction**

Pour évaluer les vues des parties prenantes en présence au Gabon concernant l'acceptabilité des quatre options et l'impact de force de levier potentiel de ces quatre options et aussi du processus FLEGT, un total de 21 personnes a été rencontré à Libreville. Sept d'entre eux ont accepté de remplir un questionnaire structuré. Parmi les personnes interviewées, six étaient des industries de transformation du bois, six du gouvernement, deux d'organisations non gouvernementales et le reste étaient des organisations internationales, des agences de coopération techniques ou d'associations.

On leur a demandé s'ils ont été consentis ou pas aux différentes propositions relatives aux quatre options et au processus FLEGT, et à quel niveau ils ont été d'accord ou pas avec chaque proposition. Le degré d'accord ou de désaccord est mesuré avec cinq options, à savoir: Entièrement d'accord, partiellement d'accord, ne savent pas, partiellement d'accord et tout à fait d'accord. Pour l'analyse des résultats, on a affecté des poids aux options valeur -2, -1, 0, 1 et 2, respectivement et ensuite les moyennes pondérées sont calculées pour chaque proposition. Une moyenne pondérée positive signifie un accord global tandis qu'une valeur négative signifie un désaccord global des propriétaires sur une proposition donnée.

9.2 **Option 1: Schéma APV**

Les répondants ont en grande partie convenu que la poursuite de l'Accord de Partenariat Volontaire (APV) permet l'implémentation considérable du processus FLEGT plus efficacement par l'élargissement de la gamme étroite de produits (grumes, sciages, placages, contreplaqués). Ils ont averti que cela ne sera effectif que si les obstacles (de passage de marchandises à travers les pays tiers) sont évités.

Les APV ne seraient considérés d'efficaces que si les autres grands pays consommateurs tels que les Etats-Unis, la Chine et le Japon auront participé et non l'Union Européenne seule. On a fermement cru que des produits légaux en provenance des pays orientés sur les APV bénéficieront d'un meilleur accès au marché et atteindront des prix rémunérateurs, mais il était impossible d'estimer la taille des primes qui seraient versées. Les coûts des réunions sur les exigences des APV n'ont pas été sérieusement pris en compte ; entravant ainsi les exportations vers l'Union Européenne des produits issus des bois légaux. L'élimination des flux de commerce illicite vers l'Europe a fait penser d'épargner les arbres de l'abattage illégal car les exportateurs remanieront les flux commerciaux par conséquent. Il a été vu de façon réaliste que les produits légaux disponibles seront exportés vers l'UE et les produits illégaux sur d'autres marchés.

La proposition selon laquelle l'APV nécessite l'assistance technique peut aider à éradiquer la corruption et rendre plus efficace l'application de la loi a été largement appuyée.

9.3 **Option 2: Schéma du secteur privé volontaire**

Les parties prenantes se sont unanimement mises d'accord que si les mesures proposées par le secteur privé sont efficaces économiquement, elles devraient être utilisées comme mesure complémentaire aux autres options. Les inquiétudes se sont exprimées quant à son caractère volontaire, la rendant ainsi potentiellement insuffisante.
9.4 **Option 3: Mesures d’accompagnement visant à empêcher l’importation des bois récoltés illégalement**

On a cru que les mesures à la frontière souffraient de certaines contradictions du fait que la qualité des éléments de preuve fournis par les autorités des pays exportateurs était susceptible de variation. Cela indique peut-être le bas niveau de confiance sur les pratiques actuelles au Gabon.

Les acteurs ne sont pas unanimes sur la capacité répressive des mesures à la frontière des pays membres en vue d’éliminer les produits illégaux en bois. Cependant, les principes de l’OMC ne sont pas considérés comme un problème majeur en raison du manque de leur connaissance.

9.5 **Option 4a: Législation interdisant la commercialisation et la détention de bois et produits dérivés récoltés en marge du respect des lois du pays d’origine**

Cette sous option, selon la majorité des acteurs interviewés, est fondée sur une approche raisonnée en ce sens que les systèmes de vérification et de suivi doivent être développés uniquement en cas de besoin ; c’est-à-dire, dans des situations d’urgence. Ils ont été prudents en affirmant qu’ils seraient injuste d’être à l’égard des produits en provenance des pays à haut risque.

9.6 **Option 4b: Législation exigeant que seuls les bois et produits dérivés récoltés légalement soient placés sur le marché**

Les parties prenantes gabonaises étaient d’avis que la cette sous option soit basées sur une approche saine dans le sens où la clé de voûte se retrouve dans le secteur privé qui a les ressources nécessaires pour en fournir la preuve. Ils n’ont pas assez supporté la menace de dépenses inutiles en exigeant des preuves de la légalité même pour les produits en provenance des pays où le risque d’exploitation illégale du bois est faible. Ils s’étaient peu préoccupés par le fait que c’est une mesure injuste du fait que l’hypothèse sous-jacente est que les biens importés sont illégaux à défaut de les prouver juridiquement.

9.7 **Autres commentaires**

Des commentaires libres ont été aussi enregistrés auprès des personnes rencontrées, en marge du questionnaire officiel. Ces discussions ont été orientées vers les perceptions du FLEGT et les APV pour le Gabon:

- Utopie, hypothèse dans les scenarii des nouvelles parties prenantes
- Le Ministère de l’Economie Forestière, des Eaux, Pêche, Parcs Nationaux ne dispose pas d’un point focal au sein du FLEGT
- L’UE ne dispose pas d’un point focal au Gabon/facilitateur pour le FLEGT
- L’accès aux concepts du FLEGT est limité à cause de l’absence d’un site web sur le thème en Français
- L’organisation d’atelier national sur le plan d’action du FLEGT est nécessaire en lieu et place d’un atelier régional
- La définition de la légalité est nécessaire à établir au Gabon comme la toute première étape (les définitions diffèrent à niveaux variés)
- Le FLEGT ne serait bon que si tous les pays y participent, et ce au-delà des pays tropicaux
- La lettre d’intention du Gouvernement a été influencée par les Français et envoyée au mauvais organisme: le Fonds Européen de Développement au Ministère de la Planification, pas l’Ambassadeur de l’UE comme cela a été le cas
• Manque de coordination entre les canaux de financement pour le travail relatif à la légalité/durabilité
• Le Gouvernement traîne les pieds dans l’espoir que l’intérêt pour le FLEGT s’évaporera avant qu’il ne soit mis en application
• Les larges mesures de durabilité des instruments pour les plus grandes compagnies peuvent être permises
• La coupe familiale (interdite en 2007) a été une source majeure de bois illégal et de sur-exploitation de bois
• Les petits permis devraient être regroupés de telle sorte qu’ils soient suffisamment forts pour préparer les plans d’aménagement forestier (dont l’élaboration n’est pas correctement mise en application de toute façon)
• Les petits permis d’exploitation sont généralement détenu par des fonctionnaires et des hommes politiques.
2. LITTERATURE CITEE:


European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 6
Country Case Study on Russia

Nepcon
Helsinki
January 21, 2008
TABLE OF CONTENTS

SUMMARY

1. RUSSIAN CONTEXT OF BUSINESS DEVELOPMENT AND FORESTRY 3

2. FOREST RESOURCE AND PRODUCTION 4

3. PUBLIC FOREST MANAGING SYSTEM 7

4. CIVIL SOCIETY MAIN REPRESENTATIVES 9
   4.1 Greenpeace Russia 9
   4.2 WWF Russia 9
   4.3 The Taiga Rescue Network 9
   4.4 Forest Stewardship Council 9
   4.5 Friends of the Siberian Forests 9
   4.6 Bureau for Regional Outreach Campaigns 10

5. TIMBER PROCESSING CAPACITIES 11

6. TRADE FLOW ANALYSIS 13

7. ESTIMATES ON THE SHARE OF ILLEGAL TIMBER OF TOTAL TIMBER PRODUCTION AND EXPORTS TO THE EU, CHINA, JAPAN, AND THE USA 16

8. DRIVERS BEHIND ILLEGAL LOGGING 20

9. EXISTING POLICIES AND INTERNATIONAL COMMITMENTS RELEVANT TO ILLEGAL LOGGING 22

10. LEGISLATION RELEVANT TO FORESTRY 23

11. ENFORCEMENT CAPACITY AND EFFECTIVENESS 27

12. CURRENT LOG TRACKING SYSTEMS 30

13. SCOPE OF LEGAL TIMBER PRODUCTION 32

14. CAPACITY TO INCREASE LOCAL PROCESSING OF TIMBER 33

15. ESTIMATE THE “BENEFIT” OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATIONS (TAXES, FEES EVADED, ETC.) 34

16. BASIC DATA FOR ASSESSING THE ECONOMIC, ENVIRONMENTAL AND SOCIAL IMPACTS 35
   16.1 Current Government Revenue from Forest Sector 35
   16.2 Current Employment in the Forest Sector 35
   16.3 Current Access to Forests and Share of Benefits to Local Population 35
   16.4 Current Structure of Industries 35
   16.5 Current Status of Corruption in the Forest Sector or in the Country (e.g. Transparency International Index ranking) 37

17. ASSESSMENT OF IMPACT 38
   17.1 Causal Model – Impacts of Four Policy Options Inside the EU 38
   17.2 Causal Model – Impacts of Four Policy Options on the Russian Forest Sector, Excluding Impacts of Foreign Trade Policies 39
17.3 Causal Model – Impacts of Four Policy Options on the Russian Forest Sector, If Foreign Trade Policies Were Implemented

18. REFERENCES

LIST OF ANNEXES

Annex 1 Some Stakeholders’ Opinions Expressed During the Workshop Held in St Petersburg, 10 of October
Annex 2 List of Participants
Annex 3 Protocol of Consultation on Potential Legislative Measures to Address Trade in Illegal Timber Products within the FLEGT Process

LIST OF FIGURES

Figure 2.1 Intensity of wood harvesting in Russia and in NW Russia
Figure 2.2 Russia roundwood production is dominated by sawlogs (59.1 million m³ in 2005) and pulp timber
Figure 6.1 Russia exports to various countries
Figure 6.2 EU imports of RWE (roundwood equivalent) from timber producers countries
Figure 6.3 Exporter – importer information about Russia exports to various countries, 2005
Figure 7.1 Volume of illegal logging in final cuttings, a harvest-consumption based estimation
Figure 7.2 Illegal logging cases (number of breaches) and illegally harvested timber volume (m³) in the RF and NW Russia
Figure 11.1 Major zones of responsibility of Federal and Regional authorities in the RF, at the Federation level (figure up) and at the local level (figure down)
Figure 15.1 Illegal and legal operations – the structure of costs
Figure 17.1 Causal model – impacts of four policy options inside the EU
Figure 17.2 Causal model – impacts of four policy options on the Russian forest sector, excluding impacts of foreign trade policies
Figure 17.3 Causal model – impacts of four policy options on the Russian forest sector, including impacts of foreign trade policies

LIST OF TABLES

Table 2.1 Forest resource and production, Russia and North-Western Russia
Table 10.1 Legal acts regarding the forest sector
Table 16.1 Concentration of the forest industry
Table 17.1 Likely impacts to occur in Russia if the four policy options implemented, and foreign trade measures progressing as forecast – an expert estimation, to be crossed with the results of the questionnaires
Table 17.2 Impacts likely to occur on stakeholders in Russia
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAC</td>
<td>Annual allowable cut</td>
</tr>
<tr>
<td>BROC</td>
<td>Bureau for Regional Outreach Campaigns</td>
</tr>
<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
</tr>
<tr>
<td>EFI</td>
<td>European Forest Institute</td>
</tr>
<tr>
<td>EFTA</td>
<td>European Free Trade Association</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EMAS</td>
<td>Eco-Management and Audit Scheme</td>
</tr>
<tr>
<td>ENA-FLEG</td>
<td>Europe and North Asia Forest Law Enforcement and Governance</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FFA</td>
<td>Federal Forestry Agency</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade</td>
</tr>
<tr>
<td>FSC</td>
<td>Forest Stewardship Council</td>
</tr>
<tr>
<td>FSF</td>
<td>Friends of the Siberian Forests</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic information system</td>
</tr>
<tr>
<td>GNP</td>
<td>Gross national product</td>
</tr>
<tr>
<td>GosDuma</td>
<td>Lower chamber of the Parliament, Russia</td>
</tr>
<tr>
<td>ha</td>
<td>hectare</td>
</tr>
<tr>
<td>HCVF</td>
<td>High conservation value forest</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>IUCN</td>
<td>World Conservation Union</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Cubic meter</td>
</tr>
<tr>
<td>m³</td>
<td>Cubic meter</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>NTFP</td>
<td>Non-timber forest product</td>
</tr>
<tr>
<td>NW</td>
<td>North-West</td>
</tr>
<tr>
<td>PWC</td>
<td>PriceWaterhouseCoopers</td>
</tr>
<tr>
<td>RF</td>
<td>Russian Federation</td>
</tr>
<tr>
<td>RFE</td>
<td>Russian Far East</td>
</tr>
<tr>
<td>RUB</td>
<td>Russian Rouble</td>
</tr>
<tr>
<td>SCA</td>
<td>Svenska Cellulosa Aktiebolaget, Sweden</td>
</tr>
<tr>
<td>TRN</td>
<td>Taiga Rescue Network</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNECE</td>
<td>United Nations Economic Commission for Europe</td>
</tr>
<tr>
<td>UPM</td>
<td>UPM-Kymmenen, Finland</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
</tr>
<tr>
<td>WFSE</td>
<td>World Forests, Society and Environment</td>
</tr>
<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreement</td>
</tr>
<tr>
<td>WRI</td>
<td>World Resources Institute</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wide Fund for Nature</td>
</tr>
</tbody>
</table>
SUMMARY

The present country study for Russia is prepared in order to provide background information for the main report elaborated as part of the project:

Assessment of the impact of potential further measures to prevent the importation or placing on the market of illegally harvested timber or products derived from such timber.

The impact of the following four policy measures has been assessed:

(1) Continuation of Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement (VPA) approach
(2) Existing Voluntary Measures by the Private Sector Further Developed
(3) Border Measures to Prevent the Importation of Illegally Harvested Timber
(4) Prohibition on the Placing on the European Union (EU) Market of Illegally Harvested Timber

In Russia a decentralization of the forest administration is taking place during the present years. A hierarchical system is replaced by local governance of forest resources leaving the more centralized authorities to monitor the proper management. However, as only the first steps of this process have been decided upon much confusion has been caused and resource management has become more difficult and is expected to become even worse in the coming years. At the same time corruption in general has increased from 2002-2005. At the same time economic growth in the country has been realized and both export of timber to the EU from North-West (NW) Russia has increased as well as the domestic demand. A significant change in the forest sector is the introduction of considerable export taxes on unprocessed roundwood which is expected to increase from EUR 4-50/m³ until 2009.

Russia contains timber reserves that account for 50% of the world’s standing softwood forest and nearly 20% of the world’s total forest. Due to large areas of protective and low productive forests, only 45% of the forests are available for industrial logging. Only around a third of the annual allowable cut (AAC) is utilized, at the same time forest areas accessed by present infrastructure is overexploited: more than 80% of timber in Russia is logged as clear cuttings and in most cases clear cuttings are permitted in areas of more than over 50 ha. The new forest code appears to increase the challenge of investing in infrastructure to make new forest areas available.

A number of non-governmental organizations (NGOs) in Russia are working to facilitate dialogue between decision makers and the industry and policy reform. Among them are Greenpeace Russia, World Wide Fund for Nature (WWF) Russia, the Taiga Rescue Network (TRN), and Forest Stewardship Council (FSC). Main work fields are certification, networking for advocacy, training, and forest conservation.

The capacity of timber processing is at a low international standard: to produce a unit of finished product, Russian forest industry logs ten times more timber than in neighboring Finland. The processing industry is simply antiquated and inefficient, as proved also by the industry’s return on assets (3%), considerably lower than that of Russian industry as whole (6%). During the last years, the forest industry became more concentrated in larger business entities and corporate structures have emerged.

Russia is a net timber exporter. Low-added value forest products dominate with 70% the Russian forest products exports. The main importers of Russian timber are the EU and China. It is likely that the introduced export taxes on unprocessed timber will cause a reduction in export rather than attracting foreign investments to increase the processing of timber within Russia.

Illegal logging is found when cutting permits to areas are not obtained (1/3 of cases) or when there is failure to comply with logging licenses prescriptions (2/3 of cases). It
appears to be caused by rent seeking behavior in presence of huge law trespassing opportunities. The increase of income when illegal logging is done is estimated to 30-40%. The fraction of illegal timber harvest is estimated to reach from few to 40% percent in NW Russia (most estimates are around 10-20%) whereas the figures climb to higher figures in fareast Russia. About 75% of the volume of timber imported from the NW Russia into the EU is covered by a proprietary tracking system that is either certified to ISO 14001 or Eco-Management and Audit Scheme (EMAS) registered. In theory these systems explicitly include provisions to exclude illegal material. In practice additional development and efforts are required to make the systems reliable.

Existing policies and international commitments appear to have little impact on illegal logging. Legislative action rarely results in prosecution and only in very rare cases to court cases finding individuals guilty as the requirements of proving guilt are difficult to establish. Current official requirements do not appear to constitute a major obstacle for export of wood from unknown sources, because it is difficult to verify the documents stating the required information. 3% of Russia’s commercially accessible forests were certified by mid-2006. At present there is a steep increase in certified forests in Russia which is likely to result in approx 10% certified by the end of 2007.

The Russian Federation (RF) increased the taxes of unprocessed timber with the aim to trigger local processing of wood. However, the result may easily be that in 2008 the present export of 50 million m³ will stop, because of the price. Foreign investment in processing facilities is only seen in few cases. The Russian forest sector has been one of the most important sectors in the Russian economy, providing 5% of the gross national product (GNP) and employment for 7% of the population. Yet, forestry appears not to be considered important in economic terms by the government.

The logging industry is dominated by small players. The industry consists of about 20 000 logging and harvesting enterprises, a substantial proportion of these companies are also exporters of wood. The industries dealing with processing of wood have become concentrated in larger and larger companies.

The foreign trade policies by Russia are reinforcing the impact of the four policy options and the result is likely to be a reduction of timber prices in Russia At the same time higher revenues for the State is accomplished because taxes are paid. It may be that the processing industry is developed and a better life for forest dependent communities is realized (if State and local administration will invest the additional money from tax in rural areas).
1. RUSSIAN CONTEXT OF BUSINESS DEVELOPMENT AND FORESTRY

Russia is still a transitional economy with uneven development, both geographically and in terms of income distribution. The task to implement necessary structural changes in the national economy is hindered by a growing performance gap between inefficient public administration and efficient private sectors (EU-Russia Centre internet). Up to the 2000s, Russia has pursued a pattern of economic development based on the inherited specialization of the soviet economy. This means having a big export potential in hydrocarbons and timber resources, and also in the production of energy intensive goods (Garanina 2007). Russia's macroeconomic performance in recent years has been impressive, with a GDP growth of 6.8% in 2006, and an estimate of 7% for 2007. High oil prices and large capital inflows have contributed importantly to this success, but a principal factor has been the combination of strong growth in both productivity, real wages, and consumption. As a consequence, since 2003, exports of natural resources started decreasing in economic importance as the internal market has strengthened consumption considerably (Wikipedia.Org).

Regarding State reform, a re-centralization policy was initiated in 2000, in response to the spontaneous regionalization process of the 1990s (Gelman 2007). This general "new centralism" is opposed to the decentralisation in the use of forest resources launched in 2007 through the new Forest Code. The Federation Council voted on 24 November 2006, to adopt a new Forestry Code, intended to attract foreign investment to the lucrative wood-processing business. The new Forest Code seeks to decentralize control over the country's forests, passing them into the hands of regional governments (The Moscow Times 2006). The decentralisation process in the forest sector mat become a long process facing the big challenge of Russia's intense political calendar with many tasks, as well as Parliamentary elections at the end of 2007, followed by presidential elections in March 2008.

One of the most significant changes in the forest sector is the rise of export taxes on roundwood in mid-2007: under a February government decree, export duties will rise from EUR 4 (USD 5.38) per cubic meter of unprocessed timber to at least EUR 10 in July, EUR 15 in 2008, and EUR 50 in 2009 (The Moscow Times, May 25, 2007: Timber Producers Edgy As Customs Duty Looms).

Box 1.1 Summary box national context

- Sustained economic growth, increasing internal consumption, including timber
- Decreasing importance of trading raw materials, except oil and gas
- (Ongoing) trade barriers for exporting raw timber materials
- (Ongoing) decentralisation process in forest resource management, still unclear rules of implementation
2. FOREST RESOURCE AND PRODUCTION

Russia contains vast timber reserves that account for 50% of the world’s standing softwood forest and nearly 20% of the world’s total forest. Forest land (territories identified for forests and forestry) comprises 52% of the Russia’s territory. Closed forests (forested areas) cover 776 million ha or 45% of the total land area. Of the total forested area, in 2003, 18% of forests were classified as protective forests, 7.6% were destined mostly for ecological services with prohibited or restricted industrial logging, and 69% were basically destined for timber extraction. Due to large areas of protective and low productive forests, only 45% of Russian forests are classified as forests available for industrial logging.

The absolute majority (95%) of Russian forests are in the boreal zone which determines the prevalence of coniferous species (70%). Deciduous broadleaved forests comprise 17%, mostly secondary birch and aspen. Relatively small areas (2.5%) are covered by valuable hard wood deciduous forests dominated by oak, ash-tree, beech, etc. The rest is mostly represented by dwarf pine and other shrubs, in regions where tall trees are not able to grow due to severe climatic conditions. The growing stock of Russian forests (i.e., the total amount of stem wood of all living trees) was 88 300 000 000 m$^3$ in 2003 (http://www.iiasa.ac.at). Russia is currently harvesting only around a third of the AAC, which has been ranging from 500-550 million m$^3$ in recent years (PWC 2006; http://www.iiasa.ac.at). Thus, over and under-exploitation of the forest resources is happening at the same time.

Figure 2.1 Intensity of wood harvesting in Russia and in NW Russia

Source: Lopina et al. 2003; estimated by Kuusela and quoted in WWF 2003

Types of cuttings applied in Russian forestry represent an extensive use of forestland. More than 80% of timber in Russia is logged as clear cuttings and in most forests clear cuttings are permitted in large areas (up to 50 ha).
Table 2.1 Forest resource and production, Russia and North-Western Russia

<table>
<thead>
<tr>
<th>Volumes</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 AAC in all of Russia (million m$^3$)</td>
<td>About</td>
<td>564.0</td>
<td>570.0</td>
</tr>
<tr>
<td>2 AAC in NW Russia only (million m$^3$)</td>
<td>89.60</td>
<td>89.60</td>
<td>91.20</td>
</tr>
<tr>
<td>3 Harvested wood by final felling in all of Russia</td>
<td>122.8</td>
<td>126.0</td>
<td>127.0</td>
</tr>
<tr>
<td>4 Harvested wood by final felling in NW Russia only</td>
<td>38.8</td>
<td>35.4</td>
<td>36.8</td>
</tr>
<tr>
<td>5 Intermediary harvesting and other harvesting in all of Russia</td>
<td>48.0</td>
<td>51.4</td>
<td>54.1</td>
</tr>
<tr>
<td>6 Intermediary and other harvesting in NW Russia only</td>
<td>6.6</td>
<td>7.0</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total in Russia (1+3+5)</strong></td>
<td>170.8</td>
<td>177.4</td>
<td>181.1</td>
</tr>
<tr>
<td><strong>Total in NW Russia (2+4+6)</strong></td>
<td>45.4</td>
<td>42.4</td>
<td>43.5</td>
</tr>
</tbody>
</table>

Source: www.iiasa.ac.at

The final cuttings, named also commercial cuttings, mean the definitive cut of the forests, followed by regeneration. The final cutting maybe a clear cut, or it may be done on two or more stages. While the final cutting is planned at the end of the production cycle of a stand, the intermediary cuttings are planned in earlier stages of the stand and have for role to improve production, by tree selection, or harvesting of damaged or ill trees. The distinction is important because in the previous Forest Code the leskhozes could undertake themselves only the intermediary cuttings, not the final (commercial) cutting. However, intermediary cutting were extensively used to provide financial resources to leskhozes (Morozov 2000). In Greenpeace opinion 1, logging carried out in the last 100 years has largely exhausted accessible and most productive forests in Russia. As a result, many forest industry companies are facing shortages of accessible high quality timber. At the same time, the overall national increase of standing volume shows that important areas accumulate growth, being under-harvested.

Northwestern Russia is rich in forest, and covers about 70% of the total land area. Coniferous species, including mostly Scots pine and Norway spruce, account for about 50% of the forest area. Aspen and birch are widespread too. Moreover, the last European large tracts of intact forests are located there, mostly in the Republics of Karelia and Komi and Arkhangelskaya Oblast. Timber production represents in NW Russia more than 40 million m$^3$ per year. This figure is still less than half of the potential harvest level, but the large extent of employing large clear cut areas is problematic regarding sustainable management of the resource. It appears that Siberia and the Russian Far East have potential as the main timber producing regions in Russia, but in reality, timber production of these areas accounts for only about one third of Russia’s total production. The region west of the Urals dominates the production (Burdin et al. 1998, quoted in Sheingauz et al. 2005).

1 Greenpeace Russia internet

Figure 2.2  Russia roundwood production is dominated by sawlogs (59.1 million m³ in 2005) and pulp timber

Source: EFI/WFSE

Box 2.1  Summary box forest resources

- Less than half of the forests of Russia have been set aside for industrial logging.
- AAC is around 500 million m³, but less than 200 million m³ is harvested, from which 40 million m³ come from NW Russia.
- Over and under-exploitation of forest resources is ongoing at the same time. Large areas being clearcut represent a problem towards sustainable management of the forest.
3. PUBLIC FOREST MANAGING SYSTEM

Before introduction of the new Forest Code (entered in force on 1 January 2007), Russia had a centralized system of public forest management. The Federal Service of Forest Management as part of the Ministry of Natural Resources of the RF had a hierarchical structure of forest management that corresponded to the general structure of state (administrative) management in Russia. The top regional management level comprises of seven Federal Okrugs, with Departments of Natural Resources including forests. The next level (indicated in the Constitution of the RF) includes (as of 2006) 88 subjects of the RF which are represented by 21 Republics, seven krays, 48 oblasts, one autonomous oblast, ten autonomous okrugs, and two cities of federal jurisdiction (Moscow and Saint Petersburg). All the subjects (besides the cities) had regional forest management bodies. The latter were divided into 1 788 forest enterprises (leshoz) in 2003. In turn, leshozes were divided into (i) 7 743 forest districts (lesnichestvo), (ii) 14 172 technical sections (uchastok), and (iii) 69 498 ranger compartments (obkhod) (http://www.iiasa.ac.at).

The leskhozes operations were guided by ten-year plans developed by the Forest Inventory Agency, an engineering and planning institution usually situated in the region, and subordinated to the Ministry of Natural Resources (a federal agency). Although the leskhozes had little input in the formulation of the long-range plans, their authority included renting the tracts of forest to private timber companies as well as performing rudimentary maintenance (such as thinning) and protecting the forest from thieves and natural disaster (though few means were available for this). The leskhozes theoretically ensured that the operations of the private timber companies are consistent with laws and regulations. However, the rent paid by the timber companies was transferred to the federal government, rather than kept by the leskhoz. The leskhozes where funded almost exclusively from federal government budgets. The funding level, however, was regularly less than forecasted in the budget (Tysiachniouk 2004). In search of financing sources, leskhozes increase the volume of sanitary cuttings, as one of the only type of cutting they are allowed to perform. Since leskhozes control their felling operations themselves and there is no real system of independent control over their activities, there were huge opportunities of violation of the existing rules. According to an UPM (Finnish company importing timber from Russia) estimate, the share of such operations undertaken by leskhozes in the violation of rules may account for 90% of all logging. Usually, leskhozes undertake high-grading cuttings passing them off as sanitary cuttings or thinning, which results in degradation of forest quality and production capacity in entire regions.

With the adoption of the Forest Code, entered in force in January 2007, the regional governments should gain control over the forest resource. The federal government will retain ownership of the forests, while the Federal Forestry Agency (FFA) will continue to exist but will oversee and supervise the fulfillment of the law, rather than managing forests directly. The way in which regional forest management structures will be organised is still not finalised on the national level.

Under the new forest code, a forest management unit will no longer be called leskhoz, but “lesnichestvo” or “lesopark.” Forest management, monitoring, and use supervision will be formally decentralized. Governments of the Russian administrative units (oblasts, republics, or okrugs) will be responsible for managing, protecting, using, and regenerating forests in their jurisdictions. Governments will be also responsible for appointing personnel for forest inspection and use supervision. At the same time, most of the forests will remain under the federal ownership, and laws and regulations regarding forest management will be established at the federal level. Similarly, income from forest use will flow into the federal budget and afterwards distributed to the regions through task-specific subventions (Greenpeace Russia 2006).
A regulation from the 2007 summer introduced a limit of 35% of the maximum volume that can be bought in a single forest unit by a single forest user. The efficiency of stumpage auctions has been proved by the fact that in these cases, actual stumpage prices exceed the minimum stumpage rates by 4-5 times, and in some areas the difference reaches 8-10 times. Auctions account for about 20% of timber sales in 2005; thereby only physically accessible resources are harvested, with no investments into road construction (Mashkina 2006) and most of not accessible intact forests remained without harvest. If no investments in road construction are made, there is a short time risk of intensive, concentrate forestry in the accessible regions (intense harvesting, harvesting of younger stands, harvesting in protected areas, etc.). However, at the same time there is a guarantee to keep the last intact forest landscapes and high conservation value forests (HCVF) untouched.

No private forest owners exist in Russia, but the new Forest Code has opened the possibility of forest privatisation.

Although the new Forest Code brings opportunities for forest sector development, NGOs (e.g. TRN) criticised it:

- less environmental restrictions on forest users, no longer obliged to an Environmental assessment, and no longer obliged to ask permission to cut (they have to notify cutting, cutting is based on a declaration);
- more difficult procedures to set up a protected area, because it is mostly a decentralized process; and
- a worsening of the present situation, from environmental protection viewpoint, of the classification of the protective forests in Russia.

**Box 3.1 Summary box forest management**

- Based on the public, federal property and long term leasing system.
- Supervised by federal authorities, but under the jurisdiction of the regions.
- Forest management unit is the “lesnichestvo” or “lesopark, with attribution on management, monitoring, forest regeneration, but with no attribution in commercial cutting, to be done only by the private sector.
- Decentralisation process is ongoing, new regulations, different from a region to other, are to be expected.
- Compared with the former legislation, the new one seems to create conditions for industry development, e.g. reducing bureaucracy in issuing feeling permits.
4. CIVIL SOCIETY MAIN REPRESENTATIVES

4.1 Greenpeace Russia

Greenpeace Russia is a key Russian NGO having about 15 years history of the active protection of the most valuable intact forests in NW, Siberia, Baikal area and Far East. Core member of “Forest Watch Russia”, initiator of the implementation of Natural World Heritage in Russia. The organisation has planned the protection of forest areas, initiated several international actions in the Far East against illegal logging, including the actions against hard legal violations in the intact forests (www.greenpeace.org). The forest campaign is the largest campaign of Greenpeace Russia. It is coordinated by Alexey Yaroshenko. Greenpeace gives priority to the following three main problems of the forest sector in Russia: decreasing territory of large tracts of intact forests, deforestation of southern parts of Russia for agriculture, and chaotic implementation of reform in the forestry sector that causes loss of biodiversity. The forest campaign of Greenpeace currently implements four projects: “World heritage”, “Reforestation”, “Volunteers” and “Protection of wild salmon in Kamchatka peninsula”. This work facilitates discussions concerning forestry in Russia that can be found in the website: www.forestforum.ru (in Russian).

4.2 WWF Russia

WWF Russia’s forest campaign is coordinated by Yelena Kulikova. WWF Russia founded the Russian Forest & Trade Network in 1999 to promote sustainable forest management and voluntary forest certification. Currently this network is coordinated by Alexander Voropayev. Companies that join the network make a public commitment to responsible forestry and credible forest certification. Russian suppliers for IKEA, one of the largest timber companies in NW Russia, Cherepovetsles, and Terneyles, the leading timber exporter in the Russian Far East, are members of the network, with millions hectares of forests certified (http://www.wwf.ru/forests/eng/).

4.3 The Taiga Rescue Network

The TRN was established in 1992. TRN is a network of over 200 grassroots NGOs across the boreal forest region and has around 25 member organisations in Russia. TRN is working to support local struggles and strengthen the cooperation between individuals, NGOs and indigenous peoples and nations concerned with the protection, restoration and sustainable use of the world's boreal forests by means that ensure the integrity of natural processes and dynamics. Currently TRN is coordinated by Kathy Harris, she also coordinates Russian part of the TRN (http://www.taigarescue.org).

4.4 Forest Stewardship Council

Russian office of the FSC is coordinated by Andrei Ptichnikov. Until 20 of September 2007 almost 17 million ha of forests received FSC certificates on forest management and 51 certificates – for chain of custody. The Russian FSC office pays special attention on controlling work of FSC accredited certification bodies and development of a new standard that will be accredited by FSC-International for use by all certification bodies (http://www.fsc.ru/).

4.5 Friends of the Siberian Forests

Friends of the Siberian Forests (FSF) is regional NGO with central office in Krasnoyarsk (Central Siberia, Russia). It was established in 1992. The main goal for the FSF is to contribute in the conservation and sustainable management of Siberian forests. FSF focuses on the development of a longer-term strategy to engage
governmental officials and other stakeholders to reform environmentally and socially unsustainable policies and practices in the management and conservation of Siberian forests. FSF has developed an advocacy strategy to prepare forest policy statements and enhance the impact of the organization, including the targeting of key international and national fora to address.

4.6 Bureau for Regional Outreach Campaigns

Bureau for Regional Outreach Campaigns (BROC), based in Vladivostok, is ten years old key partner of Greenpeace in the Far East Russia. BROC conducted all the forest campaigns and actions of Greenpeace in the region and coordinated Russian Forest Watch activity on the Far East and the World Conservation Union (IUCN) project on Far East Russia environmental hot spots (http://broc.arsvest.ru/base/1forest.htm). The organisation organized biennial conferences of TRN in Vladivostok in 2004. The BROC plays an important role as environmental educator on forest issues among forest communities, officials and media by the publishing special analytic reports on Asian timber market and the resulting impact on the forest ecosystems, as well as by publishing the quarterly magazine “Ecology and Business”. BROC implemented a series of projects targeted to strengthen forest communities in the independent monitoring of forest use over the whole Far East in collaboration with local groups like “Taiga Ranger”, “Taiga”, “Noosphere”, or other indigenous groups. For eight years, BROC has produced a regional regular biweekly television show “Preserved” and television documentaries on issues related to the forest communities. BROC is a member of RFE working group of FSC certification.

The NGOs working with forest issues in Russia, actively address forest sector reform. During the last five years, many Russian NGOs focused on work around reforms in forestry legislation. New Forest Code that was adopted in the end of 2006 was under discussion in Russian GosDuma (lower chamber of the Parliament) since 2002. The comments accepted from NGOs contributed significantly for improvement of the Forest Code, yet NGO complain that most of their comments were ignored. During last 10 years the majority of Russian NGOs from Siberia and Far East working on forest issues coordinated their work within the so-called “Sosnovka” movement. Sosnovka movement has annual meetings in one of the regions of Siberia and Russian Far East. Also Moscow NGOs coordinate their work in so called “Forest Club”. An example of successful joint work of Russian NGOs is the production of the “Atlas of Russia's Intact Forest Landscapes” in 2002.

Box 4.1 Summary box civil society

- Dialogue between the private sector and decision makers has been facilitated
- Priorities in forest conservation, educating people, helping forest-dependent communities, and certification
- Good networking across Russia
- Monitoring and advocacy in political processes
- Working for enhancing inside the forest sector corporate social responsibilities commitments
5. TIMBER PROCESSING CAPACITIES

The forest industry sector of the RF comprises of several linked sub-sectors such as forest harvesting, wood processing, pulp and paper, and resin industries. Since the 1998 financial crisis, the timber-based industry has begun to recover. The Russian forest sector export is now at a stage of accessing to international markets.

The forest industry sector consists of more than 22,000 organizations including some 3,000 major and mid-sized companies of which over 95% have been transformed before the year 2003 into joint stock companies. The sector employs more than a million workers accounting for 7% of the industrial work force. At the same time it only makes use of 3% of the industrial assets (Government of Russia, Forest Industry Strategy, 2002). A conservative estimate is that the Russian industry based on forest products generated a total output of around USD 12 000 000 000 in 2005, including logging, wood products, and pulp, paper, and paperboard. Domestically, about 35% of the estimated value of forest-based production is generated by the pulp, paper and paperboard sector, the wood products sector accounts for around 40% and the forestry/logging sector the remaining part (PWC 2006a). The biggest Russian company is Ilim Group, which recently formed a 50/50 joint venture with International Paper. Logging subsidiaries of the Ilim Pulp Corporation have the capacities to harvest more than 6 million m³ of timber yearly (as it has been done in 2006, for example). The timber processing capacities all in all are under the established AAC, e.g. roundwood production in 2005 was 152.2 million m³, while the AAC was 570 million m³ (Russian Federal Forest Service, quoted at http://www.iiasa.ac.at).

With its proximity to the fastest growing market in the world, China, the export opportunities are significant for the Russian paper and packaging industry. At the same time, these opportunities mean serious threats on the remaining intact forests in Russian provinces neighbouring China. While low labour costs, limited state environmental regulation and the ability to harvest fibre on land owned by the government makes it a potentially profitable market for investors, the involvement of powerful brokers and politics make it a difficult market for investors to enter. Infrastructure limitations, illegal logging, and capital flow requirements are but a few of the challenges facing companies in Russia, as well as the global pressures prevalent in all markets (PWC 2007). Therefore, Russia’s potential in the forestry industry remains significantly underexploited. Having almost one fourth of the forests of the planet, Russia makes only 3% of world forest production.

