Towards the 2025 SNA

Report on the Outcome of the Global Consultation on the Draft 2025 SNA

Cross-cutting issues related to natural capital/resources

Carl Obst, Peter van de Ven and Pete Harper

Prepared the Issues Note

Meeting of the Advisory Expert Group (AEG) on National Accounts

28 – 30 October 2024

Washington DC

Cross-cutting natural capital issues

Overview of Issues Note

1. Describing the relationship between ecosystem services and the production boundary of the integrated framework

2. Framing, defining and classifying natural capital and natural resources

3. Recording flows involving the harvest of biological resources by units other than the economic owner or where there is no economic ownership

4. Accounting for economic activities of non-resident units using quotas for fishing in a country’s EEZ

Cross-cutting natural capital issues

1. Ecosystem services and the production boundary

Key conceptual points following the SEEA Ecosystem Accounting:

i. Ecosystem services are natural processes which are, by definition, outside of the production boundary of the integrated framework since they do not reflect the combination of labour and capital used by economic units in the production of goods and services

ii. From a supply and use perspective the integrated framework of the SNA only records flows between economic units and hence the flow of crops is not recorded as a flow between land and farmers, but as flows between farmers and others in the food supply chain

iii. Ecosystem services, in many but not all cases, contribute to the production of goods and services inside the production boundary of the integrated framework (SNA benefits), essentially providing capital inputs/services.

iv. Ecosystem services will also contribute to the supply of benefits that are outside the production boundary of the integrated framework (non-SNA benefits) such as by providing air filtration services that lead to, for example, health benefits

v. Ecosystem assets reflect the combined value of all future ecosystem services whether they contribute to SNA benefits or non-SNA benefits.

Cross-cutting natural capital issues

1. Ecosystem services and the production boundary

Implication

- Some ecosystem assets will, in physical terms, relate to the same spatial area as land areas that are considered economic assets – e.g., agricultural land, forest land. For this reason, there will be an overlap between the value of ecosystem assets (following SEEA Ecosystem Accounting) and economic assets (i.e., land) to the extent that the land provides services that are inputs to the production of SNA benefits (e.g., crops).

Proposal

- No changes are proposed to the text in Chapter 35 in relation to this issue.
- In other chapters – notably chapters 1, 2, 11 and 34 – some changes are proposed to be consistent with this logic.
- Annex 1 of the Issues note provides proposed changes to text in all of these chapters.

Cross-cutting natural capital issues

2. Classifying natural capital and natural resources

Key points of feedback :

i. In the current guidance of the draft 2025 SNA, reference is often made to "natural capital", consisting of both natural resources and ecosystem assets. Some respondents argued that it is preferable to refer to "natural resources" or to "natural capital (excluding ecosystem assets)". More generally, respondents argued that referring to natural capital, consisting of both natural resources and ecosystem assets, in the integrated framework of the SNA, was not appropriate, because ecosystem assets are beyond the asset boundary of the integrated framework

ii. In defining natural capital (see, for example, paragraph 11.11), some respondents argued that not all natural capital "occurs naturally", and that the latter words should be avoided. Alternatively, one could consider defining natural resources as only consisting of natural resources whose growth is not managed and controlled by human activity.

Cross-cutting natural capital issues

2. Classifying natural capital and natural resources

Key points of feedback (cont.) :

iii. The question was raised where to classify costs of ownership transfer on non-produced assets. Currently, they are all classified as part of produced non-financial assets (excluding natural capital), while a significant part is related to natural capital

iv. The current guidance in paragraphs 10.140 to 10.145, which concerns produced non-financial assets (excluding natural capital), still refers to work-in-progress in, for example, agricultural crops, which seems to be inconsistent with how other types of work-in-progress in biological resources is classified .

