



Update on national TEEB studies and their linkage with NBSAP revision process



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United Nations Environment Programme

Global workshop on reviewing progress and building capacity for the
National Biodiversity Strategies and Action Plans revision process

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Nairobi, Kenya

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Why TEEB? Because...

- the **economic invisibility of nature** is a problem
- addressing losses requires knowledge from **many disciplines** (ecology, economics, policy,...) to be synthesized, integrated and acted upon
- **different decision-making groups** need different types of information and guidance
- **successes** need be understood, broadcast replicated and scaled...

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ONE NATURE • ONE WORLD • OUR FUTURE
UN Conference on Biological Diversity Bonn 2008

Phase 1



2005



2006

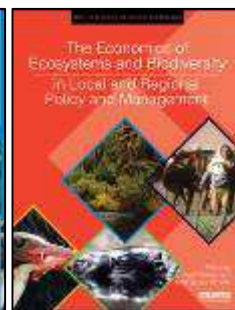
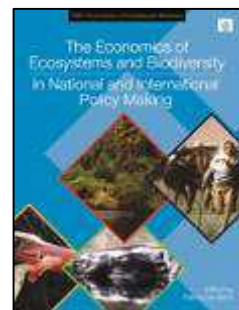
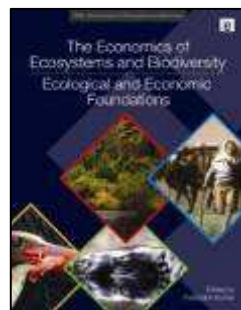


2007



2008

Phase 2



2010-2012



Phase 3

Sectors & biomes

National & international policy makers

W
Agriculture & Food (2014? -)
Oceans & Coasts (2014? -)

Local and regional administrators

TEES Country Studies

Business

Synthesis





What is TEEB and how does it integrate into the policy landscape?

Understanding of the economic

- significance
- distortions and incentives
- options (but also poverty reduction)
- adequate incentives for provisioning of public goods, etc.....

It is usually not feasible and probably not even desirable to address all issues, all ecosystem services and all regions in the country. Scoping will be the first major decision for designing the study



Uptake in MEAs...

• CBD

- Decision IX/6. Incentive measures (Article 11)
- Decision IX/11. Review of implementation of Articles 20 and 21
- **Decision X/2 on the Strategic Plan for Biodiversity 2011-20**
- Decision X/21 on Business Engagement
- Decision X/44 on Incentive Measures
- Decision XI/7 on Business and biodiversity
- Decision XI/8. Engagement of other stakeholders, major groups and subnational authorities
- Decision XI/15. Review of the programme of work on island biodiversity
- Decision XI/23. Biological diversity of inland water ecosystems
- Decision XI/30. Incentive measures

• Ramsar

- Resolution X.12 on “Principles for partnerships between the Ramsar Convention and the business sector”
- Resolution XI.17 on “Future implementation of scientific and technical aspects of the Convention for 2013-2015”

• CITES COP-15 (2010)

• CMS COP-10 (2011)

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“6 steps”

STEP 1: Refine the objectives of a TEEB country study by specifying and agreeing on the **key policy issues** with stakeholders

