EUROPEAN COMMISSION

European Environment Agency

KIP INCA Phase 1

Title

The Added Value of Natural Capital Accounting for EU policies

Date:	28/09/2015
Version:	1.00
Authors:	EC, DG ENV B2
Revised by:	ENV B2 based on comments from INCA partners 12/10/2015
Approved by:	
Public:	
Reference Number:	

Document History

Version	Date	Comment	Modified Pages
1.00	21/09/2015	Document created by DG ENV B2	

Contact: JakubWejchert, European Commission, DG ENV B2.

1. INTRODUCTION

The first priority objective of the **7th Environment Action Programme** (7EAP) is to protect, conserve and enhance the Union's **natural capital.** The Union's economic prosperity and well-being is underpinned by its natural capital, i.e. its biodiversity, including ecosystems that provide essential goods and services, from fertile soil and multi-functional forests to productive land and seas, from good quality fresh water and clean air to pollination and climate regulation and protection against natural disasters.

A substantial body of Union legislation seeks to protect, conserve and enhance natural capital. However, recent assessments, in particular the mid-term review of the Biodiversity Strategy show that biodiversity in the Union is still being lost and that most ecosystems are seriously degraded as a result of various pressures, undermining their ability to sustain the essential services that they deliver and the associated benefits to our economy and society.

Developing and applying indicators to monitor the sustainability of progress at various scales is essential in this context. The 7th EAP indeed highlights the need to continue work to integrate economic indicators with environmental and social indicators, including by means of natural capital accounting.

Natural Capital accounting is a tool to measure the changes in the stock and condition of natural capital at a variety of scales and to integrate the value of ecosystem services into accounting and reporting systems at Union and national level by 2020, which will result in better management of the Union's natural capital. It should be seen as a useful tool, as part of a wider toolbox to mainstream biodiversity in economic decision-making and to ensure that natural capital continues delivering ecosystem services to our economy and society in the long term.

At international level, the UN Statistical Commission encourages countries and international organisations to make eco-system accounting a tool for economic and other policies and analysis. The system of Environmental-Economic Accounting – Experimental Ecosystem Accounting (SEEA EEA) provides a framework for testing ecosystem accounting at different levels.

An integrated system for Natural Capital and ecosystem services Accounting (INCA), as will be developed by the KIP on accounting for natural capital and ecosystem services can provide a multi-purpose tool that can be used for a range of policies, at different stages of the policy cycle, and that national authorities and research centres can access. It can enable to explicitly account for the range of ecosystem services and demonstrate in monetary terms the benefits of investing in nature and the sustainable management of resources. INCA with information about the extent, type, condition and value of ecosystem services can:

(i) present a comprehensive overviews of ecosystem services and capital,

(ii) indicate interdependencies between natural capital and economic activities,

(iii) allow measurement of the changes in these elements over time,

(iv) present information at different *scales*: eg at regional, national or EU level, and enable the aggregation (or disaggregation) of information at different scales.

(v) provide reliable basis for decision making and cost-benefit analyses.

The ways in which NCA and a system such as INCA can provide added value in a range of specific policy contexts is further outlined below. This is based on what in principle such an integrated, as yet to be developed, system could provide. It will be important to ensure that NCA is introduced, taken up and managed across these policy areas.

INCA is meant to provide the EU layer for Natural Capital Accounting, based on data available at EU level. In principle, data available at national or local level on a finer scale could be linked to this EU layer for more detailed analysis.

2. MACRO-ECONOMIC POLICIES AND INDICATORS AT EU LEVEL

Through NCA, the contribution of natural capital to economic development can be made explicit alongside produced or manufactured capital, and human capital, as well as links to social advancement, employment, and national wealth. It can thus be taken into account as an important factor in decision making at regional, national or EU level. From NCA one can develop macro indicators that can provide information alongside GDP and employment. Policies to which NCA can contribute at EU level include:

1. Green Economy, Growth and Jobs, and EU Annual Growth Surveys, Europe 2020 Strategy and its potential follow-up: Enable the identification of opportunities and trade-offs at national or EU level between key economic, social and environmental priorities. Evaluate investment and policy options in a way that better reflects true costs to society and directly addresses externalities. Input into decision making at ministerial level at macro-economic level and that of central banks. Provide concrete information to contribute to the Greening of the European Semester and Europe 2020 and its potential follow-up.

2. Development of macro-indicators alongside GDP: Enables a consistent way of developing new macro-indicators, both in physical and monetary terms that can inform decision-making alongside or in combination with GDP. These indicators could be based on aggregates of national accounts, thus assuring consistency, reliability and comparability at EU level. Such indicators could feed into the further development of indicators for Sustainable Development Goals (SDGs).