Cross-cutting natural capital issues

2. Classifying natural capital and natural resources

Considerations and proposals:

i. It seems preferable to refer to natural resources in the guidance for the integrated framework of national accounts, and to remove references to natural capital, including ecosystem assets, from the chapters which cover the integrated framework. The main argument for doing so is that in this way the relevant guidance does not mix up the asset boundary applied in the integrated framework with the broader notion of natural capital discussed in Chapters 2 and 35.

ii. Investigation reveals a divergence between the SNA and SEEA Central Framework (CF) in the way "natural resources" are defined. Specifically,

- In SEEA CF it refers only to non-produced assets as a sub-set of environmental assets
- In 2025 SNA it refers to both non-produced and produced (i.e., cultivated) assets
- In SEEA CF environmental assets includes cultivated assets and ecosystem assets under the definition that they are "naturally occurring"
- Note that in SEEA CF the boundary in physical terms can be broader than the boundary in monetary terms
- Note that in the 2025 SNA natural resources includes the radio spectrum and renewable energy resources

Cross-cutting natural capital issues

2. Classifying natural capital and natural resources

Considerations and proposals (cont) :

iii. It proposed to apply the broader definition of natural resources, i.e., including cultivated biological resources, in the integrated framework of national accounts.

iv. It is proposed to amend the definition of natural resources to "Natural resources are assets that naturally occur, <u>such as land, mineral and energy resources, water resources, and animal, tree, crop and plant resources</u> that have an economic value and over which ownership may be enforced and transferred", or alternatively make reference to "such as land, mineral and energy resources, water resources, and biological resources".

v. Concerning costs of ownership transfer, recall that these costs are currently classified as part of produced non-financial assets (excluding natural capital/resources). Instead of applying this guidance, one could consider to reallocate this category to "natural resources". An alternative is to split the category into the costs related to natural resources, and the costs related to other non-produced assets.

Cross-cutting natural capital issues

2. Classifying natural capital and natural resources

Considerations and proposals (cont) :

vi. In relation to the costs of ownership transfer, it is proposed to apply the alternative, by splitting the category, and add each of the two components to the relevant main category of non-financial assets.

vii. The current guidance in paragraphs 10.140 to 10.145, which relates to produced non-financial assets (excluding natural resources), still refers to work-in-progress in, for example, agriculture. Paragraph 10.145 implies that work-in-progress on cultivated biological resources is classified under natural resources, while other work-in-progress is to be classified as produced non-financial assets (excluding natural resources)

viii. In respect of the latter issue, it is proposed to further clarify that all work-in-progress related to biological resources, i.e., resources yielding repeat products as well as resources yielding once-only products, are to be classified as part of natural resources in the capital account and on the balance sheet.

Cross-cutting natural capital issues

2. Classifying natural capital and natural resources

Cross-cutting natural capital issues

3. Harvest of resources by non-economic owner or no economic ownership

Key points of feedback:

i. Arange of respondents questioned the appropriate recording, especially of depletion, in cases where biological resources are harvested by units that are not the legal owner or harvest resources from resources that do not qualify as economic assets. Example instances may be

- Household collection of firewood and non-wood forest products
- Subsistence fishing
- Illegal logging and fishing
- Common pool resources
- Indigenous rights to harvest resources

Cross-cutting natural capital issues

3. Harvest of resources by non-economic owner or no economic ownership

Considerations and proposals:

i. Recognize that all harvesting activity will be recorded as part of production and consumption

ii. If an economic asset has been identified (there is a legal and economic owner/s), then:

- The value of the asset will be equal to the benefits accruing to the economic owner – i.e., future resource rents.
- A loss in value of the asset due to the productive activities of the economic owner should be treated as depletion and attributed to the economic owner
- If another economic unit harvests resources from that economic asset without payment to the economic owner, then this cannot increase the benefits accruing to the owner, as a consequence of which the loss of resources to the economic owner should be treated as an other change in volume of resources (OCV) – an uncompensated seizure
- Since the recording of depletion should be limited to the effects of actions by the economic owner, then the loss of resources as a result of harvesting by other economic units would not be treated as depletion

Cross-cutting natural capital issues

3. Harvest of resources by non-economic owner or no economic ownership

Considerations and proposals (cont.):

iii. If there is harvesting but no economic asset, then following the principles applied in the integrated framework of national accounts (e.g., forests not available for wood supply or fish stocks outside of quota regimes), there can be no depletion recorded in the accounts, since there is no economic asset.

iv. The question that arises is whether these would be cases of being able to establish a natural resource value (economic asset) for a group of people. Also, can the evidence of economic benefits alone (without legal ownership) establish a balance sheet value

v. There are no obvious conventions that might be applied since it cannot be known a priori whether the harvesting of resources is necessarily leading to depletion

vi. Note that the complementary asset accounts of the SEEA Central Framework, including accounts in physical terms, will also support the discussion of these issues

vii. This discussion raises a range of challenges and hence it is proposed that they be considered as part of the 2025 SNA Research Agenda, to arrive at a full reconciliation between the entries in the production accounts and the balance sheets