Moreover, Russian timber is not used efficiently. One cubic meter of timber in Russia gives products worth ten times less than one cubic meter in Scandinavian countries. From each cubic meter of timber, forest sector employees receive salaries 20 times lower than in other countries (www.greenpeace.org). In other words, to produce a unit of finished product, Russian forest industry logs ten times more timber than in neighboring Finland. The processing industry is simply inefficient, as proved also by the industry’s return on assets, considerably lower than that of Russian industry as whole. The forest industry return on assets is averaging just over 3% in 2003 and January-September 2004, compared to an overall Russian average of nearly 6%. This may reflect the antiquated state of equipment in many facilities (PWC 2006a).

During the last years, the forest industry became more concentrated in larger business entities and corporate structures emerged. The changes towards joint stock companies has led to dramatic job losses in many forest communities and pushed their members to illegal operations. By the beginning of 2001, forests had become an attractive object for investment (especially pulp and paper) due to the favorable situation of the international markets and improved macroeconomic situation in Russia. However, the result was not a flourishing business, but “forest wars” (Mashkina 2006). The “forest wars” (or paper wars) refer to the battles for leading positions in the Russian forest sector among oligarchs and owners from various
industries (inter-branch flow of capital), as described in the PWC’s report (PWC 2006b):

“Russia’s forest wars dominated the industry scene from 2000 to 2004, as some Russian oligarchs looked towards the forest industries sector for desirable investment opportunities. The major conflict happened when Continental Management, reportedly an affiliate of BasEl holding that controls RUSAL, one of the world’s largest aluminium producers, sought to take over the main production assets of Ilim Pulp, a holding that had managed to consolidate a group that is Russia’s largest pulp producer and exporter. While battling Ilim Pulp, Continental Management accumulated some medium-sized pulp and paper mills and logging companies. Ilim Pulp was eventually able to prevail and retain its assets, primarily through a series of court decisions. This conflict painted the mixed picture: the issues and tactics show negative aspects of investing in Russia – that the dispute was resolved shows hope for the future. The 2000-2004 forest wars had an extremely deleterious effect on investment in the industry. One M&A publication estimated that the Russian forest industry received EUR 2 billion less in investments as a result.”

The key losers of the oligarchs’ forest wars are the forest community members all over Russia. Forest-dependent communities have remained outsiders, poachers and the poorest group amongst all forest users groups.

Box 5.1 Summary box timber processing

- Harvest on national level is considerably under the AAC.
- Lack of the infrastructure to more remote forest areas – accessible forests are under pressure.
- Low return on the assets related to forestry.
- Joint stock companies formed, episodes of out-of-rules battle for leading positions.
- Ongoing concentration of companies in larger units, products are entering the global markets.
6. TRADE FLOW ANALYSIS

Russia is a net timber exporter. Low-added value forest products dominate with 70% of the Russian forest products exports. In value, unprocessed timber represented in 2005 43% of the Russian timber based exports (PWC 2006a), while sawn timber accounted for 29%, plywood for 8%, wood pulp for 11% and newsprint for 11%.

Exports of raw logs have increased dramatically in recent years and were nearing the 50 million m³ mark in 2005. The main importers of Russian timber are the EU and China. They account together for 82% of the roundwood exports and 47% of sawnwood exports (Figure 6.1).

Figure 6.1  Russia exports to various countries

The EU imported in 2005 23.16 million m³ roundwood, and China 19.1 million m³ roundwood. In the EU, the biggest importer is Finland. In 2002, the roundwood export from Russia to Finland was about 73% of the total Russian export to EU or 13.7 million m³ out of 18.8 million m³. In total, Russia supplies 22% of all timber products imported in EU (Figure 6.2).

There are some discrepancies in information provided by exporter and by importer about the volumes of forest products traded, e.g. RF declared to export more timber to EU than the EU declared to import from Russia, while China importers claim bigger volumes coming from Russia than the Russian statistics (Figure 6.3). Usually, the data provided by the importer country are more reliable.

Under a February government decree, export duties will rise from EUR 4 (USD 5.38) per m³ of unprocessed timber to at least EUR 10 in July, EUR 15 next year and EUR 50 in 2009. Zakhar Smushkin, chairman of Ilim Pulp, said in a statement from mid August 2007 that the country’s current annual exports of 50 million m³ of timber would no longer be profitable under the new export duties.
The impact of such measure is difficult to estimate. It seems that some companies are ready to invest in timber processing in Russia, while others are not. Finland has already a strategy to cope with the difficulties raised because of this trade barrier, e.g. increasing the level of domestic cuttings. It is likely also that the exporters will try to overcome the restriction, e.g. by exporting lightly processed timber. It is doubtful that trade barriers will contribute to the development of Russian forest communities and of small local businesses, which were trying to develop processing capacities.
themselves during latest years without any governmental support (Anatoly Lebedev, personal communication).

This measure of export duties on unprocessed timber has been asked for by the forest governance and management agencies in the Russian Far East for a long time. But now it seems coming too late and with too short notice in the term of implementation. In the Eastern part of Russia, the trend forecasted by the experts is a booming of 100% of Chinese processing facilities over the region. These facilities are managed with Chinese labor, Chinese settlements, and Chinese capital. China has a strong interest and a competitive advantage (based on its geographical position) to intensively use the Russian Far East timber resources. Already in 2005, the Russian Far East and Siberia supply China with 50% of its overall imported timber products (Northwall & Bull 2007). According to the Stakeholder Statement of the Baikal Economic Forum (2006), quoted by Northwall & Bull (2007), the great part of the forests in the Russian Far East is economically inaccessible, environmentally sensitive, or largely degraded: if the current harvesting rates and practices in the Russian Far East continue, the existing stocks of economically accessible wood products could be depleted in only 20 years.

Box 6.1 Summary box timber export

- Russia exports between one quarter and third of the timber production, mostly on low value added products.
- The EU imports 23 million m³, China 19 million m³, Japan 6 million m³, and the United States of America (USA) around one million m³.
- Russia supplies 22% of all timber imported by EU, but more than half of timber imported by China.
- Finland is the biggest importer of Russian timber.
- Impact of trade barriers measures will be significant in the short term.
7. ESTIMATES ON THE SHARE OF ILLEGAL TIMBER OF TOTAL TIMBER PRODUCTION AND EXPORTS TO THE EU, CHINA, JAPAN, AND THE USA

The Russian definition of “legal” logging makes reference in principal to the compliance to the logging regulations:

“Illegal logging is harvesting of trees, shrubs, and lianas without a felling license, order or logging with a felling license, order issued with violation of the standing felling rules as well as logging in other (than allowed) areas or outside their boundaries, over allowed volume, logging of other (than allowed) species or trees, shrubs, and lianas prohibited for harvesting…”

The definition can be summarized by two kinds of illegal logging activities (Roshchupkin 2006):

- Logging is illegal because the lack of permitting documents (around one third of the cases in the estimation of the Head of the Federal Forest Agency, Mr. Roshchupkin); and
- Logging is illegal because the failure to comply with logging licenses prescriptions (beyond logging site, logging trees that are banned for cutting, etc., around two thirds of the cases in the estimation of the Head of the Federal Forest Agency, Mr. Roshchupkin).

There are several possibilities to estimate illegal logging, e.g. recorded violation, analysis of the harvesting-consumption balance, and aerial observation and monitoring by remote sensing.

Until recently, high discrepancies existed between the official records and what NGOs claimed about volumes illegally logged. In the past, the Ministry of Natural Resources asserted that illegal logging only accounted for 0.5% of total logging in Russia. For 2005, the Russian state statistics (Rosleskhoz 2005, quoted by Roshchupkin 2006) provide a picture of 0.89 million m³. It has to be acknowledged that this record of violation is limited by the physical capacity (number of staff, area to be covered) of the forest control staff, and also by the level of the corruption among forest staff.

In March 2006, Valeriy Roshchupkin, head of the FFA of RF used a harvesting-consumption balance to obtain an estimate of 19 million or 3.4% the share of illegal logging in the final cutting (Figure 7.1). Entries of volumes logged and import where compared with consumption and export. The difference of 19 million ha represent entries that are not officially recorded, e.g. illegal logging. Also, in his presentation, the head of FFA calculated that the current share of the identified illegal logging compared with the total illegal logging is only 10%; at the present time the identified illegal logging is around 2 million m³ per year, but the real figure appeared to be ten times higher. The official estimated that the use of the aerial and monitoring technologies will allow a 50% discovering rate of illegal logging in the near future. In June 2006, official reports indicated that the new implemented monitoring system (remote sensing) had identified around 1.2 million m³ of illegal logging (0.2% of the total logging) additional to the classic method of recording illegal logging.

---

Figure 7.1 Volume of illegal logging in final cuttings, a harvest-consumption based estimation

![Diagram showing logging volumes and consumption estimates](image)

Source: Rosleskhooz 2005, quoted by Roshchupkin 2006

A systematic study done by European Forest Institute (EFI) in 2005, investigated the issue of different estimations (more than 40 considered) about the share of illegal logging in Russia. Main estimates from this study and from other sources are listed bellow:

- **Estimation by Seneca Creek Associates and Wood Resources International (SCA & WRI 2004):** 15–20% of the harvests and approximately 25% of log exports in Russia may be illegal. The authors prefer the term legally suspicious origin instead of illegal logging.

- **Greenpeace** estimates the scale of illegal logging as 20%. Morozov (2000) gives the figure in his report *Survey of illegal forest felling activities in Russia*. As the most common violation Greenpeace names logging without an ecological survey/EIA.

- **WWF** estimates the scale of illegal logging from 10% to 50%, in some cases even 70% or 100%. The highest estimates of 50% or 70% concern illegal logging in the Russian Far East, and 100% in Caucasus, where red listed species like chestnut are logged (WWF 2004). In one of the year report, WWF claimed that the share of illegal wood export from Northwest Russia ranges from 25% to 30% and even up to 50% (WWF 2004).

- **By the estimate of BROC and Supreme Court of Russia** all the logging operations (100%) of leskhozes should be recognized as illegal since all of them are conducted with at least one violation of the very strict logging and environmental rules (Anatoly Lebedev, personal communication). It is broadly recognized that all the so-called “intermediate”, “maintenance” and “salvage operations” ordered by leskhozes has for final purpose to provide income at this organisational level and not the forest improvement. Therefore most of the salvage cuttings have to be recognized as illegal.

- **Illegal logging in NW Russia is estimated between 25% and 30%** (Figure 7.2). The 36% (Lopina *et al.* 2003) figure was derived from comparing the wood harvested in the region with the total wood consumed and exported from the region, using data from the State Statistics Committee (GOSKOMSTAT, now ROSSTAT). WWF Russia calculates the difference as 36% of the legal
production that “may be obtained from illegally harvested wood (Lopina et al., 2003)”. In later WWF publications, the illegal logging is estimated as 27% (WWF 2003). The EFI report concludes that a share of 10-15% of timber yearly produced in NW Russia is a realistic estimate of “timber with unknown origins”, which is different from “illegally logged”, but allows a better specification of the problem from the viewpoint of trading. The picture of 10-15% estimate represents a yearly volume of 4.8 million m³ to 7.1 million m³.

For all RF, estimates of the share of the illegal timber in the exported volumes vary between 10 to 35% (EFI report 2005). For the NW Russia, a share of 10-20% of the exports from NW Russia to EU may represent timber from unknown origin, into a great extent suspect of illegal logging.

Figure 7.2 Illegal logging cases (number of breaches) and illegally harvested timber volume (m³) in the RF and NW Russia

![Figures and Graphs]

Source: Ministry of Natural Resources of the RF, quoted in EFI report 2005

Legality assessments of exports to China, USA and Japan appear to be difficult to find, or sources of information are very poor at this stage. Morozov (2000) estimates that for certain valuable species exported in China illegal logging arrives at 50% to 70% of the exported volumes.

A detailed investigation was conducted by BROCs on a two-year project "Building Capacity in NGOs in the Russian Far East and Siberia to monitor illegal logging operations and the timber trade", funded by the EU (http://www.forestsmonitor.org/). The aims of the project have been to strengthen the capacity of environmental NGOs in the Russian Far East and Siberia to play an active part in documenting the many forms of illegal logging and trade that are prevalent in these areas, and to use the information to lobby authorities at the district, regional, national and international levels to address illegal and unsustainable harvesting and export of Russia's forest resources.

The project has described in very detail and with impressive quantity of empirical data which are the main features of trade between Russian Far East and Siberia with China, Japan, Korea, and other Asiatic countries. Even though, the report contains valuable information, there is no estimation of how much of the timber traded with China or Japan is illegally cut.
Box 7.1 Summary box illegal logging and trade

- For all RF, estimates of the share of the illegal timber in the exported volumes vary between 10 to 35%.
- Illegal logging in export from NW Russia to EU amounts to 10%.
- Timber from Far East Russia traded with China may be illegally logged in much higher proportion.
- Lack of estimates for the proportion of illegal logging in export with China, Japan and USA.
8. DRIVERS BEHIND ILLEGAL LOGGING

There are two basic perspectives on identifying the illegal logging causes: one taking into account the basic motivations/reasons of illegal logging behaviour (teleological perspective, described by Bromley 2001), and a second, the factor or context-based perspective.

In the teleological perspective, the final causes of illegal logging are the rent seeking behaviour and the rural poverty.

In the first case, criminals, individuals and companies, act by deception or force to over-harvest deliberately and capitalize on gaps in legislation, while in the second case rural population over-exploits local forests, for the need of fuelwood (Pepke 2004) and mainly for sale to cover livelihood needs.

In the factor or context based perspective, the causes of illegal logging are identified in specific features of the institutional system that will allow or not allow people to trespass the law.

Close to the teleological perspective, Morozov’s report for the WWF (2000) identifies three causes of the illegal logging in Russia: rent seeking behaviour, poverty, and lack of law enforcement (report on www.forest.ru). The report claims that, due to the rent seeking behaviour, there are some most heavy criminal regions (Caucasus, Far East and Southern Siberia), export destinations (Turkey, China) and type of the forest products (valuable hardwoods), where the part of the illegal timber can reach more than 50-70%.

Secondly, poverty leads to mass public illegal activity, such as poaching. According to Morozov’s report, illegal logging to fulfil local needs is serious in some regions, but compared to the scale of legal and pure criminal logging it is of less importance. Greenpeace\(^4\) found, however, that there are some 8 to 10 million m\(^3\) of timber cut annually, which is not registered officially and which is supposed to represents the volume of forest cuttings carried by the local population.

Other reports consider the motivations of illegal logging, and the contextual factors as a whole. Thus, officials from the Russian Federal Forest Agency (Roshchupkin 2006) classify together the main causes and factors of illegal logging as following:

- Socio-economic factors: Sustained internal and external demand; High profits generated by illegal logging; Jobless population in forested areas; Low incomes of population; decline of the non-wood forest industry. Formerly, the industry of non-timber and non-marketable forest products used to be a significant source of income for forest-dependent communities in producing ecological-sound goods for domestic and international markets.
- Legal factors: Inadequate forest, penal, administrative, and customs legislation; Lack of effective enforcement practices.
- Inter-sectoral and sectoral factors: Inadequate assessment of forest resources; Poor control over the use of forest resources; Poor tracking of wood movement from the logging site to the consumer; Lack of interagency cooperation to prevent illegal logging and associated trade.

\(^4\) http://archive.greenpeace.org/forests/forests_new/html/content/reports/russian_felling.PDF
Box 8.1 Summary box drivers for illegal logging

- Illegal logging seems to have rent-seeking behavior as main driver.
- Huge law trespassing opportunities exist, e.g. lack of enforcement, monitoring mechanism, and widespread corruption, and bureaucracy.
- Poverty of rural population impacts also on the volumes illegally logged, but it can be considered of low significance.
9. EXISTING POLICIES AND INTERNATIONAL COMMITMENTS RELEVANT TO ILLEGAL LOGGING

Russia has committed itself to the Europe and North Asia Forest Law Enforcement and Governance (ENA-FLEG) process. In November 2005, Russia hosted a Ministerial Conference in St. Petersburg. As a commitment to the process, in December 2005, an Agency order set up the conditions and procedures for establishing a national action plan (Order of Rosleskhоз dated 14 December 2005 No.333 On Development of National Action Program of the RF to Improve Forest Law Enforcement and Governance, quoted by FFA, 2006), followed by the Instruction of the Russian Government in 2006 (26 January 2006 No. АЖ-П 9-233). A “Programme of measures on combating of illegal logging and trade in RF” (МФ-П9-821) was adopted in February 2007 by the Chairman of the Government of the RF. The main sections of the programme are:

- Guaranteeing of normative and legal regulation in the sphere of prevention of illegal logging and trade
- Organizational measures directed for forest protection and prevention of illegal logging and trade
- Improvement in regulation of export of timber goods
- Development of international cooperation in the field of prevention of illegal logging and trade.

In the last chapter, the programme strives to ensure participation of the RF in Intergovernmental negotiation process on ENA-FLEG process; and to ensure cooperation with Japan in the framework of Joint Commission on Environment Protection.

Russia is also a member of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) convention on the protection of the wildlife since 1992. NGOs argued to include some valuable tree species like Korean pine, linden and other endemic species from Ussuri taiga into the appropriate list of CITES. Often such demands have not been implemented by the authorities (Anatoly Lebedeev, personal communication).

RF commitments to fight illegal logging, should be interpreted from the perspective of interest that the investors started to put on forest industry (see the forest wars period). The private sector development can benefit from illegal logging up to a certain extent, but there is a break even point when illegal logging undertaken by competitors can lead to unfair competition and also hampers the sector’s image on the international markets. Thus, one of the drivers of movement towards coping with illegal logging may be the State interest to encourage investment in the sector (as confirmed by the duties on export as well). Particularly in the context of first entries of Russian companies on the global markets.

Box 9.1 Summary box international commitments

- There is a high level governmental commitment to implement policies to fight illegal logging, e.g. Russian initiative on St Petersburg meeting of ENA-FLEG.
- Evolution towards less illegal logging and trade should be analysed in the perspective of the political calendar, with elections at the end of 2007.
- Efforts are made from officials (Federal Forest Agency) in the problem identification.
10. LEGISLATION RELEVANT TO FORESTRY

The forest legislation consists of the Forest Code of January 2007, other federal laws, and laws of the Subjects of the RF. The main laws regarding the forest sector are listed in Table 10.1.

Table 10.1 Legal acts regarding the forest sector

<table>
<thead>
<tr>
<th>Field</th>
<th>Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest management</td>
<td>Federal Laws:</td>
</tr>
<tr>
<td></td>
<td>- The constitution of the RF, accepted by national voting of 12.12.93.</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 09.10.92 No. 3618-I: About protection of the</td>
</tr>
<tr>
<td></td>
<td>constitutional authorities in the RF</td>
</tr>
<tr>
<td></td>
<td>- Forest Code of the RF (2007)</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 02.01.00 No. 28-FL: About the state land cadre</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 18.06.01 No. 78-FL: About organisation of the</td>
</tr>
<tr>
<td></td>
<td>use of land</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 25.10.01 No. 136-FL: Land code</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 25.10.01 No. 137-FL: About implementing the</td>
</tr>
<tr>
<td></td>
<td>Land Code of the RF</td>
</tr>
<tr>
<td></td>
<td>- Civil Code</td>
</tr>
<tr>
<td></td>
<td>- Tax Code</td>
</tr>
<tr>
<td></td>
<td>Governmental Acts</td>
</tr>
<tr>
<td></td>
<td>- Standing orders of Federal Agency of Forestry. Passed by statutory</td>
</tr>
<tr>
<td></td>
<td>order of Government of RF on 16.06.2004 #283.</td>
</tr>
<tr>
<td></td>
<td>- Procedure of ranking the forests on groups of forests and protection</td>
</tr>
<tr>
<td></td>
<td>categories of forests of the first group. Passed by statutory order of</td>
</tr>
<tr>
<td></td>
<td>Government of RF on 15.09.1997 #1169.</td>
</tr>
<tr>
<td></td>
<td>- Standing orders of forest sites lease in RF. Passed by statutory order</td>
</tr>
<tr>
<td></td>
<td>of Government of RF on 24.03.1998 #345.</td>
</tr>
<tr>
<td></td>
<td>- Standing orders of free use of the forest sites. Passed by statutory</td>
</tr>
<tr>
<td></td>
<td>order of Government of RF on 18.02.1998 #224.</td>
</tr>
<tr>
<td></td>
<td>- Standing orders of use, protection of the forest and regeneration of</td>
</tr>
<tr>
<td></td>
<td>the forests previously owned by agricultural organizations. Passed by</td>
</tr>
<tr>
<td></td>
<td>- Regulations of sale of standing wood in the forests of RF. Passed by</td>
</tr>
<tr>
<td></td>
<td>statutory order of Government of RF on 01.06.1998 #551.</td>
</tr>
<tr>
<td></td>
<td>(Revised on 24.09.2002).</td>
</tr>
<tr>
<td></td>
<td>- Regulations of conversion the forest areas to non-forest areas for</td>
</tr>
<tr>
<td></td>
<td>the purposes not connected with forestry management. Passed by statutory</td>
</tr>
<tr>
<td></td>
<td>- The Red Book of RF. Passed by statutory order of Government of RF on</td>
</tr>
<tr>
<td></td>
<td>- Logging rules for different regions</td>
</tr>
<tr>
<td></td>
<td>- Standing order of environmental impact assessment</td>
</tr>
<tr>
<td></td>
<td>Ministerial Documents</td>
</tr>
<tr>
<td></td>
<td>- Procedure of prosecution the forest sale by auction. Order of Federal</td>
</tr>
<tr>
<td></td>
<td>Forestry Service of Russia from 11.08.1997 # 99.</td>
</tr>
<tr>
<td></td>
<td>- Procedure of prosecution the forest sites tenancy by competition. Order</td>
</tr>
<tr>
<td></td>
<td>of Federal Forestry Service from 30.09.1997 # 123.</td>
</tr>
<tr>
<td></td>
<td>- Forest sites use for the purpose of hunting. Message of Rosleskhoz from</td>
</tr>
<tr>
<td></td>
<td>20.02.1998.</td>
</tr>
<tr>
<td></td>
<td>- Arrangement of the object of forest inventory. Order of Rosleskhoz from</td>
</tr>
<tr>
<td></td>
<td>15.01.1998 #7.</td>
</tr>
<tr>
<td></td>
<td>- Procedure of forest inventory and list of inventory documentation</td>
</tr>
<tr>
<td></td>
<td>concerning the forests not included to the forest fund. Order of</td>
</tr>
<tr>
<td></td>
<td>Rosleskhoz from 15.07.1997 #94.</td>
</tr>
<tr>
<td></td>
<td>- Procedure of calculation the allowable cut volume (for final cut) in</td>
</tr>
<tr>
<td></td>
<td>state forests of Union of Soviet Socialist Republics (USSR). Approved</td>
</tr>
<tr>
<td></td>
<td>by board of State Committee of Forestry (USSR) on 26.02.1987 #4.</td>
</tr>
<tr>
<td></td>
<td>- Regulations of resin tapping and harvesting the raw materials for</td>
</tr>
<tr>
<td></td>
<td>wood chemistry in the forests of RF. Order of Rosleskhoz from 29.12.1993</td>
</tr>
<tr>
<td></td>
<td>#347.</td>
</tr>
<tr>
<td>Field</td>
<td>Legislation</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>- Regulations of registration, keeping, filling out and issuance to forest user the felling licenses, orders and forest tickets. Order of Ministry of Natural Resources of RF from 12.08.2003 #729.</td>
</tr>
<tr>
<td></td>
<td>- Procedure of state accounting of forest fund. Order of Rosleskhoz from 30.05.1997 #72.</td>
</tr>
<tr>
<td></td>
<td>- Sanitary regulations in the forests of RF. Order of Rosleskhoz on 15.01.1998 #10.</td>
</tr>
<tr>
<td></td>
<td>- Criteria and indicators of sustainable forest management in RF. Order of Rosleskhoz on 05.02.1998 #21.</td>
</tr>
<tr>
<td></td>
<td>- Procedure of economic evaluation of forests. Order of Federal Forestry Service of Russia from 10.03.2000 #43.</td>
</tr>
<tr>
<td></td>
<td>- Strategy of preservation of rare and threatened species of animals, plants and fungi. Order of Ministry of Natural Resources of RF from 06.04.2004 #323.</td>
</tr>
<tr>
<td></td>
<td>- Evaluation of influence of planned economic and other activity on environment in RF. Order of State Ecological Committee of RF from 16.05.2000 #372.</td>
</tr>
<tr>
<td>Environmental</td>
<td>- The law of the RF 19.12.91 No. 2060-I: About preservation of the environment</td>
</tr>
<tr>
<td>protection</td>
<td>- The new RF Water Code adopted 3 June, 2006, and come into force on 1 January 2007</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 24.04.95 No.52-FL: About fauna</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 14.03.95 No. 33-FL: About especially protected natural territories</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 04.05.99 No. 96-FL: About protection of free air</td>
</tr>
<tr>
<td></td>
<td>- The federal law dated 10.06.01 No. 92-FL: About special ecological programs for the rehabilitation of the radiation-polluted sites and territories</td>
</tr>
<tr>
<td></td>
<td>- Order of the Government of May 23, 2001 # 725-p: On the List of State Nature Strictly Protected Reserves (zapovedniki) and National Parks to be Organized at the Territory of the RF in 2001-2010</td>
</tr>
<tr>
<td>Transportation</td>
<td>- The code of an internal water transport of the RF dated 07.03.01 No. 24-FL</td>
</tr>
<tr>
<td></td>
<td>- Rules of railroad cargo transfer (governmental)</td>
</tr>
<tr>
<td></td>
<td>- Civil Code</td>
</tr>
<tr>
<td>Timber processing</td>
<td>- The Forest Code of the RF (2007)</td>
</tr>
<tr>
<td></td>
<td>- State standards and technical conditions on timber and non-timber forest products (NTFPs)</td>
</tr>
<tr>
<td>Exports</td>
<td>- The federal law dated 18.07.99 No.183-FL &quot;About export control&quot;;</td>
</tr>
<tr>
<td></td>
<td>- The customs code of the RF dated 18.06.93 No. 5221-I</td>
</tr>
<tr>
<td></td>
<td>- The law of the RF dated 21.05.93 No. 5003-I : About custom tariffs</td>
</tr>
<tr>
<td></td>
<td>- Governmental Resolution #158 increasing export tariffs on round wood, March 24, 2006</td>
</tr>
</tbody>
</table>

Sources: [http://www.ibcinfo.co.uk/newsletters/Russian%20Newsletter%20January%202007.pdf](http://www.ibcinfo.co.uk/newsletters/Russian%20Newsletter%20January%202007.pdf)  
SmartWood Interim forest management evaluation standard for Pskov Oblast, Russia, 2005: [http://www.balticdata.info/russia/russia_legislation.htm](http://www.balticdata.info/russia/russia_legislation.htm)  
[http://cabri-volga.org/DOC/Cherepovets/AllEGs/RF_EUWater%20Directives_rev_01.doc](http://cabri-volga.org/DOC/Cherepovets/AllEGs/RF_EUWater%20Directives_rev_01.doc)  

The 1997 Forest Code was inconsistent with the budgetary and land legislation, and ambiguous regarding the local forest management units’ dual role of forest guards and forest managers (Dieterle & Kushlin 2004). The 1997 law also failed to provide proper incentives for new investments to make use of a bigger part of the forest resources. The 1997 legal and institutional framework favoured perpetuation of predominantly discretionary and short-term allocation of forest leases, which failed to guarantee to
new investors a secure and transparent long-term access to forest resources. Yet, the
system preserved a forest utilisation favourable to the small businesses that helped
poor forest communities to access forest resources. The excessively prescriptive and
rigid character of subsidiary forest regulations has become a disincentive against
introduction of new, economically effective, technologies of forest management and
harvesting that are demanded by the global consumer markets (Dieterle & Kushlin
2004). Furthermore, large-scale clear-cut in environmentally fragile forests were
avoided, and no major environmental disasters occurred in time when both companies
and forest service agencies were extremely weak.

In the new forest code from 2007, the responsibilities for forest management are
delegated towards entities within the RF (in number of 88, 21 Republics, seven kras,
48 oblasts, one autonomous oblast, ten autonomous okrugs and two cities of federal
jurisdiction (Moscow and Saint Petersburg). However, the way in which regional forest
management structures will be organised is still not finalised on the national level.
Diverse regional models, which will need further regulations to implement the Forest
Code, are being developed. As the forest law has already entered into force, forest
management and the overall governance of forest and their natural resources,
including timber, water, NTFPs, minerals, and biodiversity, is likely to be chaotic until
this happens (TRN 2007). As an example, illegal logging cases are reported to have
doubled in Kirov Oblast, since the new forest code was adopted beginning this year,
compared to the same half-year period in 2006. Damages from the violations
amounted to approximately USD 4 million, which is 2.4 times the damages during the
same period last year (information distributed by the Russian news agency Regnum,
based on the data from the Ministry of Internal Affairs, and quoted in Greenpeace
Russia, 2007). According to some sources, in the Far East some leskhozes are trying
to make as much profit as possible before the transformation of the system is
implemented. Until December 2007, they have issued unlimited volumes of logging
permits for “maintenance” logging in restricted zones. According to such sources, it
appears that no authority is able to stop the “maintenance” logging, since leskhozes
have lost their authority and responsibility. (Anatoly Lebedev, personal
communication).

Previous to the forest Code from 2007, timber harvesting was regulated by forest rent
agreements concluded between the leskhoz, a forest management organization
representing the State, and the forest lessee (forest operator). Also, the harvesting
has been carried out based on the results of forest auctions. The leskhoz was
delivering a felling permit, giving the right to start timber harvesting. In the new
regulation valid from the beginning of 2007, the harvesting is based on forest rent
agreements or forest stands purchase agreements. The person using the forests
should submit annually a Forest Declaration to the public authorities or local self-
governance bodies. The existing rent agreements and logging permits are phased out
and streamlined with new laws (TRN 2007). In essence, the forest operator should not
wait anymore for the issuing of the felling permit, he can start forest harvesting, and
report to the authorities afterwards how much was cut.

In summer 2007, there were intensive discussions going on, involving participation of
officials, forest industries and NGOs about establishing new rules of logging. For
instance, The Public Forest Council of the Russian Federal Forest Agency held a
meeting July 12 to discuss the new Logging Stipulations. The meeting gathered
representatives from Forest Industry and Exporters Union, forest companies like Titan-
Lesprom, Ilim, Investlesprom, and research organizations. Previous to the meeting,
the NGOs provided already their position in a public letter. They are concerned mostly
with the low level of environmental restrictions on the harvesting activities.

To create a more competitive environment in forest harvesting, the government of the
RF issued an order (22 June 2007, n. 395) that establishes the maximum volume of
timber that can be logged by an individual, or a group of individuals, within an
administrative division of the RF. This amount equals to 35% of the total AAC for all
lesnichestva and lesoparks (http://forestforum.ru/upload/upload/Competition.doc). Generally, the new Code in combination with the new hard export tax policy is based on the hope of the government that investments into timber processing and shift of management authority to the regions will solve the problems. Nevertheless, there are doubts about the real capacity of Russian industry to compete in global markets, and about the availability of skilled labour for high tech processing facilities required to ensure the proper development of the industry.

Box 10.1 Summary box legislation

- Obviously, the legislation in place before the new forest code was too rigid and strict, yet ineffective in coping with illegal logging.
- The new Forest Code of January 2007 attempts decentralisation of forest management, at the level of the regions. This requires rules for implementation which are absent at present time.
- Transition is the legislative frame is in short run harmful for sustainable forest management.
- The new Forest Code attempts to enhance competition and a business friendly environment.
- Consultation of stakeholders as new mode of forest governance is included in the new Forest Code as well.
11. ENFORCEMENT CAPACITY AND EFFECTIVENESS

The main institutions involved in monitoring and control of the legality of forest uses in the RF are (Figure 11.1):

- Federal Service for Environmental Supervision (Rosprirodnadzor): has tasks to be responsible for the conservation of forest resources and state control over their use.
- FFA (Rosleskhoz): is presently involved in monitoring the use of forest resources.
- Rostransnadzor: Improving the system of control and economic security compliance when logging, transporting, selling and processing forest products.
- General Prosecutor’s Office of RF: Strengthening control and supervision over law enforcement agencies.
- Forest Agencies in Territorial administrations and governments: organizing and coordinating activities for combating illegal logging and associated trade.
- Federal Service for supervision in wildlife use and habitat protection (Rosselkhoznadzor).

Recent measures of monitoring forest resources can be summarized like this: Under the new code, government officials across the country are required to survey existing timber resources and a create system of cadastre census of the forest lands with mapping out woodland boundaries by the end of this year. Due to the difficulty of this task, the Natural Resources Minister proposed to push back the deadline until the end of next year (2008). In a Cabinet meeting from July, the ministers said that only woodlands already surveyed can be made available for development (The Moscow Times, Timber Producers Edgy As Customs Duty Looms, May 25, 2007 Friday)\(^5\).

Juridical system enforcement: Illegal harvesting constitutes around 90% of all officially registered forest-related abuses (Ministry of Natural Resources of the RF 2003). Around 20% of all forest-related abuses are turned over for investigation, 16% taken to court and 3% are found guilty (WWF & Taiga Rescue 2002). For example, a total of 24 847 cases of illegal logging were registered in 2002, only 3 621 cases were turned over the court investigation (EFI 2005). In order to take a case to court, the person’s guilt should be proved as a criminal case, and this is possible by the legislation only if the impact is proved and assessed as exceeding a certain sum. Otherwise, all such cases are a subject of Administrative Code punishment by the municipal Administrative Commission, and only a modest fine is the only penalty. Furthermore, in the case of forestry violations the guilt must be proved according a protocol fulfilling the Regulations of Goskomleskhoz of USSR issued in 1986. If the protocol is followed incorrectly it looses its legal power. Ignorance of these instructions is a reason why cases are often turned down (Korelskiy 2001, quoted in EFI 2005).

---

\(^5\) “As usual in Russian governance practice, new system of the forest management which came with the new Code was apparently targeted to increase profits from the forest use, however, none in government was able to draft the whole comprehensive legal system of regulations BEFORE the Code was adopted. They thought it’s very simple and may be done in half a year, but practically even two years before 2009 will be obviously only beginning of creation and practical testing of the new system of relations and management in the forest complex” (Anatoly Lebedeev, personal communication).
The aerial and space monitoring technologies are now being employed in a number of regions with developed timber harvesting, and the Federal Forest Agency plans to expand the systems to include all harvested areas by 2007. Some sources claim that, it is broadly known that all the illegal logging sites are perfectly known by the local foresters, which always have some share from that illegal income (Anatoly Lebedev, personal communication). In addition to spotting illegal loggers, the technology is intended to help monitor forest fires. The EFI study assessed the accuracy of the satellite analysis through field-measurements and concludes that there is a systematic overestimation of 9.2% of clear-cut area measurements by satellite-analysis in comparison to actual field-measurements.
Export formalities. Current official requirements do not appear to constitute a major obstacle for export of wood from unknown sources, mainly for two shortcomings: The current paper-based system for issuing logging licenses seems vulnerable to forgery and fraud, and also makes verification of licenses tedious and time-consuming. Secondly, for export formalities the logging license is needed as proof of origin for obtaining a phytosanitary certificate. However license documents are not routinely verified for their authenticity. The effectiveness of official requirements could be improved by switching from a strictly paper based system of license issuing and recording to an electronic one. Such a system would be less susceptible to forgery or fraud and also allow more regular validity checks for licenses by public authorities (e.g. phytosanitary and customs authorities). It could also assist the track of origin systems of private companies (EFI 2005). The system is however very costly and it is very unlikely that the funding to implement the electronic tracking system will be made available.

Certification. Major domestic players like Ilim Pulp and APPM have increased their certification efforts in recent years. Also, most Western companies operating in Russia are choosing to source certified wood as part of rigorous chain-of-custody and procurement programmes. Whilst Russia has ambitious aims in regard to certification, for the time being, the trend toward greater use of certified materials will likely be driven by those operators who export regularly to the West and Japan (PWC 2006). As regards to suppliers of raw logs to China, they never meet any such obstacle: the issue here is to bring as much raw logs as possible to feed huge processing industry, developed over the past ten years on the North-East China. Certification is not required by Chinese wood buyers.

FSC certification (forest management and/or chain of custody), too, is based on an evaluation of systems and compliance checks within the framework of regular audits, rather than permanent control of operations. Forest experts recommend a system build on proper procedures verified by supervision rather than a very costly and primitive attempt to monitor all operations all the time (Tönisson, personal communication). Currently the FSC-certified forest area amounts to around 2% of the total forest area in the NW region (EFI 2005). In total Russia, according to United Nations Economic Commission for Europe - Food and Agriculture Organization (UNECE-FAO), less than 3% of Russia's commercially accessible forests were certified by mid-2006, compared to over 30% in North America and over 50% in the EU/European Free Trade Association (EFTA) area. On the other hand, there is a steep increase in certified forests in Russia. Forest areas certified under the FSC jumped exponentially from 350 000 ha in 2003 to 7.36 million ha by the end of 2005, including 1.6 million ha in Siberia. Almost 99% of certified area is located in European Russia. By November 2006, the certified area had grown to 12.8 million ha. It is estimated that by the end of 2007, 25 million ha will be certified to FSC standards in Russia (www.panda.org). FSC certification has it limits in efficiency, e.g. the questionable certification of firm Terneyles which violated a set of core environmental restrictions on Samarga lease in Russian Far East. But violations will be discovered in the course of repeated field visits and monitoring.