STEP 2: Identify the most relevant ecosystem services

STEP 3: Define information needs and select appropriate methods

STEP 4: Assess and value ecosystem services

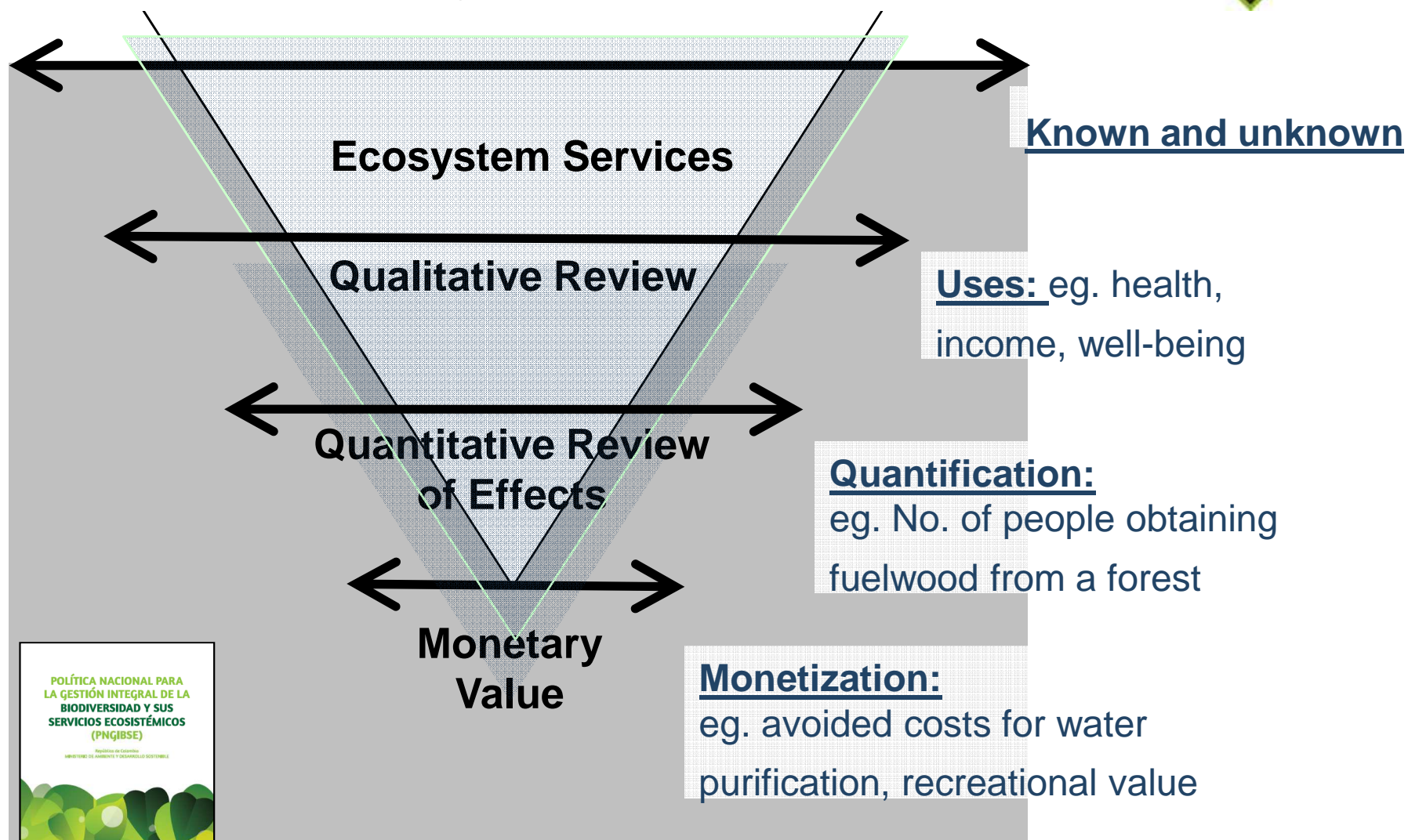
STEP 5: Identify and outline the pros and cons of policy options, including distributional impacts

STEP 6: Review, refine and report

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Different levels of analysis



Source: based on TEEB Interim Report, 2008



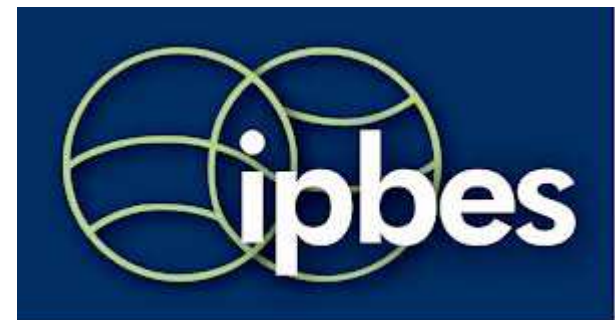
Colombia: NBSAP (2012)

