

Economic Valuation of Ecosystem Services in IW-Projects: Training Materials on the systematic integration of the economic valuation of ecosystem services into the TDA/SAP methodology

Session 3, Subsession 1: „Aim and Scope of a Tier 2 EV- Policy Appraisal Context“

Related reading: Tier 2 Guidance Document, chapters III.1 and III.2.1, available at: www.iwlearn.net/valuation and www.iwlearn.net/learning/manuals/economic-valuation/

Handout for the participants

Aims/objectives of the Subsession:

- 1 Introducing the tier 2 economic valuation approach.
- 2 Clarification of the different policy appraisal contexts.
- 3 Presenting the possible aims and objectives of an in-depth EV.
- 4 Relate the tier 2 approach to the project areas/experiences of the participants [and to Bakul], in a plenary discussion.

Short summary of the content of the Subsession:

This subsession introduces the "tier 2" economic valuation approach, i.e. an in-depth economic valuation in an IW project area with more time and resources at hand than a tier 1 project. The subsession also presents several contexts - "policy appraisal contexts" - and possible aims/objectives of such an in-depth valuation.

This subsession includes a presentation and plenary discussion of the most promising policy appraisal contexts for a tier 2 valuation and experiences of the participants on “studies with effects”.

The discussion could also aim at selecting a policy appraisal context in Bakul and relate it to a tier 2 in-depth valuation.

Economic Valuation of Ecosystem Services in IW-Projects: Training Materials on the systematic integration of the economic valuation of ecosystem services into the TDA/SAP methodology

Session 3, Subsession 2: "Preparation of a Tier 2 EV: Setting the Scene and Scoping"

Related reading: Tier 2 Guidance Document, chapter III.2, available at: www.iwlearn.net/valuation and www.iwlearn.net/learning/manuals/economic-valuation/

Handout for the participants

Aims/objectives of the Subsession:

- 5 Introducing the set up of a tier 2 economic valuation ("scoping") according to the tier 2 Guidance Document.
- 6 Introducing the Checklist for tier 2 economic valuations and the different sub-steps to be taken.
- 7 [Conducting the scoping as a small group exercise, using the Checklist provided in the Handout "Checklist for Tier 2", and the information and map provided in the Handout "Introduction to Bakul Country".]

Short summary of the content of the Subsession:

This subsession introduces the first main steps in setting up a tier 2 EV: spatial scoping (setting spatial boundaries, selecting ecosystems to be assessed, determining the size of the ecosystems), temporal scoping (whether a timeframe or discount rate is necessary), and the selection of the ecosystem services to be evaluated (using the sub-steps for the selection/non-selection of the Guidance Document).

These steps will then be performed in small groups, using "Checklist for Tier 2", and the information and map provided in the Handout "Introduction to Bakul Country". The trainer will provide guidance and answer questions.

The subsession will end with short presentations and discussions of the reached results in the plenary.

Group exercise:

For this exercise, you'll need the "Checklist for Tier 2", and the information and map provided in the Handout "Introduction to Bakul Country".

In the very beginning of the scoping, have a look at Bakul Country, and decide for a proper policy appraisal context. Afterwards, decide whether you need to set any spatial boundaries to accommodate for this policy appraisal context. E.g. you might want to concentrate on a certain ecosystem, or region of the country.

At this point, you can identify which ecosystems are present within the spatial boundaries defined and which ecosystem services are provided by these ecosystems, and which of these might not be relevant. This process is supported by the Checklist provided in the Handout "Checklist for Tier 2".

After determining the spatial boundaries, you start by taking a closer look at the pre-filled matrices in the Checklist (table C1 for freshwater ecosystems, and table C2 for marine ecosystems): this matrices show the ecosystems that can be present in freshwater or marine ecosystems, and the ecosystem services that are usually provided by these ecosystems (according to the MAES typology (European Commission 2013) for freshwater, and to the Millennium Ecosystem Assessment (MAE 2005) and Naber/Lange/Hatzios (2008) for marine ecosystems).

1) Your task is now to first delete from the respective table C1 or C2 all ecosystems which are not present within the spatial boundaries determined.

→Do you want to prioritize? Do you want to exclude any?