Box 11.1 Summary box enforcement mechanisms

- A variety of enforcement mechanism exist, within the private and public sector
- Regulatory, classical mechanism such border formalities, recording violation, use of criminal law seems to have little influence in the fight against illegal logging
- Trends towards more effective mechanism such new techniques of aerial observation, auditing systems, certification, etc., it is hampered for instance by the unclear set of rules regarding the forest management
- Voluntary FSC certification has made impressive progress in Russia within the last years
12. CURRENT LOG TRACKING SYSTEMS

The importers of timber from Russia generally do not operate in the country, with the exception of thousands of Chinese operators very active in Siberia and Far East. During the last ten years these companies have been established in 100% Chinese owned as well as joint timber trade ventures.

In European Russia, importers have long-term co-operation partners, e.g. Stora is purchasing all timber from Russia through its sister company. The reason is that it would be quite risky to purchase timber from Russia being a foreign company. The Russian forest logging and primary timber processing sector is quoted as a risky sector, because of the legislative inconsistencies, perceived political risks, bad publicity due to the “forest wars”, underdeveloped infrastructure, and unsecured concession or lease agreements (PWC 2006). For a foreign company, it will be difficult to adapt to the following risks: illegal logging, contract termination irrespective to the fault, need of paying bribes, having less timber than paid, etc.

The decline of Russian forest and timber market operators after the Soviet era under all the crisis and restructuring measures was profitable for Chinese wholesalers, who care less for legal or environmental limitations. The Chinese companies do not invest in Russia, they do the business in Russia themselves. This means they buy at low price and re-sell by the higher price with a good profit outside Russia (Anatoly Lebedev, personal communication).

About 75% of the timber volume imported from NW Russia into the EU is covered by a proprietary tracking system that is either certified to ISO 14001 or EMAS registered. In theory, these systems explicitly include provisions to exclude illegal material, which provides an adequate level of assurance that only legal timber is handled. Unless negligence or worse is assumed within the process of issuing these labels, it may be stated that existing systems seem to be effective in achieving the tasks for which they were designed (EFI report, 2005). However, in reality it remains doubtful how well the tracking can avoid illegal timber as long as no independent verification is implemented.

The StoraEnso log tracking system is based on the following main elements (EFI 2005):

- Geographic information system (GIS)-based mapping of supply areas.
- Possibility to trace origin of wood based on individual harvest site.
- Keeping track of wood consignments (including volume data) from harvest site until it is taken into possession by Stora Enso (including keeping track of railroad loading and transport).
- Internal audits by the supplier and audits by Stora Enso.
- External audits (ISO 14001 and EMAS).

UPM has developed an award winning system for tracing the origin of imported wood. The system is based on three main elements:

1. A statement of origin
2. Database and GIS mapping program
3. Audits in the country of origin

The system requires that the wood suppliers provide the specific origin of the felling area, down to map grid reference, prior to the start of deliveries. UPM then checks the information provided as part of field audits. At audit the trustworthiness of the statement of origin and the legality of harvesting can be assessed, as well as evaluating the suppliers overall responsibility in environmental and other key areas. The boundaries of felling areas and felling licenses are also checked as part of the site visit. Each year, UPM carries out 100 to 150 felling site checks covering about 80% of...
the volume delivered from Russia to UPM-Kymmene's mills (www.upm-kymmene.org).

Also IKEA is in possession of auditing schemes throughout the world, and have developed their own verification and audit procedures.

In the Russian-Chinese timber market, dominating on the Russian Far East no serious prospective concerned to the legal compliance may be found up to now. Although there are some ambiguous State announcements from China about measures to stop entrance of the doubtful wood to Chinese market, the reality of booming Chinese economy and its demand in timber appears as a much stronger factor. It is pushing regular operators to ignore whatever may slow down their export of raw logs to China. On the Russian side it obviously results in a sustained illegal timber market.

Box 12.1 Summary box current log tracking systems

- European timber importers are looking for log tracking systems that would argue the existence of a corporative responsibility towards the preservation of Russian forests.
- Chinese timber importers do not practice a log tracking system, except those currently used for trade purposes.
- NGOs involvement and more ecologically oriented consumers' behaviour in Europe are likely to push towards monitoring, improvement and reinforcement of private log tracking systems in place.
- A third party certification/verification is most appropriate to ensure transparency and accountability of log tracking.
13. SCOPE OF LEGAL TIMBER PRODUCTION

Considerable income from the forest export stimulates forest felling both legal and illegal. The majority of companies, particularly Asian, buying wood from Russia either does not take interest in the origin of the timber they buy, because they think that it should be a Russian concern only (www.forest.ru). The incentive to such real interest may come from the producer of final consumer products anywhere in the EU, which needs to check all the custody chain from the very origin - wherever it is located.

The Russian Government, after the Greenpeace action in 2000 in Japan and raising the issue to G8 on Okinawa, started a program to fight illegal logging. New means such as remote sensing were used since 2005. First on 7 subjects in the RF and up to 18 subjects in 2007 or more than 110 million ha covered. From the political side, there is a commitment to increase legal timber production in the country. Things can be different in the private sector, and particularly this may be true in the context of the increased timber export taxes.

The increase in FSC certified forests shows, however, a tendency by the private sector to increase legal production. There may be a risk that the development of certification will lead to a shift of trade towards the Russian Far East borders, where corruption will make easy the export of logs, using false certification documents created in NW or in Moscow (Anatoly Lebedev, personal communication).
14. CAPACITY TO INCREASE LOCAL PROCESSING OF TIMBER

The new export duties create a situation in which exports of roundwood, sawnwood and plywood/veneer are made expensive by export tax but no restrictions apply to processed products. The RF increased the taxes with the aim to trigger local processing of wood. However, the result may easily be that next year the export of 50 million m³ will be not possible, because of the price. This measure thus appears to be the equivalent of a total prohibition of the selling of roundwood based products in the country. This may be in favour of the internal demand, since the domestic market of the wood products is developing rapidly.

Nevertheless, “foreign timber producers are not rushing to establish processing facilities in Russia before prohibitive new customs duties on raw timber take effect”, stated the First Deputy Prime Minister Sergei Ivanov quoted in The Moscow Times from May 25, 2007. Finnish and Swedish timber producers have not come in droves to invest in Russian processing plants, Ivanov said at a Cabinet session dedicated to the industry. Russia has yet to implement its new Forestry Code, which came into force at the start of the year, or make the new rules clear to potential investors, he said (The Moscow Times 2007b). However, executive vice-president of Finnish timber producer StoraEnso, which is building a new packaging plant south of Moscow, said it was looking at possible further investments in the country. The company praised the new Forestry Code, saying it gives companies better opportunities for securing unprocessed timber (The Moscow Times 2007b). Another company expanding in NW Russia is IKEA. Swedwood International, subsidiary of Swedish furniture giant IKEA’s, has agreed with regional authorities in the Republic of Karelia about the construction of a new plant. The plant will be the extension of an existing plant in Kostomuksha, a town on the border to Finland. A total of 500 people will work in the plant when completed, Stolica.onego.ru reports⁶.

The issue of timber export tariffs was in the center of a meeting between the Finnish Prime-minister and Russian Prime-Minster in Helsinki, at the end of June 2007. According to the declarations after the meeting (Helsingin Sanomat 2007) the Russia Federation is ready to lower import tariffs on wood processing technology as a way of encouraging Finnish investments in the Russian forest industry. Also, Russia has made legislative changes aimed at easing foreign investments into the forest industry.

As to Chinese investments, they came to the Russian Far East long ago as different, mainly small businesses set up. During last 5-7 years, tens of Chinese small sawmills appeared all over the forest settlements in Siberia and Russian Far East, and now Russian middle size timber businesses are developing processing facilities with Japanese, European and Chinese equipment independently on the governmental tax policy. This was awaited and desired in the region for many years. Some big investments projects with Chinese partners of pulp mills are on the table and in the process now in the region, but mainly regional companies started in the processing earlier, not thanks to the state, but rather in spite of the official policy (Anatoly Lebedev, personal communication).

Box 14.1 Summary box capacity to increase local processing of timber

Yet there is incentive to increase the local processing, the perspective of sharp increase of local processing is unclear, because of huge effort in money, infrastructure and human resources needed to process 200 million m³ per year. Moreover, this effort has to be done in a very short timeline.

---

15. **ESTIMATE THE “BENEFIT” OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATIONS (TAXES, FEES EVADED, ETC.)**

The benefits of illegal logging are explained at the level of the year 2003 for the Khabarovsk Krai region (Sheingauz, 2006). Left column shows a structure of expenses in legal logging, while the right column, the structure of expenses in case of illegal logging.

It should be noticed also that the practice of illegal logging can be as well the result of a bureaucracy considered too demanding by the operator, therefore the benefits of illegal logging is due to the simplification of the procedures; or to the collusion to the power, giving advantage therefore to those operating in the grey or black markets which work in the proximity to the powerful elites.

**Box 15.1 Summary box benefit of illegal logging as opposed to legal operations**

The illegal logging operations may raise the profit by 30-40%, in eluding taxes, afforestation costs and social costs.

**Figure 15.1 Illegal and legal operations – the structure of costs**

Source: Sheingauz, 2006
16. BASIC DATA FOR ASSESSING THE ECONOMIC, ENVIRONMENTAL AND SOCIAL IMPACTS

16.1 Current Government Revenue from Forest Sector

The Russian forest sector has been one of the most important sectors in the Russian economy, providing 5% of the GNP and employment for 7% of the population (Maskina 2006). According to the Federal laws on the federal budgets for 2004 and 2005 all payments for final felling of wood according to a minimum prices were assigned to the federal budget. The payments for wood of final harvest above the minimum prices as well as the money received for other use were included in the budgets of subjects of the RF.

Of the total amount of all forest fees in 2005 is close to RUB 27 700 000 000, or USD 972 million. The payments for all types of forest use (mostly final harvest of wood) comprised 31% and for use of forest fund lands - 8.5%. The average stumpage price of 1 m³ of wood was RUB 57.3 or USD 2 in 2005 (Federal Service of Forest Management 2006, www.iiasa.ac.at).

Forestry income seems not to be very important in economic terms for the government. But for the local community livelihoods and people living in forests, the forestry income is extremely important. In other words, it is not the volume of the income which is important, but the ways of distributing timber revenues.

16.2 Current Employment in the Forest Sector

In 2005, the total amount of people working in forest management in Russia accounted for 165 000 persons of which 61 000 were workers, 51 000 were rangers (the lowest level of the State Forest Guard of Russia), and 10 000 persons were forest masters (technicians). The rest (44 000) were mostly represented by professionals and managers of state forest enterprises, as well as of other institutions of forest management and forestry. The overall average monthly salary comprised RUB 4 990 (USD 191) in 2005 (www.iiasa.ac.at).

The forest industry has one of the lowest average incomes, at only RUB 3 956 or 40% of average wage level in Russia in 2006 (MEDTRF 2007, Internet).

16.3 Current Access to Forests and Share of Benefits to Local Population

Today local residents are limited in their influence regarding the way forests are used. The access of forest communities to the forest resources depends on several factors, including the level of NGO activity in the area, level of corruption in the regional and municipal authorities, the tradition of resource use and accessibility of the forests by infrastructure.

In Russian Far East there are some situations when local forests are appointed by the regional or municipal authorities to Chinese companies for logging and processing, whilst locals have no jobs and have to harvest logs and NTFPs for subsistence. There are a couple of examples when local community members, evinced from getting a logging right, entered however on the forests to illegally log. (Anatoly Lebedev, personal communication).

16.4 Current Structure of Industries

The logging industry is dominated by small players. The industry consists of about 20,000 logging and harvesting enterprises, a substantial proportion of these companies are also exporters of wood (PWC 2007). The sawn wood sector is also
highly fragmented and dominated by small, independent mills. The larger sawmills are concentrated in the bigger cities all over Russia from NW through Siberia and Far East. In fact, many of the larger sawmills are owned by integrated groups (Table 2.1), which combine logging operations, pulp and paper production and often panel board production. The most concentrated industry is the pulp and paper sector, where three players account for almost 80% of the production: Ilim, Mondi and International Paper.

Table 16.1 Concentration of the forest industry

<table>
<thead>
<tr>
<th>Logging industry</th>
<th>Largest players</th>
<th>European players</th>
<th>Top five account for</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ilim Pulp Group, with facilities in the NW and central Siberia</td>
<td>- UPM - yearly wood procurement from Russia about 5 million m³</td>
<td>Less than 10% of the output</td>
<td></td>
</tr>
<tr>
<td>- Titan Group, based in Arkhangelsk on the Arctic</td>
<td>- Ikea Swedwood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mondi Business Paper, based in Syktyvkar northeast of Moscow</td>
<td>- StoraEnso</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Vologodskie Lespromshchenniki and Cherepovetsles near Moscow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Karemmasprom, north of St. Petersburg, near Segezha</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Continental Management, with diverse spread of smaller and medium-sized facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tyndales, Amur Oblast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Dallesprom, Khabarovsk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Amurski pulpmill, Khabarovski Kraj</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Khorski pulpminn, Khabarovski Kraj</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Les Export, Dalnerechensk (in the process of FSC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Teneiles, Plastun, Primorye</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Primorsklesprom-holding, Vladivostok</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Forest Star, Primorye</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Teneilestroy, Primorye – 120 000 m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sawn wood sector</th>
<th>Largest players</th>
<th>European players</th>
<th>Top five account for</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Titan Group, 330 000 m³ yearly, main supplier of APPM, one of Russia’s largest pulp and paper producers</td>
<td></td>
<td>5% of the output</td>
<td></td>
</tr>
<tr>
<td>- Lesozavod-2, part of Continental Management group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Teneilestroy, Lesozavodsk (Primorye)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Forest Star, Primorye</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Les Export and tens of other producers in RFE and Siberia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kronostar Group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel production</th>
<th>Largest players</th>
<th>European players</th>
<th>Top five account for</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Fibreboard – largest producer: Swiss Group Kronostar, based in Kostroma, with MDF plant in north of Moscow, output of 42 million m³ in 2005</td>
<td>- Fibreboard: 35% of the output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Plywood - largest producer: Fanpilt, also based in Kostroma</td>
<td>- Plywood: 40% of total output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- which is part of the Severstal group, whose major assets are in the steel industry, output 360 000 m³ in 2005</td>
<td>- Particleboard: 25% of output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Particleboard (chipboard) - largest producer: Permksiy FK, based in the Perm region (Urals Federal District), with 2005 output of 240 000 m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- And tens of other producers in RFE and Siberia</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pulp production</th>
<th>Largest players</th>
<th>European players</th>
<th>Top five account for</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ilim Pulp Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mondi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- International Paper</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: PWC 2006, with additions
16.5 Current Status of Corruption in the Forest Sector or in the Country (e.g. Transparency International Index ranking)

Corruption in Russia in general does not necessarily decrease, as found in the World Bank study, “Anticorruption in transition” (2006). Thus, corruption was seen as a bigger problem for business in 2005 than in 2002 in Russia. Also, Transparency International said in its annual Global Corruption Report released in May 25, 2007 that Russian authorities have increased their influence over the country’s judicial system over the past few years and have done little to tackle corruption in the courts. The Transparency International report, which focused on judicial corruption worldwide, singled out Russia and Argentina as countries where “erosion of international standards is evident.” (The Moscow Times 2007a).

Cases of corrupted forest official are mentioned by NGOs, several form being mentioned in the following quotation dated 2000:

“Overlogging by area is something that cannot be contained very often. Such over logging often takes place due to mistakes foresters make while allocating wood. The fact is that the forester gets paid dearly for such ‘mistakes’. The second variant is when the felling operation passes beyond the borders of the forest plot allocated for cutting. While cutting of one or several trees beyond the borders of the logging site is a common practice almost everywhere, illegal cuttings of larger amounts of wood are typical for those regions where volumes of logged timber are very large and for the regions situated far from the supervising agencies. For example, in 1998 in the Pervomaysky leskhoz we watched construction of a new road leading toward logging sites that have not been allocated, yet. The logging company that constructed the road at the same time picked up all trees fit for cutting in the range of 30 meters on both sides of the roads without any permission to do this. Judging by the way the logways in this region looked, such a practice is a general rule here. In the same region we encountered an occasion when a company paid a forester and logged wood 500 meters beyond the borders of its logging site. In several leskhozes of the Leningrad region we met a situation when timber logged over the officially permitted amounts, were given to foresters under a corresponding preliminary agreement in order to ‘build good relationships for the future’. According to our estimates, such overlogging reaches 1.5-2 million m³ annually. It is very difficult to discover such violations during independent checks because there is no access to the necessary forestry documents and because there is always a covert agreement between leskhoz officers and logging companies.” (Morozov 2000)

Box 16.1 Summary box economic data to assess the impact of options

- The forest sector income represents a small contribution to the budget.
- Most of the enterprises are of small scale, but international companies appear as well on the market; integrated activities are common.
- The most concentrated is the pulp and paper industry, with 80% of the production on only three main players.
- The forest salaries were in 2005 less than half of the average wage level in Russia.
- Local communities are kept away from decision making on using resource, and from benefits of the resource.
17. ASSESSMENT OF IMPACT

17.1 Causal Model – Impacts of Four Policy Options Inside the EU

The objective directly followed by the four policy options is to decrease the amount of illegal cut timber imported from Russia. All policy options could lead to this objective, but indirectly all of them will lead, into a greater or smaller extent, to an increase of the costs of monitoring and enforcement of the new rules.

An indirect positive effect of the application of one or of combination of the policy options will be an “ecologically-sound” benchmarking positioning of European forest industry on the global market.

Figure 17.1  Causal model – impacts of four policy options inside the EU

On the other hand, if the reduction of volumes imported from Russia will be significant, e.g. more than 10 to 15%, the EU will import timber from other timber supplying countries, and it is likely that these potential additional suppliers would be also countries with forest governance and illegal logging-related difficulties (higher pressure on forests elsewhere). Therefore, a slight increase in requirements concerning legality on raw material procurement would lead at best to a slight increase of timber prices (lower supply), at worst to a re-orientation of demand for timber substituting products when possible. An indirect positive effect may be also the opportunity for European forest owners to sell their timber at better prices, if the importation from Russia is significantly cut as a result of applying export taxes on roundwood).
17.2 Causal Model – Impacts of Four Policy Options on the Russian Forest Sector, Excluding Impacts of Foreign Trade Policies

Figure 17.2 Causal model – impacts of four policy options on the Russian forest sector, excluding impacts of foreign trade policies

The policy options should lead to an increased legality of exported timber. But the positive effects – improved image of the Russian forest industry, may be hindered by a reduction of prices on the internal market, due to the higher supply (effective monitoring system is assumed). The growing trend of the domestic markets may however cover the assumed 10 to 20% extra demand if illegal trade were cut. For regions depending on external forest-related trade, the introduction of the barriers to export (option 3), and the introduction of a State checking system (derived from option 1) signify lower income for forestry, at least on short time, but perhaps better opportunities for developing the forest sector (raw material input at lower prices). Again, if forest income again decreases, it may be possible that this results in a higher pressure on forests.
17.3 Causal Model – Impacts of Four Policy Options on the Russian Forest Sector, If Foreign Trade Policies Were Implemented

Figure 17.3 Causal model – impacts of four policy options on the Russian forest sector, including impacts of foreign trade policies

The implementation of export taxes as forecast will lead in short term at a collapse of timber prices, because the external market for roundwood material will not absorb the export anymore. The foreign trade policies by Russia are reinforcing the impact of the four policy options, and it is likely that whatever policy option is implemented, its effects will be at the beginning confounded in the effects of foreign trade policies: timber prices reduction, higher revenues for the State because taxes are paid and processing industry developed, better life for forest dependent communities (if State and local administration will invest the additional money from tax in rural areas). Monitoring costs and other costs-related to implementation will be lower with the implementation of export taxes, however, the main question about the legality of timber processed still remain, as far as part of the timber will be further exported as finished products in EU. A positive aspect is that foreign industries will have better facilities for monitoring the chain of custody (as operating closer to the Russian market, not via intermediaries).
Table 17.1 Likely impacts to occur in Russia if the four policy options implemented, and foreign trade measures progressing as forecast – an expert estimation, to be crossed with the results of the questionnaires

<table>
<thead>
<tr>
<th>-3: High negative impact</th>
<th>-2: Medium negative impact</th>
<th>-1: Low negative impact</th>
<th>0: No impact/I do not know</th>
<th>1: Low positive impact</th>
<th>2: Medium positive impact</th>
<th>3: High positive impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1: FLEGT VPAs</td>
<td>Option 2: Private schemes</td>
<td>Option 3: Border measures</td>
<td>Option 4: Prohibition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic impact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional costs for industrial players</td>
<td>-1</td>
<td>-1</td>
<td>-2</td>
<td>-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-border investment flows (EU to Russia)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close down business</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased availability of timber raw material</td>
<td>1*</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income of forest owner/administration</td>
<td>-2</td>
<td>0</td>
<td>-1**</td>
<td>-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income of forest workers</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition, businesses-sound milieu</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social impacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life in forest-dependent communities</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social welfare, social packages supplied by industry/State to local people</td>
<td>2***</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment in forestry sector</td>
<td>-1</td>
<td>0</td>
<td>-1</td>
<td>-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of local forest-based industry</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance and reduce corruption</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental impacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce illegal logging in Russia</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protecting HCVF</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Justification: none of the options are expected to lower the bureaucracy level in getting rights to harvest, neither to facilitate in any way the access to the resource (hampered by corruption, political pressure, fight between big and small companies); The impact is positive anyway, because when some illegal logging is stopped, some few more million of cubic meters will come on the market (millions, compared to 200 millions)

** The difference to option 1 is explained by the assumption that less resources will be spent by the public owner/administration in ensuring/monitoring the legality at the border, or abroad, compared to verifying all the chain of transport and trade in option 1. Of course, if considerable technical/financial assistance from EU is provided, the options may have the same assessment -1, except option 2, which is more “business like usual”.

*** The figure may appear optimistic, but reflects the assessment of Russian stakeholders interviewed.

A list of potential impacts was proposed to the participants of workshop meant to comment on the four policy option in St. Petersburg (10 October 2007, see Annex 1). They identified in fist place that the environmental impacts of implementing policy options will be highly positive. Also the social impact on improving governance and reduce corruption were underlined. In this latest case, opportunities for corruption may rise by the application of the policy options themselves, particularly for option one and three.

Border measure and prohibition of putting timber illegally logged in the EU market may have higher costs for economic agents. All in all, the policies will have a medium positive impact on the creation of a business friendly environment. The effect of policy measures on the forest owners’ income (forest administration) greatly varies, according to the owner and to the type of further regulation that the regions of RF will develop. Low or even medium negative impact will affect the salaries of the forest workers, as far as the increased legality of businesses is associated with more payments to the State, and lower salaries, or even loss of jobs in a fist stage.
In many cases, the policy option 2 (private sector measures) will have no negative impact on the economic activities, because the policy option is already implemented in some of the sensitive regions.

Table 17.2 Impacts likely to occur on stakeholders in Russia

<table>
<thead>
<tr>
<th>Option</th>
<th>Option 1: FLEGT VPAs</th>
<th>Option 2: Private schemes</th>
<th>Option 3: Border measures</th>
<th>Option 4: Prohibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest-dependent communities</td>
<td>Short term -2</td>
<td>Short term -1</td>
<td>Short term -1</td>
<td>Short term -1</td>
</tr>
<tr>
<td></td>
<td>Long term 2</td>
<td>Long term 2</td>
<td>Long term 2</td>
<td>Long term 2</td>
</tr>
<tr>
<td>Enterprises from the sector, local operators</td>
<td>Short term -3</td>
<td>Short term -2</td>
<td>Short term -2</td>
<td>Short term -2</td>
</tr>
<tr>
<td></td>
<td>Long term 1</td>
<td>Long term 1</td>
<td>Long term 1</td>
<td>Long term 1</td>
</tr>
<tr>
<td>Multinational and domestic holdings</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Forest administration inside the regional governments</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Trade companies and intermediaries</td>
<td>1</td>
<td>0</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Auditing, consultancy and other service providers</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Regional governments</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Organisations for nature conservation; civil society</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

The first beneficiaries of implementing the four policy options should be in medium and long run term the forest-dependent communities, under the assumption that better income for the State will be translated into more money for social investments in remote areas. Regional governments will have more income, while the income of industrial, multinational companies will increase as well, despite of additional efforts of monitoring the implementation. The situation will be worsening in short time for local, small operators, obliged to adapt themselves to the legality conditions (including payment of taxis, hiring employees on legal market).
18. REFERENCES


Burdin et al. 1998.


PWC. 2006b. Risks and Rewards Forest, paper & packaging in Russia, October 2006.


SmartWood. 2005. Interim forest management evaluation standard for Pskov Oblast, Russia.


Tönisson. Personal communication


Wikipedia.org, quoting Statement by John Lipsky, First Deputy Managing Director of the International Monetary Fund, Press Release No. 07/126.


WWF. 2004. Illegal logging in Northwestern Russia and export of timber products to Germany (June 2004).


Internet

EU-Russia Centre, source Internet, http://www.eu-russiacentre.org/


http://archive.greenpeace.org/forests/forests_new/html/content/reports/russian_felling.PDF
http://broc.arsvest.ru/base/1forest.htm
http://cabri-volga.org/DOC/Cherepovets/AllEGs/RF_EUWater%20Directives_rev_01.doc
http://forestforum.ru/upload/upload/Competition.doc
http://www.balticdata.info/russia/russia_legislation.htm
http://www.forest.ru
http://www.forest.ru
http://www.forestforum.ru
http://www.forestsmonitor.org
http://www.fsc.ru/
http://www.greenpeace.org/russia/en
http://www.icbinfo.co.uk/newsletters/Russian%20Newsletter%20January%202007.pdf
http://www.iiasa.ac.at
http://www.panda.org
http://www.taigarescue.org/
http://www.wfw.ru/forests/eng/.
SOME STAKEHOLDERS’ OPINIONS EXPRESSED DURING THE WORKSHOP HELD IN ST PETERSBURG, 10 OF OCTOBER

1. EU should stimulate all member countries to commit in reduction of illegal logging on equal terms. The position of some states, eg Great Britain, is ambiguous, sometimes they apply the EU Treaty, sometimes it seems this is not the case. Also, the EU should not consider only border countries for such issue (not only Russia), because there are eg South European countries importing timber illegally logged from very long distances.

2. There is a need for a law, a binding document that will oblige all EU countries to implement measures.

3. The EU should consider that there is a supply, but also a “demand” side. In this game there are two side players, the exporters of illegal cut timber, and the importers. Responsibilities are shared by the seller and by the buyer.

4. A combination of options presented will be the best way to proceed. Also, one should remember that the options have to evolved, and the solution today will not apply for the situation tomorrow.

5. The end of illegal logging will signify, at least on the short term, a worse life for the forest workers, because their firms will start to pay taxes, and by consequence, the salaries will be lowered. On the other hand, if there is no export of illegal timber, and the price of timber decreases, therefore the timber purchasers may be in a good position, it depends how much they will process the timber.

6. If there are less illegal cuttings, the State will have more money, because more firms will pay their taxes; thus, the State will have more resources to pay people in the villages, such staff working in educational or health systems. So, less illegal logging may be also better life in rural communities.

7. Environmental effects of more legal timber trade are all positive. If the laws are respected, a sustainable forest management is implemented.

8. The impact of concomitant process of increasing trade taxes should be considered in the analysis. Yet, the Russian forest industry has not the capacity to process all the timber produced in Russia.

9. Monitoring of legality by State or companies is costly, but necessary. Private companies should have advantages granted from the State for implementing monitoring systems. They can be facilitated by lower taxation or other financial incentives to practice auditing on the origin of timber produced or traded.

10. It is great that the foreign companies involved themselves in the auditing and checking of the timber origin. But it should be applied by all companies, not a voluntary process, because there are so many companies who do not check where the timber is coming from. The companies should provide, by law, a minimum of guaranties that prove that they are not using illegally cut timber.

11. In our region, our association of timber exporters is looking to implement monitoring systems to check timber origin. However, we cannot find support in the local authorities and administration, because there are a lot of people supporting Ilim Pulp Corporation. The firm is powerful. 30% of the timber they use is illegally cut; in the case of pulpwood, that may arrive at 60%. In these conditions, it is difficult to find a way to influence the process. Ilim Pulp was bought by International Paper: probably the new firm will be more interested in adopting measures against illegal logging.

12. Is the system practiced by the private companies to control legality reliable? They can check only the papers, on papers everything may be ok, but not necessarily in the field. Firms are doing their own monitoring system because is good for image, but it is not trustfully. If you want to discover illegal timber, you can. E.g., what about the tax? If a firm provides you with timber at cheaper prices because they will not pay tax, this timber is legal or not? If you want to find something, you will find it, this is a matter of willingness. A better system is the auditing by a third party. Our firm (from Arhangelsk region) pays early some EUR 5 700 on auditing (some RUB 150 000 on direct costs and some other 50 000 on indirect costs for auditing). From the eight enterprises we have, five are certified and the sixth is ongoing. 50% of our products are certified, and we want to increase this percentage. We have our own sawmills, but 90% of the sawmill production is for export, very few quantities are traded on the domestic market. From Arhangelsk, the transportation costs are too high for us for a profitable trade with roundwood.

13. Sometime Greenpeace or other ecologists exaggerate: if one enterprise cut timber in one area where since 40 years harvesting is done, how they can claim that this area, even if it is contingent with an old forest, represent “undisturbed” forests?

14. Border stop? The documents can be always provided, invented, modified, this is not a realistic measure. A better system should have government and private sector working together to fight illegal logging.
LIST OF PARTICIPANTS

List of participants to the workshop held in St Petersburg, 10 October

1. Lilia Shevlyakova, CJSC Lesosibirsk Sawmill No. 1, Krasnoiarski Krai, lshevlyakova@lldk1.ru
2. Tatiana Voronova, CJSC Lesosibirsk Sawmill No. 1, Krasnoiarski Krai, tsvoronova@lldk1.ru
3. Victoria Bezrukikh, Mondi Business Paper Syktyvkar, pulp and paper mill, modemgroup@mondibp.com
4. Serghei Pautov, Mondi Business Paper Syktyvkar, pulp and paper mill, mondigroup@mondibp.com
5. Ekaterina Osiyava, Mondi Business Paper Syktyvkar, pulp and paper mill, mondigroup@mondibp.com
6. Margarita Zemtsova, Ust-pokshengskii, Titan Group, arkhangelsk oao1px@atnet.ru
7. Alexandru Rudakov, CJSC Arkhangelsk Sawmill No. 3, Arkhangelsk, rudakov@arhldk3.ru
8. Dimitri Liubimov, Zelenenkovskoe Company, Arkhangelsk, rudakov@arhldk3.ru
9. Alexei Kholzhikin, NepCon, Syktyvkar, ak@nepcon.net
10. Natali Tchihlov, NepCon, Arkhangelsk, nt@nepcon.net
11. Tigran Martirosian, NepCon, Vologda, tm@nepcon.net
12. Vasili Bakaev, Irkutsk, Association of timber industry, baik-ltb@bk.ru
13. Andrei Letin, NepCon, Krasnoiarski Krai, apl@nepcon.net
14. Anna Nemchinova, University of Kostromskaia Oblast (region), neman@kmtn.ru
15. Constantin Rogov, Titan, Arkhangelsk, rogov@titans.ofu
16. Valeri Malchev, Forest Institute, Arkhangelsk, valgm@atnet.ru
17. Vladimir Soldatov, Krasnoiarski forest protection Center (government), soldatov@protect.akadem.ru
18. Serghei Moroz, Russian Branch of the WWF Global Forest and Trade Network, morozm@list.ru
19. Olja Golovina, Forest Academy of St Petersburg, olja.golovina@gmail.com

List of participants of the public hearings in Moscow, November 7, 2007

1. Kulikova Elena, WWF-Russia, ekulikova@wwf.ru
2. Vladimir Dmitriev, WWF-Russia, v.dmitriev@wwf.ru
3. Mikhail Kreindlin, Greenpeace-Russia, mkrendel@yandex.ru
4. Anna Yakovleva, Greenpeace-Russia, anna.yakovleva@ru.greenpeace.org
5. Alexey Yaroshenko, Greenpeace-Russia, aly@yandex.ru
6. Anna Komarova, Greenpeace-Russia, anna.komarova@ru.greenpeace.org
7. Mikhail Karpachevsky, Biodiversity Conservation Center, forest@biodiversity.ru
8. Andrey Ptichnikov, FSC-Russia, aptichnikov@yandex.ru
9. Alexey Grigoriev, IUCN-Russia, alexei.grigoriev@iucn.ru
10. Andrey Letin, NEPCon, apl@nepcon.net
Participants of the consultation representing WWF Russia, Greenpeace Russia, Biodiversity Conservation Center, FSC National Office in Russia, and Russian Division of the IUCN, have been informed by Mr. A.P. Laletin, a representative of the non-commercial organization NEPCon, on the consultation process and on the options of the potential measures within the FLEGT process to address trade in illegal timber products.

It should be noted that the Forest Law in Russia has been revised and updated: a new Forest Code has come into effect since 1 January 2007, over 60 governmental and agency regulations have been adopted or have come to a final stage in their development. However the new Forest Law lacks clarity and consistency and it allows for corruption. Therefore, we are afraid of a possible raise of corruption in the forestry, infringement of interests of the small business and of many workers and inhabitants of forested areas, with a follow-up increase in the level of illegal logging and other violations of the Forest Law. The new Forest Law makes it quite difficult to identify legal timber and to track its origin.

Below is our common view on the proposed options of potential measures to address trade in illegal timber products.

The only option that could lead to a decrease in import of illegally harvested timber and related timber products to the EU from the Russian Federation is the Option 4b. To make it most efficient, it is necessary to add it with the following:

- The EU within the FLEGT process should develop uniform requirements to the legal sources of timber in order to ensure an equitable approach to loggers in countries with a differing quality of the Forest Legislation.
- Russian Federation (RF) should develop clear and unambiguous national criteria for legal timber origin.

We consider Option 1 absolutely inefficient in terms of timber and timber products export from the RF to the EU. It is very likely to bring forth a corruption scheme, allowing officials “to use” funds allocated for VPA development, with no outcomes achieved. In order to legalize the scheme and to make it seem legal, it is quite probable that dummy organizations will be established mimicking the civil society, but that in fact are under control of certain interested bureaucrats.

Option 2 could be efficient only if it is used as an addition to the Option 4b. A disadvantage of the Option 2 is that it could be too expensive for the small business. A considerable obstacle for introduction of the Option 2 is corruption in the forestry sector. Besides, the standards for timber origin tracking, applied by the different market players, could turn out to be incompatible in terms of their quality and reliability.

Option 3 concerns just some aspects of trade in illegal timber and related products. In practice it would not address illegal logging, but it would contribute to legalizing illegal timber, for instance, by “making it look the same” at the wood stock markets and by substituting papers to go with it.

Option 4a would in no way address import of illegal timber and related products to the EU, since it supports the present status quo.

It should also be noted that the Questionnaire does not fully reflect the essence of the proposed options of potential measures. Some of questions are not very clear. The Questionnaire itself prefers some of options, for example, the Option 1, by giving it detailed clarifications and detailed questions. Besides the answers to the Questionnaire could be interpreted differently.

Therefore all the meeting participants express unanimous support for the Option 4b in the present Protocol and ask NEPCon and INDUFOR to bring the Protocol and the Questionnaire results to the notice of all stakeholders.
Communicating and Reconciling Forest Values

Markets and Society

Industrial Forest Products

Environmental & Social Services

Pulp & Paper Wood Products

Biodiversity

Environment

Policy and Institutions

Strategic and Landscape-level Planning

Sustainable Forest Management

INDUFOR

Töölönkatu 11 A
FI-00100 Helsinki, FINLAND

Tel.: +358 9 684 0110, fax: +358 9 135 2552
indufor@indufor.fi
www.indufor.fi
European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 7
Country Case Study on Vietnam

Helsinki
January 21, 2008
DISCLAIMER

Indufor makes its best effort to provide accurate and complete information while executing the assignment. Indufor assumes no liability or responsibility for any outcome of the assignment.

