



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS

SEEA Revision

**SEEA Experimental
Ecosystem Accounting**

Comment form

Comment form for the Consultation Draft

Deadline for responses: 15 January , 2013
Send responses to: seea@un.org

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Your country/organization:	(on behalf of the) UK's Natural Capital Committee
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To submit responses please save this document and send it as an attachment to the following e-mail address: seea@un.org.

The comment form has been designed to facilitate the analysis of comments.

In Part I general comments on the structure and content of the draft document are sought. In Part II any other comments, particularly those of a technical nature should be included.

Relevant documents

Before submitting responses you are encouraged to read

Cover Note to the Consultation Draft

SEEA Experimental Ecosystem Accounting – Consultation Draft

Part I: General comments

In the box below please supply any comments on the structure of the document, the balance of material and the coverage of the draft including any thoughts on missing content.

Comments on the style, tone, and readability of the text are also welcome.

Please reference paragraphs numbers or section numbers as appropriate.

The Consultation Draft from the United Nations on *Experimental Ecosystem Accounting* is a timely document and a crucial extension to the System of Environmental Economic Accounting (SEEA). There is much interest in ecosystem accounting and this document will be an invaluable contribution to

that debate. There is an appropriate emphasis in the Consultation Draft on the experimental nature of this accounting and the need for national statistical bodies to feel able to experiment with different approaches.

It is not only statistical agencies that will find these guidelines valuable. Public bodies – such as the Natural Capital Committee (NCC) in the United Kingdom – also have a substantial interest in seeing how fledging ecosystem accounting frameworks develop. In the NCC's specific case, for example, a crucial part of our terms of reference (see Annex) is to provide independent advice to HM Government in the UK on when natural assets are being used unsustainably. As such, NCC sees natural capital accounts as a vitally important means of fulfilling this requirement.

The Consultation Draft emphasizes where progress can be made and where the most serious challenges in deriving a system of ecosystem accounting lie. It contains a comprehensive and systemic approach to considering a physical accounting system based in particular on land areas and other forms of physical aggregation. This will provide a useful framework for future applications. Where the consultation draft is far less sure-footed is in attaching monetary values to these physical measures of ecosystems. As such, the NCC is keen to direct its response to the Consultation Draft to this one crucial issue.

To do so it is necessary to begin by considering the purpose of natural capital accounting and the questions that it is designed to address. This is an issue that the NCC has given significant recent thought in relation to its own terms of reference. In sharing these thoughts, in this response, we will then consider alternative approaches to measurement and finally conclude with some recommendations about the way forward.

Part II: Other comments

In the box below please supply any additional comments including those of a more technical nature.

Please reference your responses with the relevant paragraph number or section number.

The Purposes of Natural Capital Accounting

There are several purposes to which natural capital accounting is put. The first is to provide a more comprehensive valuation of the total stock of assets in the world alongside human, material, intellectual and social capital.

Comprehensive descriptions of the wealth of countries and the world are sought as ways of establishing levels of our well-being and prosperity, and to provide a description of the source and allocation of that wealth. Moreover, this description might also reveal the way in which wealth is changing over time in terms both of its totality and its composition.

The second purpose of natural capital accounting is to determine whether resources are being used sustainably. For example, this might manifest itself in particular interest in whether natural capital accounts can provide a more accurate description of economic activity net of the (unsustainable) consumption of natural capital. In that regard accounting for natural capital is equivalent to that of any other resource in reflecting its capital consumption. Put this way, national accounts are incomplete in failing to take account of consumption of natural capital.

These two alternatives of providing a comprehensive description of wealth, what Partha Dasgupta and others have described as “inclusive wealth”, and accounting for natural capital consumption address different questions and require different approaches to measurement. The first is a forward looking evaluation of the value of services that will be derived from different forms of capital (as well as changes in that capital). The second is a retrospective evaluation of the consumption of existing capital stocks. The first is addressed

through using market and other estimates of present values of future benefits. The latter involves an assessment of costs of capital maintenance.

We address issues in relation to both of these in turn starting with valuation of the benefits that natural capital provides and then turning to costs of its maintenance.

The Importance of Valuation

The thrust of the Consultation Draft reflects some ambivalence about the merits of moving from physical to monetary accounts for ecosystems. There is some justification for this not least in the daunting scale of the exercise involved and the potential unreliability of estimates. Nevertheless, this should not deflect from the importance of the task.

The Consultation Draft considers a number of proposals for valuation. There is a strong presumption in the extensive review of options that unless market prices can be found, consistency with the System National of Accounts (SNA) cannot be achieved. The NCC would argue that this is too conservative. Ecosystems provide services that in many cases are not marketed or marketable or only provide an incomplete picture of the value of their services. To restrict valuations, for practical purposes, to resources in the manner implied in the Consultation Draft is to underestimate substantially the extent of natural capital's contribution.