Draft IPBES programme of work 2014–2018: Initial scoping of the fast-track assessment of the conceptualization of value, valuation and accounting of biodiversity and ecosystem services (under **Objective 3 (d)**)

- “Chapter 6 will consider methodologies for assessing the shared, plural and social value of ecosystems (e.g., conceptualization of cultural, social and shared non-economic values, e.g., cultural ecosystem services and their spiritual and aesthetic benefits; methodologies for comparing aggregated individual values (monetary and non-monetary) to shared values).”

IPBES/2/2

IPBES/2/16/Add.5



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NATURKAPITAL
DEUTSCHLAND – TEEB DE



THE ECONOMICS
OF ECOSYSTEMS & BIODIVERSITY
NORDIC SYNTHESIS



| National TEEB studies / scoping studies | Sub-national TEEB studies | Regional TEEB studies | TEEB for Business |
|--|---|--|---|
| Brazil, Finland, Georgia, Germany, India, Mexico, Netherlands, Norway, Portugal, Thailand, UK, Saint Lucia, South Africa, Sweden | Polish TEEB for Cities, TEEB Flanders, TEEB Reykjavík | Heart of Borneo, Nordic TEEB, Southeast Asia | NL TEEB for Business, TEEB Germany for Business, TEEB for Business Brazil |

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EC-funded TEEB National Implementation project: Reflecting the Value of Ecosystems and Biodiversity in Policymaking

- **5 country portfolio:** Bhutan, The Philippines, Tanzania, Liberia, Ecuador
- **Launched** at CBD COP-11 side event on “How to factor natural capital into decision making and leverage biodiversity finance?” (October 2012)
- **Three components:** (1) Guidance Material and Training; (2) Implementation of country projects; (3) Communication and Outreach



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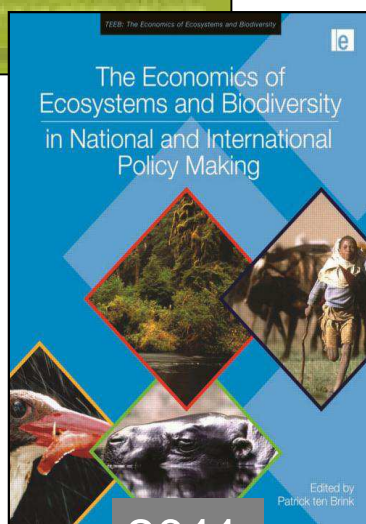
- *“We can no longer agree to the use of GDP as a measure of social performance alone in the face of environmental degradation...national budgeting systems have to change to reflect either the environmental damage or its deterioration.” Hon. Tshekedi Khama, Minister of Environment, Wildlife and Tourism, Botswana*



2010

TEEB and natural capital accounting

- Conventional economic aggregates generated through national accounting, such as GDP, do not reflect the values of nature
- TEEB has been calling for the development of natural capital accounts
- Generic recommendations on NCA can be taken forward in a TEEB Country Study if this responds to country's priorities



2011



Linking TEEB, SEEA and WAVES

- **TEEB encourages engagement in WAVES** that was in part catalyzed by TEEB, as well as parallel approaches such as the EU ecosystem capital accounts and other accounts across the SEEA volumes.
- TEEB country studies and national engagement in WAVES are **compatible initiative with significant synergies**. The WAVES is likely to be more in-depth in its areas of focus, but TEEB country studies are likely to have an overall wider scope.
- A WAVES project may be informed by a TEEB assessment and a TEEB Country Study could recommend implementing natural capital accounting.
- Where there are limits to national resources, countries may wish to **engage in these initiative sequentially**, starting with whatever is more appropriate for the policy interest and data availability