Copyright © 2008 by Indufor Oy
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, but not limited to, photocopying, recording or otherwise.
# TABLE OF CONTENTS

1. **BACKGROUND INFORMATION**
   1.1 General Institutional Framework in Forestry Sector  
      1.1.1 Public Administration  
      1.1.2 Professional Forestry Units  
      1.1.3 Industry Associations  
      1.1.4 Non-governmental Organizations  
   1.2 Forest Resources  
   1.3 Production and Timber Processing Capacity  

2. **TRADE FLOW**
   2.1 Export  
      2.1.1 General  
      2.1.2 Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement (VPA) Products  
   2.2 Import  

3. **ILLEGAL TIMBER PRODUCTION AND EXPORT**  

4. **MAIN DRIVERS BEHIND ILLEGAL LOGGING IN VIETNAM**  

5. **BENEFITS OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATION**  

6. **INITIATIVES TAKEN SO FAR TO COMBAT ILLEGAL FOREST ACTIVITIES IN VIETNAM**  
   6.1 International Commitments and Actions Taken So Far  
   6.2 Initiatives So Far Taken by Vietnam Government  
   6.3 Legislation in Vietnam  

7. **CURRENT FOREST LAW ENFORCEMENT SYSTEM AND ITS EFFECTIVENESS**  

8. **CURRENT STATUS OF LOG TRACKING IN THE PRIVATE SECTOR IN VIETNAM**  

9. **SCOPE TO INCREASE LEGAL TIMBER PRODUCTION**  

10. **SCOPE TO INCREASE TIMBER PROCESSING**  

11. **CURRENT CONDITION IN FOREST SECTOR OF VIETNAM**  
   11.1 Government Revenue from Forest Sector  
   11.2 Employment in the Forest Sector  
   11.3 Access to Forests and Share of Benefits to Local Population  
   11.4 Structure of Forest Industries  
   11.5 Status of Corruption in Vietnam  

12. **CAUSAL MODEL ON THE IMPACTS OF FOUR OPTIONS**  

13. **STAKEHOLDER VIEWS**  
   13.1 General Information  
   13.2 Option 1: VPA Scheme  
   13.3 Option 2: Private Sector Voluntary Scheme  
   13.4 Option 3: Broader Measures to Prevent the Importation of Illegally Harvested Timber  
   13.5 Option 4: Prohibition on the Placing of the EU Market of Illegally Harvested Timber  

13.5.1 Option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws of the Country of Origin 28

13.5.2 Option 4b: Legislation which Requires that Only Legally Harvested Timber and Timber Products Be Placed on the Market 28

14. LIST OF REFERENCES 29

LIST OF ANNEXES

Annex 1 Organizational Structure of Forestry Sector in Vietnam
Annex 2.1 Individual shares (%) of Export of Different Forest Products from Vietnam to Different Countries
Annex 2.2 EU Tropical sum of All Products (RWE) Imports from Various Countries
Annex 2.3 Major Destinations of Vietnam’s Export of Sawnwood, Roundwood, Plywood and Veneer Inside EU
Annex 2.4 EU Tropical Wood Manufactures (RWE) Imports from Various Countries
Annex 2.5 The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe
Annex 2.6 Individual Shares in Vietnam’s Import from Different Counties in Different Continents and Regions
Annex 2.7 Vietnam’s Sum of Import of All Forest Products from Different Countries Around the Globe
Annex 3 Tax Rates for Different Harvested Natural Forest Products in Vietnam
Annex 4 International Commitments and Actions So Far Taken to Combat Illegal Logging in Vietnam
Annex 6 Projection of Demand for Timber in Export-oriented Timber Processing Industries in Vietnam
Annex 7 List of Respondents to the Questionnaire Survey
Annex 8 Analysis of Questionnaire Responses

LIST OF FIGURES

Figure 2.1 Vietnam’s export of main forest products to various countries 5
Figure 2.2 Vietnam’s export of main forest products to EU countries 6
Figure 2.3 Vietnam’s export of roundwood, sawnwood, plywood and veneer to various countries 7
Figure 2.4 Vietnam’s import of forest products from different continents and regions around the globe 8
Figure 2.5 Vietnam’s import of forest products from various countries around the globe 8
Figure 9.1 Projection of timber demand in wood processing sector in Vietnam 16
Figure 9.2 Projection of sawnwood production and demand in wood processing sector in Vietnam 17
Figure 10.1 Projection of production and domestic consumption of and processing capacity for sawnwood in local forest industries in Vietnam 19
Figure 10.2 Projection of production and domestic consumption of and processing capacity for fiberboard in local forest industries in and export from Vietnam 19
Figure 10.3  Projection of production and domestic consumption of and processing capacity for particleboard in local forest industries in and export from Vietnam 20
Figure 10.4  Projection of plywood and veneer production, and processing capacity in local forest industries and domestic consumption in Vietnam 20
Figure 10.5  Projection of pulp production and processing capacity in local forest industries and domestic consumption for paper and paperboard in Vietnam 21
Figure 11.1  Distribution of net income from an illegal logging among its different actors 23
Figure 12.1  Casual model on the impacts of four policy options on EU 26

LIST OF TABLES

Table 1.1  Vegetation cover in Vietnam 3
Table 1.2  Growing stock in the forests of Vietnam 3
Table 1.3  Domestic wood production in Vietnam 4
Table 1.4  Value of domestic wood production in Vietnam 4
Table 11.1  Public sector revenue from the forestry sector in Vietnam in the form of taxes, fees and charges 22
Table 11.2  Employment in forestry sector in Vietnam 22
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>Association of South-East Asian Nations</td>
</tr>
<tr>
<td>CFM</td>
<td>Community Management of Forest</td>
</tr>
<tr>
<td>CoC</td>
<td>Chain of Custody</td>
</tr>
<tr>
<td>CPC</td>
<td>Commune People’s Committee</td>
</tr>
<tr>
<td>DARD</td>
<td>Department for Agriculture and Rural Development</td>
</tr>
<tr>
<td>DFID</td>
<td>Department For International Development, UK</td>
</tr>
<tr>
<td>DoF</td>
<td>Department of Forestry</td>
</tr>
<tr>
<td>DPC</td>
<td>District People’s Committee</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Investigation Agency</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>FAC</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FGLG</td>
<td>Forest Governance Learning Group</td>
</tr>
<tr>
<td>FLEG</td>
<td>Forest Law Enforcement and Governance</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade</td>
</tr>
<tr>
<td>FPD</td>
<td>Forest Protection Department of Vietnam</td>
</tr>
<tr>
<td>FPU</td>
<td>Forest Protection Unit</td>
</tr>
<tr>
<td>FSC</td>
<td>Forest Stewardship Council</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GFRA</td>
<td>Global Forest Resource Assessment</td>
</tr>
<tr>
<td>GFTN</td>
<td>Global Forest and Trade Network (WWF)</td>
</tr>
<tr>
<td>GOV</td>
<td>Government of Vietnam</td>
</tr>
<tr>
<td>GSOVN</td>
<td>General Statistical Office of Vietnam</td>
</tr>
<tr>
<td>GTZ</td>
<td>Deutsche Gesellschaft für Technische Zusammenarbeit GmbH</td>
</tr>
<tr>
<td>ha</td>
<td>hectare</td>
</tr>
<tr>
<td>HAWA</td>
<td>Handicraft and Wood Processing Association</td>
</tr>
<tr>
<td>IIEED</td>
<td>International Institute for Environment and Development</td>
</tr>
<tr>
<td>IUCN</td>
<td>The World Conservation Union</td>
</tr>
<tr>
<td>m³</td>
<td>cubic meter</td>
</tr>
<tr>
<td>MARD</td>
<td>Ministry of Agriculture and Rural Development, Vietnam</td>
</tr>
<tr>
<td>MDF</td>
<td>Medium Density Fibreboard</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
</tr>
<tr>
<td>NTFP</td>
<td>Non-timber forest product</td>
</tr>
<tr>
<td>PC</td>
<td>People’s Committee</td>
</tr>
<tr>
<td>PPC</td>
<td>Provincial People’s Committee</td>
</tr>
<tr>
<td>TFF</td>
<td>Trust Fund for Forests</td>
</tr>
<tr>
<td>TFT</td>
<td>Tropical Forest Trust</td>
</tr>
<tr>
<td>TNC</td>
<td>The Nature Conservancy</td>
</tr>
<tr>
<td>TRAFFIC</td>
<td>The Wildlife Trade Monitoring Network of WWF and IUCN</td>
</tr>
<tr>
<td>UK</td>
<td>The United Kingdom</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>USA</td>
<td>The United States of America</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>VN</td>
<td>Vietnam</td>
</tr>
<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreement</td>
</tr>
<tr>
<td>WB</td>
<td>The World Bank</td>
</tr>
<tr>
<td>WCMC</td>
<td>World Conservation Monitoring Center</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wide Fund for Nature</td>
</tr>
</tbody>
</table>
1. BACKGROUND INFORMATION

1.1 General Institutional Framework in Forestry Sector

1.1.1 Public Administration

The public forestry administration\(^1\) in Vietnam, which is extended from the state level at the top to the commune level at the bottom, is headed by the Ministry of Agriculture and Rural Development (MARD) (see Annex 1 for detailed organizational structure of the Forestry Sector in Vietnam).

Under its direct supervision, the MARD has two agencies, viz. Department of Forestry (DoF) and Department of Forest Protection to look after the whole forestry sector from the state level in the country.

The DoF performs the state management function on forest activities in the whole country. The department works with six sections:

(1) Administrative-General Section: This section takes care of organization, inspection and finance of the whole department.
(2) Planning Department Section: In addition to planning, this section looks after the science and international cooperation.
(3) Forestry Basic Inventory Section: This section, as its name suggests, looks after the forest inventory in the country.
(4) Silvicultural Section: This section looks after the silviculture and also forestry extension in the country.
(5) Forest Use and Management Section: This section, as its name suggests, is for looking after the forest utilization and management in Vietnam.
(6) Standing Section in Ho Chi Minh City.

The Department of Forest Protection in Vietnam undertakes the function of the state management on protection of natural forests ensuring appropriate law enforcement on forest management, forest protection and management of forest products in the whole country. Like the DoF, it operates with six sections:

(1) Administrative-General Section (Planning and Finance)
(2) Organization, Dissemination and Forces Build-up section
(3) Inspection and Legislative Section
(4) Nature Reservation Section
(5) Protection and Forest Fire Prevention and Extinguishment Section
(6) Information and Documentation Section

In addition, there are Forest Protection Technical Centers, which are directly controlled by the Department of Forest Protection.

Some other departments under the MARD notably the Department of Agriculture, the Department of Agriculture and Forest Product Processing and Salt Management, and the Department of Cooperatives and Rural Development are also linked to the forestry administration in Vietnam.

At the Provincial Level, the forestry administration is operated with three agencies, which are set up and placed directly under the Province People’s Committee\(^2\):

---

\(^1\) Key reference for this description is MARD 2007a.

\(^2\) The People's Committee is the executive arm of a provincial government (or district or commune level public administration), and is responsible for formulating and implementing policy. It may be considered as equivalent to a cabinet. The People's Committee have a chairman and a vice-chairman, and nine to eleven ordinary members.
1. Department for Agriculture and Rural Development (DARD) (through the Forestry Section);
2. Forest Development Branch, and
3. Forest Protection Branch

The Forestry Section of the DARD takes care of the management function of forestry activities in a province. Ideally each provincial DARD should have a forestry section. In some provinces, however, forestry sections are disbanded and merged with other sections\(^3\) of the DARD.

The forest development branches are established in those provinces where the DARD does not have a forestry section. Therefore, in a sense, these branches are substitutive to the forestry sections of the DARD. Such branches have been established in 27 provinces until May 2003.

There are forest protection branches in 58 provinces out of 61 in Vietnam. Until May 2003, the forest protection branches in 42 provinces were belonged to Province People Committee and in the rest 16 provinces to DARD. Since 2006, there is a policy in Vietnam to put the forest protection branches under the direct administration of DARD. However, this restricting has been done only in few provinces.

At the district level, the forestry sector is administered by the Agriculture and Rural Development Section, which is directly belonged to District People’s Committee (DPC) and District Forest Protection Station.

At the commune level, members of Commune People’s Committee (CPC) and local forest rangers are responsible for looking after the forestry issues. In each commune one member from the CPC takes care of forestry along with agriculture, water resources and rural trade issues.

1.1.2 Professional Forestry Units

To conduct forestry research, provide forestry education and training, and support the overall forestry administration, there are two forestry research institutes, one forest inventory and planning institute, one forestry university, three forestry secondary schools, five forestry vocational training schools and one agricultural and forestry highschool in Vietnam, which are under the direct control of the MARD. Agro-Forestry University in Ho Chi Minh city and Thai Nguyen Agro-Forestry University are under the control of the Ministry of Training and Education. Forestry studies are included in the curricula of Central Highlands University and Hue University. In addition, some high schools and secondary agro-forestry schools in some provinces, which are under the Ministry of Training and Education provide education and training forestry (MARD 2007a).

1.1.3 Industry Associations

The Vietnam Forestry Corporation and the Vietnam Paper Corporation together own about 400 state forest enterprises. There are also Central Forest Seed Company and system of companies, forest seed enterprises of different provinces and state enterprises operating on a public interest basis. In addition, there are system of wood and forest product processing enterprises belonging directly to the provinces and cities especially having forests in abundance (MARD 2007a).

\(^3\) Ideally the Department of Agriculture and Rural Development should have five professional sections including forestry.
1.1.4 Non-governmental Organizations

International non-governmental organizations (NGOs) and organizations like World Wide Fund for Nature (WWF), Greenpeace, The World Conservation Union (IUCN), Global Forest and Trade Network - GFTN (South East Asia), etc. and some local NGOs work in parallel to or association with the state forestry administration to combat illegal forest activities and forestry sector development in Vietnam.

1.2 Forest Resources

The total area of forest in Vietnam, as of year 2005, is 12,931 million ha which is about 39.72% of the total land area of the country. The natural forests including both primary and modified natural forests cover 10.24 million ha and the rest is covered with productive and protective plantations. The area of forest has been in gradual increase since 1990 due to the expansion of modified natural forests and plantation. However, the primary natural forests have been in gradual decline (Table 1.1). Besides forest, there are about 2.26 million ha of other wooded land in Vietnam. Therefore, the total vegetation cover in this country is about 15.19 million ha which constitutes about 46.67% of the total land surface of the country (FAO 2005).

Table 1.1 Vegetation cover in Vietnam

<table>
<thead>
<tr>
<th>Forest types</th>
<th>Area in different years (million ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Primary forest</td>
<td>0.384</td>
</tr>
<tr>
<td>Modified natural forest</td>
<td>8.012</td>
</tr>
<tr>
<td><strong>Sub-total of natural forest</strong></td>
<td><strong>8.396</strong></td>
</tr>
<tr>
<td>Productive plantation</td>
<td>0.664</td>
</tr>
<tr>
<td>Protective plantation</td>
<td>0.303</td>
</tr>
<tr>
<td><strong>Sub-total of plantation</strong></td>
<td><strong>0.967</strong></td>
</tr>
<tr>
<td>Total</td>
<td>9.363</td>
</tr>
</tbody>
</table>

Source: Adapted from FAO 2005

According to the Food and Agriculture Organization Global Forest Resource Assessment - FAO GFRA (FAO 2005), the total standing volume over the bark in the forests of Vietnam was 922 million m$^3$ in 2005 which included 850 million m$^3$ growing stock in the natural forests and another 72 million m$^3$ as commercial growing stock. The growing stock has been increasing gradually since 1990. However, the average growing stock$^4$ in the forests of Vietnam, which was 71.30 m$^3$ per ha in 2005, has been in gradual decline since 1990 (Table 1.2).

Table 1.2 Growing stock in the forests of Vietnam

<table>
<thead>
<tr>
<th>Categories</th>
<th>Standing volume over the bark (million m$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Growing stock in the natural forest</td>
<td>658</td>
</tr>
<tr>
<td>Commercial growing stock</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total growing stock</strong></td>
<td><strong>716</strong></td>
</tr>
<tr>
<td>Average growing stock (m$^3$ per ha)</td>
<td>76.47</td>
</tr>
</tbody>
</table>

Source: Adapted from FAO 2005

$^4$ Average growing stock = (total growing stock/total area of forest).
1.3 Production and Timber Processing Capacity

The total domestic wood production, which included both industrial roundwood and woodfuel, in Vietnam in year 2005 was 2.37 million m\(^3\) while it was 3.55 million m\(^3\) and 2.72 million m\(^3\), respectively in 1990 and 2000 (Table 1.3).

The total value of domestic wood production in Vietnam was about USD 40.93 million in 1990 but declined sharply to about USD 18.42 million over the next decade. The value continued to decline further since 2000 to finally reach to USD 16.94 million in year 2005 (Table 1.4).

Table 1.3 Domestic wood production in Vietnam

<table>
<thead>
<tr>
<th>Categories</th>
<th>Standing volume over the bark (million m(^3))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Industrial roundwood</td>
<td>0.345</td>
</tr>
<tr>
<td>Woodfuel</td>
<td>3.206</td>
</tr>
<tr>
<td>Total wood production</td>
<td>3.551</td>
</tr>
</tbody>
</table>

Source: Adapted from FAO 2005

Table 1.4 Value of domestic wood production in Vietnam

<table>
<thead>
<tr>
<th>Categories</th>
<th>Value of wood in USD million</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Industrial roundwood</td>
<td>21.21</td>
</tr>
<tr>
<td>Woodfuel</td>
<td>19.729</td>
</tr>
<tr>
<td>Total wood production</td>
<td>40.929</td>
</tr>
</tbody>
</table>

Source: Adapted from FAO 2005

There are more than 1,500 enterprises involved in timber processing in Vietnam. The total wood processing capacity of these enterprises is about 4 million m\(^3\) per year (WWF Launches...2005). The timber processing industry is growing very fast in Vietnam with the increase of the export of processed wood products. As a result, the wood processing capacity is also increasing.

\(^5\) About 2.1 million m\(^3\) come from plantation and the rest from natural forests.
2. TRADE FLOW

2.1 Export

2.1.1 General

Vietnam’s yearly total quantity of export of all forest products (round timber, sawnwood, plywood and veneer, boards, panels, wood chips for pulp and paper wood manufactures and wood furniture) is about 5.23 million m³. The highest share of this export, i.e. about 2.44 million m³, go to Japan. China appears the second biggest importer of Vietnamese forest products with an annual import of about 1.27 million m³, while the United States of America (USA) comes third with over 0.667 million m³ of import of forest products. European Union (EU) is the fourth biggest importer of Vietnamese forest product with a total yearly quantity of nearly 0.453 million m³. South Korea, Malaysia and Hong Kong are the other biggest export destinations of forest products from Vietnam (Figure 2.1; see also Annex 2.1).

Vietnam contributes about 1% of EU’s total import of all forest products (see Annex 2.2). Among the EU countries, the United Kingdom (UK) is the biggest consumer of Vietnamese forest products while France and Germany consumes the second and third highest amount, respectively. The other important export destinations of forest products from Vietnam in EU include Spain, Netherlands, Belgium and Italy (Figure 2.2).

Figure 2.1 Vietnam’s export of main forest products to various countries
2.1.2 Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement (VPA) Products

Vietnam's export of forest products to EU includes mainly boards, panels, wood chips for pulp and paper, wood manufactures and wood furniture. However, the export of VPA products, i.e. sawnwood, roundwood, plywood and veneer is very insignificant (Figure 2.3). Among the EU countries, UK, Belgium, Italy and Germany are the main importers of these four products from Vietnam (see Annex 2.3).

Vietnam supplies about 3% of the total demand of tropical wood manufactures of EU (see Annex 2.4). However, from Vietnam, the overall export of main forest products like paper, wood pulp, boards and panels, plywood and veneer, round wood and sawnwood, and tropical wood furniture to EU, Japan and the USA, the biggest importers of forest products in the world, is not substantial in comparison to other exporters of these products like Indonesia, Malaysia, and Brazil (see Annex 2.5).
2.2 Import

At present Vietnam’s yearly import quantity of all forest products is over 4.1 million m³. About three fourth (72%) of this import comes from the Asian countries, 11% from North America, 8% from EU countries, 6% from Latin America and the rest from Africa, Russian Federation and Balkans countries (Figure 2.4; see also Annex 2.6 for the individual shares in Vietnam’s import from different countries in different continents and regions).

According to Figure 2.5, among the individual countries around the globe where Vietnam imports forest products from, Asian countries dominate with Malaysia at the top satisfying 21% of the total import demand. Indonesia comes the second with a contribution to the total import demand of 15%, while Thailand is on the third place with 14% contribution. The USA takes the fourth place supplying 10% of the imports, while China and South Korea claims the next two places with 8% and 7% contribution to Vietnamese import demand for forest products, respectively (see also Annex 2.7).
Figure 2.4  Vietnam’s import of forest products from different continents and regions around the globe

![Pie chart showing Vietnam's import of forest products from different continents and regions around the globe.](chart1.png)

Figure 2.5  Vietnam’s import of forest products from various countries around the globe

![Pie chart showing Vietnam’s import of forest products from various countries around the globe.](chart2.png)
3. ILLEGAL TIMBER PRODUCTION AND EXPORT

It is estimated that 20% to 40% of total timber production in Vietnam is illegal (Seneca Creek Associates et al. 2004). However, there is no available estimate of how much of this illegal timber is converted into processed products in local processing units and later exported to EU, China, Japan and the USA.

In Vietnam the timber processing industry receives only 20% of its total timber demand from the local sources and the rest 80% is met with the import (Vietnam Economic Times 2007). If it is assumed, for simplicity, that timber-processing industry in Vietnam does not import any illegally produced timber from abroad and the estimate of illegal timber production for the whole country (20-40%) applies to the domestic supply of timber to the timber processing industry, only 4-8%6 of the total timber intake of Vietnam timber processing industry could come from the illegal sources. This implies that up to 8% of Vietnam’s export of processed timber products to EU, China, Japan and the US could be derived from illegally produced timber.

However, it is not practical to assume that there is no illegally sourced timber at all in Vietnam imports. A great portion of Vietnam’s timber import comes from countries like Laos, Malaysia, Thailand and Indonesia where there certainly are illegal timber productions and exports. Therefore, it is highly likely that there is a certain proportion in Vietnam’s timber import that originates from illegal sources. This proportion works toward increasing the proportion of Vietnam timber industry’s total timber intake from illegal sources and hence, proportion of export of processed timber products that originate from the timber of illegal origin.

---

6 Proportion of imported timber; 80% X proportion of imported timber that comes from illegal sources; 0% + timber comes from domestic sources; 20% X proportion that comes from illegal sources; 20-40%) / Proportion of total timber demand; 100 %) = 4-8%.
4. MAIN DRIVERS BEHIND ILLEGAL LOGGING IN VIETNAM

Listed below are the main factors which drive illegal logging and other illegal forest activities in Vietnam. These drivers are also relevant to most of Vietnam’s neighboring countries like Indonesia in South East Asia region.

- Corruption in the forestry and other sectors of economy in the country. This corruption not only allows the illegal logging to occur, but also help proceed these type of activities unchecked or unpunished. The corruption also causes the institutional, market and policy failures, which further augment illegal forest activities.
- Weak and/or under-resourced Forest Law Enforcement And Governance (FLEG). This allows creating patronage even at the top-level government administration for the illegal loggers.
- Weak and/or under-resourced financial auditing of public forest administration and enterprises.
- Corrupt and/or weak judiciary, which further weakens the law enforcement. As a result, major portion of illegal forest activities remain unpunished or under punished.
- Poor information management within the forest sector. There are insufficient data and information about illegal acts in Vietnam.
- Lack of clear directives in the Forest Policy of Vietnam to combat illegal logging.
- Poverty. It drives people to get involved in illegal forest activities.
- Fast growth of the timber processing industry in Vietnam. This causes the timber demand to exceed the legal supply limit and hence fuels the illegal logging especially when the law enforcement is weak.
- Weak system of control and monitoring to track the flow and origin of timber
- Heavy dependence on forest for firewood.
- Low salaries of public employees. Employees in Vietnam forest service, police and other law enforcing agencies are paid with low salaries. Therefore, it is often possible to convince them with bribe to act in favor of illegal loggers or to help them avoid more serious punishment if they are caught.
- High profitability of illegal logging compared to legal logging.
- High profitability of agriculture and other alternative land uses of forestry. For example, shrimp culture in Vietnam offers higher returns in a very short time. As a result, a large area of mangrove forest in the Vietnamese Mekong Delta has already been cleared, mostly illegally, to make shrimp ponds.
- Lack of consultation and involvement of the important stakeholders in formulating forest policies and imposing forest laws.
- Lack of a clear definition of what is legal and what is not in forestry. Conflicting and unclear legislation does not allow a clear distinction between legal and illegal forestry activities and products. Such legislations hinder recognition and suppression of illegal activities.
- Penalties for illegal activities are often proved too low and do not act as a deterrent.
- Lack of legislation, corporate accountability, verification and monitoring system to stop importing from Vietnam illegally produced timber or products derived from such timber.
5. BENEFITS OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATION

To establish a legal harvesting right over any forestland in Vietnam, a person needs to pay a number of fees and taxes. The taxes and fees are:

- Land use charge. It is paid only once when a person receives forestland from government. The charge is normally a certain percent of the market value of the forestland (Haughton et al. 2006).
- Tax on transference of land use right. It is paid to the government when a person obtains the user right of a forestland from another person. The tax rate is determined based on a government defined value of the forestland, which is normally lower than the market value.
- Forestland use tax. It is paid to the government annually. The rate of this tax is normally 4% of the total value of the forest products produced on that land.
- Harvesting quota fee. To get the harvesting quota, a person or an enterprise, who intends to harvest has to pay a certain amount of fee to the government based on the size of the quota.

Besides harvested natural forest products are subjected to tax in Vietnam. The tax rate is different for different forest products (see also Annex 3). It varies between 5% and 40% of real selling price of the unprocessed product (Yano & Phung no date).

In Vietnam, the first condition for a harvest to become legal is that the harvest must come from production forest. In addition, to keep a harvest legal in Vietnam, all of the above mentioned taxes and fees (before and after the harvest) must be paid in full and in time. A harvest will be illegal if anyone of these fees or taxes is not paid. Therefore, from monetary term, the benefit of illegal logging in Vietnam in comparison to the legal one is not paying anyone or all of the above-mentioned taxes and fees. It is estimated that the Vietnamese government loses at least EUR 5 million per year in tax revenue due to illegal logging (Tan et al. 2007). In other words, the total benefit of illegal logging in Vietnam compared to legal one in terms of not paying taxes is at least EUR 5 million per year.

In addition, there is an opportunity benefit of illegal logging in Vietnam. It has already been mentioned in the preceding chapter that in some parts of Vietnam people illegally clear forestland for agriculture (notably for growing coffee in hilly and mountainous region) and aquaculture (shrimp firm in the coastal area), which are more profitable land uses than legal forestry. The extra benefit, compared to legal forest operation, that people (could) get by doing agriculture and aquaculture on illegally cleared forestland is the opportunity cost of legal forestry. As the illegal logging is the mean to clear the forestland, where otherwise legal forestry operation would occur, for agriculture and aquaculture, the opportunity cost of legal forestry is the opportunity benefit of the illegal logging.
6. INITIATIVES TAKEN SO FAR TO COMBAT ILLEGAL FOREST ACTIVITIES IN VIETNAM

6.1 International Commitments and Actions Taken So Far

Initiatives taken so far by international organization to combat illegal logging and improve FLEG situation in Vietnam are listed below (see also Annex 4):

- Technical assistance services for strengthening capacity of the Vietnam Forestry Protection Department’s task force on forest violations under FLEGT. It is an initiative from the World Bank (WB) to be launched by the end of the year 2007.
- Strengthening voices for better choices enhancing forest governance in six key tropical countries in Asia, Africa and South America. It is an IUCN initiative.
- Component 2 of WWF GFTN project. This component aims to develop criteria and guidelines for the definition and verification of legal timber in Vietnam.
- Project on strengthening wildlife trade control in Vietnam by the Wildlife Conservation Society.
- Trust Fund for Forests’ (TFF) support to Forest Protection Department (FPD) to strengthen training curricula and delivery at forestry training centers for FPUs.
- FRR/ Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (GTZ) support to FPD to improve its database and information management on forest violations.
- Forest and trade network for legal and sustainable forest management in Africa and Asia by WWF International.
- Improving governance of forest resources and reducing illegal logging and associated trade with full civil society participations in East Asia by the Environmental Investigation Agency (EIA) and Telapak Indonesia.
- Custom modernization project in Vietnam by the WB.
- Regional processes for FLEG in Asia, Africa and Latin America by the WB.

6.2 Initiatives So Far Taken by Vietnam Government

The following are the actions taken by the government of Vietnam so far, which have direct or indirect application in combating illegal logging in the country:

- Vietnam Forest Development Strategy 2006-2020
- Decree on Organization and Function of Forest Protection Institution (Decree No.119 / 2006/ND-CP; promulgated by the Prime Minister of Vietnam on 16/10/2006)
- Instruction on Strengthening Information Technology Application to Forest Protection Force (promulgated by the Vietnamese MARD on 27/9/2006; Instruction No. 88/2006/CT-BNN)
- Decision on Police Dog Control Regulation to Protect Forest in the FPUs (promulgated by the Vietnamese MARD on 21/9/2006; decision No. 87/2006/QĐ-BNN)
- Decision regarding Regulation on Checking and taking over the Plantation Forest, Regenerated Forest, Plantation Forest Caring, Forest Protection, Zoning Natural Forest for Rehabilitation (promulgated by the Vietnamese MARD on 24 January 2005)
6.3 Legislation in Vietnam

The following are the legislation, which are or can be used to combat illegal logging in Vietnam either directly or indirectly:

- Law on Environmental Protection (1993)
- Land Law (1993)
- Ordinance on Natural Resources Tax (1993)
- Law on Criminal Procedures
7. CURRENT FOREST LAW ENFORCEMENT SYSTEM AND ITS EFFECTIVENESS

In Vietnam FPD is the prime forest law enforcing authority. It has the functions of protecting forests and assisting the Chairmen of People's Committee (PC) at all levels in exercising the state management over forests, ensuring the observance of forest protection and development of legislation.

To protect the state forests the government employs forest protector forces (in an average 1 person for 500 ha of special use forests, 1 person for 1 000 ha of protection forests). Forest owners can also protect their own forests by contracting forest protection to local households, individuals, communities or hiring professional guards to protect forests. Both government and forest owner employed forces, however, do not have any right to take legal action against the violators of forest protection system.

The forest protection agent (on duty), heads of FPU and mobile FPU teams, directors of sub-FPDs and the director FPD can take legal measures against violators of forest protection system mainly by imposing fines. The chairmen of CPC, DPC and Provincial People’s Committee (PPC) also have the same authority. Usually all forest crimes in Vietnam fall into the jurisdiction of trial of the district-level people’s court.

In each community, there is a person who serves as a specialized judge against the violation of customary principles and rules related to forestry. However, the traditional community leaders including village headman, land guardian, council of elders and family heads are responsible for the enforcement of the customary forestry principles and rules. The highest decision-making power belongs to the village chief and council of elders (Tan et al. 2007).
8. CURRENT STATUS OF LOG TRACKING IN THE PRIVATE SECTOR IN VIETNAM

Currently 141 private wood processing companies, out of just over 1,000, in Vietnam hold Forest Stewardship Council (FSC) certificate (www.fsc-info.org). The FSC certification process is used to ensure the legality of origin, i.e. the chain of custody (CoC), of timber that is used as material in these companies.

Public sector wood processing enterprises, i.e. state forest enterprises in Vietnam are also getting involved in the CoC certification process. The Tropical Forest Trust (TFT) with the assistance from some state forest enterprises has already drafted a Certification Action Plan for forests that are managed by the state forest enterprises. The Certification Action Plan recommends actions and activities to be addressed for ensuring sustainable forest management. The action plan proposes the sustainability to be verified by gaining FSC certification of these forests in the future (TFT 2006).
9. SCOPE TO INCREASE LEGAL TIMBER PRODUCTION

In Vietnam, only 20% of the total timber demand is currently met by the local forest resources. The rest 80% of the timber demand is met with imports making Vietnam one of the biggest timber importers in the world (Vietnam Economic Times 2007).

The number of wood processing enterprises in Vietnam is increasing. As a result, the total timber processing capacity and the timber demand in Vietnam is also increasing. It is projected that the demand for large timber, pulpwood, pit-porps and consequently the total timber demand will continue to rise over the next decade (Figure 9.1).

However, the domestic timber production in Vietnam is not growing as fast as the demand does despite the creation of large areas of plantation forests (through for example the 5 Million Hectare Reforestation Project). It is projected that the gap between the domestic sawn timber production (supply) and total sawn timber demand will further be widened by year 2020 (Figure 9.2). This implies that, if the domestic supply does not increase, Vietnam wood-processing sector has to further increase its level of dependence on timber import, which will push the timber processing cost further up.

The most feasible long-term solution to cut this dependence is to create more domestic sources of timber. Vietnam has immense potential to increase its domestic timber supply from legal sources. It has a vast area of about 6.76 million ha unused land, which covers about 18.59% of the total land surface of the country and mostly includes barren land on hilly and mountainous areas (MARD 2007b). These could be the potential land for establishing plantations through afforestation and reforestation with industrial timber species, and hence, the legal sources of industrial timber supply. Adequate planning, investment from both public and private sector, and cooperation among various sections of the timber production chain and from forest law enforcing body is of course required for this.

In addition, through applying better management and silvicultural techniques, and strict monitoring for protection and improving FLEG the productivity in and hence, the legal timber supply from the productive natural forests could also be increased.

Figure 9.1 Projection of timber demand in wood processing sector in Vietnam

Note: 2003-2005—real; 2010-2020—projection; figure generated using data presented in Annex 6
Figure 9.2  Projection of sawnwood production and demand in wood processing sector in Vietnam

Note: 2003-2005→real; 2010-2020→projection; figure generated using data presented in Annex 5
10. SCOPE TO INCREASE TIMBER PROCESSING

In year 2003 and 2005, the capacity of Vietnamese forest industries to process small and large timber to produce sawn timber, particleboard, fiberboard, plywood and veneer, and pulp was more than what was actually produced (Figures 10.1-10.5). This means that the local forest product processing industries in Vietnam had some unused capacities during that time.

It is projected that both processing capacity and production of sawn timber, particleboard, fiberboard, plywood and veneer, and pulp in the wood processing industries in Vietnam will continue to rise almost at the same rate in the next decade and the production will not exceed the processing capacity (Figures 10.1-10.5). Therefore, some processing capacities will always remain unused.

According to Figure 10.2 and Figure 10.3, the export of fiberboard and particleboard is projected to decrease by year 2020, although both processing capacity and production of both products, as already mentioned in the preceding paragraph, will continue to rise. The domestic consumption of both products is also projected to rise steadily over the next decade. The consumption of fiberboard will continue to be more than the projected production and the consumption of particleboard will be more than the projected production and processing capacity. This indicates that the increasing domestic consumption, not the export, is going to be the main driver to expand the production of, and also for the processing capacity for fiberboard and particleboard in Vietnam. This implies that, in case the export of fiberboard and particleboard from Vietnam declines or is even stopped, the forest industries will have scope and incentives to expand their production of and processing capacity for these two products in future if the domestic markets for them continue to expand.

According to Figure 10.1, the domestic consumption of sawn timber in Vietnam is projected to rise steadily over the next decade. The level of domestic consumption, which will be more than the production, is expected to exceed the processing capacity by the middle of the next decade. Gradually increasing trend in domestic consumption, with a level exceeding both production and processing capacity, is also forecast over the whole of next decade for plywood and veneer, and pulp and paper (and paperboard) (Figure 10.4 and Figure 10.5). This implies that the correlation between the domestic consumption, and production of and processing capacity for sawn timber, plywood and veneer, and paper and paperboard is positive. This means that the forest industries in Vietnam will have enough scope and incentives to expand their production of and processing capacity for these products in future in case the export of these products from Vietnam declines or is even stopped if the domestic demand for these products continue to increase.
Figure 10.1  Projection of production and domestic consumption of and processing capacity for sawnwood in local forest industries in Vietnam

Figure 10.2  Projection of production and domestic consumption of and processing capacity for fiberboard in local forest industries in and export from Vietnam
**Figure 10.3** Projection of production and domestic consumption of and processing capacity for particleboard in local forest industries in and export from Vietnam

![Graph showing particleboard production, processing capacity, and export from 2003 to 2020.](image)

*Note:* 2003-2005 → real; 2010-2020 → projection; figure generated from data presented in Annex 5

**Figure 10.4** Projection of plywood and veneer production, and processing capacity in local forest industries and domestic consumption in Vietnam

![Graph showing plywood and veneer production, processing capacity, and consumption from 2003 to 2020.](image)

*Note:* 2003-2005 → real; 2010-2020 → projection; figure generated from data presented in Annex 5
Figure 10.5  Projection of pulp production and processing capacity in local forest industries and domestic consumption for paper and paperboard in Vietnam

Note: 2003-2005—real; 2010-2020—projection; figure generated from data presented in Annex 5
11. CURRENT CONDITION IN FOREST SECTOR OF VIETNAM

11.1 Government Revenue from Forest Sector

According to the Vietnam Forestry Development Strategy 2006-2020, the contribution of forestry sector to national gross domestic product (GDP) is about 1%. However, the values of most of the non-marketed products and services of forest like values of upstream protection, environmental protection, genetic conservation etc. have been omitted from this calculation. If these values were considered; the contribution of forestry sector to national GDP would be more than 1%.

The total public sector revenue from the forestry sector in Vietnam in the form of taxes, fees and charges in 2004 was about USD 31.30 million (Table 11.1).

<table>
<thead>
<tr>
<th>Revenue in different years</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>In billion VN Dong</td>
<td>446.15</td>
<td>525.75</td>
<td>548.76</td>
<td>546.39</td>
<td>541.46</td>
</tr>
<tr>
<td>In USD million</td>
<td>23.49</td>
<td>28.53</td>
<td>29.98</td>
<td>30.63</td>
<td>31.30</td>
</tr>
</tbody>
</table>

11.2 Employment in the Forest Sector

The forestry sector in Vietnam is an important sector in terms of providing employment. In 2000, the sector provided employment to 0.21 million people in production of primary forest goods and provision of forest services (Table 11.2). In 2004 the forest industry sector, together with the agriculture and fisheries sector, provided jobs to about 24.52 million people which was about 60% of the total employment in Vietnam (GSOVN 2007).

There are 1 500 wood processing enterprises in Vietnam which employ about 0.70 million workers. In addition, small-scale timber art handicraft and non-timber forest product trading enterprises which are based mainly in rural areas provide employment to another 0.30 million people (Thanh 2007). The wood processing industry in Vietnam still needs about 120 000 additional skilled workers (Vietnam Economic Times 2006).

<table>
<thead>
<tr>
<th>Employment in forestry sector in Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Production of primary goods</td>
</tr>
<tr>
<td>Provision of services</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: FAO 2005

11.3 Access to Forests and Share of Benefits to Local Population

In Vietnam, forests and forestry activities are important sources of income for the people, particularly the people from ethnic minority groups. For example, in Bac Can Province low income households earn about 32.8% of their total income from forestry activities, while the proportion is 16.8% for the high income households. In the Central Highlands, the forestry activities contribute 17% and about 40% of the total income of the low and high-income households, respectively (MARD 2007).
Households and individuals in Vietnam can lease or get allocated with the forestland from the state and are allowed to operate some services in the forests and derive benefits from those services. The benefits include the harvesting of non-timber forest products (NTFPs), collection of dead branches for fuel, bamboos and timber through selective cutting. Forest owners also get a share of after tax timber products sales income.