Cross-cutting natural capital issues

4. Fishing by non-resident units in a country's EEZ

Key points of discussion:

i. The entry point for this discussion is if fishing by non-resident units leads to depletion of the underlying asset (fishery) then how is this recognised in the integrated framework

ii. The issue arises if a non-resident unit is fishing using a quota established by a country. If there is no quota then no economic asset would be present

iii. The current guidance on fish resources (paragraphs 27.36 to 27.45) aims to cover a number of different types of arrangements between legal owners of fish stocks within an EEZ (assumed to be general government) and those economic units harvesting fish

iv. Three situations are highlighted :

1. annual payments of rent to the legal owner;
2. sale of an asset when quotas are issued in perpetuity;
3. quotas for a certain period of time (e.g., 5 years) with a longer term arrangement between legal and economic owner.

Cross-cutting natural capital issues

4. Fishing by non-resident units in a country's EEZ

Key points of discussion:

v. If the economic unit harvesting the resource is a non-resident unit then:

- For the first case, with annual payments of rent, there is no economic asset for the non-resident unit and any depletion that arises from the activities of the non-resident unit are costs incurred by the legal owner (government).
- For the second case, if the sale of an asset occurs (and one would imagine that this might be an extreme/very unusual case for non-resident units), then it would seem essential that a notional unit is created, otherwise you would have a non-resident owning national fish stock, which does not seem appropriate.
- In the third case, the split-asset approach applies. Here, one may assume, as a starting point, that the underlying asset, the fishery (fishing area) where the fish is harvested, should be considered a domestic/national economic asset. Hence, it would seem that any partitioning must be between two (or more) domestic economic units. One is the legal owner (government) and the other would be a notional unit .

Cross-cutting natural capital issues

4. Fishing by non-resident units in a country's EEZ

Key points of discussion:

vi. However, what should be attributed to the notional unit. If the notional unit is assumed to also undertake the productive activity (of harvesting fish), the recording would be aligned with the establishment of branches undertaking economic activity in other countries. This would likely involve recording quite a number of transactions that can be envisaged conceptually but may be difficult to implement. Note that the payment of rents by the "non-resident" unit would not constitute an international transaction, but would be a transaction between resident units - the notional unit and the government.

vii. Alternative conceptual framings to describe the economic ownership of the fishery by a non-resident may also be envisaged but these have not been elaborated at this stage, nor has a complete working through of the wider implications for any approach on balancing items, macroeconomic aggregates and related matters.

viii. In the case of short-term arrangements, it is not appropriate to create a notional unit and hence following long-standing convention, the production activities would be recorded as being undertaken by non-residents and not recorded in the host country's production accounts. As there is no change of ownership to the underlying asset, there are also no cross-border depletion transactions to record.

Cross-cutting natural capital issues

4. Fishing by non-resident units in a country's EEZ

Key points of discussion:

ix. For longer-term arrangements, the case looks much stronger to create a notional unit, as the activity has more "permanence". From a conceptual point of view, but contrary to current convention, one could also argue that the production associated with fishing in a country's EEZ should be included within the national accounts of that country as the production is occurring within the economic territory of that country.

x. However, it is not considered possible to arrive at an agreed resolution of this issue, which appropriately balances all of the ins and outs from a conceptual and a practical perspective, and also provides for an adequate consultation process. Therefore, it is proposed to also put this issue on the 2025 SNA Research Agenda.

xi. It is also proposed to refer the topic to the SEEA Central Framework revision process for their consideration of potential recording approaches within a SEEA context.

