Applying the TEEB stepwise approach to valuation

Exercise

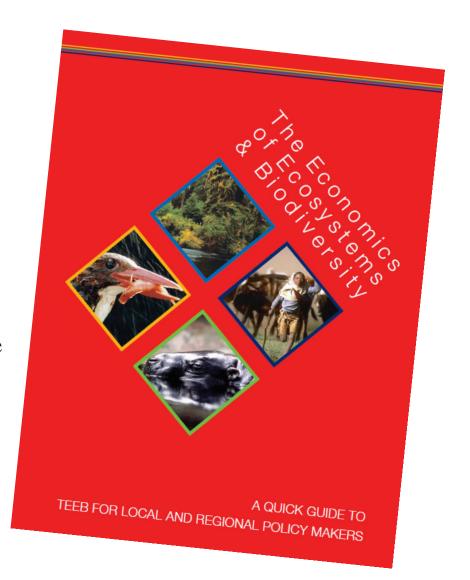
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The TEEB stepwise approach to valuation:

- 1. Specify and agree on the problem
- 2. Identify which ecosystem services are (most) relevant to the decision
- 3. Define the information needs and select appropriate methods
- 4. Assess the expected changes on the flow of ecosystem services
- 5. Identify and assess policy options
- 6. Assess distributional impacts of policy options



The rationale: Picking the low-hanging fruit in valuation...

Many valuation tools are costly and timeconsuming to apply, and require considerable technical expertise...

- Apply a cost-benefit-criterion to the valuation exercise itself
 - ✓ Aim to capture the most important ecosystem services/elements of TEV in a specific context – do not seek comprehensiveness at all cost
 - ✓ Use simpler tools whenever appropriate
 - ✓ Consider using qualitative/semi-quantitative representations; do not monetize at all cost

The step-wise approach step by step...

- Specify and agree on the decision-making problem at hand
 - This may involve the definition of (stylized) scenarios for the different options
- Identify the most important ecosystem services (or components of TEV) in the specific context
 - in many situations, these will be a few key direct and indirect use values
 - Stakeholder involvement will be critical (example: identification of the role of NTFR for local well-being!)
 - aim for option and existence value only when there is a clear indication that these values are significant in the specific context (because those are particularly difficult to evaluate)

The step-wise approach step by step...

3. Considering using the following (comparatively simple) tools:

- <u>Existing market data</u>: for many direct use values (e.g.: local market prices for many NTFR; tourism revenues;...)
- Cost-based approaches: e.g. replacement cost associated with the loss of indirect use values
- <u>Benefits transfer</u>: for rapid assessments, and with due caution
- Change-in-productivity method: for important indirect use values when good scientific data is available

The step-wise approach step by step...

- Use indicators for human well-being which are meaningful and practicable in the present context
 - In some cases, using highly aggregated monetary figures will actually obfuscate the contribution of ecosystem services to local well-being

For instance, the monetary figures for NTFR are often low in absolute terms and need to be complemented by indicators of their relative importance for human well-being

- > Examples for possible indicators:
 - Percentage share of NTFR in monetary/non-monetary income
 - Dietary contribution of food NTFR
 - Annual revenue from tourism sector, number of type of jobs created
 - Etc.

Case example: Cacao development policy in Cameroon

Background and objective: Cameroon seeks to expand its export base by promoting cacao production. Potentially negative impacts on forest-related ecosystem services are expected to result, in particular through forest conversion. However, much of the coffee is shade-grown, under traditional agroforestry systems, and this is an interesting potential asset. The study seeks to inform policy-makers on the best way to implement cacao promotion.

- 1. Three stylized scenarios; (i) no conversion (status quo); (ii) intensive conversion; (iii) promotion of agro-forestry
- 2. Most critical ecosystem services:
 - Cacao production
 - Other agricultural production from agro-forestry (fruit trees)
 - Forest-related services, in particular NTFR
 - Carbon sequestration

Estimation de la VED sous les trois scénarios (ici: illustratif et qualitatif)

I. Pas de conversion

- +++ séquestration de carbone
- +++ services/produits forestiers
- 0 revenu additionnel cacao
- 0 autre revenus additionnels agro forets cacaoyers

II. Conversion intensive

- 0/+ séquestration de carbone
- + services/produits forestiers
- +++ revenu additionnel cacao
- 0 autre revenus additionnels

III. Conversion agro forets cacaoyers

- ++ séquestration de carbone
- ++ (?) services/produits forestiers
- +/++ (?) revenu additionnel cacao
- ++ autre revenus additionnels agro forets cacaoyers

Exercise (by country group)

Suggested cases:

Reef conservation policy

Keywords: fishing, construction, and tourism sectors; pollution; marine protected areas

Wetland conservation

 Keywords: pollution, illegal settlements, city growth, agriculture development, sanitation, water provision

>>> your 'own juicy case' here <<<

- 1. Discuss and agree on your decision-making problem and possible stylized scenarios.
- 2. Identify the most important ecosystem services associated with the case.
- 3. Based on existing data, which valuation tools could you foresee applying?
- 4. Which indicators would you think are most meaningful and practicable?
- 5. Develop the scenarios in semi-quantitative terms.