Households and individuals can also be contracted by the state to restore the forests through regeneration or plantation. In this case, the contracted households and individuals are provided with state funding for plantation, restoration, protection and regeneration. In addition, they are allowed to harvest NTFPs like flowers, fruits, oil and resin, or to use a certain portion of non-forested forestry land for agriculture and aquaculture. They can also do selective logging on such forests and get a share of timber benefit after paying the taxes.

The benefit sharing mechanism is quite different in case of forest plantations and varies from state to state. For example, in Thua Thien Hue province, 65% of the net benefit from plantations which are raised with state budget under programs like the 327 Program, the 5 Million Hectare Reforestation Program goes to the state, 3% to the CPC and the rest 32% to the households and forest owners who are involved in plantations (Tan et al. 2007).

Xuan and Thomas (2006) reveals that a household in Vietnam derives about USD 250 in a year from timber logging which could be legal or illegal. The study also reveals that a villager receives just 17% of the total net income of an illegal logging and the rest goes to migrant woodcutters, timber traders, middlemen and state officials (Figure 11.1).

![Figure 11.1 Distribution of net income from an illegal logging among its different actors](source: Xuan & Sikor 2006)

### 11.4 Structure of Forest Industries

At present there are about 1,500 timber processing and trading enterprises in Vietnam, which are mostly medium to large-scale enterprises. They export processed forest products to about 120 countries around the globe and earn a combined yearly
turnover of about USD 2 billion. In addition, they gather another USD 1 billion as turnover from the domestic market. This implies that the average yearly turnover of the timber processing enterprises in Vietnam is about USD 2 million. These enterprises employ about 0.70 million workers at present which means the average employment size in each enterprise is about 467 workers (Thanh 2007).

The total number of foreign timber and non-timber forest product processing and trading enterprises in Vietnam at present is 212, which own a total registered capital of about USD 400 million. This means the average capital size of foreign enterprises in Vietnamese timber industry is about USD 1.9 million.

In Vietnam, there are about 418 village based small enterprises, which produce art handicraft from timber. The number of similar enterprises, which process NTFPs, is about 713. The total turnover of the non-timber forest product processing sector is about USD 260 million (Thanh 2007).

11.5 Status of Corruption in Vietnam

According to the Transparency International Corruption Perception Index 2007\(^7\), the Vietnam ranks 123 out of 179. This implies that the degree of corruption among the public officials, which include people from public forestry sector, is quite high in Vietnam.

\(^7\) Available at http://www.transparency.org/policy_research/surveys_indices/cpi/2007 (last sighted on 1 November 2007).
12. CAUSAL MODEL ON THE IMPACTS OF FOUR OPTIONS

The four policy options\(^8\) are to prevent the importation or placing on EU market of illegally harvested timber or products derived from such timber. As an indirect effect as shown in the Model in Figure 12.1, these options also help to improve the image and acceptance of the EU forest industry sector to general public both inside and outside EU.

As the EU is a very important export destination of forest products of Vietnam, these policy options will directly affect Vietnam’s forest sector. If the VPA is adopted by Vietnam, and other three options successfully come in to force, Vietnam’s export of forest products to EU, and Japan and the USA will be reduced by 4 to 8 percent\(^9\). To cope with this reduction the EU will have to increase its import of forest products by some percent from other supplying countries like Brazil, Malaysia and Indonesia, which will finally end up exerting more pressure on the forests of these supplying countries.

These four options may also make EU’s import of timber and other forest products from Vietnam and other countries a little bit more expensive than what it is now as their implementation incurs costs, for example in the form of monitoring. This rise in EU’s importation costs and the reduction of Vietnam’s forest products exports to EU may lead to a slightly increased demand for timber from domestic sources in countries like UK, Germany and France which have quite a heavy dependence on forest products from Vietnam. As a result, the timber prices in these EU countries may increase slightly which can possibly affect the EU forest sector in two ways. First, the timber harvesting may slightly increase in EU countries with dependence on Vietnamese forest products like France and Germany and second, profitability of forest owners in these countries may also increase slightly.

The increase in timber price in EU countries may also make the forest products market in EU more attractive to countries like Brazil, Malaysia and Indonesia exerting more pressure on their forests.

---

\(^8\) The four policy measures proposed by the EU to combat illegal logging are: (i) FLEGT VPAs; (ii) Private Sector Voluntary Schemes; (iii) Border Measures to Prevent Importation of Illegally Harvested Timber; and (iv) Prohibition on the Placing of the EU Market of Illegally Harvested Timber.

\(^9\) It is estimated that in Vietnam 4-8% forest products could originate from illegally produced timber. Please see Chapter 3 of this report for more information.
Figure 12.1  Casual model on the impacts of four policy options on EU

- **FLEG VPA**s
- **Private sector measures**
- **Border measures**
- **Prohibition on placing on the market**

**To prevent importation or placing on market of illegally harvested timber or products derived from such timber**

**Reduction in volume of import of illegal timber & products originate from such timber from Vietnam by 4-8%**

**Increase in costs of monitoring and implementation**

**Improvement in image / acceptance of EU forest industry**

**Increase in volume imported from other timber suppliers, e.g. Brazil, Malaysia, and Indonesia.**

**Slightly increase in timber prices in EU countries like UK, France & Germany**

**Slightly increase in timber harvesting in EU countries like France & Germany**

**Slightly increase in profitability to forest owners in EU (e.g. France & Germany)**

**Higher pressure on forest elsewhere? In Brazil, Indonesia & Malaysia??**

**Improvement in image / acceptance of EU forest industry**

**Source: Adapted from Bouriaud 2007**
13. **STAKEHOLDER VIEWS**

13.1 **General Information**

To assess the views of stakeholders in Vietnam concerning the acceptability of the four options, and potential leverage impact of these four options and also the FLEGT, a survey with a structured questionnaire was carried out involving 14 respondents. Among the respondents, five were from the MARD, four from NGOs and the rest five were from the private sector in Vietnam (also see Annex 7). They were asked whether they agreed or not to different propositions related to the four options and FLEGT, and to what degree they agreed or disagreed with each proposition. The degree of agreeance or disagreeance is measured with five options, viz. fully disagree, partially disagree, do not know, partially agree and fully agree. For the analysis of the results, the options are given weights of –2, -1, 0, 1 and 2, respectively and then weighted averages are calculated for each proposition. A positive weighted average means the overall agreeance while the negative means the overall disagreeance of the stakeholders over a proposition.

The full result is presented in Annex 8. According to the result, the four options are highly acceptable among the stakeholders in Vietnam. The stakeholders’ views regarding each of the four options are presented below.

13.2 **Option 1: VPA Scheme**

The stakeholders agree that the first option, i.e. the VPA scheme will leave positive impact on Vietnam forestry sector particularly in its fight against illegal logging. According to them, this option will help Vietnam to reduce illegal logging as due to this scheme illegal timber and products derived from such timber will be denied of entry to EU markets. They also think that this option will help Vietnam improve the image of its forestry sector to EU which will lead to increase in the export of legal forest products and fetch higher prices for Vietnamese products in EU markets. As a result of this increase in price and export quantity of legal products the loss in export revenue due to the reduction in illegal exports will be compensated.

Furthermore, in their opinion, the VPA scheme will leave some positive environmental, societal and governance related benefits in Vietnam. They highly agree with the proposition that the VPA will help not only to decrease the overall level of logging in natural forests in Vietnam but also to eliminate unlawful forest conversion, and unsustainable and wasteful harvesting practices associated with illegal logging.

The positive societal impacts that the stakeholders think will be resulted by the VPA scheme are helping Vietnam to ensure the welfare of forest-dependent people by securing the enforcement of existing regulations concerning distribution of benefits, access to non-wood forest products, protection of watersheds etc. and to improve work safety in logging and processing of timber. They also think that the VPA will help create more employment opportunities in the forestry sector in the long run although that in the short run may decrease due to the reduction in illegal logging activities.

The stakeholders highly agree that VPA will help make law enforcement more effective in Vietnam by providing technical assistance and capacity building and eliminate corruption by requiring transparency. In addition, they think this option will help make the court system more effective by providing technical assistance and capacity building.

However, they suspect that the VPA would only have a limited impact on Vietnam forest sector unless other major consumers such as Japan and the USA join the scheme. In their opinion, the limited impact may also result from the fact that it cannot effectively catalyze changes to factors underpinning illegal logging such as poor forest governance, poverty, corruption, inappropriate land tenure, etc.
In the end, they all generally agree that to make the VPA more effective the coverage of the licensing scheme should be expanded to all wood products (not only roundwood, sawn timber, veneer and plywood) and circumvention (passing goods through third countries) should be effectively prevented.

13.3 Option 2: Private Sector Voluntary Scheme

The stakeholders agree to accept this option as a cost-effective option, which is more efficient than the government led measures. However, they all are generally of the opinion that its voluntary nature makes it an insufficient measure. It is useful only when it is used as a complementary measure to other additional options.

13.4 Option 3: Broader Measures to Prevent the Importation of Illegally Harvested Timber

The stakeholders generally agree with the proposition that this option is based on a sound approach in the sense that it eliminates the possibility of circumvention through third countries. However, they suspect that it cannot be implemented because it contradicts World Trade Organization (WTO) rules requiring equal treatment for products originating from within and outside of the EU. They also suspect that this option will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably.

13.5 Option 4: Prohibition on the Placing of the EU Market of Illegally Harvested Timber

13.5.1 Option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws of the Country of Origin

This sub-option, according to the stakeholders in Vietnam, is based on a sound approach in the sense that the verification and tracking systems need to be developed only when they are needed i.e. in high-risk situations. At the same time, they think that it may unfairly discriminate against products from high risk countries because companies in these countries need to develop costly tracking and verification systems to prove legality, whereas companies in low risk countries may not need them.

13.5.2 Option 4b: Legislation which Requires that Only Legally Harvested Timber and Timber Products Be Placed on the Market

The Vietnamese stakeholders are of the opinion that this sub-option is too based on a sound approach in the sense that the burden of proof is on the private sector which has the necessary resources to provide evidence. But it may incur unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low. Moreover, it is sort of unfair a measure as its underlying assumption is that imported goods are illegal unless proven legal.
14. LIST OF REFERENCES

Bouriaud, L. 2007. Assessment of the impact of potential further measures to prevent the importation or placing on the market of illegally harvested timber or products derived from such timber: Country case studies-Russia (draft 23 October 2007). NEPCon.


www.fsc-info.org
Organizational Structure of Forestry Sector in Vietnam

National level
The Government

Ministry of Agriculture and Rural Development
- Forest Protection Department
- Forest Department
- Agricultural and Forestry Extension Department
- Department of Agro-forestry Product Processing and Rural Industries

Provincial level
Provincial People's Committee

Department of Agriculture and Rural Development
- Forest Section/ Sub-department
- Agricultural and Forestry Extension Center
- Section of Agro-forestry Product Processing and Rural Industries
- Forest Protection Sub-department *

District level
District People's Committee

Agriculture and Rural Development/ Economic Unit
- Forestry staff
- Agriculture Extension Station

Communal level
Communal People's Committee

Forest Protection Unit

Source: Tan et al. 2007
Annex 2.1

Individual Shares (%) of Export of Different Forest Products from Vietnam to Different Countries

Vietnam Exports to Various Countries (%)

- China
- EU
- Hong Kong
- Japan
- Malaysia
- Other
- South Korea
- Taiwan
- USA

Percentage based on:
- Roundwood
- Sawnwood
- Plywood & Veneer
- Boards & Panels
- Wood Pulp
- Paper
- Wood Manufactures
- Wood Furniture
Annex 2.2

EU Tropical Sum of All Products (RWE) Imports from Various Countries

- Brazil
- Paraguay
- Nicaragua
- Ecuador
- Guyana
- Cameroon
- Gabon
- Cote d Ivoire
- Congo
- Ghana
- Indonesia
- Malaysia
- Thailand
- Viet Nam
- India
- Other
Major Destinations of Vietnam’s Export of Sawnwood, Roundwood, Plywood and Veneer Inside EU

Vietnam Exports of Roundwood, Sawnwood, Plywood & Veneer to EU Countries

- Belgium
- Other EU
- France
- Germany
- Italy
- Netherlands
- Spain
- UK

cubic meters (RWE)

Legend:
- Vietnam Info
- Importer Info
Annex 2.4

EU Tropical Wood Manufactures (RWE) Imports from Various Countries

- Switzerland
- Norway
- USA
- Canada
- Brazil
- Ecuador
- Paraguay
- Guatemala
- Peru
- Cote d Ivoire
- Ghana
- Congo
- Cameroon
- Dem Rp Congo
- Indonesia
- Malaysia
- Thailand
- Viet Nam
- India
- Russian Fed
- Croatia
- Belarus
- Bosnia Herzg
- Ukraine
- Other
The USA, EU and Japan’s Import of Forest Products from Different Countries Around the globe

![EU Tropical Boards & Panels (RWE) Imports from Various Countries](image)

- EU
- Switzerland
- Norway
- USA
- Canada
- Brazil
- Cuba
- Venezuela
- Costa Rica
- Ecuador
- Ghana
- Gabon
- Kenya
- Cote d'Ivoire
- Tanzania
- Thailand
- Malaysia
- Singapore
- Indonesia
- Hong Kong
- Russian Fed
- Croatia
- Belarus
- Bosnia Herz
- Ukraine
- Other

cubic meters (RWE)
Annex 2.5

The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU, Japan & USA Tropical Boards & Panels (RWE) Imports from Various Countries

- Brazil
- USA
- Canada
- Cuba
- Venezuela
- Costa Rica
- Ecuador
- Ghana
- Gabon
- Kenya
- Côte d’Ivoire
- Thailand
- Tanzania
- Thailand
- Malaysia
- Singapore
- Indonesia
- Hong Kong
- Russia
- Croatia
- Belarus
- Bosnia Herzegovina
- Ukraine
- Other

The US
Japan
EU

cubic meters (RWE)

0 100 000 200 000 300 000 400 000 500 000 600 000 700 000 800 000

Switzerland
Norway
USA
Canada
Brazil
Cuba
Venezuela
Costa Rica
Ecuador
Ghana
Gabon
Kenya
Côte d’Ivoire
Thailand
Tanzania
Thailand
Malaysia
Singapore
Indonesia
Hong Kong
Russia
Croatia
Belarus
Bosnia Herzegovina
Ukraine
Other
Annex 2.5

The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU Tropical Paper (RWE) Imports from Various Countries

- Switzerland
- Norway
- USA
- Canada
- Brazil
- Columbia
- Mexico
- Nea Aisla
- Ecuador
- Sierra Leone
- Central Africa
- Gabon
- Indonesia
- Thailand
- Singapore
- India
- Hong Kong
- Russian Federation
- Croatia
- Belarus
- Bosnia Herzegovina
- Ukraine
- Other

Cubic meters (RWE)
The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU, Japan & USA Tropical Paper (RWE) Imports from Various Countries

- Switzerland
- Norway
- USA
- Canada
- Brazil
- Columbia
- Mexico
- Neth Antilles
- Ecuador
- Sierra Leone
- Cent Af Ri
- Cuba
- Gabon
- Mauritius
- Indonesia
- Thailand
- Singapore
- India
- Hong Kong
- Russian Fed
- Croatia
- Belarus
- Bosnia Herz
- Ukraine
- Other

The USA
Japan
EU
Annex 2.5

The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU, Japan & USA Tropical Plywood & Veneer (RWE) Imports from Various Countries

- The US
- Japan
- EU

The graph shows the cubic meters of tropical plywood and veneer (RWE) imports from various countries, categorized by importing regions (The US, Japan, and EU). Notable countries include Brazil, Guyana, Ecuador, Bolivia, Peru, Cameroon, Equatorial Guinea, Indonesia, Malaysia, and Thailand. The y-axis represents cubic meters (RWE) while the x-axis lists the countries. The data indicates the significant import volume from these countries to The USA, EU, and Japan.
Annex 2.5

The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU Tropical Roundwood (RWE) Imports from Various Countries

- Switzerland
- Norway
- USA
- Canada
- Brazil
- Paraguay
- Nicaragua
- Cuba
- Angola
- Gabon
- Congo
- Cameroon
- Dem Rep Congo
- Malaysia
- Myanmar
- Indonesia
- Philippines
- Sri Lanka
- Russian Fed
- Croatia
- Belarus
- Bosnia Herz
- Other

EU imports are indicated by a blue bar chart.
Annex 2.5

The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU, Japan & USA Tropical Roundwood (RWE) Imports from Various Countries

- The USA
- Japan
- EU

The USA, EU and Japan's import of forest products from different countries around the globe.
The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU Tropical Sum of RW, SW, P & V (RWE) Imports from Various Countries

- Brazil
- Paraguay
- Nicaragua
- Guyana
- Honduras
- Cameroon
- Gabon
- Côte d'Ivoire
- Congo
- Ghana
- Indonesia
- Malaysia
- Myanmar
- Singapore
- Thailand
- Other

Cubic meters (RWE)
The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU, Japan & USA Tropical Sum of RW, SW, P & V (RWE) Imports from Various Countries

- Brazil
- Paraguay
- Nicaragua
- Guyana
- Honduras
- Cameroon
- Gabon
- Cote d’Ivoire
- Congo
- Ghana
- Indonesia
- Malaysia
- Myanmar
- Singapore
- Thailand
- Other

cubic meters (RM)

0
2,000,000
4,000,000
6,000,000
8,000,000
10,000,000
12,000,000
14,000,000
16,000,000
18,000,000

Annex 2.5

The USA, EU and Japan's Import of Forest Products from Different Countries Around the Globe

EU Tropical Wood Furniture (RWE) Imports from Various Countries

- Switzerland
- Norway
- USA
- Canada
- Brazil
- Mexico
- Costa Rica
- Bolivia
- Columbia
- Ghana
- Colombia
- Zimbabwe
- Sierra Leone
- Madagascar
- Mauritius
- Indonesia
- Vietnam
- Malaysia
- India
- Thailand
- Russia
- Croatia
- Belarus
- Bosnia Herzegovina
- Other

© INDUFOR: ASSESSMENT OF THE IMPACT OF POTENTIAL FURTHER MEASURES TO PREVENT IMPORTATION OR PLACING ON THE MARKET OF ILLEGALLY HARVESTED TIMBER OR PRODUCTS DERIVED FROM SUCH TIMBER, Technical Report 7
Annex 2.5

The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe
The USA, EU and Japan’s Import of Forest Products from Different Countries Around the Globe

EU Tropical Wood Pulp (RWE) Imports from Various Countries
The USA, EU and Japan’s import of forest products from different countries around the globe
Individual Shares in Vietnam’s Import from Different Countries in Different Continents and Regions (Asian Countries)

Vietnam Sum of All Products (RWE) Imports from Asian Countries

- Malaysia
- Indonesia
- Thailand
- China M
- Korea Rep
- Other 4. Asia
Individual Shares in Vietnam’s Import from Different Countries in Different Continents and Regions (USA, Canada, Switzerland and Norway)

Vietnam Sum of All Products (RWE) Imports from Various Countries

- USA
- Canada
- Switzerland
- Norway
Annex 2.6

Individual Shares in Vietnam’s Import from Different Counties in Different Continents and Regions (Latin America)

Vietnam Sum of All Products (RWE) Imports from Latin American Countries

- Brazil
- Uruguay
- Costa Rica
- Chile
- Guyana
- Other 2. Latin America
Annex 2.6

Individual Shares in Vietnam’s Import from Different Countries in Different Continents and Regions (Former USSR and Balkans countries)

Vietnam Sum of All Products (RWE) Imports from Various non-EU European Countries

- Russian Fed
- Ukraine
- Georgia
- Belarus
- Croatia
- Other 5. Former USSR & Balkans
Annex 2.6

Individual Shares in Vietnam’s Import from Different Counties in Different Continents and Regions (African Countries)

Vietnam Sum of All Products (RWE) Imports from African Countries

- South Africa
- Mozambique
- Cote d’Ivoire
- Ghana
- Egypt
- Other 3. Africa

South Africa

Mozambique

Cote d’Ivoire

Ghana

Egypt

Other 3. Africa
Vietnam’s Sum of Import of All Forest Products from Different Countries Around the Globe
# Annex 3

## Tax Rates for Different Harvested Natural Forest Products in Vietnam

<table>
<thead>
<tr>
<th>Forest Product category</th>
<th>Sub-category</th>
<th>Tax rate (% of the real price of the unprocessed product)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw woods</td>
<td>Category I&lt;sup&gt;10&lt;/sup&gt;</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Category II</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Category III, IV</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Category V, VI, VII, VIII&lt;sup&gt;11&lt;/sup&gt;</td>
<td>15</td>
</tr>
<tr>
<td>Mine-pillar woods</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Woods used to make paper materials</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Foremast pillar woods</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Soaked woods</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>Branches, firewood</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Bamboos</td>
<td>-</td>
<td>10</td>
</tr>
</tbody>
</table>

*Source: Yano & Phung no date.*

<sup>10</sup> Category I is the best category wood  
<sup>11</sup> Category VIII is the worst category wood
Annex 4

International Commitments and Actions So Far Taken to Combat Illegal Logging in Vietnam

<table>
<thead>
<tr>
<th>Project theme</th>
<th>Implementing organisation</th>
<th>Project title</th>
<th>Project summary and objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research, analysis, capacity building and piloting</td>
<td>The WB</td>
<td>Forest Sector Support: FLEG Assessment 2006-2007</td>
<td>This work is funded by European Community (EC) and implemented by WB as one of three components of an EC support package for forestry in Vietnam. The FLEG component seeks to assist GOV in strengthening its overall approach to FLEG. This includes providing better assessment of existing challenges, development of options for policy reform, programmatic development and definition of project opportunities. Work might also be expanded to assist GOV in preparation for participation in international policy dialogue and negotiations related to FLEG and recommendations on development of technical resources such as guidelines, reference and training materials. Specific objectives are to: (a) characterize and place in the context of its overall governance and economic reform program the country’s forest law enforcement challenges and options; (b) relate FLEG issues to ongoing forest sector programs, policies and investment projects; (c) explain to national stakeholders within and outside the forestry sector the implications for Vietnam of international developments related to illegal logging and illicit trade in forest products (e.g. EU FLEGT); and (d) formulate proposals for follow-up policy reforms, investment and capacity building efforts.</td>
</tr>
<tr>
<td>Project theme</td>
<td>Implementing organisation</td>
<td>Project title</td>
<td>Project summary and objective</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
<td>---------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Strengthening voices for better choices: enhancing forest governance in six key tropical forest countries in Asia, Africa and South America</td>
<td>IUCN</td>
<td>IUCN</td>
<td>Aims to promote improved forest governance in six key tropical forest countries. The project will identify the policy, legal, institutional and economic obstacles to improved forest governance; pilot test innovative approaches to overcoming these obstacles; enhance the capacity of key stakeholders to implement forest governance reforms; and disseminate the lessons learned at national, regional and global levels. The project will also support the regional FLEG official processes being organized by the WB (see below). The Vietnam component will: a) Undertake an assessment of policy, legal and institutional frameworks, and an assessment of economic policies and instruments b) Test forest and land-use planning approaches at the landscape level and co-management of natural forest between government and local ethnic communities in Thua Thien Hue province c) Enhance facilitation skills and the organisation of consultative processes, creating awareness on the role of improved forest governance in equitable and sustainable forest management. d) Organize FLEG preparatory and follow-up sessions at national level, assisting in the organization of the regional FLEG preparatory sessions, continuing supporting the FLEG process, and facilitating the development of forest monitoring and information frameworks. e) Assist in the establishment of a Cross-Regional Working Group on Forest Governance, facilitating the establishment of national forest working groups. Other countries involved in this project are Sri Lanka, Vietnam, Democratic Republic of Congo, Ghana, Tanzania and Brazil</td>
</tr>
<tr>
<td>Technical Assistance Services for Strengthening Capacity of the Vietnam Forestry Protection Department’s Task Force on Forest Violations under the FLEGT</td>
<td>The WB</td>
<td>The WB</td>
<td>The overall objectives of the project is to strengthen the capacity of the FPD of Vietnam to investigate forest crimes, collection, manage and use forest violations data more effectively and to improve inter-agency working to address forest crimes. The WB with the financial support from EU is going to lunch this project by the end of the year 2007.</td>
</tr>
<tr>
<td>Project theme</td>
<td>Implementing organisation</td>
<td>Project title</td>
<td>Project summary and objective</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Strengthening Enforcement Aspects</td>
<td>The Wildlife Trade Monitoring Network of WWF and IUCN (TRAFFIC)</td>
<td>Component 2, WWF GFTN project</td>
<td>Aims to develop criteria and guidelines for the definition and verification of legal timber in Vietnam, using existing The Nature Conservancy (TNC) guidelines as a template. Draft guidelines are scheduled for completion by mid-late November, following which consultations will be held with GoV ministries, industry representatives and NGOs. The project also aims to develop a policy paper to highlight areas where national legislation needs to be improved. TRAFFIC is also providing inputs to the WWF ‘Keep It Legal’ country guide for Vietnam, describing the legal timber trade mechanism from harvest through export, highlighting legal weaknesses and providing sample documents for proving timber legality for Vietnam. Other TRAFFIC work broadly relevant to FLEG includes: a) Training of customs officers on wildlife trade (funded by Department For International Development, UK - DFID) b) Work on cross-border wildlife trade (with Conservation International) c) Awareness raising and education work . d) Possible future work on the mid term review of the National Action Plan on Wildlife Trade e) Support work on the Association of South-East Asian Nations (ASEAN) wildlife enforcement network. Other countries involved in this project are Malaysia, China and several African countries.</td>
</tr>
<tr>
<td>Wildlife Conservation Society</td>
<td>Strengthening wildlife trade control</td>
<td>WCS is providing technical and financial support to FPD of MARD for the revision of Decree 139/2004/ND-CP on imposing administrative fines in the field of forest management and protection and forest product management in Vietnam. A series of consultation workshops with FPD units countrywide and with other stakeholders are planned for the last quarter of 2006.</td>
<td></td>
</tr>
<tr>
<td>TFF support to FPD</td>
<td>Proposal under consideration for funding by the TFF</td>
<td>Will strengthen training curricula and delivery at forestry training centres for FPUs.</td>
<td></td>
</tr>
<tr>
<td>FRR/GTZ support to FPD</td>
<td>n/a</td>
<td>Ongoing work aims to improve FPD’s database and information management on forest violations</td>
<td></td>
</tr>
<tr>
<td>Project theme</td>
<td>Implementing organisation</td>
<td>Project title</td>
<td>Project summary and objective</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Private Sector and Trade-related aspects</td>
<td>Worldwide Fund for Nature (WWF) International</td>
<td>Forest and trade networks for legal and sustainable forest management in Africa and Asia</td>
<td>This initiative aims to establish Forest &amp; Trade Networks to facilitate trade in legal and sustainable timber products; develop criteria, guidelines and policy recommendations for definition and verification of legal sources of forest products; and strengthen capacity for forest certification and legal verification of forest products through training and demonstration projects. Target groups are producers of forest products in developing countries, including forestry companies and community forestry organisations. Countries other than Vietnam involved in this project are Cameroon, China, Gabon, Indonesia, Malaysia, Democratic Republic of Congo and Ghana.</td>
</tr>
<tr>
<td>TFT</td>
<td>Worldwide Fund for Nature (WWF) International</td>
<td>Forest and trade networks for legal and sustainable forest management in Africa and Asia</td>
<td>TFT’s goal is to increase the area of FSC certified natural tropical forests and get timber and timber products from FSC certified natural tropical forests into TFT members’ supply chains. It does this through promotion of FSC certified natural tropical forests into TFT members’ supply chains. It does this through promotion of FSC certified natural tropical forests in TFT members’ products. This is achieved through stages whereby the threshold of acceptability is continually raised – at first the minimum requirement is that all wood comes from verifiably known and legal sources. Wood from legal but undesirable sources is phased out as quickly as possible, and replaced with wood from TFT supported forest projects and from FSC certified forests. TFT has two members in Vietnam - Tran Duc To – a joint Vietnam-New Zealand company which holds CoC certification and Furniture Global Company Vietnam.</td>
</tr>
</tbody>
</table>
| Broad forest governance       | IIED                                       | FGLG 2006-2008                                                                | The focus of FGLG in Vietnam is on sharing experience and learning on poverty alleviation through community forestry. The Vietnam FGLG is designed to help refine the community forestry guidelines by complementing the work of the Community Management of Forest (CFM) pilot programme with concrete examples both of how CFM works at the local level and of what benefit sharing arrangements have been applied in existing community forestry, whether through projects or traditional practices. FGLG’s contribution will focus on how future policy on CFM can contribute to alleviate poverty in the forest area through equitable and sustainable benefit sharing arrangements. With such focus, FGLG Vietnam expects to contribute to the cause of poverty alleviation of the nation in general and of the forestry sector in particular. The FGLG will focus in two or three provinces (yet to be confirmed), selected from Son La, Thua...
<table>
<thead>
<tr>
<th>Project theme</th>
<th>Implementing organisation</th>
<th>Project title</th>
<th>Project summary and objective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Thien Hue and Dak Lak. These are situated in the northwest mountains, the central region and the more southerly central highlands region respectively. The Vietnam FGLG will survey existing examples of community forest management in each province, scheduled for November 2006 through March 2007. The survey will look particularly at past experience, governance structure and functioning, community arrangements for benefit sharing, and responses to external interventions. The results of these provincial surveys will be presented and discussed at provincial and national level workshops. Countries other than Vietnam involved in this project are India, Indonesia, Cameroon, Ghana, Malawi, Mozambique, Niger, South Africa and Uganda.</td>
</tr>
<tr>
<td>Building capacity of local civil society groups</td>
<td>EIA / Telapak Indonesia</td>
<td>Improving governance of forest resources and reducing illegal logging and associated trade with full civil society participation in East Asia</td>
<td>Together with the local partner, Telapak, aims to develop Indonesian civil society and local community involvement in dialogue and implementation of the EU FLEGT initiative and other related processes. The project will extend lessons learned through networking with civil society in Indonesia to the wider Southeast Asian region. Activities include capacity building for civil society, independent monitoring of timber tracking and “legality” schemes, research and investigations into regional timber trade movements and illegal logging in Indonesia and other countries in the region, and promotion of good practice in law enforcement to improve governance in forests. Countries other than Vietnam involved in this project are Indonesia, Malaysia, Thailand, Cambodia, Laos, Philippines, Papua New Guinea and China.</td>
</tr>
<tr>
<td>Project theme</td>
<td>Implementing organisation</td>
<td>Project title</td>
<td>Project summary and objective</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------</td>
<td>----------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Border controls and customs</td>
<td>WB</td>
<td>Customs Modernization Project</td>
<td>The project will provide consultant services, including training, technical assistance to strengthen 4 components of the customs system a). new and improved technical and procedural systems b). organizational and resource management improvements required for the new systems c). information and communications technology support d). d, technical and managerial support for project implementation.</td>
</tr>
</tbody>
</table>
| Regional political processes  | The WB                   | Regional processes for FLEG in Asia, Africa and Latin America | The WB coordinates regional political processes for FLEG in Asia and Africa. The project aims to ensure continuation and follow-up in the two regions, and initiate a similar initiative in Latin America. Activities include strategic analyses to support consensus building; facilitating political dialogue to create the space and political will needed for change; preparation and consultative work to involve stakeholders, including NGOs, civil society, the private sector and government agencies; fostering linkages to existing national or regional processes and institutions, and; supporting catalytic follow-up actions to translate i political commitments into effective action at the national level.  
All East Asian and African countries are involved in this project. |

Source: Adapted from Hughes, R., pers. comm.
## Demand and supply of wood, wood and fiber based forest product in Vietnam for 2003-2020

(2003,2005 → real; 2010-2020 → projection)

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>2003</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawn timber (large timber in m³)</td>
<td>Processing capacity</td>
<td>4 000 000</td>
<td>4 000 000</td>
<td>4 000 000</td>
<td>5 000 000</td>
<td>6 000 000</td>
</tr>
<tr>
<td></td>
<td>Sawnwood production</td>
<td>2 165 000</td>
<td>2 185 304</td>
<td>2 800 000</td>
<td>4 000 000</td>
<td>4 800 000</td>
</tr>
<tr>
<td></td>
<td>Sawn timber consumption</td>
<td>2 211 000</td>
<td>2 570 946</td>
<td>3 588 989</td>
<td>5 009 542</td>
<td>6 991 506</td>
</tr>
<tr>
<td></td>
<td>Wood demand</td>
<td>3 936 364</td>
<td>3 973 281</td>
<td>5 090 909</td>
<td>6 666 667</td>
<td>7 741 935</td>
</tr>
<tr>
<td>Fibreboard/ Medium density fibreboard (MDF) (in m³)</td>
<td>Processing capacity</td>
<td>54 000</td>
<td>80 000</td>
<td>80 000</td>
<td>180 000</td>
<td>180 000</td>
</tr>
<tr>
<td></td>
<td>Fiberboard production</td>
<td>30 000</td>
<td>35 754</td>
<td>43 780</td>
<td>162 000</td>
<td>162 000</td>
</tr>
<tr>
<td></td>
<td>Fiberboard consumption</td>
<td>40 100</td>
<td>49 100</td>
<td>79 600</td>
<td>117 400</td>
<td>166 400</td>
</tr>
<tr>
<td></td>
<td>Fiberboard export</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50 470</td>
<td>3 920</td>
</tr>
<tr>
<td></td>
<td>Wood demand (small)</td>
<td>69 767</td>
<td>83 148</td>
<td>78 804</td>
<td>291 600</td>
<td>291 600</td>
</tr>
<tr>
<td>Particle board (in m³)</td>
<td>Processing capacity</td>
<td>80 000</td>
<td>80 000</td>
<td>80 000</td>
<td>220 000</td>
<td>300 000</td>
</tr>
<tr>
<td></td>
<td>Particleboard production</td>
<td>60 000</td>
<td>64 000</td>
<td>68 000</td>
<td>198 000</td>
<td>270 000</td>
</tr>
<tr>
<td></td>
<td>Particleboard consumption</td>
<td>80 000</td>
<td>95 500</td>
<td>147 600</td>
<td>215 500</td>
<td>312 500</td>
</tr>
<tr>
<td></td>
<td>Particle board export</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>25 600</td>
<td>20 000</td>
</tr>
<tr>
<td></td>
<td>Wood demand (small)</td>
<td>139 535</td>
<td>148 837</td>
<td>136 000</td>
<td>380 769</td>
<td>490 909</td>
</tr>
<tr>
<td>Plywood and veneer (in m³)</td>
<td>Processing capacity</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15 000</td>
<td>26 000</td>
</tr>
<tr>
<td></td>
<td>Plywood and veneer production</td>
<td></td>
<td></td>
<td></td>
<td>12 000</td>
<td>20 800</td>
</tr>
<tr>
<td></td>
<td>Plywood and veneer consumption</td>
<td>11 000</td>
<td>12 904</td>
<td>18 366</td>
<td>26 149</td>
<td>37 246</td>
</tr>
<tr>
<td></td>
<td>Wood demand (large)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>30 000</td>
<td>52 000</td>
</tr>
<tr>
<td>Pulp</td>
<td>Pulp processing capacity</td>
<td>682 000</td>
<td>682 000</td>
<td>900 000</td>
<td>1 400 000</td>
<td>2 200 000</td>
</tr>
<tr>
<td></td>
<td>Pulp production</td>
<td>642 000</td>
<td>642 000</td>
<td>847 214</td>
<td>1 317 889</td>
<td>2 070 968</td>
</tr>
<tr>
<td></td>
<td>Total paper consumption</td>
<td>967 000</td>
<td>1 232 331</td>
<td>2 176 784</td>
<td>3 478 112</td>
<td>5 361 529</td>
</tr>
<tr>
<td></td>
<td>Demand for pulpwood (m³)</td>
<td>2 568 000</td>
<td>2 568 000</td>
<td>3 388 856</td>
<td>5 271 554</td>
<td>8 283 871</td>
</tr>
</tbody>
</table>

Source: Adapted from MARD 2007b, Appendix 3a
### Annex 6

**Projection of demand for timber in export-oriented timber processing industries in Vietnam**

<table>
<thead>
<tr>
<th>Category</th>
<th>Real demand</th>
<th>Projection</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
<td>2005</td>
<td>2010</td>
<td>2015</td>
<td>2020</td>
</tr>
<tr>
<td><strong>1 000 m³</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large timber</td>
<td>4 561</td>
<td>5 373</td>
<td>8 030</td>
<td>10 266</td>
<td>11 993</td>
</tr>
<tr>
<td>Small timber for panel and wood chips</td>
<td>1 649</td>
<td>2 032</td>
<td>2 464</td>
<td>2 922</td>
<td>1 682</td>
</tr>
<tr>
<td>Small timber for pulp</td>
<td>1 150</td>
<td>2 568</td>
<td>3 388</td>
<td>5 271</td>
<td>8 283</td>
</tr>
<tr>
<td>Pit-porps</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7 420</strong></td>
<td><strong>10 063</strong></td>
<td><strong>14 004</strong></td>
<td><strong>18 620</strong></td>
<td><strong>22 160</strong></td>
</tr>
</tbody>
</table>

*Source: Adapted from Vietnam Forestry Development Strategy 2006-2020*
List of respondents to the questionnaire