2) In a second step, determine the size of the selected ecosystems. For this, fill row number 2 in the respective table C1 or C2.

→See Handout "Introduction to Bakul Country" for area information of ecosystems in the country.

3) In an intermediate step, discuss the temporal scoping: is there a need for discounting? If yes, which discount rates should be used?

4) Going back to the matrices, you select the ecosystem services which are not present or not relevant in the ecosystems left, and change the "Y" to a "N".

→Do you want to prioritize? Do you want to exclude any?

- Exclude ecosystem services not present in the ecosystems.
- Exclude ecosystem services only marginally present in the ecosystems.
- Possibly exclude ecosystem services where monetary information is already available.
- Possibly exclude ecosystem services for which not enough information is available.
- Possibly exclude/select remaining ecosystem services based on the policy appraisal context/ special interests.

After completing these steps, you have a filled matrix which shows which ecosystems and corresponding ecosystem services are included in your economic valuation in Bakul Country, and the size of the ecosystems. For these ecosystem services only, methodologies for the concrete valuation will be selected.

Economic Valuation of Ecosystem Services in IW-Projects: Training Materials on the systematic integration of the economic valuation of ecosystem services into the TDA/SAP methodology

Session 3, Subsession 3: "Selecting the method to use: Overview of the most important valuation methodologies"

Related reading: Tier 2 Guidance Document, chapter III.2.5 and Annex II, available at: www.iwlearn.net/valuation and www.iwlearn.net/learning/manuals/economic-valuation/

Handout for the participants

Aims/objectives of the Subsession:

- 1 Linking the selection of suitable valuation methods to the selected ES and the TEV-categories
- 2 Getting to know the most important valuation methodologies, their application, and advantages and disadvantages.

Short summary of the content of the Subsession:

In this subsession, the selection of valuation methods is linked to the ES selected and the related TEV-categories. Then, the most important valuation methodologies for in-depth economic valuations of the Tier 2 Guidance Document are discussed. No exercise will be conducted in this subsession, as any approach and methodology will be very different from each other in each project area.

The methods are classified into:

- Revealed Preference methods (market price assessment, production function approach, hedonic pricing and the travel cost method).
- Stated Preference methods (contingent valuation, choice modelling/choice experiments).
- Cost-based approaches (replacement cost method, damage cost avoided).
- Methods of eliciting non-economic values (overview of Participatory Valuation methods.)

Discussion:

The subsession ends with questions and answers and a discussion of experiences of the participants with applying them and their advantages and disadvantages.

Economic Valuation of Ecosystem Services in IW-Projects: Training Materials on the systematic integration of the economic valuation of ecosystem services into the TDA/SAP methodology

Session 3, Subsession 3.4: "Identifying, assessing and communicating the benefits of transboundary water cooperation"

Related reading: Tier 2 Guidance Document, chapter III.2.6, available at: www.iwlearn.net/valuation and www.iwlearn.net/learning/manuals/economic-valuation/

Handout for the participants

Aims/objectives of the Subsession:

- 1 To introduce to participants why identifying, assessing and communicating the benefits of transboundary water cooperation is relevant to TDA/SAP processes.
- 2 To provide participants with an overview of methodologies to help them identify, quantify and communicate the benefits of transboundary water cooperation.

Short summary of the content of the Subsession:

This subsession starts with a background to benefit assessments and their relevance to TDA/SAP processes. Benefit assessments complement economic valuations of ecosystem services by looking at a broader range of benefits. It supports prioritization of problems (TDA) and responses (SAP), engagement of relevant actors, and acceptance of the SAP package.

The subsession introduces a typology of benefits that would help IW project managers to identify a broader range of benefits and frame them in terms of development outcomes. A benefit assessment combines qualitative, quantitative and monetary valuation approaches and the subsession provides guidance on which types of approaches are better suited to the different types of benefits. It concludes that the whole process of benefit assessment can be seen as a communication effort, and the importance of linking it to other communication efforts of the TDA/SAP process.

The sub-session presents a number of case studies (Okavango, Sio-Malaba-Malakisi, Drina) that highlight how a benefit assessment can be integrated in and support TDA/SAP processes.