3. SECTORAL POLICIES

NCA can contribute to the better understanding, articulation, and accounting of the range of services that ecosystems provide (provisioning, regulating and cultural). These services stand alongside those typically accounted for, such as the provision of timber or food, and need to be explicitly taken into account. Specific examples of policies to which NCA can add value to include:

3. Environmental policies (The 7th EAP, the EU Biodiversity Strategy, the Water Framework Directive, the Marine Strategic Framework Directive, the Soil Thematic Strategy, air quality legislation, the circular economy): Explicitly account for the range of ecosystem services and demonstrate in monetary terms of the benefits of investing in nature, biodiversity, water and air quality and the sustainable

management of resources. Provide a common reference basis to assess progress towards targets related to ecosystem condition, such as on the target to restore 15% of degraded ecosystems.

4. Forestry (EU Forest Strategy): tangible demonstration of the true value of forests beyond timber production including: air purification, water filtration, and tourism and leisure provision. Potential generation of new sources of income for land owners, and with less dependence on market volatility. Implications for forestry planning.
5. Agricultural and Regional polices: Provide a basis for future CAP reviews, and provide authorities with a wide range of environment-favourable options to choose from. Numerical illustrations of the benefits of investing in more sustainable forms of farming, connecting landscapes and increasing biodiversity. Provide sound basis for specific cost-benefit analyses at regional or more local scales.
6. Marine Common Fisheries Policies (MSFD, CFP): Demonstration of the return in investment of restoring fish and shellfish stocks, alongside gains in terms of jobs and financial incomes. More accurately reflect the contribution of marine ecosystems to blue growth.
7. Urban and land use planning and EIA Directive: Concrete basis for evaluating land-use planning and cost-benefit decisions. For example: planning plantation woodland areas nearer to urban areas because of air, water purification services and leisure and health benefits; planning the creation of wetlands in suitable areas, thus increasing quality water for human consumption.
8. Climate Change Policies: Numerical values of contribution to ecosystem services to mitigation (such as carbon absorption due to healthy oceans, peat lands, and forests) and contributions to valuations of nature-based adaptation strategies. Costs and benefits and investment opportunities in nature-based solutions, such as flood protection schemes (instead of high-tech solutions), greening of cities, and demonstrating financial implications for insurance companies and public budgets.
9. Health and well-being polices: Provide basis for estimating benefits of nature and ecosystems to human health in monetary terms, and potential implications for health care policies and their review at national and EU level. For example, contributions to reducing pre-mature deaths and health care costs by improving air quality and introducing more green spaces in urban areas.
10. Research and innovation policies: tools to assess the impacts of R&I policy in environmental and economic terms, impacts of actions under Horizon 2020.

There is also a potential benefit of contribution to the development of consistent and streamlined forms of reporting across a range of policies and at different stages of the policy cycle: planning and development, monitoring and review, and at a range of different spatial scales, including at regional, national or at EU level.

4. BUSINESS AND BUSINESS RELATED POLICIES

In the context of the Union's promotion of environmentally responsible business practices, NCA has potential in providing a concrete basis for business performance reporting by explicitly mapping out impacts and/or dependencies on natural resources and placing a monetary value on them. This gives companies clarity on how much they

depend on nature to generate revenue and provides a common metric to embed sustainability in business decision-making. This will result in greater transparency and accountability in the way natural resources are exploited. Proper natural capital accounting also contributes to better managing and reducing risks. The TEEB reports give a lot of background on such potential benefits. In the longer term it also means that business accounting can be compatible with national accounts so they can feed into it. Specific examples include:

11. Business Accounting and Reporting: consistent basis for business accounting and reporting on nature and environmental related assets and investments. This in turn can transform business strategies and plans, contribute to the better management of risks, as well as pointing to investment opportunities by directly seeing costs/values related to nature.
12. The disclosure of non-financial reporting and accounting Directives: NCA can facilitate business reporting, in a way that is consistent with national accounting and reporting.

At international level a number of initiatives such as the "Friends of Paragraph 47" following Rio+20 and the Global Reporting Initiative have been put into place.

5. INTERNATIONAL POLICIES

Finally at international level, NCA can contribute to a globally consistent approach to account for ecosystems and their value. The EU contributes to the UN development of accounting standards such as the UN SNA, UNSEEA which includes environmental reporting and the UN SEEA EEA which is still in an experimental phase and includes ecosystem accounting. These standards can also offer contribute to a consistent approach to reporting at international level, and monitoring the Sustainable Development Goals (SDGs).

13. Contribution to UN international standards: Contributions to the further development of international standards such as UN SEEA EEA both at conceptual and practical levels. Contribution to implementation on the ground in many developing and middle income countries, including through those supported by the World Bank and the UN.
14. Contribution to the international UN Agenda 2030 for Sustainable Development by providing consistent basis for analysis and development of policies to achieve the goals and target and parallel reporting, monitoring and review of goals and targets.
15. Trade: Provide gross numerical estimates of the value of loss/gain of ecosystems and nature-based services in guiding bilateral and multilateral trade agreements.
16. Development: Supporting the adoption of NCA in developing countries will enhance their capacity for sustainable decision making processes and help in guiding foreign and internal investments. It can therefore help to increase the effectiveness of EU development and cooperation policies and ODA contributions.

These benefits can in turn ensure that the EU continues to play a lead role in international environmental affairs through its support and use of effective measures, international standards and accounting relating to natural capital.