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MARD</strong></td>
<td></td>
</tr>
<tr>
<td>1 Tran Van Cong</td>
<td>Programme officer, ICD</td>
</tr>
<tr>
<td>2 Le Van Bach</td>
<td>Head of Legal unit, DoF</td>
</tr>
<tr>
<td>3 Dam Van Mai</td>
<td>Deputy director, Agro-forest Products Processing Dept.</td>
</tr>
<tr>
<td>4 Nguyen Phi Truyen</td>
<td>Head of Special Task Force, FPD</td>
</tr>
<tr>
<td>5 Mr. Le Dinh Thang</td>
<td>Ministry of Industry and Trade, Export unit</td>
</tr>
<tr>
<td><strong>NGOs</strong></td>
<td></td>
</tr>
<tr>
<td>6 Le Thien Duc</td>
<td>WWF, senior forestry officer</td>
</tr>
<tr>
<td>7 Le Khac Coi</td>
<td>WWF, senior forestry officer</td>
</tr>
<tr>
<td>8 Mr. Le Tien Phong</td>
<td>ActionAid Vietnam, Southern Programme Manager</td>
</tr>
<tr>
<td>9 Mr. Nguyen Van San</td>
<td>Senior programme manager, IUCN (Vietnam office)</td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
<td></td>
</tr>
<tr>
<td>10 Phan Manh Cuong</td>
<td>Designing manager, International Furniture Corporation Scansia Pacific</td>
</tr>
<tr>
<td>11 Dang Quoc Hung</td>
<td>Director, Wood and handicraft company</td>
</tr>
<tr>
<td>12 Tran Quoc Manh</td>
<td>Director, Sadaco company</td>
</tr>
<tr>
<td>13 Nguyen Van Vy</td>
<td>Head of office, Handicraft and Wood Processing Association of Ho Chi Minh City (HAWA)</td>
</tr>
<tr>
<td>14 Do Thi Bich Sam</td>
<td>Director, Bao Hung Furniture</td>
</tr>
</tbody>
</table>
Analysis of Questionnaire Responses

<table>
<thead>
<tr>
<th>1) With the implementation of the VPAs in your country</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exports of illegal wood and wood products from your country to the EU will be significantly reduced</td>
<td>-2 -1.5 -1 -0.5 0 0.5 1 1.5 2</td>
<td><img src="image" alt="Graph" /></td>
</tr>
<tr>
<td>b) Exports that have been illegal will be legalized, i.e, the proportion of legal imports will significantly increase</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td>c) Exports of legal wood and wood product to the EU will significantly decrease because exporters/importers will consider that the cost of meeting the VPA requirements outweighs the benefits</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2) Elimination of imports of illegal wood and wood products from your country to the EU will</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) reduce illegal logging in your country</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td>b) will leave illegal logging unaffected because exporters will reshuffle trade flows shipping available legal products to the EU and illegal products to other markets</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td>c) will leave illegal logging unaffected because local processing of illegal timber will increase and these products will be exported to the EU</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3) Reduction of illegal exports from your country to the EU will</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) be compensated with legal exports from your country</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td>b) be compensated with exports from countries not involved in VPA implementation</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td>c) shift demand towards timber products available within the EU</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td>d) shift demand towards substitute products (other than wood products)</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td>e) have a positive impact on the market share of wood products in the EU because of giving them a better image</td>
<td><img src="image" alt="Graph" /></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>---</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>4) <strong>From the standpoint of private sector the VPA scheme will</strong></td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>a) benefit legal producers and traders by eliminating the unfair advantage enjoyed by illegal producers and traders</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) lead to relocation of timber transformation activities outside of the EU</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>c) favor large export companies at the expense of small and medium-sized ones</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>5) <strong>The VPA will be effective only if</strong></td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>a) the coverage of the licensing scheme were expanded to all wood products (not only roundwood, sawntimber, veneer and plywood)</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) circumvention (passing goods through third countries) were effectively prevented</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>6) <strong>Even if technical arrangements to secure legality were effective, the VPA scheme would have limited impact</strong></td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>a) because it cannot effectively catalyze changes to factors underpinning illegal logging such as poor forest governance, poverty, corruption, inappropriate land tenure, etc.</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) unless other major consumer countries such as Japan and USA join the scheme</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>7) <strong>Legal products from VPA countries will</strong></td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>a) fetch higher prices in the EU market because reduction of overall supply in the EU will drive price level higher</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) will enjoy a price premium of 10% or more in the EU market</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>c) Will have better access to the EU market, i.e., the main benefit is bigger market share rather than price premium</td>
<td><img src="" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>---</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>8) The main benefits of having unhindered access to the EU market is that</td>
<td>-2 -1.5 -1 -0.5 0 0.5 1 1.5 2</td>
<td></td>
</tr>
<tr>
<td>a) wood and wood products fetch higher prices in the EU market than in other markets</td>
<td><img src="image1" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) there is more demand for high value added products in the EU market than in other markets</td>
<td><img src="image2" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>c) other</td>
<td><img src="image3" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>9) The main environmental benefits of the VPA scheme are that it will</td>
<td>-2 -1.5 -1 -0.5 0 0.5 1 1.5 2</td>
<td></td>
</tr>
<tr>
<td>a) help decrease the overall level of logging in natural forests</td>
<td><img src="image4" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) help eliminate unlawful forest conversion</td>
<td><img src="image5" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>c) help eliminating unsustainable and wasteful harvesting practices associated with illegal logging</td>
<td><img src="image6" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>10) The main social impacts of the VPA scheme are that it will</td>
<td>-2 -1.5 -1 -0.5 0 0.5 1 1.5 2</td>
<td></td>
</tr>
<tr>
<td>a) help ensuring the welfare of forest-dependent people by securing the enforcement of existing regulations concerning distribution of benefits, access to non-wood forest products, protection of watersheds etc.</td>
<td><img src="image7" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) help improve work safety in logging and processing of timber</td>
<td><img src="image8" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>c) reduce local employment in the short run by reducing illegal logging</td>
<td><img src="image9" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>d) secure long term employment by providing a sustainable basis for forest management</td>
<td><img src="image10" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>11) The main impacts of the VPA scheme with respect to governance are that it will</td>
<td>-2 -1.5 -1 -0.5 0 0.5 1 1.5 2</td>
<td></td>
</tr>
<tr>
<td>a) help make law enforcement more effective by providing technical assistance and capacity building</td>
<td><img src="image11" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>b) help eliminate corruption by requiring transparency</td>
<td><img src="image12" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>c) help make the court system more effective by providing technical assistance and capacity building</td>
<td><img src="image13" alt="Bar Chart" /></td>
<td></td>
</tr>
<tr>
<td>d) further erode respect for law because the VPA scheme cannot be enforced effectively</td>
<td><img src="image14" alt="Bar Chart" /></td>
<td></td>
</tr>
</tbody>
</table>
### Assumptions

<table>
<thead>
<tr>
<th>Option 2: Private sector schemes expanded</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) is a cost-effective option</td>
<td>-2</td>
<td>-1.5</td>
</tr>
<tr>
<td>b) is a more efficient approach than government-led measures</td>
<td>-1</td>
<td>-0.5</td>
</tr>
<tr>
<td>c) is a useful but insufficient measure because of its voluntary nature</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>d) is useful as complementary measure to be used in combination with other additional options</td>
<td>1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber

| a) is based on a sound approach in the sense that it eliminates the possibility of circumvention through third countries | -2 |
| b) will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably | -1.5 |
| c) cannot be implemented because it contradicts WTO rules requiring equal treatment for products originating from within and outside of the EU | -1 |

### Option 4a: Legislation which prohibits the trading and possession of timber and timber products harvested in breach of the laws of the country of origin

<p>| a) Is based on a sound approach in the sense that the verification and tracking systems need to be developed only when they are needed i.e. in high risk situations | -2 |
| b) | -1.5 |
| c) | -1 |
| d) | -0.5 |
| e) | 0.5 |
| f) | 1 |
| g) | 1.5 |
| h) | 2 |</p>
<table>
<thead>
<tr>
<th>Option 4b: Legislation which requires that only legally harvested timber and timber products be placed on the market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a)</strong> is based on a sound approach in the sense that the burden of proof is on the private sector which has the necessary resources to provide evidence</td>
</tr>
<tr>
<td><strong>b)</strong> causes unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low</td>
</tr>
<tr>
<td><strong>c)</strong> is unfair because the underlying assumption is that imported goods are illegal unless proven legal</td>
</tr>
<tr>
<td><strong>d)</strong> Will there be any other impacts that would be significantly different from those of the VPA scheme (e.g., impact on legal imports, eliminating advantages enjoyed by illegal traders, etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1.5</td>
</tr>
<tr>
<td>-1</td>
<td>-0.5</td>
</tr>
<tr>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

-2 -1.5 -1 -0.5 0 0.5 1 1.5 2
European Commission
DG Environment

Assessment of the Impact of Potential Further Measures to Prevent Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 8
Country Case Study Indonesia

Helsinki
January 21, 2008
DISCLAIMER

Indufor makes its best effort to provide accurate and complete information while executing the assignment. Indufor assumes no liability or responsibility for any outcome of the assignment.

Copyright © 2008 by Indufor Oy
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, but not limited to, photocopying, recording or otherwise.
# TABLE OF CONTENTS

1. BACKGROUND INFORMATION 1
   1.1 Forest Resources 1
   1.2 Land Tenure 2
   1.3 Production of Roundwood and Wood Products 3
   1.4 Trade in Roundwood and Wood Products 5
   1.5 General Institutional Framework in the Forest Sector 7
      1.5.1 Public Administration 7
      1.5.2 Research and Development Institutes 8
      1.5.3 Private Sector 8
      1.5.4 Non-government Organizations 9

2. ILLEGAL TIMBER PRODUCTION AND EXPORTS 10

3. MAIN DRIVERS BEHIND ILLEGAL LOGGING IN INDONESIA 11

4. BENEFITS OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATION 12

5. INITIATIVES TAKEN SO FAR TO COMBAT ILLEGAL FOREST ACTIVITIES IN BRAZIL 13
   5.1 Initiatives Taken So Far by the Indonesian Government 13
   5.2 Legislation in Indonesia 13

6. CURRENT FOREST LAW ENFORCEMENT SYSTEM AND ITS EFFECTIVENESS 15

7. CURRENT STATUS OF LOG TRACKING IN THE INDONESIAN PRIVATE SECTOR 17

8. SCOPE TO INCREASE LEGAL TIMBER PRODUCTION 18

9. SCOPE TO INCREASE TIMBER PROCESSING 20

10. CURRENT CONDITION IN FOREST SECTOR OF INDONESIA 21
   10.1 Forest Sector Contribution to the National Economy 21
   10.2 Employment in the Forest Sector 21
   10.3 Status of Corruption in Indonesia 22

11. STAKEHOLDER VIEWS 23
   11.1 General Information 23
   11.2 Option 1: Voluntary Partnership Agreement Scheme 23
   11.3 Option 2: Private Sector Voluntary Scheme 24
   11.4 Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber 24
   11.5 Option 4: Prohibition of the Placing of Illegally Harvested Timber on the EU Market 24
      11.5.1 Option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws of the Country of Origin 24
      11.5.2 Option 4b: Legislation Which Requires that Only Legally Harvested Timber and Timber Products Be Placed on the Market 24

12. LIST OF REFERENCES 25
LIST OF ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AFPA</td>
<td>American Forest and Paper Association</td>
</tr>
<tr>
<td>APHI</td>
<td>Association of Indonesian Forest Concession</td>
</tr>
<tr>
<td>BAPPENAS</td>
<td>National Development Planning Agency of Indonesia</td>
</tr>
<tr>
<td>BOSF</td>
<td>Borneo Orangutan Survival Foundation</td>
</tr>
<tr>
<td>BPN</td>
<td>National Land Agency of Indonesia</td>
</tr>
<tr>
<td>C&amp;I</td>
<td>Criteria and indicators</td>
</tr>
<tr>
<td>CI</td>
<td>Conservation International</td>
</tr>
<tr>
<td>CIDA</td>
<td>Canadian International Development Agency</td>
</tr>
<tr>
<td>CIFOR</td>
<td>Center for International Forestry Research</td>
</tr>
<tr>
<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil society organization</td>
</tr>
<tr>
<td>DBH</td>
<td>Diameter at breast height</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agricultural Organization of the United Nations</td>
</tr>
<tr>
<td>FFI</td>
<td>Fauna &amp; Flora International</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade</td>
</tr>
<tr>
<td>FSC</td>
<td>Forest Stewardship Council</td>
</tr>
<tr>
<td>FWI</td>
<td>Forest Watch Indonesia</td>
</tr>
<tr>
<td>GDA</td>
<td>Global Development Alliance</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GTZ</td>
<td>German Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit GmbH)</td>
</tr>
<tr>
<td>ha</td>
<td>Hectare</td>
</tr>
<tr>
<td>HPH</td>
<td>Indonesian forest concession system</td>
</tr>
<tr>
<td>IBRD</td>
<td>International Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>ICEL</td>
<td>Indonesian Center for Environmental Law</td>
</tr>
<tr>
<td>INFID</td>
<td>International NGO Forum for Indonesian Development</td>
</tr>
<tr>
<td>ITTO</td>
<td>International Tropical Timber Organization</td>
</tr>
<tr>
<td>JCP</td>
<td>Joint Certification Program</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>LEI</td>
<td>Indonesian Eco-labeling Institute</td>
</tr>
<tr>
<td>m³</td>
<td>Cubic meter</td>
</tr>
<tr>
<td>MOFR</td>
<td>Ministry of Forestry of Indonesia</td>
</tr>
<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>MPR</td>
<td>People's Consultative Assembly of Indonesia</td>
</tr>
<tr>
<td>MSP</td>
<td>Medium-sized program</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>NA</td>
<td>Not available</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>NPFM</td>
<td>Natural production forest management</td>
</tr>
<tr>
<td>RWE</td>
<td>Roundwood equivalent</td>
</tr>
<tr>
<td>SFM</td>
<td>Sustainable Forest Management</td>
</tr>
<tr>
<td>TNC</td>
<td>The Nature Conservancy</td>
</tr>
<tr>
<td>UK</td>
<td>The United Kingdom</td>
</tr>
<tr>
<td>UNFF</td>
<td>United Nations Forest Forum</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USA</td>
<td>The United States of America</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreement</td>
</tr>
<tr>
<td>WAC</td>
<td>World Agroforestry Center</td>
</tr>
<tr>
<td>WALHI</td>
<td>Wahana Lingkungan Hidup Indonesia</td>
</tr>
<tr>
<td>WARSRI</td>
<td>Conservation Community Indonesia</td>
</tr>
<tr>
<td>WCS</td>
<td>Wildlife Conservation Society</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wide Fund for Nature</td>
</tr>
</tbody>
</table>
1. BACKGROUND INFORMATION

1.1 Forest Resources

Comprising of 17 508 islands, Indonesia is the world's largest archipelagic state and has a total land area including inland water bodies of 190 million ha. The most recent forest resources assessment of the Food and Agricultural Organization of the United Nations (FAO) indicates a total forest area of 88.5 million ha, this somewhat differs to the Indonesian's Ministry of Forestry which classifies some 144 million ha of forest land.

No integrated record of forest area has been kept in Indonesia, so any analysis of current forest cover and recent deforestation must be based on a variety of national and sub-national scale sources.

The Indonesian Ministry of Forestry classifies the forest areas into five categories:

- Protected Forests - This category is in majority comprised of watershed forests completely closed to commercial and even recreational uses. This type of is entitled to protection because of its hydrological function.
- Limited Production Forest - Managed for timber production, but may have lower allowable harvest levels due to environmental concerns. Only selective felling is permitted.
- Regular Production Forest - Designated for timber, rattan and other forestry products; managed under harvesting and reforestation regulations. Selective felling and some clear cutting is permitted.
- Conversion Forest - Forest convertible to farms, plantations and other uses such as resettlement.

The distribution of forest area over the five classification categories is illustrated in Figure 1.1.

Figure 1.1 Share of forest classification areas

![Pie chart showing forest classification areas with Conservation and National Parks at 13%, Protected Forests at 21%, Limited Production Forests at 21%, Regular Production Forests at 24%, and Conversion Forests at 21%.]
There are as many as 19 different forest types in Indonesia, including coastal forests on beaches and dunes, tidal forests such as mangroves, nipah, and palm, heath forests associated with sandy soils of poor quality, and finally peat, swamp, wetland, evergreen, bamboo, savanna, and montane forests. Indonesia contains the most extensive mangrove forests in the world, estimated at 4.25 million ha in the early 1990s.

The Forest Cover Map of Insular Southeast Asia in Figure 1.2 covers the countries of Malaysia, Singapore, Indonesia, Brunei, East Timor and the Philippines and lists the major forest types and crop land. The map also includes Papua New Guinea. This map was produced by digital classification of a regional SPOT VEGETATION satellite image composite, between March 1998 and March 2000.

**Figure 1.2 Forest cover map of insular Southeast Asia**

![Forest cover map of insular Southeast Asia](http://www-gvm.jrc.it/tem/Forest_mapping/products/forest_maps/insularSEasia.htm)

There are over 4000 species of trees in Indonesia. Of these, 120 hardwood species (267 botanical species) are suitable for commercial use. More than 48 are used in the plywood industry, mainly from the Dipterocarp family. Major timber producing species are those dipterocarps in the genera Shorea. Within the Shorea group, the light hardwood Meranti species is the most important hardwood due to its great demand in world markets and its abundance and accessibility (it is Indonesia's dominant wood species). Timber areas, which supply the pulp and paper industries generally produce fast growing species like Pine, Eucalyptus, Albizia, and Acacia.

Softwoods are produced in Indonesia but on a much smaller scale than hardwoods. The most important softwood species is Agathis, which is generally found interspersed with hardwoods or, rarely, in pure stands in Kalimantan, Sulawesi, and Irian Jaya. *Pinus merkusii* is another important softwood, primarily found in Sumatra. Rattan is an important non-timber wood product in Indonesia. Indonesia has 516 kinds of rattan originating from nine genus. The main growing areas are Kalimantan, Sumatra and Java.

### 1.2 Land Tenure

In Indonesia all forest land area is owned by the state. Some people grow forests on their own land, also known as “people forest” (hutan rakyat). Even though the state did not formally own all of the ‘free’ land, the notion of state-controlled land was
interpreted, during the Suharto period, as an exclusive authority over any territories classified as kawasan hutan (forest area) — including all aspects of human activities within it (McCarthy 2000:93). The Forest Land Use Consensus Plan (Tata Guna Hutan Kesepakatan) was established in 1982. This land use plan classified 75% (or 144 million ha) of Indonesia’s land as forest areas (Evers 1995:6), and still wields influence over the planning process for such areas. Under the Basic Forestry Law (No. 41/1999), the adat community can only obtain rights to use and manage adat land or forest if the state acknowledges their existence. They are not able to own land.

Moreover, Article 5 of the new Basic Forestry Law states that the Indonesian state will only recognize community rights to forest land if it can be proven that:
- the adat community in question is still in a group form (paguyuban or rechtsgemeenschap) and live in their own adat area;
- the adat community still follow their adat institutions;
- the adat community forest area has clear boundaries, approved and acknowledged by their neighbors;
- there is an adat law framework related to forest that is still practiced; and
- the adat community still relies on the forest for subsistence, religion and social activities based on adat rule.

While this new regulation may give some new opportunities to adat communities, a management plan for adat forest has to be approved by the Ministry of Forestry (Article 10) and the plan must consider existing land use planning determined by the Regional Land Use Plan (Rencana Tata Ruang Wilayah).

Nevertheless, the new Basic Forestry Law gives adat communities some recognition of their rights to land and natural resources. Therefore, there is an opportunity for community mapping to play a crucial role in helping indigenous or adat communities to document their adat area, including the rights that are attached to it, and to help them create adat management plans to promote their own community-based natural resource management.

In recent years, a range of internal and external pressures has weakened indigenous tenure systems. The weakening of cultural, social and family ties is usually a response to external pressures. Less cohesion and social control within communities causes ‘individualization of communal rights’. The absorption of communal rights within an adat community creates a situation where outsiders, including government, have unlimited access to adat land for agriculture, mining, logging, road construction and other ‘land hungry’ development activities. Conflicts arise between these large-scale developments and local people because the state has failed to acknowledge adat rights when allocating concessions and development permits. Moreover, adat communal lands have been threatened by ‘unofficial’ encroachment, such as illegal land purchases and illegal logging, which are often supported by police, armed forces or local government staff (Evers 1995: 12; Eghenter 2000).

Sometimes, adat institutions also break down when community members seek to gain quick profits from particular resources, such as agar wood, rattan or timber (Sorensen 1997:249). Dramatic environmental change resulting from natural disasters, such as the 1997–98 forest fires, has also threatened adat resource management systems as these tend to break down when the resources become scarce and more valuable.

1.3 Production of Roundwood and Wood Products

Indonesia’s efforts to become a leading wood processor have been successful. Since the 1985 ban on log exports, there has been a rapid development of value-added industries. Today, processed wood products are Indonesia’s second-highest source of foreign exchange after oil and gas. In 1993, Indonesia’s forestry sector brought in
USD 5.15 billion in export earnings, accounting for 25% of total industrial exports. The major sectors of Indonesia’s forest industry are logs, lumber, wood panels, pulp and paper, secondary wood processing, and non-timber forest products such as rattan.

For industrial wood, original data are available for 1990 and 2000 from both natural and plantation forests, however for fuelwood, data is available only from plantation forest (Perum Perhutani). For 2005 data, production was forecasted based on cutting quota defined by Ministry of Forestry. Table 1.1 and Table 1.2 present estimates for the amount of Industrial wood removals from natural and plantation forests, and the approximate aggregate volume and value of roundwood removals in Indonesia for 2005.

**Table 1.1 Industrial wood removals**

<table>
<thead>
<tr>
<th>National class</th>
<th>Natural forest</th>
<th>Plantation forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahan baku Industri (Industrial roundwood)</td>
<td>24 935</td>
<td>18 039</td>
</tr>
<tr>
<td>Kayu Bakar (Fuel wood)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24 935</td>
<td>18 039</td>
</tr>
</tbody>
</table>

Source: FAO 2005

**Table 1.2 Value of wood removals**

<table>
<thead>
<tr>
<th>FAO categories</th>
<th>Volume in 1 000 m³ of roundwood over bark</th>
<th>Value of roundwood removal (USD 1 000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial roundwood</td>
<td>26 203</td>
<td>24 238</td>
</tr>
<tr>
<td>Wood Fuel</td>
<td>357</td>
<td>171</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26 560</td>
<td>24 410</td>
</tr>
</tbody>
</table>

Source: FAO 2005

Forestry sector activities are not evenly distributed across the country, but are highly concentrated in a few provinces. From 2000 to 2004, just seven provinces accounted for nearly 85% of wood production: Riau, Sumatra Selatan, Kalimantan Timur, Kalimantan Tengah, Sumatra Utara, Jambi, and Papua. Presumably, most of the forest degradation and forest crime also occurred in these high producing provinces.

There is also some geographic distinction in the distribution of industrial output from forest sector firms. Sawmill capacity is concentrated in Sumatra and Java, while pulpmills are concentrated in Kalimantan. Pulpmill capacity is concentrated in Riau province of Sumatra. In recent years, timber harvesting began moving from west to east within Indonesia, as the supplies of Sumatra and Kalimantan are becoming depleted, Papua increasingly becomes the target of commercial exploitation. Figure 1.3 illustrates the log production by province between 2000 and 2004.

Most economic value comes from three primary processing sub-sectors: sawnwood, plywood, and pulp. However, plantations and secondary timber processing activities are becoming more important, including furniture, building components, and reconstituted panel products. The development of the forest products industry in terms of production can be seen in Table 1.3.
**Figure 1.3** Log production by province 2000-2004

![Log production by province 2000-2004](image)

<table>
<thead>
<tr>
<th>Province</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jawa Tengah</td>
<td>5%</td>
</tr>
<tr>
<td>Jawa Timur</td>
<td>7%</td>
</tr>
<tr>
<td>Riau</td>
<td>18%</td>
</tr>
<tr>
<td>Sumatera Selaton</td>
<td>21%</td>
</tr>
<tr>
<td>Kalimantan Timur</td>
<td>21%</td>
</tr>
<tr>
<td>Kalimantan Tengah</td>
<td>16%</td>
</tr>
<tr>
<td>Sumatera Utara</td>
<td>12%</td>
</tr>
<tr>
<td>Jambi</td>
<td>12%</td>
</tr>
<tr>
<td>Jambi</td>
<td>12%</td>
</tr>
<tr>
<td>Papua</td>
<td>12%</td>
</tr>
<tr>
<td>Kalimantan</td>
<td>12%</td>
</tr>
<tr>
<td>All others</td>
<td>12%</td>
</tr>
</tbody>
</table>

**Table 1.3** Forest industry capacity and production

<table>
<thead>
<tr>
<th>Year</th>
<th>Sawmill</th>
<th>Plymill</th>
<th>Pulpmill</th>
<th>Papermill</th>
<th>Sawmill</th>
<th>Plymill</th>
<th>Pulpmill</th>
<th>Papermill</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mill. m³</td>
<td>mill. m³</td>
<td>mill. m³</td>
<td>mill. m³</td>
<td>mill. m³</td>
<td>mill. m³</td>
<td>mill. m³</td>
<td>mill. m³</td>
</tr>
<tr>
<td>1985</td>
<td>8.8</td>
<td>6.3</td>
<td>0</td>
<td>0.9</td>
<td>7.1</td>
<td>4.6</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>10.6</td>
<td>10.1</td>
<td>0.7</td>
<td>1.5</td>
<td>10.4</td>
<td>8.8</td>
<td>0.5</td>
<td>1.2</td>
</tr>
<tr>
<td>1990</td>
<td>10.8</td>
<td>10.2</td>
<td>1.0</td>
<td>1.7</td>
<td>9.1</td>
<td>8.3</td>
<td>0.7</td>
<td>1.4</td>
</tr>
<tr>
<td>1997</td>
<td>11.6</td>
<td>9.8</td>
<td>4.3</td>
<td>7.2</td>
<td>7.2</td>
<td>9.6</td>
<td>3.1</td>
<td>4.8</td>
</tr>
<tr>
<td>1998</td>
<td>11.0</td>
<td>9.4</td>
<td>4.3</td>
<td>7.5</td>
<td>7.1</td>
<td>7.8</td>
<td>3.4</td>
<td>5.5</td>
</tr>
<tr>
<td>1999</td>
<td>11.0</td>
<td>9.4</td>
<td>4.5</td>
<td>9.1</td>
<td>6.6</td>
<td>7.5</td>
<td>3.7</td>
<td>6.7</td>
</tr>
<tr>
<td>2000</td>
<td>11.0</td>
<td>9.4</td>
<td>5.2</td>
<td>9.1</td>
<td>6.5</td>
<td>8.2</td>
<td>4.1</td>
<td>6.8</td>
</tr>
<tr>
<td>2001</td>
<td>11.0</td>
<td>9.4</td>
<td>5.6</td>
<td>9.9</td>
<td>6.8</td>
<td>7.3</td>
<td>4.7</td>
<td>7.0</td>
</tr>
<tr>
<td>2002</td>
<td>11.0</td>
<td>9.4</td>
<td>6.1</td>
<td>10.1</td>
<td>6.5</td>
<td>7.6</td>
<td>5.0</td>
<td>7.2</td>
</tr>
<tr>
<td>2003</td>
<td>11.0</td>
<td>9.4</td>
<td>6.1</td>
<td>10.1</td>
<td>5.4</td>
<td>6.4</td>
<td>5.2</td>
<td>7.2</td>
</tr>
<tr>
<td>2004</td>
<td>11.0</td>
<td>9.4</td>
<td>6.1</td>
<td>10.1</td>
<td>5.3</td>
<td>4.7</td>
<td>5.2</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Source: Simangsunsong 2004b

### 1.4 Trade in Roundwood and Wood Products

Most of Indonesia’s processed wood production is export oriented and destinations vary by product type. The large economies of Asia – China, Japan, and the Republic of Korea – consume over half of Indonesia’s plywood, pulp, and sawnwood exports. As illustrated in Figure 1.4 for plywood in 2003, Japan was the dominant importer, consuming 40% of Indonesia’s plywood exports (by volume). The next five largest importers of Indonesian plywood at that time were, China at 14%, Europe at 10%, Korea at 9%, the United States of America (USA) at 8% and Saudi Arabia at 4%. Of the European importers, the most significant were Belgium, the United Kingdom (UK), Norway, Germany and the Netherlands.
The pulp industry exports approximately 45% of its production and the remainder is used for domestic paper and paperboard production, of which approximately 35% is exported. Of total pulp and paper exports between 1999 and 2001, Asian countries accounted for 72% of imports. China accounted for 36% of the export market, Europe 11%, Korea 9% and Japan 6%. The USA and Australia each accounted for 3% of exports.

In 2003, Indonesia exported about a third of sawnwood production. A substantial portion of sawnwood-based exports are in the form secondary processed wood products such as furniture, building joinery, carpentry, flooring, and other wooden articles. The largest market for Indonesia’s unprocessed sawnwood exports is China (which bought 70% of Indonesia’s exports in 2002), followed by Japan, Malaysia, and Korea. The largest market for processed (value-added) wood product exports is Western Europe (which accounted for 49% exports in the period of 2002 to 2004. Germany was the largest European importer, followed by the UK, and Netherlands with 13%, 10% and 8% of total imports. The USA accounted for 20% of value-added wood exports and Japan accounted for another 19% of the total.

Although the forest sector grew during 1985-2004, other industrial sectors grew faster, as indicated by the declining share of forest exports as a share of total manufacturing exports in Table 1.4.

Figure 1.5 illustrates the Indonesia’s export share, by volume and shows that the European Union (EU) received about 15% of the total timber exports (roundwood equivalent - RWE) in 2004 from Indonesia.
Table 1.4 Development of industrial forestry exports from Indonesia

<table>
<thead>
<tr>
<th>Year</th>
<th>Sawnwood</th>
<th>Plywood</th>
<th>Other processed wood</th>
<th>Paper</th>
<th>Total</th>
<th>Share of industrial sector exports</th>
<th>Share of total exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>307</td>
<td>825</td>
<td>53</td>
<td>21</td>
<td>1 206</td>
<td>28.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>1989</td>
<td>668</td>
<td>2 351</td>
<td>42</td>
<td>168</td>
<td>3 228</td>
<td>29.3%</td>
<td>14.6%</td>
</tr>
<tr>
<td>1990</td>
<td>110</td>
<td>2 726</td>
<td>491</td>
<td>156</td>
<td>3 483</td>
<td>29.3%</td>
<td>13.6%</td>
</tr>
<tr>
<td>1997</td>
<td>380</td>
<td>3 411</td>
<td>1 512</td>
<td>939</td>
<td>6 241</td>
<td>17.8%</td>
<td>11.7%</td>
</tr>
<tr>
<td>1998</td>
<td>164</td>
<td>2 078</td>
<td>2 182</td>
<td>1 426</td>
<td>5 849</td>
<td>16.9%</td>
<td>12.0%</td>
</tr>
<tr>
<td>2000</td>
<td>331</td>
<td>1 989</td>
<td>1 241</td>
<td>2 291</td>
<td>5 852</td>
<td>13.9%</td>
<td>9.4%</td>
</tr>
<tr>
<td>2001</td>
<td>301</td>
<td>1 838</td>
<td>1 126</td>
<td>2 034</td>
<td>5 300</td>
<td>14.1%</td>
<td>9.4%</td>
</tr>
<tr>
<td>2002</td>
<td>371</td>
<td>1 748</td>
<td>1 132</td>
<td>2 097</td>
<td>5 349</td>
<td>13.8%</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

Figure 1.5 Indonesia timber exports in 2004

1.5 General Institutional Framework in the Forest Sector

1.5.1 Public Administration

Many local governments are experimenting with innovative forest, watershed, and community-based natural resource management approaches, often with the help of Non-governmental organization (NGO) networks and universities. The Ford Foundation and the Department for International Development (DFID) Multi-stakeholder Forestry Program support a wide range of efforts of this type using grants and technical assistance. World Bank managed Global Environment Facility Medium-sized Programs (GEF-MSPs) have also been successful in achieving conservation objectives working at the provincial and district level.
There are increasing opportunities to engage on land use and access issues with central and local government, NGOs, farmer and adat groups, academics and business interests. The Ministry of Forestry of Indonesia (MOFR) established the Tenure Working Group in November 2001 to develop a discourse on forest management that is more just and sustainable. The Working Group aims to develop mechanisms for resolving conflicts and building understanding among multiple stakeholders about land use conflicts. National Development Planning Agency of Indonesia (BAPPENAS) and National Land Agency of Indonesia (BPN) are engaged in developing a National Land Policy Framework that strives to develop institutions and mechanisms to resolve land use conflicts, in line with the principles in People’s Consultative Assembly of Indonesia (MPR) Decree Number 9 of 2001.

1.5.2 Research and Development Institutes

Center for International Forestry Research (CIFOR), The World Agroforestry Center (WAC) and the Ford Foundation are important partners in conducting analysis and supporting civil society organizations (CSOs) and wider dialogue processes. These organizations and their partner CSOs have supported technical analyses and dialogue processes that have contributed to the current opportunities seen in the sector. Other important donors which assist the sustainable development of Indonesia’s forest sector include the Asian Development Bank (ADB), International Bank for Reconstruction and Development (IBRD), DFID, United States Agency for International Development (USAID), Canadian International Development Agency (CIDA), German Technical Cooperation (GTZ), Japan International Cooperation Agency (JICA), and CIRAD Foret.

1.5.3 Private Sector

Previous to current operations, the forest industry was more monolithic and controlled by a few powerful trade associations. Now, though, it seems that furniture makers, pulp producers, plywood and sawnwood manufacturers, all face different market forces and see their opportunities for the future differently. There are signs that at least some parts of the corporate sector are adapting in ways that will contribute to solving forest sector problems. Progressive firms are already making investments in plantations and retooling that will allow them to demonstrate sustainability and efficiency in global markets. The trade associations have also evolved: many are under new management, better represent the needs of their members firms trying to do business in the global economy – and are more open to public consultation and transparency. The industry no longer speaks with one voice. Progressive forces denounce illegal logging because they recognize that international perceptions of Indonesia influence their ability to access lucrative foreign markets.

Indonesia has been the focus of numerous private sector efforts to help combat illegal logging. Indonesia plays host to the Global Development Alliance (GDA) launched with the specific objective to “strengthen market signals to expand certification and combat illegal logging, specifically to stimulate demand for certified forest products and reduce the market for illegally cut wood products in Japan, China and other key Indonesian export markets.” The Alliance is a public-private partnership comprised of the US Government (through USAID), the Government of Indonesia, international and local NGOs, the international forestry research institution (CIFOR), and more than 17 companies. The Alliance is led by The Nature Conservancy (TNC), World Wide Fund for Nature - WWF, and Tropical Forest Foundation. Alliance members have built an independent legal verification and timber tracking system in two forest concessions in East Kalimantan, covering 350 000 ha of natural forest. The alliance has assisted three forest companies in West Kalimantan, to successfully convert their timber concession practices to meet Reduced Impact Logging Verification standards as well
as legality standards. More than 506,560 ha of natural forest are now covered by the logging verification system.

1.5.4 Non-government Organizations

The environmental and conservation NGOs have been key partners of donors in developing analyses of commercial forestry issues, contributing to ongoing dialogue processes, and supporting conservation initiatives (e.g., Forest Watch Indonesia - FWI, TNC, Conservation International - CI, Wildlife Conservation Society - WCS, Fauna & Flora International - FFI, and WWF Indonesia). Several NGOs have developed constructive partnerships with the MOFR on critical governance issues (e.g., Indonesian Corruption Watch and Greenomics). The Ministry also has a long-term capacity-building program that seconds staff to NGOs and international organizations for several years at a time.

Some NGOs (WWF and TNC) and the IFC have developed partnerships with more progressive elements of the private sector to work on issues such as certification or high conservation value forest. Most of the early partnership opportunities have already been found. However, additional opportunities will arise as market forces and opportunism continue to differentiate various groups within the industry. Donors can (and have) influence this process through policy initiatives that favor access to their domestic markets for legally-sourced forest products, through support to NGO networks and civil society watchdogs, and through private sector partnerships. Optimism must be tempered, however. Efforts to increase financing in the forest sector or to work with individual firms would have to recognize that firms may misjudge costs, underestimate environmental impacts, and use overly optimistic future projections. Financing agencies need better due diligence practices and better follow up on forest sector projects, especially in the pulp sector in emerging markets, such as Indonesia (Setiono 2006; Spek 2006).

A list of the NGOs in Indonesia which are particularly active on forest issues are listed below:

- WCS - Indonesia Program
- FFI
- World Rainforest Movement
- Wahana Lingkungan Hidup Indonesia (WALHI)
- Conservation Community Indonesia - WARSI
- FWI
- Birdlife International
- Tropenbos International
- Wetlands International
- Wetland International - Indonesia Program
- WAC
- Borneo Orangutan Survival Foundation (BOSF)
- Indonesian Center for Environmental Law (ICEL)
- World Wildlife Fund Indonesia (WWF)
- CIDA
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- CI
- CI - Indonesia
- TNC
- Kehati Foundation
- Pelangi Indonesia
- International NGO Forum for Indonesian Development (INFID)
2. ILLEGAL TIMBER PRODUCTION AND EXPORTS

The MOFR estimates that the total legal annual harvest of Indonesian native forest timber is approximately 17 million m$^3$ and the installed capacity of the forest industry is approximately 74 million m$^3$. While some of this wood (especially for the pulp and paper mills) comes from existing industrial plantations, it is estimated that the great majority (approximately 75%) of the timber is sourced illegally. This is because most of the commercially viable timber available from legal forest concessions has been exhausted and industrial forest plantations have not been developed quickly enough to meet the shortfall.

Reported estimates of illegal logging activity in Indonesia are commonly very high and range from 50% to 83% of total wood supply (Table 2.1). Costs (in lost government revenues) associated with illegal logging have also been variously estimated at anywhere from about USD 600 million/year to USD 3 billion/year.