Cross-cutting natural capital issues

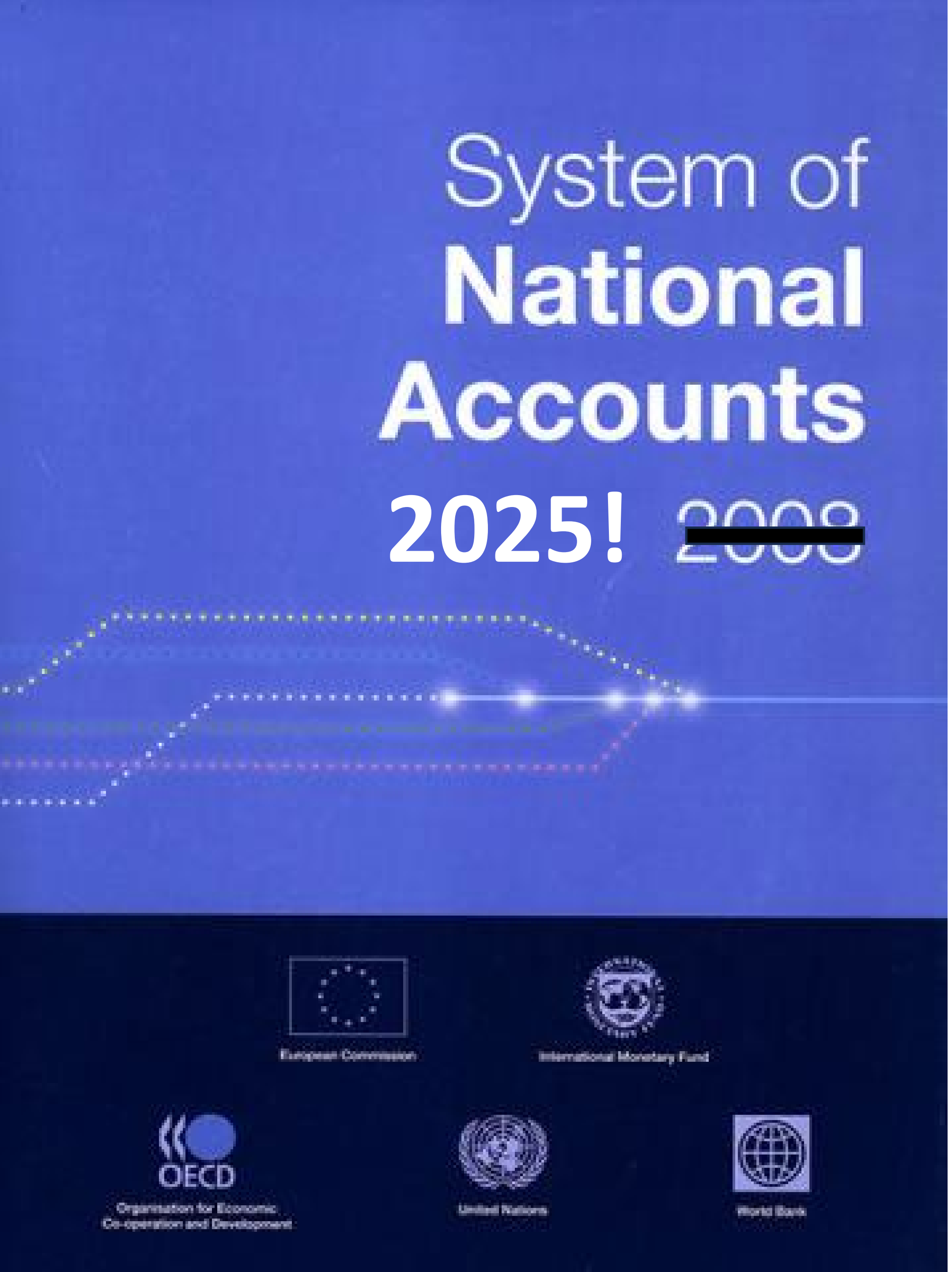
Questions for AEG Discussion

1. Do you agree with the description of the relationship between ecosystem services and the production boundary applied in the integrated framework of national accounts?
2. Do you agree with referring to “natural resources”, instead of “natural capital”, in the integrated framework of national accounts?
3. Do you agree with the application of the broad definition of “natural resources” in the integrated framework of national accounts (i.e., including cultivated biological resources), and the related change in the definition of “natural resources”?
4. Do you agree with the separate classification of costs of ownership transfer under the relevant main category of assets?
5. Do you agree with further clarifying the treatment of work-in-progress on biological resources?

Cross-cutting natural capital issues

Questions for AEG Discussion

6. Do you agree to put the recording of flows involving the harvest of biological resources by units other than the economic owner or where there is no economic ownership on the 2025 SNA Research Agenda?
7. Do you agree to put the accounting for the economic activities of non-resident units making use of quota established for fishing in a country's EEZ on the 2025 SNA Research Agenda ?


System of
National
Accounts
2025! ~~2008~~
European Commission
International Monetary Fund
OECD
Organisation for Economic
Co-operation and Development
United Nations
World Bank

THANK YOU!