



Effects of international wood trade on forests: wealthier countries benefit

International trade in wood and wood products affects forest stocks around the world. A recent study examines the relationship between changes in forest cover and international timber trade at global level. It finds that some wealthier nations with low population density can maintain forest areas while exporting wood; but other, usually poorer, nations, are losing forests through domestic and global demand for wood.

Most societies have converted natural forests to agricultural land and urban areas and exploited forests for timber resources. As income levels rise some areas become much more intensively farmed. Since intensive agricultural practices can reduce the demand for additional agricultural land, forests can recover: a process called 'forest transition'. Wealthier countries with high population densities tend to import forest products while maintaining stable forest cover.

International trade has a major impact on deforestation. Demand for wood in one country can increasingly be met by imports from other countries through international trade. Consumption in one area can therefore affect land use and land transitions in other areas. Additionally, imports can reduce demand for domestic wood and allow local recovery of forests.

Partly funded by the EU, this study¹ assessed the impact of the international wood trade on patterns of forest changes for the period 1997 to 2007. Domestic consumption of wood and import and export trade in wood was linked to changes in forest stocks for 172 countries around the world.

For countries that had more exports than imports of wood (net exporters), 35 reveal forest loss, 25 have gained forest stock and 10 showed no change in forest stocks.

Two categories of net exporters were identified. The first consisted of relatively wealthy countries, with low populations and extensive forest areas. These countries were able to achieve stable or increasing areas of forests, accounting for two thirds of the net international trade in wood. The second category was made up of less wealthy, more densely populated countries with declining forest stocks.

Of those countries that had more imports than exports (net importers), 39 experienced loss of forest stock, 39 gained forest stock and 29 showed no changes in forest stock. However, the largest trade flows for net importers – over 90% of total net imports – were found in countries that had increasing areas of forests. Many of these countries are densely populated and wealthy, European examples include: Belgium, Denmark, Ireland, Italy, the Netherlands and the UK.

Policies that regulate national land use and protection of forests should consider their impact on timber supply and on forests in other parts of the world, says the study. International trade can play a positive role in protecting forests, for example, in countries with high demands for wood by enabling imports to meet demand without depleting national forests. However, careful assessments of the impact of wood exports from countries with declining forests have to be made to ensure land use is sustainably managed for the best outcomes, both nationally and at the global level.

1. VOLANTE (Visions of Land Use Transitions in Europe) is supported by the European Commission under the Seventh Framework Programme. See: www.volante-project.eu

Source: Kastner, T., Erb, K-H., Nonhebel, S. (2011) International wood trade and forest change: A global analysis. *Global Environmental Change*. 21:947-956.

Contact: thomas.kastner@aau.at

Theme(s): Forests, Land use

The contents and views included in Science for Environment Policy are based on independent, peer-reviewed research and do not necessarily reflect the position of the European Commission.

To cite this article/service: "[Science for Environment Policy](#)"; European Commission DG Environment News Alert Service, edited by SCU, The University of the West of England, Bristol.