DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS

Cover Note

Issue #20: Recording of soil and its valuation

Outcome paper for global consultation

Outcome Paper Issue #20: Recording of soil and its valuation

Issue description

Soil has only marginally been addressed in the SEEA-2003. Although it appears in the asset classification, there is very little text addressing the issues on how to measure changes in soil quantity and quality. Losses in the productive capacity of land due to soil depletion and degradation is an important issue to be investigated.

Background

The inclusion of this issue as an issue for the revised System of Environmental and Economic Accounts (SEEA) reflects the recognition that soil is a key natural resource underpinning both economic production and environmental cycles such as water and carbon. However, our understanding of soil, in particular its quality, is not as strong as its importance suggests.

One barrier to work in this area from an environmental and economic accounts perspective is the interdependent relationship between soil and land. This interdependence has meant that in accounting terms it has never been quite clear as to whether soil should itself be considered a separate asset. In some cases treating the land and soil together makes most sense, in other situations a separation of the two is better. This lack of clarity has meant that flows relating to soil have usually not been clearly identified. For example, even though the depletion and degradation of soil are long recognised phenomena, a common accounting assumption is that land cannot deplete as its area stays the same from year to year. Better conceptualising and reflecting the asset and the associated flows is an important part of the revision of SEEA.

This outcome paper presents recommendations of the London Group on how stocks and flows related to land and soil should be recorded in the SEEA asset accounts and balance sheets. The paper does not deal with specific issues related to land use and land cover classifications that are discussed under a separate SEEA revision issue (Issue #19: Land).

Overall, the London Group considered that accounting for soil depletion and degradation is highly policy relevant. However, it is recognised that, to date, the practical experience in this area by the environmental accountants community is rather limited. Despite this lack of practical experience the recommendations are applications of accounting concepts that have been developed and applied for other natural resources and hence are relevant for explanation in relation to soil in Volume 1 of the revised SEEA.

Summary of outcomes

The following are the key recommendations emerging from the discussion of this issue within the London Group.

Recommendation 20.1: That the market value of all land within a territory should be included in the balance sheets of the revised SEEA whether explicitly owned or owned by the government by default.

Recommendation 20.2: That, in certain cases such as the area of land associated with roads in residential areas, it may be appropriate for the value of government owned land to be accounted for in the value of adjacent private land.

Recommendation 20.3: That in the revised SEEA the depletion and degradation of soil should be clearly defined where, in general terms, depletion relates to changes in the quantity of soil and degradation relates to changes in the quality of soil.

Recommendation 20.4: That, since both soil depletion and soil degradation causing a loss in productive capacity of the soil can occur as a direct result of economic production, the revised SEEA should deduct the value of this loss in productive capacity in the generation of income account similar to the recording of depletion for non-renewable resources.

Recommendation 20.5: That, due to their specific ecological characteristics, land and soil should be classified as separate assets in the revised SEEA.

Recommendation 20.6: That where land use agreements are in place and soil depletion and degradation is recorded, then the accounting treatment in the revised SEEA should show the deduction of soil depletion in the generation of income account, the payment of rent from the land user in the allocation of primary income account and a capital transfer from the land owner equal to the value of soil depletion in the capital account.

Questions

1. Do you agree that the market value of all land within a territory should be included in the balance sheets of the revised SEEA whether explicitly owned or owned by the government by default?

2. Do you agree that, in certain cases such as the area of land associated with roads in residential areas, it may be appropriate for the value of government owned land to be accounted for in the value of adjacent private land?

3. Do you agree that in the revised SEEA the depletion and degradation of soil should be clearly defined where, in general terms, depletion relates to changes in the quantity of soil and degradation relates to changes in the quality of soil?

4. Do you agree that, since both soil depletion and soil degradation causing a loss in productive capacity of the soil can occur as a direct result of economic production, the revised SEEA should deduct the value of this loss in productive capacity in the generation of income account similar to the recording of depletion for non-renewable resources?

5. Do you agree that, due to their specific ecological characteristics, land and soil should be classified as separate assets in the revised SEEA?

6. Do you agree that where land use agreements are in place and soil depletion and degradation is recorded, then the accounting treatment in the revised SEEA should show the deduction of soil depletion in the generation of income account, the payment of rent from the land user in the allocation of primary income account and a capital transfer from the land owner equal to the value of soil depletion in the capital account?

7. Any other comments?

To submit responses to these questions please complete the accompanying comment form available on the website. You are encouraged to submit a short response to the questions (yes/no/no comment) even if you have no further comments to submit.

Deadline for responses: 6 December 2010