WAVES Core implementing countries (current and proposed)

| Current | + 6 months | + 12 months | + 18 months |
|-------------------------|---------------|-------------------------|---------------------------|
| Botswana, Madagascar | Ghana, Rwanda | Mozambique, Gabon*** | Tanzania, Mauritania** |
| Philippines | Indonesia** | Vietnam* | |
| | | Turkey** | |
| Colombia, Costa Rica | Guatemala | | Belize |
| | | Bhutan | |
| | Morocco | Egypt | Lebanon |

* Implementation has begun through CMU funds

** Not signed yet but have expressed strong interest

*** Currently discussing RAS with AFR to support implementation

| | Bhutan | Philippines | Liberia | Tanzania | Ecuador |
|---|-------------------------------------|-------------|---------|----------|---------|
| TEEB The Economics of Ecosystems and Biodiversity  | X | X | X | X | X |
| BIOFIN The Biodiversity Finance Initiative  | | X | | | X |
| WAVES Wealth Accounting and Valuation of Ecosystem Services  | (X) | X | | (X) | |
| SEEA-EEA System of Environmental-Economic Accounting (SEEA) - Experimental Ecosystem Accounting  | Pilot countries under consideration | | | | |



1. A specific request from policy
2. General interest to learn more about natural assets of a country
3. A policy where nature could play a role is being formulated or revised
4. Using the TEEB recommendations for scoping



A specific request from policy that can be addressed by a TEEB Country Study

Opportunities include: creation of new tools; revisions of existing policy tools; options or processes linked to biodiversity and ecosystem services; a policy ‘window of opportunity’ in the country; implementation of MEAs.



India – Demand created by Supreme Court

- In order to be able to set compensation rates for conversion of different types of forested land to non-forest use, the Indian Supreme Court commissioned an economic valuation study of Indian forests. By doing so, the Indian Supreme Court created a demand for a valuation study.
- As a basis for compensation rates, the Centrally Empowered Committee (CEC) of the Supreme Court based on published results of the Green Indian States Trust (GIST 2006) estimated the value for six different classes of forests. For this study the values of timber, fuelwood, non-timber forest products and ecotourism, bio-prospecting, ecological services of forests, and non-use values for the conservation of some charismatic species, were taken into account. Based on the value of the different classes of forest, the Indian Supreme Court decided to establish a compensation system. In this system any party that plays part in actively converting forest into other land-uses would have to pay into an afforestation fund to improve national forest cover.



South Africa – planning law need for biodiversity and ecosystem services indicators for accounting and monitoring

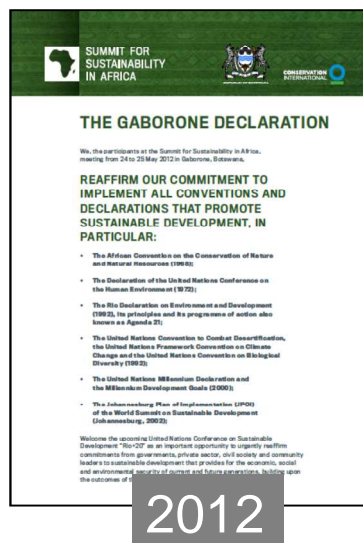
- Post 1994, South Africa embarked on an exhaustive planning regime and developed planning instruments and tools.
- Various ministries signed a ‘service delivery agreement’ for ten services such as housing, energy, water, and ‘biodiversity’ was included as a service as well. Until 2014, status and trends of the deliverables from these services need to be reported.
- This generated the need to understand costs and benefits from biodiversity, to establish indicators for ecosystem services provision, and to quantify ecosystem service values for monitoring purposes, and as decision support for resource allocation.
- The South African Government pursues a **TEEB initiative at least partially with the objective to contribute to this 2014 policy goal.**

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The Gaborone Declaration (2012)