Table 2.1 Share of illegal timber of total production in Indonesia

<table>
<thead>
<tr>
<th>Illegal timber, % of total production</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 66</td>
<td>World Bank 2006a</td>
</tr>
<tr>
<td>73</td>
<td>WWF 2002</td>
</tr>
<tr>
<td>70-80</td>
<td>American Forest and Paper Association (AFPA) 2004</td>
</tr>
<tr>
<td>80</td>
<td>HCEAC-UK 2006</td>
</tr>
<tr>
<td>83</td>
<td>Tacconi et al. 2004</td>
</tr>
</tbody>
</table>

The Ministry of Forestry has no reliable way of knowing how much the logging of natural forests actually amounts to, in view of the fact that provincial departments of forestry which provide authorization for such logging tend not to report that information to the national government. In fact, no reliable national statistics are kept on the felling of HPH (Indonesian forest concession system) timber or other timber sources. In contrast to most other countries, the government of Indonesia has itself acknowledged that illegal logging is a significant problem.

The total volume of forest product exports from Indonesia is about 42 million m$^3$ (RWE). The largest export markets are China and Japan with 21% and 19% of the total, respectively. The EU and South Korea account for 11% and 10%, respectively.

According to Global Timber, more than 10 million m$^3$ of logs are thought to have been smuggled out of Indonesia during 2006. Throughout 2005, the export of sawn wood was prohibited. Indonesia’s customs recorded negligible quantities of sawn wood exports during 2005, whereas large volumes had been exported in prior years. However, there has been no discernible difference in the large volume of sawn wood which major countries have declared as imports from Indonesia since that export ban was introduced – late 2004.

---

1 [http://www.fas.usda.gov/gainfiles/200606/146198093.pdf](http://www.fas.usda.gov/gainfiles/200606/146198093.pdf) – presumably to China and (despite a reciprocal ban on trade in logs) Malaysia for end-use or laundering. This volume is in addition to the quantities of illegal timber estimated on the basis of declared trade.

2 ITTO Tropical Timber Market reports for 16-31 October 2004 and 16-28 February 2006. The ban is understood to have been ambiguous.
3. MAIN DRIVERS BEHIND ILLEGAL LOGGING IN INDONESIA

Listed below are the main factors which drive illegal logging and other illegal forest activities in Indonesia.

- Poverty
- Inadequate law enforcement
- Inadequate capacity of prosecutors
- High industrial processing capacity compared to the Annual Allowable Cut
- High profitability of illegal logging compared to legal logging
- Decentralization without adequate coordination in forest sector
- Low level of transparency of governmental agencies
- Corruption
- Lack of public policies encouraging development combined with natural resources preservation
- Insufficient means to collect fines applied to illegal operations
- Low level of interaction among the agencies responsible for enforcing environmental responsibility
4. **BENEFITS OF ILLEGAL LOGGING AS OPPOSED TO LEGAL OPERATION**

Illegal logging in Indonesia mainly takes place outside logging concessions, since the concession enterprise normally is able to protect the area that has been allocated (but that is not always the case). The main sources of illegal logs are abandoned logging concessions (in the absence of control), protection forest areas and national parks. Harvesting outside concessions avoid paying fees, thus illegal operators are able to sell their products cheaper than legal operators and/or they can gain higher profit margins. The economic incentives to operate illegally are significant. Legal loggers have to pay EUR 17 per m³ in taxes on unprocessed logs, which per processed product makes about EUR 34 to 50 per m³. Avoiding other taxes and compliance measures adds significantly to these figures.

In addition, the benefits are related to avoiding the high transaction costs in the bureaucratic process of getting the concessions and management plans approved. The transaction costs of the illegal operations include bribes and penalties to be paid multiplied by probability of being caught and prosecuted. Bribes can be significant and penalties are in theory an additional factor. However, due to the weaknesses of the enforcement system and the structural nature of corruption, it is only rarely that illegal operators are paying these costs⁴. In fact, companies are being allowed to break the law for a price, rather than paying bribes to operate illegally. This should be fully understood in combating illegal practices. Making government institutions more transparent and accountable through social and other pressure may be the only way to change this situation.

5. INITIATIVES TAKEN SO FAR TO COMBAT ILLEGAL FOREST ACTIVITIES IN BRAZIL

5.1 Initiatives Taken So Far by the Indonesian Government

The UK-Indonesia Memorandum of Understanding (MoU) "on cooperation to improve forest law enforcement and governance and to combat illegal logging and the international trade in illegally logged timber and wood products" has facilitated several relevant activities. Together with the EU Illegal Logging Response Center project, it has laid down, by testing key concepts and initiating transparency and reform processes, a solid basis for making a faster progress through the technical assistance provided by the EU-Indonesia Forest Law Enforcement, Governance and Trade (FLEGT) Project.

There are other MoUs or similar agreement relating to illegal logging between Indonesia and other countries:

- Joint Announcement on the cooperation in combating illegal logging and the trade in illegally logged timber and wood products between the Government of Japan and the Government of Indonesia (June 24, 2003).
- MoU between the Government of the Republic of Indonesia and the People’s Republic of China concerning cooperation in combating illegal trade of forest products (December 18, 2002)
- Letter of Intent between the Government of the Kingdom of Norway and the Government of Indonesia regarding cooperation to improve law forest law making and law enforcement to combat illegal logging.

The Minister of Forestry of Indonesia gave a statement regarding transparency of forestry operations on 27 February 2006. The statement reiterated the commitment of the government of Indonesia to sustainable forest management (SFM) and to transparency specifically, and that forestry operations need to involve multiple stakeholders in a responsible way.

On 8 January 2007 the Minister of Forestry of Indonesia met EU Commissioners responsible for Development and Environment respectively, in Brussels. They agreed to initiate formal negotiations towards conclusion of a voluntary partnership agreement (VPA) on FLEGT, which will provide assurance that Indonesian forest products imported to the EU are verified to be legal. The agreement will also provide for cooperation, including capacity building, market and technical studies and knowledge sharing.

5.2 Legislation in Indonesia

The following are the legislation, which are or can be used to combat illegal logging in Indonesia either directly or indirectly:

**Constitution**

Constitution of the Republic of Indonesia, 1945

**Laws**

- Law/Act (3)
  - 1999, law no. 41, Forestry
  - 2004, Law no. 1, Amendment of Law No. 41 on Forestry
  - 2004, Law no. 19, Replacing Law No. 41
• Government Regulation (7)
  - 1999, Law no. 22, Concerning Local Government
  - 1999, Law no. 29
  - 1999, Law No. 25, Concerning Central and Provincial Government Authorities as an Autonomous Region
  - 2002, Law no. 34
  - 2004, A Joint Study on Forestry Penalties and Sanctions
  - 2004, Law no. 45
  - 2007 Law no. 6, Forest Arrangement and Preparation of Forest Management Plan, and Forest Utilization

• Presidential Decree (1)
  - PP No. 04 of 2001, On Control Of The Environmental Degradations And Pollution Related To Forest And Land Wildfire

• Presidential Instruction (1)
  - 2005, Law no. 4, Eradication of Illegal Logging

• Ministerial Regulation (4)
  - 2004, Law no. 1, Empowerment of the local community inside and or in the forest vicinity in terms of social forestry
  - 2004, Law no. 101, Acceleration of the development of estate forest to accommodate the raw material requirement for the pulp and paper industry
  - 2006, Law no. 27, Long Term Development Plan of Forestry 2006-2025
  - 2007, Law no. 23/Menhut-II, The Application Procedure for Business License for Timber Forest Product Utilization at the People’s Tree Farm in a Planted Forest

• Ministerial Instruction (1)
  - 2005, Law no. 3, Eradication of Illegal Logging

• Decree of Echelon I (1)
  - 2001, Law no. 5, Combating Of Illegal Logging And Trading Of Illegal Forest Products Within Leuser And Tanjung Puting National Park Ecosystems

• Secretary General Decree (34)
  - 2000-2004 34 laws

• Inspector General Decree (3)
  - 2000, Draft Government Regulation Concerning Forest Planning
  - 2001, Draft Government Regulation Concerning Forest Management
  - 2001, Draft Government Regulation Concerning Forest Protection

• Head of BAPLAN Decree (1)
  - 2003, Law no. 29, Land reform

• Secretary General Circular (1)
  - 2004, Ministry of Forestry Organizational Structure Chart

• Provincial Regulation (1)
  - 2005, Law no. 4, Transparency of Government Operation in West Kalimantan Province

• Governor Decree (2)
  - 2007, Law no. 116, Decree on Establishment of Provincial Steering Committee and Technical Team of EC-Indonesia FLEGT Support Project in West Kalimantan
6. CURRENT FOREST LAW ENFORCEMENT SYSTEM AND ITS EFFECTIVENESS

The following assessment on forest law enforcement system is from Schroederus-Wildberg et. al. 2005.

Decentralization began in 2000 and aimed at transforming Indonesia into one of the most decentralized countries in the world. Most government functions moved to districts and municipalities, overstepping the province level because of the fear of strengthening separatist movements. The defense, security, and justice systems remained centralized and the central government also retained a specific role in national planning and natural resource utilization. At the same time, responsibilities for agriculture, land, industry and trade, capital, and labor shifted to some 360 local governments (districts). This step positively influenced the general political climate in Indonesia. However, the new law did not define the local governments’ functions in these policy areas, leaving, for example, the responsibility for natural resource management unclear.

When decentralizing the forestry sector, good intentions did not result in good laws. Also, local governments did not receive adequate financial resources to enable them to fulfill their new tasks. The most significant decision in the forestry sector was that districts gained the authority to grant 100 ha logging concessions in order to provide poor people with land for subsistence farming and to compensate them for the loss of their indigenous land rights. Clear-cut concessions of this type did not require reforestation and were only valid for one year. In the end, ambiguous, overlapping, or conflicting decentralization laws, as well as the need for revenues, have led local governments to issue larger concessions, which often overlap with centrally-issued logging concessions. All in all, some 500 pieces of legislation within the forestry sector are overlapping or conflicting.

Local governments still do not have sufficient capacities or funds in order to govern effectively, resulting in intensified exploitation of forest resources as a means to generate short-term revenues. Decentralization, in reality, has resulted in a shift of the imbalance of power from the national to local level. Local patterns of cronyism today resemble the structures found under the former governments.

In 2002, the national government issued Government Regulation No. 34/2002 in order to reduce deforestation and stop the issuance of overlapping logging concessions by local governments. This regulation declares that the granting of logging concessions by district governments is illegal and is retroactive for all licences issued after 1 January 2002. This law has so far been unsuccessful because local authorities do not recognize its legitimacy and have not stopped issuing concessions. The central government does not see any possibility of enforcing the new law since the police and military accept bribes from local players or play an active part in illegal logging activities themselves.

The practice of local governments granting logging concessions to areas already allocated to companies under national concessions often causes conflict. For this reason businesses ally with decision makers at different government levels since the issuance of licences often depends on bribes. For local authorities this is a lucrative business because, with every concession granted, bribes between from USD 5 000 to 50 000 may be paid. The situation is particularly difficult because both government levels claim to have sole authority to issue legal licences. Since an independent jurisdiction, which could solve these problems, does not exist, conflicts are 'resolved' in the field.

There is no effective law enforcement on the ground in Indonesia's forests. Factors contributing to this are the selective or non-enforcement of law, widespread corruption (including judicial corruption), and bribery. Corruption has played a role in Indonesia's bureaucratic system since the Suharto era and continues to be a driving force behind
a majority of illegal activities and political decisions. Today, corruption is the main reason behind the lack of enforcement of forestry law and of binding rules and regulations governing access to and harvesting of forest resources.

The decentralization process has triggered flourishing corruption also at the local level. This has occurred since increased local responsibilities have taken place in the context of an ineffective legal system and weak mechanisms of democratic accountability. Fighting corruption is essential to re-establish the rule of law. Yet, since it benefits many actors, corruption will be difficult to combat.

Corruption weakens the state by eroding citizens’ confidence and reinforcing the perception of state failure. Widespread corruption also encourages open access to forest resources by enabling wealthier and better-connected individuals and groups to move outside the law with no fear of prosecution. Individuals in this group include companies, civilian government officials, law enforcement personnel, and legislators.

Local government officials may also widely abuse newly obtained power by receiving bribes for their election campaigns, votes, or personal wealth. In turn, they reward supporters with logging concessions. Another source of financial rewards for local government representatives is shareholding in logging companies. Logging companies also undertake infrastructure development, such as roads and bridges, which may positively reflect back on local leaders who support those companies.

Corruption enables companies to pursue their interests independent from any laws. They bribe local government officials to obtain concessions or to build a new processing plant. Companies may also hire military or police forces to suppress local conflict or discourage local leaders by arresting them.
7. CURRENT STATUS OF LOG TRACKING IN THE INDONESIAN PRIVATE SECTOR

In 1994, the Indonesian Eco-labeling Institute (LEI) was established in response to calls for certified timber. LEI, a NGO and independent institution, has established a “voluntary certification” program to assess concessionaires towards SFM. LEI has developed certification for Natural Production Forest, Plantation Forest, Community Based Forest Management, and Chain of Custody. Certification assessment for sustainable natural production forest management (NPFM) is undertaken under a Joint Certification Program (JCP) between LEI and Forest Stewardship Council (FSC).

Association of Indonesian Forest Concession (APHI) had also formulated principles, based on the International Tropical Timber Organization Criteria and Indicators (ITTO C&I) for SFM called “List of Valuation for internal assessment amongst members of APHI”, in which numbers of forest concessionaires were evaluated in the period of 1994-1998. But since 1998, where the country faced an economic crisis, almost all forest management units which have prepared for forest certification assessment had set back to the former condition.

One example of a log tracking system development in Indonesia is Perum Perhutani lock tracking project with the Tropical Forest Trust and Helveta using TracElite software.

Perum Perhutani plantation tracks its timber throughout the supply chain in two pilot sites, and plans to gradually roll out the system to a further 55 locations. The logging process starts with pre-harvest inventory recording in the plantation using a barcode tagging system. The system pinpoints tree locations for back-to-stump traceability and uses this approach to prevent timber of non-verifiable origin entering the supply chain. Data collected during barcode scanning also allows accurate calculations of volume per tree or log. All the data capture software is managed and deployed remotely across the Internet, meaning updates and enhancements can take place without anyone having to leave the forest.

With log tracking system in place, Perum Perhutani is aiming at FSC certification.
8. SCOPE TO INCREASE LEGAL TIMBER PRODUCTION

Figure 8.1 shows that the proportion of timber from the natural forest has fallen from about 95% in the early nineties to about 40% in 2005.

Figure 8.2 illustrates the reduced importance of the natural forest as a timber source over time. The violet part, identified as secondary forest, is logged over natural forest, the productivity of which is also shown as declining. The study has underestimated the productivity of the plantations in 2001-2007. Pulpwood plantations and private plantations together are now producing more than legal logging in the natural forest. – The point, however, is to demonstrate the radical change in raw material base that is already taking place in Indonesia, with natural forests providing steadily reduced wood volumes to the industry.

The diminishing proportion of natural timber in the raw material mix does not diminish the importance of controlling illegal logging in natural forest. The conclusion should instead be that trade measures will not be enough to curb the illegal activities. This point is further emphasized in the following section on wood products trade with EU, where it is pointed out that EU absorbs only a small portion of Indonesia’s wood products export.

Figure 8.1 Timber supply from natural forest and other sources 1994-2005

![Share of timber supplies from various sources](chart.png)

*Source: Forest Department 2004*
Figure 8.2  Estimated raw material flow in million m³ from various timber sources 2001 to 2055

Source: Forest Department 2004
9. SCOPE TO INCREASE TIMBER PROCESSING

The plywood industry in Indonesia has long been the most important sector in the forest industry. An estimated 107 plants have a capacity of almost 10 million m\(^3\) annually but the actual production is much lower and has been declining for the past ten years. In 2002, production totaled approximately 7.5 million m\(^3\) of which 6.7 million m\(^3\), or more than 85%, was exported. Plywood exports in 2002 were valued at over USD 1.6 billion and accounted for almost 30% of global plywood trade. Major markets for Indonesian plywood include Japan, the USA, South Korea, China and the EU.

Plywood production costs have increased by 30 to 40% since 2001 at the same time that competition from China, Russia and Eastern Europe has put downward pressure on global prices. As a result, the Indonesian plywood sector has been forced to downsize. The industry is hoping to use more fast-growing Albizia in the future as an additional, more stable supply source. The species is said to reach 40 cm DBH in only 8-10 eight years.

Estimates differ as to the size of the sawmilling industry, but installed capacity ranges from 12 to 16 million m\(^3\) annually, depending on the source. Regardless of the actual figure, the sawmill industry suffers from gross overcapacity. The operating rates have consistently been low, ranging from 50 to 60%. Production levels appear to have remained fairly stable during the past several years. Statistics are unreliable and every government agency seems to have their own set of industry production numbers. We estimate production in 2002 was approximately 6.5 million m\(^3\), of which a major share was consumed by secondary manufacturers in the domestic market.

In 2002, Indonesia exported almost three million m\(^3\) of tropical hardwood lumber mainly to China, Japan, Hong Kong and South Korea. Sawnwood (i.e. lumber) exports to Malaysia include rough sawn logs shipped to Malaysian sawmills for further breakdown. The trade of these products, often cut to squares by chain saws in the forest, is a way to circumvent the log export ban and a legal way of exporting square logs.

The pulp and paper industry consists of seven wood-consuming pulpmills with installed capacity of over six million tons per year. Despite as much as 11 million m\(^3\) of manufacturing residues produced each year by the solid wood products industry, the pulp industry depends largely on roundwood to meet its fiber requirements. This sector is the largest consumer of roundwood in Indonesia; an estimated 25% to 35% of its fiber is sourced from plantations.

Despite wood supply problems in much of Indonesia, pulp capacity is expanding. A new pulpmills have been planned.
10. CURRENT CONDITION IN FOREST SECTOR OF INDONESIA

10.1 Forest Sector Contribution to the National Economy

In 2000, the forestry’s contribution to gross domestic product (GDP) accounted for 1.6% of the national GDP. In 2001, export value of forest products, of which majority harvested from natural production forest accounted for USD 4.445 billions. Of this amount, processed wood products accounted for 98.2%, while logs and non-timber forest products only 1.5% and 0.2% respectively. In the same year, total value of non-oil exports accounted for USD 43.685 billions. Of this amount, forest products exports contributed of 10.2%, or ranking 3 of national exports after electronics and textiles exports which contributed of 14.8% and 17.5% respectively.

10.2 Employment in the Forest Sector

There are no official statistics on employment in the forest sector so only crude estimates can be made. In 2004 estimates were made of direct employment generation in pulpwood plantations, logging industry, sawmilling industry, plywood industry and pulp and paper industry. The numbers provided make it clear that employment has been declining from a peak of 389,000 workers in 1997 to 363,000 in 2002. Employment in logging has fallen from 114,000 to 82,000, in sawmilling from 44,000 to 31,000 and in plywood industry from 124,000 to 97,000 workers. Since 2002 employment in the plywood industry has fallen even further.

The exceptional expansion of the pulp and paper industry during the past ten years has not made up for this decline, as it is generally capital intensive with limited labor input. This is also true for the pulp wood plantations.

We can estimate that presently about 101,000 workers are employed in logging outside the pulp and paper industry (legal plus illegal), 58,000 in sawmilling and 75,000 in plywood manufacture. The total figure becomes 234,000.\(^5\) It is estimated here that some 54,000 are employed in illegal logging. They would lose their jobs as illegal logging is reduced.

In sawmilling today’s number of employees would fall from 58,000 to about 31,000 if illegal logging were to stop suddenly. Plywood manufacture would have to reduce employment from 75,000 to 38,000, following the same reasoning, but there are opportunities to mix plantation wood into the production, and to expand volumes while lowering the cost of raw material.

The conclusion of the above is that job losses would be considerable in logging work (more than 50,000 jobs, or half the labor force currently involved) with the closing of all illegal logging. Plywood manufacture is expected to be less affected due to shift to plantation wood as raw material. The major job losses in the plywood sub sector have already taken place.

Employment generation in pulpwood plantations is relatively low: 23.3 ha per permanent worker. With the government target of establishing 2.5 million ha of plantations by 2009 about 107,000 permanent workers will be employed on a steady basis, a rate that will hardly be noticed in the provinces. Using a farm forestry approach will need 3.5 ha to create one permanent job, so about 714,000 permanent jobs will be created.

---

\(^4\) Simangsunsong 2004a.

\(^5\) It is usually assumed that each permanent worker provides for four to five dependents, so the total number of individuals concerned could be between 1.17 and 1.4 million.
A report estimates\(^6\) that illegal logging employs twice as many workers per m\(^3\) extracted as the legal logging operations, and this is seen as an explanation why illegal logging is so difficult to control: marginalized people in the forest areas need work, and the illegal loggers can offer it.

10.3 Status of Corruption in Indonesia

According to the Transparency International Corruption Perception Index 2007, Indonesia ranks 143 out of 179. This implies that the degree of corruption among the public officials, which include people from public forestry sector, is quite high.

\(^6\) Pumomo 2006.
11. STAKEHOLDER VIEWS

11.1 General Information

To assess the views of stakeholders in Indonesia concerning the acceptability of the four options, and potential leverage impact of these four options and also the FLEGT, a survey with a structured questionnaire was carried out involving 21 respondents. Among the respondents, 3 were from the private sector, 12 representatives from Civil Society, and 6 from the Government. They were asked whether they agreed or not to different propositions related to the four options and FLEGT, and to what degree they agreed or disagreed with each proposition. The degree of agreeability or disagreeability is measured with five options, viz. fully disagree, partially disagree, do not know, partially agree and fully agree. For the analysis of the results, the options are given weights of –2, -1, 0, 1 and 2, respectively and then weighted averages are calculated for each proposition. A positive weighted average means the overall agreeability while the negative means the overall disagreeability of the stakeholders over a proposition.

The full results are presented in the Annex. According to the results, the stakeholders in Indonesia had varying responses between themselves. Private sector respondents strongly favored options 4a and 4b. Government respondents generally favored a combination of options 1 and 2, with either 3 or 4, while civil society respondents strongly preferred a combination of options of 1, 4a and 4b. According to the stakeholders, Option 4a is the best option among four options and hence it is worth implementing it in Indonesia, while Option 2 is the worst (Figure 11.1).

Figure 11.1 Ranking of different options

<table>
<thead>
<tr>
<th></th>
<th>Best</th>
<th>Worst</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>4a</td>
<td>4b</td>
</tr>
</tbody>
</table>

The stakeholders’ views regarding each of the four options are presented in the following sections.

11.2 Option 1: Voluntary Partnership Agreement Scheme

In general, the Indonesian stakeholders who responded to the questionnaire is that the VPA scheme has a positive effect on the Indonesian forest sector, but the implementation of the VPA needs some improvement. In particular, the impacts and the incentives under the VPA scheme are not clear.

In general, Indonesia’s producers still see the EU as a prestigious market and therefore the VPA scheme has potential to be taken seriously, however, it will depend on what types of incentives can be offered by each market. If there could be a simple
mechanism on licensing and legality standards adopted in different countries, which is also are comparable, some stakeholders think that it could be a viable option. Stakeholders are also cautious to the reality that the domestic market of an exporter country could be susceptible to increased illegal timber within the domestic market.

11.3 Option 2: Private Sector Voluntary Scheme

A number of stakeholders had critical comments regarding the private sector voluntary scheme in Indonesia. In terms of law enforcement, it will be very difficult to implement because the law enforcement officials do not have sufficient training and require a much deeper understanding of what is considered legal and illegal. Some stakeholders feel that the private sector voluntary scheme will actually discourage partners in producing countries to comply with the scheme due to the current lack of law enforcement in Indonesia with respect to forests. The skeptical stakeholders perceive that this is likely to be implemented as another trade/business/politics tactic to get benefits at the expense of producing companies.

On the other hand, a number of retailers are already implementing a legal purchase policy and tend to have an exclusivity agreement with their suppliers. However, the retailers cannot pay more or give incentives to their suppliers alone, it needs to be backed up with high-level government support.

11.4 Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber

In general, the potential implications of option 3 are not clear to the stakeholders.

11.5 Option 4: Prohibition of the Placing of Illegally Harvested Timber on the EU Market

11.5.1 Option 4a: Legislation which Prohibits the Trading and Possession of Timber and Timber Products Harvested in Breach of the Laws of the Country of Origin

On one hand this particular option received support and was the most preferable option across the stakeholders. However, stakeholders also had concerns with implementing this option. Firstly, it was perceived that option 4a is rather country specific. It was noted that the EU itself needs to also work on developing its market mechanisms on how to define illegal and legal timber. Furthermore, some stakeholders think that it may unfairly discriminate against products from high-risk countries because companies in these countries need to develop costly tracking and verification systems to prove legality, whereas companies in low-risk countries may not need them.

11.5.2 Option 4b: Legislation Which Requires that Only Legally Harvested Timber and Timber Products Be Placed on the Market

On one hand, stakeholders thought that this option may encourage trading partners in producing countries to respected positively, on the condition that consuming countries support this option with a concrete commitment and provide and incentive that makes this option viable. Alternatively, stakeholders think that this option may incur unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low. Also small exporters and producers may face difficulties meeting the evidence requirements by importers.
12. LIST OF REFERENCES


Simangsunsong, Bintang C.H. 2004b. Compiled from various sources (presented in World Bank 2006 Strategic Options for Forest Assistance in Indonesia).


Internet:
http://www-gvm.jrc.it/tem/Forest_mapping/products/forest_maps/insularSEasia.htm
### LIST OF PARTICIPANTS

**Workshop of Impacts of VPA towards Indonesian Timber Trade**  
Jakarta, 30 October 2007

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hadi S. Pasaribu</td>
<td>Director General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>2.</td>
<td>Hadi Daryanto</td>
<td>Secretary of Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>3.</td>
<td>Harry Budhi P</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>4.</td>
<td>Wahyu Andayani</td>
<td>Faculty of Forestry, University of Gajah Mada, Yogyakarta</td>
</tr>
<tr>
<td>5.</td>
<td>A. Edi Nugroho</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>6.</td>
<td>Roni Saefullah</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>7.</td>
<td>Syamsu Alam</td>
<td>Faculty of Forestry, University of Hassanudin, South Sulawesi</td>
</tr>
<tr>
<td>8.</td>
<td>Abdurrani Muin</td>
<td>Faculty of Forestry, University of Tanjungpura, West Kalimantan</td>
</tr>
<tr>
<td>9.</td>
<td>Asep Jalaludin</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>10.</td>
<td>Agus Isnantio</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>11.</td>
<td>Budi Suharto</td>
<td>Directorate General Custom and Excise, Ministry of Finance</td>
</tr>
<tr>
<td>12.</td>
<td>Bambang D. Adj</td>
<td>Center for Forestry Development Regional III (Kalimantan island)</td>
</tr>
<tr>
<td>13.</td>
<td>B. Murdiono</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>14.</td>
<td>A. Dahlan</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>15.</td>
<td>A. Yani</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>16.</td>
<td>Haidir</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>17.</td>
<td>Zahidi Putra</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>18.</td>
<td>Laksmi B</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>19.</td>
<td>Cucung S</td>
<td>Forestry Information Center, Ministry of Forestry</td>
</tr>
<tr>
<td>20.</td>
<td>Suhendroyono</td>
<td>Center for Forestry Development Regional III (Kalimantan island)</td>
</tr>
<tr>
<td>21.</td>
<td>Usman</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>22.</td>
<td>Jansen</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>23.</td>
<td>Yulinda</td>
<td>Directorate General of Land Rehabilitation and Social Forestry, Ministry of Forestry</td>
</tr>
<tr>
<td>24.</td>
<td>Widayaka D</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>25.</td>
<td>Haris S</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>26.</td>
<td>Aryan MD</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>27.</td>
<td>Rita P</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>28.</td>
<td>Andi Sarmah</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>29.</td>
<td>Chandra C</td>
<td>Directorate general of Directorate General of Forest Protection and Nature Conservation</td>
</tr>
<tr>
<td>30.</td>
<td>Tri Meinartin</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Institution</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>31</td>
<td>Wawan Kurniawan</td>
<td>International Cooperation Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>32</td>
<td>Deny K</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>33</td>
<td>Sri Wahyuningsih</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>34</td>
<td>Bambang Edi</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>35</td>
<td>Effi Fitriyani</td>
<td>Directorate General of Forest Production Management, Ministry of Forestry</td>
</tr>
<tr>
<td>36</td>
<td>Agustina</td>
<td>Law and Organization Bureau, Ministry of Forestry</td>
</tr>
<tr>
<td>37</td>
<td>Ahmad Darmawan</td>
<td>CIFOR</td>
</tr>
<tr>
<td>38</td>
<td>M.A. Sardjono</td>
<td>University of Mulawarman, East Kalimantan</td>
</tr>
<tr>
<td>39</td>
<td>Bramasto Nugroho</td>
<td>Faculty of Forestry, University of Agriculture, Bogor, West Java</td>
</tr>
<tr>
<td>40</td>
<td>Sudarsono Sudomo</td>
<td>Faculty of Forestry, University of Agriculture, Bogor, West Java</td>
</tr>
<tr>
<td>41</td>
<td>Rudy Haryo</td>
<td>Facilitator</td>
</tr>
<tr>
<td>42</td>
<td>Melya Gustini</td>
<td>French Embassy</td>
</tr>
<tr>
<td>43</td>
<td>Agus Setyarso</td>
<td>National Forestry Council (DKN)</td>
</tr>
<tr>
<td>44</td>
<td>Mulia Addidjaja</td>
<td>Forest concession association</td>
</tr>
<tr>
<td>45</td>
<td>Bambang</td>
<td>TVRI (state TV station)</td>
</tr>
<tr>
<td>46</td>
<td>Nurcahyo Adi</td>
<td>WWF-Indonesia</td>
</tr>
<tr>
<td>47</td>
<td>David</td>
<td>Forest concession association</td>
</tr>
<tr>
<td>48</td>
<td>Arief</td>
<td>EU-TTAP</td>
</tr>
<tr>
<td>49</td>
<td>Reena Balding</td>
<td>Australian Embassy</td>
</tr>
<tr>
<td>50</td>
<td>Harry P</td>
<td>Forest concession association</td>
</tr>
<tr>
<td>51</td>
<td>Thesis</td>
<td>EU-TTAP</td>
</tr>
<tr>
<td>52</td>
<td>Wawan</td>
<td>Kompas (national printed news)</td>
</tr>
<tr>
<td>53</td>
<td>Suryanto</td>
<td>Indosiar (private tv station)</td>
</tr>
<tr>
<td>54</td>
<td>George B</td>
<td>APKINDO (plywood association)</td>
</tr>
<tr>
<td>55</td>
<td>Zulfikar</td>
<td>BRIK (forest industry revitalization body)</td>
</tr>
<tr>
<td>56</td>
<td>Andini</td>
<td>BRIK (forest industry revitalization body)</td>
</tr>
<tr>
<td>57</td>
<td>John JS</td>
<td>Sinar Harapan (national printed news)</td>
</tr>
<tr>
<td>58</td>
<td>Deni A. Novendi</td>
<td>PT. Mutu Agung (consulting company)</td>
</tr>
<tr>
<td>59</td>
<td>Ruslan AR</td>
<td>TPI (private tv station)</td>
</tr>
<tr>
<td>60</td>
<td>Arief</td>
<td>ANTARA (state printed news)</td>
</tr>
<tr>
<td>61</td>
<td>Fenny Budiman</td>
<td>Agro Indo (national printed news)</td>
</tr>
<tr>
<td>62</td>
<td>Akbar</td>
<td>Metrotv (private tv station)</td>
</tr>
<tr>
<td>63</td>
<td>Hamzirwan</td>
<td>Kompas (national printed news)</td>
</tr>
<tr>
<td>64</td>
<td>Pater</td>
<td>Kontan (national printed news)</td>
</tr>
<tr>
<td>65</td>
<td>Tommy P</td>
<td>Investor daily (national printed news)</td>
</tr>
<tr>
<td>66</td>
<td>Minangsari</td>
<td>Telapak (NGO)</td>
</tr>
<tr>
<td>67</td>
<td>Yudi iskandar</td>
<td>TNC (NGO)</td>
</tr>
<tr>
<td>68</td>
<td>Takeshi Toiwa</td>
<td>FFPRI, Japan</td>
</tr>
<tr>
<td>69</td>
<td>Miyatomo Motoe</td>
<td>FFPRI, Japan</td>
</tr>
<tr>
<td>70</td>
<td>Cininta</td>
<td>Jurnal Nasional (national printed news)</td>
</tr>
</tbody>
</table>
ANALYSIS OF RESPONSES FROM INDONESIAN STAKEHOLDERS

1) With the implementation of the VPAs in your country

a) Exports of illegal wood and wood products from your country to the EU will be significantly reduced

b) Exports that have been illegal will be legalized, i.e., the proportion of legal exports will significantly increase

c) Exports of legal wood and wood products to the EU will significantly decrease because exporters/importers will consider that the cost of meeting the VPA requirements outweighs the benefits
2) Reduction of illegal exports from your country to the EU will

a) Reduce illegal logging in your country

Disagree | Agree
---|---
-2 | -1.5 | -1 | -0.5 | 0 | 0.5 | 1 | 1.5 | 2

b) Leave illegal logging unaffected because exporters will reshuffle trade flows shipping available legal products to the EU and illegal products to other markets

Disagree | Agree
---|---
-2 | -1.5 | -1 | -0.5 | 0 | 0.5 | 1 | 1.5 | 2

c) Leave illegal logging unaffected because the involved countries will increase local processing of illegal timber and export these products to the EU

Disagree | Agree
---|---
-2 | -1.5 | -1 | -0.5 | 0 | 0.5 | 1 | 1.5 | 2
3) Reduction of illegal imports from your country to the EU will

a) Be compensated with legal exports from your country

b) Be compensated with exports from countries not involved in VPA implementation

c) Shift demand towards timber products available within the EU
### Annex 2

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>d) Shift demand towards substitute products (other than wood products)</td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
<tr>
<td>e) Have a positive impact on the market share of wood products in the EU because of giving them a better image</td>
<td><img src="chart1.png" alt="Bar Chart" /></td>
<td><img src="chart2.png" alt="Bar Chart" /></td>
</tr>
</tbody>
</table>
4) From the standpoint of the private sector, the VPA scheme will

a) Benefit legal producers and traders by eliminating the unfair advantage enjoyed by illegal producers and traders

b) Lead to relocation of timber transformation activities outside of the EU

c) Favor large export companies at the expense of small and medium-sized ones
5) Even if technical arrangements to secure legality were effective, the VPA scheme would have a limited impact

a) Because it cannot effectively catalyze changes to factors underpinning illegal logging such as poor forest governance, poverty, corruption, inappropriate land tenure, etc.

b) Unless other major consumer countries such as China, Japan and the US join the scheme
6) Legal products from VPA countries will

a) Fetch higher prices in the EU market because reduction of overall supply in the EU will drive price level higher

b) Will enjoy a price premium of 10% or more in the EU market

c) Will have better access to the EU market, i.e., the main benefit is bigger market share rather than price premium
7) The main benefits of having unhindered access to the EU market is that

a) Wood and wood products fetch higher prices in the EU market than in other markets

b) There is more demand for high value added products in the EU market than in other markets
8) The main environmental benefits of the VPA scheme are that it will

a) Help decrease the overall level of logging in natural forests

b) Help eliminate unlawful forest conversion

c) Help eliminating unsustainable and wasteful harvesting practices associated with illegal logging
9) The main social impacts of the VPA scheme are that it will

a) Help ensuring the welfare of forest-dependent people by securing the enforcement of existing regulations concerning distribution of benefits, access to non-wood forest products, protection of watersheds etc.

b) Help improve work safety in logging and processing of timber

c) Reduce local employment in the short run by reducing illegal logging
d) Secure long term employment by providing a sustainable basis for forest management

10) The main impacts of the VPA scheme with respect to governance are that it will

a) Help make law enforcement more effective by providing technical assistance and capacity building

b) Help eliminate corruption by requiring transparency
c) Help make the court system more effective by providing technical assistance and capacity building

![Disagree Agree Graph]

d) Further erode respect for law because the VPA scheme cannot be enforced effectively

![Disagree Agree Graph]
Option 1: VPA implementation continued

a) Will make FLEGT implementation considerably more effective because of broader coverage of countries

b) Will be effective only if the coverage of the licensing scheme were expanded to all wood products (not only roundwood, sawn timber, veneer and plywood)

c) Will be effective only if circumvention (passing the goods through third countries) were effectively prevented
Option 2: Private sector schemes expanded

a) Is a cost-effective option

b) Is a more efficient approach than government-led measures

c) Is a useful but insufficient measure because of its voluntary nature
d) Is useful as complementary measure to be used in combination with other additional options

Option 3: Border Measures to Prevent the Importation of Illegally Harvested Timber

a) Are based on a sound approach in the sense that it eliminates the possibility of circumvention through third countries

b) Will suffer from inconsistency because the quality of evidence provided by authorities in the exporting countries is likely to vary considerably
c) Cannot be implemented because it contradicts World Trade Organization (WTO) rules requiring equal treatment for products originating from within and outside of the EU

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>0</td>
</tr>
<tr>
<td>-1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>-0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Option 4a: Legislation which prohibits the trading and possession of timber and timber products harvested in breach of the laws of the country of origin

a) Is based on a sound approach in the sense that the verification and tracking systems need to be developed only when they are needed, i.e., in high risk situations

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>0</td>
</tr>
<tr>
<td>-1.5</td>
<td>0.5</td>
</tr>
<tr>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>-0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

b) Will unfairly discriminate against products from high risk countries because companies in these countries need to develop costly tracking and verification systems to prove legality whereas companies in low risk countries may not need them

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1.5</td>
</tr>
<tr>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Option 4b: Legislation which requires that only legally harvested timber and timber products be placed on the market

a) Is based on a sound approach in the sense that the burden of proof is on the private sector which has the necessary resources to provide evidence

b) Causes unnecessary costs by requiring evidence of legality even for products from countries where the risk of illegal logging is low

c) Is unfair because the underlying assumption is that imported goods are illegal unless proven legal
Assessment of the Impact of Potential Further Measures to Prevent Importation or Placing on the Market of Illegally Harvested Timber or Products Derived from Such Timber

Technical Report 9
Scenario Analyses with EFI-GTM Global Forest Sector Model

European Forest Institute
Alexander Moiseyev, Birger Solberg and Bruce Michie

Helsinki
January 21, 2008
DISCLAIMER

Indufor makes its best effort to provide accurate and complete information while executing the assignment. Indufor assumes no liability or responsibility for any outcome of the assignment.