As the Consultation Draft notes, there are several approaches that can be taken to the valuation of those services provided by natural capital which are not traded directly in markets. All of these have well known difficulties and problems but these do not in themselves justify excluding these non-marketable items. Nor, in the view of the NCC, is the inconsistency of the principles of these valuation methods and the principles of the SNA as at odds as judged in the Consultation Draft. The risks of an overly conservative approach, however, are clear. By placing the value of these non-market items effectively at zero,

estimates are unequivocally biased downwards. As we have indicated, this is not to say that the considerable uncertainty surrounding valuations should not be recognized. Indeed, NCC would argue for ranges rather than point estimates to indicate the magnitude of uncertainty and the possible extent to which central estimates could be misleading.

In summary, while physical accounting rightly should be viewed as the foundation of natural capital accounts, the NCC would question the extent to which such physical lists (albeit within a consistent accounting framework) represent a sufficient step-change towards the goal of putting natural capital at the heart of decision-making. Put another way, our concern is that the approach taken towards the valuation challenge in the Consultation Draft risks placing this potentially important work programme on the policy periphery in many countries from the outset.

Capital Maintenance

A crucial focus for interest in natural capital accounting is in correcting the distortions which otherwise afflict the valuation of national income. A failure to account for depreciation of natural capital is equivalent to excluding the capital consumption of any asset leading to an overestimate of net national income.

Many ecosystems are self-sustaining and regenerate themselves to a degree that offsets the effect of human consumption. Where ecosystems are self-sustaining then no provisions need be made for natural capital consumption. It is only where natural capital is being degraded and there is a risk to its sustainability that account needs to be taken of its erosion. In comparison to the derivation of inclusive wealth measures where a comprehensive coverage of all forms of natural capital is desirable, capital maintenance only requires assets at risk to be identified. The scale of accounting for natural capital consumption is therefore much less extensive than inclusive wealth valuations.

The question arises then about how to account for this capital consumption.

Compiled over time, a comprehensive description of wealth, for example, will indicate what is lost when distinct elements of natural capital such as ecosystems are in decline. Another compelling perspective, however, would focus on capital maintenance in terms of current costs rather than (changes in) future values. On this view, where natural capital should be sustained then depreciation is measured by costs of replacement, avoidance or the economic value of activities which need to be forgone to protect natural capital.

A virtue of this approach is that it does not in general require assessments of future benefits to the same degree as an approach based on a measure of wealth. Thus it is more readily susceptible to measurement than wealth measures. It also addresses directly questions about sustainability of particular resources and attaches costs to where that sustainability is in question. However, it does not provide a measure of the wealth of natural capital or, for that matter, the value of what is lost when natural capital is degraded or destroyed. It therefore addresses a different set of questions from wealth measures and should not be regarded as a substitute for a comprehensive set of valuations within natural capital accounts (or experimental ecosystem accounts).

A Proposed Way Forward

The Natural Capital Committee (NCC) believes that deriving a set of monetary valuations is of fundamental importance and should be a primary objective of SEEA. NCC would argue further that valuations of both wealth and capital maintenance are needed. We would propose, first, an approach to valuation that provides a broad assessment of the value of different forms of natural capital to complement existing measures of other forms of wealth. Second, we would recommend that risk registers of forms of natural capital that are potentially vulnerable to degradation should be established. These identify areas where action is required to sustain current levels of natural capital. In this instance, it also could be that estimates of the costs of maintenance are needed to provide the basis for evaluating the costs of natural capital consumption (in

addition to understanding the value of what is lost).

Together both these approaches provide a comprehensive description of natural capital which will inform policy and detail the extent to which existing measures of national income are overstated by failing to account properly for its degradation.

These are topics on which the NCC is currently engaged and we would be happy to discuss our thinking on them further with those involved in the SEEA exercise.

Natural Capital Committee

31st January 2013

The Natural Capital Committee and its Terms of Reference

The Natural Capital Committee (NCC) was one of the headline commitments in the UK Government's Natural Environment White Paper (NEWP). It was established in 2012 as an independent advisory body to Government. It formally reports to the Economic Affairs Committee.

The NCC's Terms of Reference are to:

- **provide advice on when, where and how natural assets are being used unsustainably.** For example, in a way that takes us beyond some acceptability limits or non linearity thresholds, or in a way that diminishes some measure of comprehensive wealth;
- **advise the Government on how it should prioritise action to protect and improve natural capital, so that public and private activity is**

focused where it will have greatest impact on improving wellbeing in our society. This will include advising the Government on tools and methodologies to ensure that the value of natural capital is fully taken into account in policy decisions and in economic planning;

- **advise the Government on research priorities to improve future advice and decisions on protecting and enhancing natural capital.** The Committee's advice in this area will reflect consultations with the Research Councils and the academic community.