- To ensure that the contributions of natural capital to sustainable economic growth, maintenance and improvement of social capital and human well-being are quantified and integrated into development and business practice; through
- **Integrating the value of natural capital into national accounting and corporate planning and reporting processes, policies, and programmes, in agreed efforts, including the appended Communiqué on Natural Capital Accounting**
- Botswana, Liberia, Namibia, Tanzania, Mozambique, Rwanda, Gabon, Kenya, South Africa, Ghana



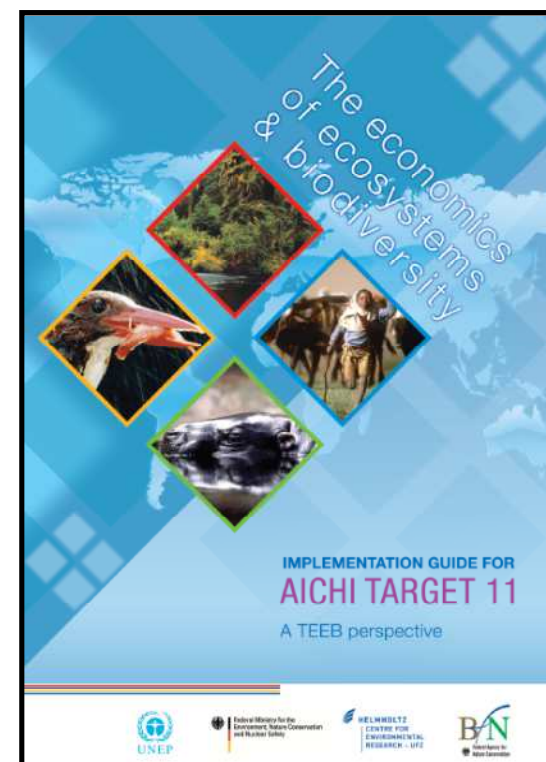
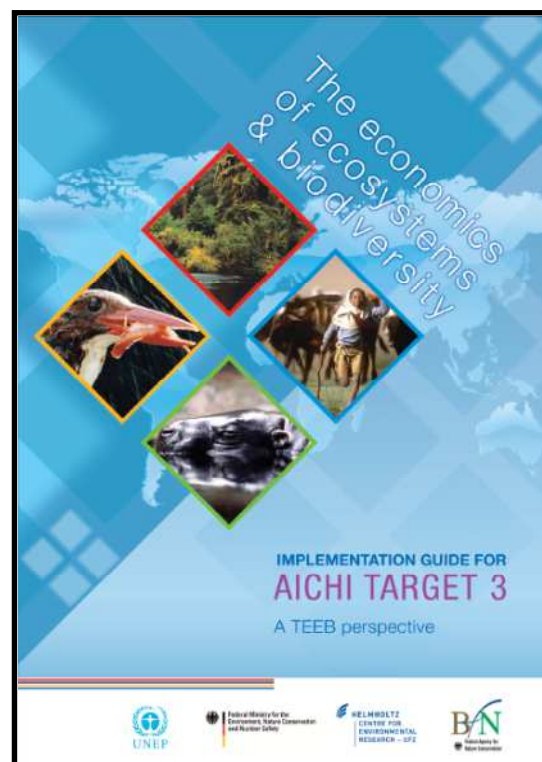
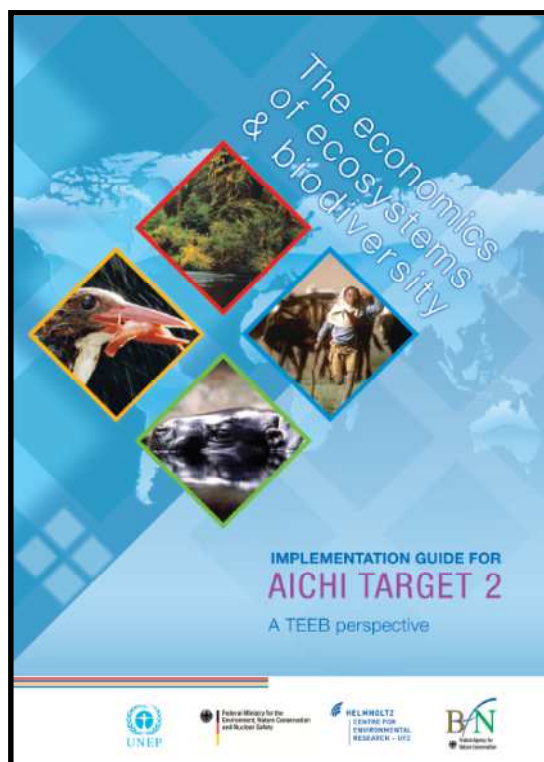
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START