Copyright © 2008 by Indufor Oy
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, but not limited to, photocopying, recording or otherwise.
TABLE OF CONTENTS

1. SUMMARY 1
2. METHODOLOGY 3
3. SCENARIOS 4
4. SCENARIO RESULTS 5
   4.1 Harvest Development 5
   4.2 Wood Prices 10
   4.3 Sawnwood and Plywood Production 15
   4.4 Pulp and Paper Production 23
   4.5 Forest Sector Value Added 30
   4.6 Labor Employment Development 36
5. REFERENCES 42

LIST OF FIGURES

Figure 4.1 Changes in the Global industrial roundwood harvests compared to business as usual scenario 5
Figure 4.2 Changes in the Baseline countries of the industrial roundwood harvests compared to business as usual scenario 5
Figure 4.3 Time trends in the Baseline countries of the industrial roundwood harvests compared to business as usual scenario 6
Figure 4.4 Changes in Indonesia of the industrial roundwood harvests compared to business as usual scenario 6
Figure 4.5 Changes in the expanded VPA countries of the industrial roundwood harvests compared to business as usual scenario 7
Figure 4.6 Time trends in the expanded VPA countries of the industrial roundwood harvests compared to business as usual scenario 7
Figure 4.7 Changes in other high/moderate risk countries of the industrial roundwood harvests compared to business as usual scenario 8
Figure 4.8 Changes in the EU27 of the industrial roundwood harvests compared to business as usual scenario 8
Figure 4.9 Changes in the EU Nordic region of the industrial roundwood harvests compared to business as usual scenario 9
Figure 4.10 Time trends in the EU27 of the industrial roundwood harvests compared to business as usual scenario 9
Figure 4.11 Changes in USA of the industrial roundwood harvests compared to business as usual scenario 10
Figure 4.12 Changes in the Global industrial roundwood prices compared to business as usual scenario 10
Figure 4.13 Time trends in the Global industrial roundwood prices compared to business as usual scenario 11
Figure 4.14 Changes in the Baseline countries of the industrial roundwood prices compared to business as usual scenario 11
Figure 4.15 Time trends in the Baseline countries of the industrial roundwood prices compared to business as usual scenario 12
Figure 4.16 Changes in the expanded VPA countries of the industrial roundwood prices compared to business as usual scenario 12
Figure 4.17 Time trends in the expanded VPA countries of the industrial roundwood prices compared to business as usual scenario 13
Figure 4.18 Changes in the EU27 of the industrial roundwood prices compared to business as usual scenario 13
Figure 4.19 Time trends in the EU27 of the industrial roundwood prices compared to business as usual scenario 14
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.20</td>
<td>Time trends in the EU Nordic region of the industrial roundwood prices compared to business as usual scenario</td>
</tr>
<tr>
<td>4.21</td>
<td>Time trends in USA of the industrial roundwood prices compared to business as usual scenario</td>
</tr>
<tr>
<td>4.22</td>
<td>Changes in global sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.23</td>
<td>Time trends in global sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.24</td>
<td>Changes in the Baseline countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.25</td>
<td>Time trends in the Baseline countries sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.26</td>
<td>Changes in Indonesia of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.27</td>
<td>Time trends in Indonesia of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.28</td>
<td>Changes in the expanded VPA countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.29</td>
<td>Time trends in the expanded VPA countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.30</td>
<td>Changes in other high/moderate risk countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.31</td>
<td>Time trends in other high/moderate risk countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.32</td>
<td>Changes in USA sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.33</td>
<td>Time trends in USA sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.34</td>
<td>Changes in EU27 of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.35</td>
<td>Time trends in EU27 of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.36</td>
<td>Changes in the EU Nordic countries sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.37</td>
<td>Time trends in the EU Nordic countries sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.38</td>
<td>Changes in the Central and Western EU countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.39</td>
<td>Time trends in the Central and Western EU countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.40</td>
<td>Changes in the Other EU countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.41</td>
<td>Time trends in the Other EU countries of sawnwood &amp; plywood production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.42</td>
<td>Changes in Global Pulp &amp; Paper production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.43</td>
<td>Time trends in Global Pulp &amp; Paper production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.44</td>
<td>Changes in the Baseline countries of Pulp &amp; Paper production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.45</td>
<td>Time trends in the Baseline countries of Pulp &amp; Paper production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.46</td>
<td>Changes in Indonesia of Pulp &amp; Paper production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.47</td>
<td>Time trends in Indonesia of Pulp &amp; Paper production compared to business as usual scenario</td>
</tr>
<tr>
<td>4.48</td>
<td>Changes in the expanded VPA countries of Pulp &amp; Paper production compared to business as usual scenario</td>
</tr>
</tbody>
</table>
Figure 4.78  Changes in Indonesia of labor employment compared to business as usual scenario
Figure 4.79  Time trends in Indonesia of labor employment compared to business as usual scenario
Figure 4.80  Changes in the expanded VPA countries of labor employment compared to business as usual scenario
Figure 4.81  Time trends in the expanded VPA countries of labor employment compared to business as usual scenario
Figure 4.82  Changes in other high/moderate risk countries of labor employment compared to business as usual scenario
Figure 4.83  Time trends in other high/moderate risk countries of labor employment compared to business as usual scenario
Figure 4.84  Changes in USA labor employment compared to business as usual scenario
Figure 4.85  Time trends in USA labor employment compared to business as usual scenario
Figure 4.86  Changes in EU27 of labor employment compared to business as usual scenario
Figure 4.87  Time trends in EU27 of labor employment compared to business as usual scenario

ABBREVIATIONS

EFI  European Forest Institute
EU  European Union
EU27 European Union with 27 Member States
EUR  Euro
FAO  Food and Agricultural Organization of the United Nations
FLEG  Forest Law Enforcement and Governance
FLEGT  Forest Law Enforcement, Governance and Trade
GDP  Gross domestic product
GTM  General Trade Model
m³  Cubic meter
USA  The United States of America
VPA  Voluntary Partnership Agreement
1. SUMMARY

Assessment of the impact of potential further measures to prevent the importation or placing on the market of illegally harvested timber or products derived from such timber is carried out with the global forest sector model European Forest Institute - General Trade Model (EFI-GTM).

The impact of the following four policy scenarios has been assessed:

(i) **Baseline Scenario** – Voluntary Partnership Agreements (VPAs) are made between EU and six countries: Indonesia, Malaysia, Ghana, Cameroon, Gabon, and Congo Brazzaville. It is assumed that there are no direct exports of illegal wood products from these countries to the European Union (EU) starting from year 2009 when the licensing system applying to exports to the EU is introduced. In addition, improvements in law enforcement in VPA countries start increasingly to limit the supply of illegal wood products from year 2011 onwards. It is assumed that improved law enforcement will eliminate all illegal logging by 2020.

(ii) **Option 1** - VPAs are made between EU and 12 countries. In addition to the six countries included in the baseline scenario, VPA agreements are made with six additional countries: Brazil, China, Russia, Ukraine, Belarus and Vietnam. It is assumed that there are no direct exports of illegal wood products from these countries to the EU starting from year 2009 when the licensing system is introduced. In addition, improvements in law enforcement in VPA countries start increasingly limit the supply of illegal wood products from year 2011 onwards. It is assumed that improved law enforcement will eliminate all illegal logging by 2020.

(iii) **Option 3** - It is assumed that all illegal imports from all non-EU countries to the EU are eliminated starting in year 2009 when the import ban is introduced.

(iv) **Option 4** - It is assumed that all illegal imports from all non-EU countries to the EU as well as illegal logging within the EU are eliminated starting from year 2009 when the measures preventing the placing of illegal goods on the EU market are introduced.

(v) **Option 1 exp** - The impact of additional options would be strengthened if other consumer countries developed their regulatory environment in a similar manner, where expanded VPA (option 1) were combined with the introduction of similar measures in the US, Japan and China.

(vi) **Option 1 Ru** - The impact of options 1 (with expanded VPA) would be strengthened if Russia were to introduce high export tariffs for logs in 2008-2009 (reaching EUR 50 per m$^3$ in 2009).

The most significant impact under the baseline scenario option is reduced harvests, increased wood prices and reduced forest industry production in particular for the baseline VPA countries. Expanded VPA countries under Option 1 and other high and moderate risk countries are going to increase their market shares, harvests, production volumes, employment and value added. EU 27, USA and other low risk countries are also increasing their harvests, employment, production volume and value added. However, these positive changes are marginal, since potential market impact of elimination of illegal harvests in few baseline VPA countries is limited on the global scale.

Under the Option 1 scenario all 12 potential VPA countries are expected to suffer from lower harvests, forest industry production and employment decline, although the scale of the reduction is modest for additional VPA countries.
Other high and moderate risk countries, EU 27, USA and other low risk countries are increasing their harvests, employment, production volume and value added. These positive changes are substantially more significant, since suggested 12 VPA countries are covering most of the trade of illegal wood and products made out of such wood.

Under Option 3 & 4 the impacts are rather minor, since these options do not foresee FLEG measures for high-risk countries under VPA arrangement. These options are mostly affecting trade with EU27 in the short to medium term. There are no big winner and no big losers.

Additional Option 1 scenario combined with USA, Japan and China implementing similar FLEGT measures shows similar results to Option 1. However, it may strengthen trade impacts in the short term.

Additional Option 1 scenario combined with Russian roundwood export tax increases strongly the potential market impacts, which are similar in direction to Option 1, but having larger impact.
2. METHODOLOGY

EFI-GTM is a forest sector model. By forest sector models we mean models which include in a spatial integrated context both forestry (as a supplier of roundwood and forest fibre), the forest industries (as demander of the roundwood and chips), the demand for forest industry products, and the transport of roundwood, forest fibre/chips and the forest industry products.

EFI-GTM is a spatial and multi-periodic partial equilibrium model of the global forest sector and is now up-dated and operated by the European Forest Institute in Joensuu, Finland (Kallio et al. 2004 & 2006, Moiseyev & Solberg 2001, Solberg et al. 2003). The model originates from the global trade model (GTM) of the forest sector products developed and described by Kallio, Dykstra & Binkley (1987). The model is intertemporal but static in the meaning that it seeks an equilibrium solution for one period at time, and then updates the input data for the subsequent period (Salo & Kallio 1987). One important factor which links the periods are the new investments implemented if prices and costs give high enough profitability. Another dynamic factor is the forest growth, which depends upon growing stock and harvest volumes.

The regions in the model are assumed to trade commodities whenever the trade increases economic welfare in the regions. It is assumed that consumers maximize their utility and that producers maximize their profits (Samuelson 1954). For each region supply functions for production factors are defined, as well as a set of fixed-input technologies with specific capacities for producing intermediate and final products. All the agents in the model are assumed to behave competitively and the equilibrium solutions in the model simulate competitive behaviour.

Each country in Europe is one region in the model. In addition, ten Asian, five North American, three Russian, six Latin American, two Oceanian, and four African regions are included making the system a global model linked through the transport costs between each region for all products. In the newest version of the model, data for the year 1999 is used. These include data for 61 world regions, 36 forest products (25 forest industry products, five types of roundwood plus chips, and five types of waste paper) and for each European country three types of technologies - corresponding to low, high and average production costs (“technology” means here a specification - for each product - of the production input required of labour, energy, timber (or pulp), chemicals and “other” components per ton product produced). Non-linear optimization solver MINOS is used in combination with the optimization software GAMS.

The base year demand for the final products (sawnwood, panels, paper and paperboard) is calculated from production, import and export FAO data. The demand for final products in the following years is computed using equations which describe quantity demanded as a function of prices and gross domestic product (GDP). Price and GDP elasticities for the final product demand equations are from FAO (1997). Demand for intermediate products (sawlogs, pulpslogs, chemical and mechanical pulp) derives from the demand for the final products through input-output coefficients for each technology activity in each region. Each technology activity (process) is described in the model by material input coefficients, production capacity and processing costs.

The regional wood supply is described by a supply equation, where supply is a function of price and growing stock. For each region there is a forestry submodel where the forest growth is decided by the biological growth and the annual harvest. If the annual harvest in a region is less than the net annual forest growth, the growing stock increases thus increasing the biological growing stock volume. In addition, the model includes another dynamic factor as increased growing stock increases roundwood supply according to the elasticities specified. As such the growing stock is a “shifter” of the supply curve.
3. SCENARIOS

The analyses of the trade impacts was based on the following scenarios:

(vii) Baseline Scenario – VPAs are made between EU and six countries: Indonesia, Malaysia, Ghana, Cameroon, Gabon, and Congo Brazzaville. It is assumed that there are no direct exports of illegal wood products from these countries to the EU starting from year 2009 when the licensing system applying to exports to the EU is introduced. In addition, improvements in law enforcement in VPA countries start increasingly to limit the supply of illegal wood products from year 2011 onwards. It is assumed that improved law enforcement will eliminate all illegal logging by 2020.

(viii) Option 1 - VPAs are made between EU and 12 countries. In addition to the six countries included in the baseline scenario, VPA agreements are made with six additional countries: Brazil, China, Russia, Ukraine, Belarus and Vietnam. It is assumed that there are no direct exports of illegal wood products from these countries to the EU starting from year 2009 when the licensing system is introduced. In addition, improvements in law enforcement in VPA countries start increasingly limit the supply of illegal wood products from year 2011 onwards. It is assumed that improved law enforcement will eliminate all illegal logging by 2020.

(ix) Option 3 - It is assumed that all illegal imports from all non-EU countries to the EU are eliminated starting in year 2009 when the import ban is introduced.

(x) Options 4 - It is assumed that all illegal imports from all non-EU countries to the EU as well as illegal logging within the EU are eliminated starting from year 2009 when the measures preventing the placing of illegal goods on the EU market are introduced.

(xi) Option 1 exp - The impact of additional options would be strengthened if other consumer countries developed their regulatory environment in a similar manner, where expanded VPA (option 1) were combined with the introduction of similar measures in the USA, Japan and China.

(xii) Option 1 Ru - The impact of options 1 (with expanded VPA) would be strengthened if Russia were to introduce high export tariffs for logs in 2008-2009 (reaching EUR 50 per m³ in 2009).
4. SCENARIO RESULTS

4.1 Harvest Development

Global world harvest development is shown in Figure 4.1. Baseline scenario has very limited impact (within +/- 0.1%) on the global harvests due to limited VPA countries coverage, when other countries can very easily compensate reduction of the supply from baseline countries. Under option 3 & 4 very limited effect is seen due to trade measures applied, which in general shows more limited impact compared to the Forest Law Enforcement and Governance (FLEG) measures under baseline scenario and option 1. Option 1 shows the largest impact in the long term, which is, however, rather limited at the global scale – 0.4% reduction over 2016-2020 period compared to business as usual scenario.

Alternative scenarios (see Figure 4.2) shows slightly higher impact on the reduction of the global industrial roundwood harvest with stronger reduction also in the medium term, which is however below 0.5% at the global level.

Figure 4.1 Changes in the Global industrial roundwood harvests compared to business as usual scenario

Figure 4.2 Changes in the Baseline countries of the industrial roundwood harvests compared to business as usual scenario
Despite a very limited impact at the global level, the impact in the baseline countries is substantial under baseline and option 1 scenario, with the industrial roundwood reduction exciding 20% on average for the baseline countries (the impact in 2020 is approaching 30% reduction of harvest – see Figure 4.3). This is due to the high share of illegal harvest, especially in Indonesia (with assumed 60% illegal harvest share) and the impact of the baseline and option 1 scenarios is 35-38% (see Figure 4.4).

Figure 4.3  Time trends in the Baseline countries of the industrial roundwood harvests compared to business as usual scenario

Figure 4.4  Changes in Indonesia of the industrial roundwood harvests compared to business as usual scenario

Changes of the harvest in the expanded VPA countries are less dramatic than in the baseline countries (see Figure 4.5). However, under option 1 harvest reduction is about 10% in the long term and approaching 12% in 2020 (see Figure 4.6). Alternative scenarios (see Figure 4.5b and Figure 4.6) are expected to have much stronger impact on the harvest reduction. Under additional Russian roundwood export tariff scenario harvest reduction is close to 20% in the long term, while in the medium term it’s approaching 12% reduction.
Figure 4.5  Changes in the expanded VPA countries of the industrial roundwood harvests compared to business as usual scenario

While baseline and expanded VPA countries are expected to reduce their industrial roundwood harvests due to implementation of Forest Law Enforcement, Governance and Trade (FLEGT) measures, other high/moderate risk countries, which are not covered under VPA FLEGT arrangement, are going to gain market share. Under option 1 these countries are expected to increase their harvest by close to 8% in the long term and close to 10% under alternative scenario with additional Russian export tariff scenario (see Figure 4.7). Under option 3 & 4 the impact is very marginal.

Figure 4.6  Time trends in the expanded VPA countries of the industrial roundwood harvests compared to business as usual scenario

While baseline and expanded VPA countries are expected to reduce their industrial roundwood harvests due to implementation of Forest Law Enforcement, Governance and Trade (FLEGT) measures, other high/moderate risk countries, which are not covered under VPA FLEGT arrangement, are going to gain market share. Under option 1 these countries are expected to increase their harvest by close to 8% in the long term and close to 10% under alternative scenario with additional Russian export tariff scenario (see Figure 4.7). Under option 3 & 4 the impact is very marginal.
EU27 is also expected to increase its industrial roundwood harvest (see Figure 4.8). In the medium term option 1, 3 and 4 will cause about 2% harvest increase on average, while EU Nordic region will see higher harvest increases around 3% (see Figure 4.9). Among alternative scenarios Russian export tariff scenario (Option 1 Ru) increases the average EU27 harvest with 5% in the long run (see Figure 4.8b) and an increase of 6.5% in the EU Nordic region (see Figure 4.9b). It should be noted that while option 1, 3 and 4 are all having similar impact in the medium term, the long term impact of option 3 and 4 is diminishing, and option 1 impact is staying relatively constant over time, the impact of Russian export tariff scenario is expected to increase substantially over time (see Figure 4.10).
USA gets in the model results a modest increase in industrial roundwood harvest, which is for most of the options not exceeding 0.5% in the long term, with the exception of option 1 where harvest is expected to increase by 2% (see Figure 4.11b) Alternative scenario where USA together with Japan and China are also implementing similar to EU trade measures, has a somewhat higher impact, and the highest impact is seen under Russian export tariff scenario (see Figure 4.11).
4.2 Wood Prices

Proposed FLEGT measures have rather limited impact on the global wood prices under baseline scenario and option 3 and 4 (see Figure 4.12a). Assuming that FLEGT measures will be successful in the VPA countries global wood prices are projected to increase about 3% under baseline and 8% under option 1 scenario in the long term (price increases up to 10% higher in 2020 compared to business as usual scenario, see Figure 4.13). Option 1 combined with Russian export tariff scenario (see Figure 4.12b) shows some 5% global wood prices increase in the medium term and over 10% increase in the long term.

Figure 4.11 Changes in USA of the industrial roundwood harvests compared to business as usual scenario

Figure 4.12 Changes in the Global industrial roundwood prices compared to business as usual scenario
Global industrial roundwood prices increases dramatically around 60-70% in the long term and up to 100% in 2020 in the baseline VPA countries (see Figure 4.14 and Figure 4.15). The reason for such increase is a reduction of high share of illegal logging due to successful FLEG measures in the long run. On the other hand, alternative scenarios aren't showing any significant additional impact compared to baseline and option 1 scenario. It should be noted that under alternative scenario with option 1 combined by major consuming countries joining similar FLEGT measures (Option 1 exp – see Figure 4.15) wood prices are up to 25% lower than in the business as usual scenario because of the sharp reduction of export demand from expanded VPA countries. However, this reduction is limited to few years, and in the medium to long term prices will be even higher compared to any other scenario. Under option 3 and 4 there will be some minor price reduction compared to business as usual development.

Figure 4.14 Changes in the Baseline countries of the industrial roundwood prices compared to business as usual scenario

-5% 5% 15% 25% 35% 45% 55% 65% 75%
Baseline Option 1 Option 3 Option 4
2009 - 15 2016 - 20

-5% 5% 15% 25% 35% 45% 55% 65% 75%
Option1 exp Option1 Ru

In the expanded VPA countries impact of FLEGT measures on the wood prices is more moderate compared to the baseline VPA countries (see Figure 4.16). Impact under baseline and option 3 & 4 is not exceeding 1% increased prices of wood (baseline) or reduced price (option 3 & 4). Only under option 1 scenario which covers expanded VPA countries with FLEG measures wood prices will grow up to 20% in 2020, but the projected increase stay mostly around 10% within medium term (see Figure 4.17).

**Figure 4.16** Changes in the expanded VPA countries of the industrial roundwood prices compared to business as usual scenario

a. Main options

b. Additional scenarios
Baseline scenario shows very marginal impact on wood prices in EU27 countries on average (below 0.4% increase – see Figure 4.18). Under option 1, 3 and 4 projected price increase is within 3-6% on average, however in the EU Nordic countries price increase is a bit higher (up to 7% under option 4 – see Figure 4.20). However, alternative scenario with option 1 and increased Russian export tariff will result in a prices increase up to 12% in EU27 on average (see Figure 4.18b) and exceeding 17% in the EU Nordic countries (see Figure 4.20).

In the USA all scenarios shows marginal impact on wood prices in the medium term. Under option 1 and alternative scenarios price increase is projected within 2-4% in 2020, with the highest price increase under Russian export tariff scenario (see Figure 4.21).

Figure 4.18 Changes in the EU27 of the industrial roundwood prices compared to business as usual scenario
Figure 4.19  Time trends in the EU27 of the industrial roundwood prices compared to business as usual scenario

Figure 4.20  Time trends in the EU Nordic region of the industrial roundwood prices compared to business as usual scenario

Figure 4.21  Time trends in USA of the industrial roundwood prices compared to business as usual scenario
4.3 Sawnwood and Plywood Production

Global medium vs long-term comparisons of sawnwood and plywood production for various options and additional scenarios are given in Figure 4.22. The baseline scenario has a limited impact (within -0.1%) of global production due to the limited production coming from baseline countries. Long-term effects of option 1 and additional scenarios are larger than medium term effects (-0.6% to -0.8% vs -0.2% to -0.5%) however for additional scenarios the medium term effects come closer to the long-term effects. Options 3 and 4 both have effects less than -1%. Trends (Figure 4.23) confirm the impression that impacts FLEGT measures are increasing through time with the effects of option 1 and additional scenarios all approaching -1% in 2020.

Figure 4.22 Changes in global sawnwood & plywood production compared to business as usual scenario

![Graph showing changes in global sawnwood & plywood production](image)

a. Main options

b. Additional scenarios

Figure 4.23 Time trends in global sawnwood & plywood production compared to business as usual scenario

![Graph showing time trends in global sawnwood & plywood production](image)

Baseline country medium vs long-term comparisons of sawnwood and plywood production show larger effects FLEGT measures on baseline countries (Figure 4.24). The baseline scenario has a -3% impact in the medium term and -17% impact in the long term. Long term effects of option 1 and additional scenarios are much larger than medium term effects (-17% to -19% vs -3% to -6%) however for additional scenarios the medium term effects come closer to the long-term effects. Options 3 and 4 both have effects less than -1%. Trends (Figure 4.25) confirm the impression that impacts are increasing through time with the effects of baseline, option 1 and additional scenarios all exceeding -20% in 2020.
Indonesia medium vs long-term comparisons of sawnwood and plywood production show more dramatic effects of FLEGT measures on Indonesia (Figure 4.26). The baseline scenario has a -6% impact in the medium term and 36% impact in the long term. Long-term effects of option 1 and additional scenarios are much larger than medium term effects (-35% to -38% vs -6% to -11%). Medium term effects of option 1 expanded are approximately double the effects of other scenarios. Options 3 and 4 both have negligible effects. Trends (Figure 4.27) confirm the impression that impacts are increasing dramatically through time with the effects of baseline, option 1 and additional scenarios all approaching -50% in 2020.
Figure 4.26  Changes in Indonesia of sawnwood & plywood production compared to business as usual scenario

Expanded VPA country medium vs long-term comparisons of sawnwood and plywood production show larger effects FLEGT measures on expanded VPA countries (Figure 4.28). The baseline scenario has less than +1% impact in the medium term and more than +1% impact in the long term. Long-term effects of option 1 and additional scenarios are larger than medium term effects (-6% to -8% vs -4% to -7%) however for additional scenarios the medium term effects come closer to the long-term effects especially for option 1 expanded. Options 3 and 4 both have medium and long-term effects of approximately -3%. Trends (Figure 4.29) confirm the impression that impacts are increase quickly but then grow less quickly through time especially option 1 expanded.
High and moderate risk countries medium vs long term comparisons of sawnwood and plywood production show the large effects that FLEGT measures has on these countries (Figure 4.30). The baseline scenario has a +0.5% impact in the medium term and +2% impact in the long term. Long term effects of option 1 and option 1 Russian export tariff scenario are much larger than medium term effects (+4% to +6% vs +1% to +2%) however for the option 1 expanded scenario the medium term effects come closer to the long term effects (+3% vs +4%). Options 3 and 4 both have effects less than -0.2%. Trends (Figure 4.31) confirm the impression that impacts are increasing through time with growth slowing after 2010 for option 1 expanded and 2016 for option 1 Russian export tariff scenarios.
USA medium vs long-term comparisons of sawnwood and plywood production show the moderate effects that FLEGT measures has on these countries (Figure 4.32) especially in the medium term. The baseline scenario has almost no impact in the medium term and +1.3% impact in the long term. Long-term effects of option 1 and additional scenarios are larger than medium term effects (+1.3% to +3% vs 0.0% to 0.3%) Options 3 and 4 both have effects less than +0.3% in long term and negligible effects in the medium term. Trends (Figure 4.33) confirm the impression that impacts are increasing through time with growth slowing after 2010 for option 1 expanded and 2016 for option 1 Russian export tariff scenarios.
Figure 4.32 Changes in USA sawnwood & plywood production compared to business as usual scenario

![Graph showing changes in USA sawnwood & plywood production](image)

- **Baseline**: Option 1, Option 3, Option 4
- **2009 - 15**
- **2016 - 20**

a. Main options  

b. Additional scenarios

Figure 4.33 Time trends in USA sawnwood & plywood production compared to business as usual scenario

![Graph showing time trends in USA sawnwood & plywood production](image)

EU27 medium vs long-term comparisons of sawnwood and plywood production show the moderate effects that FLEGT measures has on these countries (Figure 4.34) especially in the medium term. The baseline scenario has a +0.4% impact in the medium term and +0.8% impact in the long term. Long-term effects of option 1 and additional scenarios are larger than medium term effects (approximately +4% vs +2.7%). Options 3 and 4 both have effects from +2.6% to +3.3% in both the medium and long terms. Trends (Figure 4.35) confirm the impression that impacts are increasing through time at roughly the same rates for all scenarios except the baseline scenario with growth of options 3 and 4 declining starting in 2015 and growth of option 1 Russian export tariff scenario declining in 2018.
Figure 4.34  Changes in EU27 of sawnwood & plywood production compared to business as usual scenario

Figure 4.35  Time trends in EU27 of sawnwood & plywood production compared to business as usual scenario

Figure 4.36  Changes in the EU Nordic countries sawnwood & plywood production compared to business as usual scenario
Figure 4.37  Time trends in the EU Nordic countries sawnwood & plywood production compared to business as usual scenario

![Graph showing time trends in the EU Nordic countries sawnwood & plywood production compared to business as usual scenario.]

Figure 4.38  Changes in the Central and Western EU countries of sawnwood & plywood production compared to business as usual scenario

![Graph showing changes in the Central and Western EU countries of sawnwood & plywood production compared to business as usual scenario.]

Figure 4.39  Time trends in the Central and Western EU countries of sawnwood & plywood production compared to business as usual scenario

![Graph showing time trends in the Central and Western EU countries sawnwood & plywood production compared to business as usual scenario.]

© INDUFOR: ASSESSMENT OF THE IMPACT OF POTENTIAL FURTHER MEASURES TO PREVENT IMPORTATION OR PLACING ON THE MARKET OF ILLEGALLY HARVESTED TIMBER OR PRODUCTS DERIVED FROM SUCH TIMBER, Technical Report 9
Scenario Analyses with EFI-GTM Global Forest Sector Model. January 21, 2008
4.4 Pulp and Paper Production

Impacts that FLEGT measures have on the pulp and paper sector are indirect and fairly small when compared with the effect that the measures have on other forest sectors (except for the case of Indonesia where option 1 effects are as large as -25% and in Nordic countries where effects are as large as -4% under the option 1 scenario and as large as -6% under the Russian export tariff scenario). The following set of figures shows the effects of FLEGT measures on a region by region basis.
Figure 4.42  Changes in Global Pulp & Paper production compared to business as usual scenario

Figure 4.43  Time trends in Global Pulp & Paper production compared to business as usual scenario

Figure 4.44  Changes in the Baseline countries of Pulp & Paper production compared to business as usual scenario
Figure 4.45  Time trends in the Baseline countries of Pulp & Paper production compared to business as usual scenario

Figure 4.46  Changes in Indonesia of Pulp & Paper production compared to business as usual scenario

Figure 4.47  Time trends in Indonesia of Pulp & Paper production compared to business as usual scenario
Figure 4.48 Changes in the expanded VPA countries of Pulp & Paper production compared to business as usual scenario

Figure 4.49 Time trends in the expanded VPA countries of Pulp & Paper production compared to business as usual scenario

Figure 4.50 Changes in other high/moderate risk countries of Pulp & Paper production compared to business as usual scenario
Figure 4.51  Time trends in other high/moderate risk countries of Pulp & Paper production compared to business as usual scenario

Figure 4.52  Changes in USA Pulp & Paper production compared to business as usual scenario

a. Main options  b. Additional scenarios

Figure 4.53  Time trends in USA Pulp & Paper production compared to business as usual scenario
Figure 4.54  Changes in EU27 of Pulp & Paper production compared to business as usual scenario

Figure 4.55  Time trends in EU27 of Pulp & Paper production compared to business as usual scenario

Figure 4.56  Changes in the EU Nordic countries of Pulp & Paper production compared to business as usual scenario
Figure 4.57  Time trends in the EU Nordic countries of Pulp & Paper production compared to business as usual scenario

Figure 4.58  Changes in the Central and Western EU countries of Pulp & Paper production compared to business as usual scenario

Figure 4.59  Time trends in the Central and Western EU countries of Pulp & Paper production compared to business as usual scenario
4.5 Forest Sector Value Added

Global forest sector value added is below 0.5% change for the most FLEGT options except long term change exceeding 1% under option 1 (see Figure 4.62a). Nevertheless, forestry alone gets much higher changes (see Figure 4.62b) due to increased wood prices. Generally, forestry value added changes are more or less in line with global wood price changes (see Figure 4.12a).

Global time trends (see Figure 4.63a & b) shows that the highest increase of value added is projected under both alternative scenarios, especially under Russian export tariff scenario.
Figure 4.62  Changes in the Global forest sector value added compared to business as usual scenario

![Graph showing changes in the Global forest sector value added](image)

- a. Forest sector total
- b. Forestry

Figure 4.63  Time trends in the Global forest sector value added compared to business as usual scenario

![Graph showing time trends in the Global forest sector value added](image)

- a. Forest sector total
- b. Forestry

Figure 4.64  Changes in the Baseline countries of the forest sector value added compared to business as usual scenario

![Graph showing changes in the Baseline countries of the forest sector value added](image)

- a. Forest sector total
- b. Forestry
In the Baseline VPA countries total forest sector value added gets sizable reduction (under 7-9% - see Figure 4.65a) under the baseline and option 1 scenario due to large harvest and forest industries production decline. Value added reduction gets up to -20% when in addition to option 1 USA, Japan and China are implementing similar FLEGT measures, although this is only short-term reduction (see Figure 4.65a). Changes in the baseline countries forestry value added are in the opposite direction – increase of up to 10% under baseline and option 1 scenario due to greatly increased prices and despite of declining harvests.

Under option 3 and 4 the total forest sector value added is mostly increasing, but marginally, whereas forestry gets up to 2% reduction due to reduced wood export demand and wood prices mostly unaffected.

Figure 4.65 Time trends in the Baseline countries of the forest sector value added compared to business as usual scenario

In the expanded VPA countries total forest sector value added gets a reduction under 2-3% (see Figure 4.66a) under the option 1 scenario due to some modest harvest and forest industries production decline. Changes under the baseline and option 3 & 4 scenarios are below 1%.

Forestry value added under option 1, 3 and 4 gets a reduction of up to 3% due to reduced harvest. Wood prices under option 3 & 4 are down and price increase under option 1 is not high enough to offset reduced price (it’s just gets zero balance in the long term – see Figure 4.66b). However, under the baseline scenario value added of these countries gets a minor increase due to gaining market share lost by baseline VPA countries.

Alternative scenarios result in the highest value added decline especially for forestry (see Figure 4.67).
High and moderate risk countries get sizable value added for both total forest sector and forestry under baseline, option 1 and additional option 1 based scenarios (see Figure 4.68 and Figure 4.69). However, under option 3 & 4 the impact is close to zero.
In the EU27 countries total forest sector value added increase around 1% under most options except base, where increase is very marginal (see Figure 4.70a). With the exception of the baseline, forestry gets much more sizable increases due to increased harvests and wood prices in the EU27.

Among additional scenarios Option 1 Russian export tariff scenario provides significant boost for EU value added (see Figure 4.71).
USA forest sector and forestry value added gets modest increase (see Figure 4.72) mostly within 1% except option 1, where in the long term forest sector value added gets up to 3% and forestry gets up to 5-8% (see Figure 4.73).
4.6 Labor Employment Development

Global labor employment is generally increasing (+0.03% to +0.12, medium term and +0.13% to +3.7%, long term – see Figure 4.74) under all FLEGT scenarios except the option 1 Russian export tariff scenario which has medium-term effects of -0.2% and long term effects of -0.3%. Baseline countries show medium-term effects of from -2% to -5% and long-term effects of from -14% to -16% (Figure 4.76). Indonesia shows medium-term effects of -5% to -12% and long-term effects of -35% to -42% (Figure 4.78). This is generally in line with the baseline countries forest industries production decline. Expanded VPA countries show increasing labor employment under the baseline scenario of +0.2%, medium term and +0.4% long term and decreasing labor costs under all other scenarios (-0.3% to -1.2%, medium term and -0.7% to -2.3%, long term – see Figure 4.80). Other high/moderate risk countries show decreasing labor employment (Figure 4.82) for baseline, option 3 and option 4 scenarios in the medium term (-0.2% to -0.4%) and increasing labor employment for the same scenarios in the long term (+0.2% to +1%). Option 1, option 1 expanded and option 1 Russian export tariff scenarios (Figure 4.83) show increasing labor employment (+0.5% to +1.2%, medium term and +2% to +2.7%, long term).

USA labor employment increases from +0.3% to +0.7%, short term and from +0.7% to +1.8%, long term under all scenarios except the baseline scenario which shows negligible increases (Figure 4.84).

Effects of FLEGT measures on EU27 labor employment are mixed. The baseline scenario shows medium-term effects of +0.2% and long-term effects of +1%. Medium-term effects of options 1, 2 and 3 are negligible in the medium term. Long-term effects of +0.43, option 1, -0.03, option 2 and -0.09, option 4 show mixed impacts of timber supplies to EU countries and reduction of illegal harvests within EU member countries (Figure 4.86).
Figure 4.74  Changes in Global labor employment compared to business as usual scenario

a. Main options

b. Additional scenarios

Figure 4.75  Time trends in Global labor employment compared to business as usual scenario

Figure 4.76  Changes in the Baseline countries of labor employment compared to business as usual scenario

a. Main options

b. Additional scenarios
**Figure 4.77** Time trends in the Baseline countries of labor employment compared to business as usual scenario

**Figure 4.78** Changes in Indonesia of labor employment compared to business as usual scenario

- a. Main options
- b. Additional scenarios

**Figure 4.79** Time trends in Indonesia of labor employment compared to business as usual scenario
Figure 4.80  Changes in the expanded VPA countries of labor employment compared to business as usual scenario

Figure 4.81  Time trends in the expanded VPA countries of labor employment compared to business as usual scenario

Figure 4.82  Changes in other high/moderate risk countries of labor employment compared to business as usual scenario
Figure 4.83  Time trends in other high/moderate risk countries of labor employment compared to business as usual scenario

Figure 4.84  Changes in USA labor employment compared to business as usual scenario

Figure 4.85  Time trends in USA labor employment compared to business as usual scenario
Figure 4.86  Changes in EU27 of labor employment compared to business as usual scenario

![Chart showing changes in EU27 labor employment](chart1.png)

a. Main options  
b. Additional scenarios

Figure 4.87  Time trends in EU27 of labor employment compared to business as usual scenario

![Chart showing time trends in EU27 labor employment](chart2.png)
5. REFERENCES


Communicating and Reconciling Forest Values

Markets and Society

Industrial Forest Products  Environmental & Social Services
Pulp & Paper Wood Products  Biodiversity  Environment

Policy and Institutions

Strategic and Landscape-level Planning

Sustainable Forest Management

INDUFOR

Töölönkatu 11 A
FI-00100 Helsinki, FINLAND

Tel.: +358 9 684 0110, fax: +358 9 135 2552
indufor@indufor.fi
www.indufor.fi