1

Implementation Guides for Aichi Targets 2, 3 and 11: a TEEB perspective (2012)





General interest to learn more about the natural assets of the country or wish to add an economic dimension to existing ecosystem services assessments

- One possible starting point is to undertake an assessment of natural assets, including assessments of their values, the pressures and threats they face, and the needs and opportunities for responses to initiate changes or reforms.
- This is likely to be the most appropriate approach in situations where the policy or decision makers voice the need for more information on the state of natural assets, and how this relates to the provision of ecosystem services as inputs to further policies, management and (environmental or financial) accounting within specific sectors.
- The starting point here is to produce an assessment of natural assets (such as an ecosystem assessment) or to take a prior such assessment as a starting point.
- In most cases, such a study would focus on specific regions, on certain ecosystems or on a selected range of ecosystem services



Socio-economic importance of ecosystem services in the Nordic Countries. Synthesis in the context of TEEB (2012)

- An independent synthesis, separate from the national ecosystem service assessment taking place in, or being initiated by individual Nordic countries. Synthesis provided useful source of information and/or starting point for these on-going and planned in-depth assessments. Outputs:
- A list of Nordic ecosystem services
- Identification of indicators for Nordic ecosystem services
- A Synthesis of the existing information
- Identification of Important knowledge gaps
- Recommendations for policy action, with close links to the green economy
- Stand-alone TEEB case studies
- Outreach and communication



S Y K E



norden

Nordic Council of Ministers

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Assessments are currently under review and content is subject to change

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A policy is being formulated or revised
where the consideration of nature could play an important role or make a significant contribution, but policy makers in charge are often not yet aware of this

- This includes the necessity to mainstream ecosystem services/ecosystem-based solutions across relevant policy areas; e.g. in policy formulation or revision, wherever a policy is being formulated or revised where more explicit consideration of nature could lead to better outcomes with regards to ecosystem service provision (e.g. development planning, agricultural policy, trade and finance decisions, etc)



Thematic focus of TEEB Germany

- Four main thematic reports are being developed: (1) The role of ecosystem services for climate change: mitigation and adaptation; (2) The role of ecosystem services in urban areas: health and quality of life; (3) The role of ecosystem services in rural areas: forestry, agriculture, and nature conservation conflicts; and (4) Instruments to better address the economic importance of Natural Capital and Synthesis.
- Chosen to mainstream TEEB beyond the most commonly monitored environmental concerns, and beyond nature conservation
- All reports aim at informing important current policy discussions, such as for example, agricultural policy or the ongoing German 'energy transition'

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| | |
|---|--|
| Transport, infrastructure development | How can transport infrastructure be designed so as to minimise impacts on ecosystems and their services? |
| Health and protection against natural disasters | Are there ecosystems which are essential for protection against natural disasters, e.g. flooding, land slides, or avalanches? |
| Tourism and recreation | How can opportunities for tourism and recreation be aligned with biodiversity conservation objectives? |
| Energy provisioning | <ul style="list-style-type: none">• How can ecosystems be used as sustainable sources of energy?• How can biomass be harvested in a way that does not jeopardise the provision of other ecosystem services? |
| Agriculture, forestry and water management | Are agricultural practices causing problems (e.g. soil erosion, nitrification, high water consumption, degradation of ability to regulate natural fluxes or disasters etc.)? |



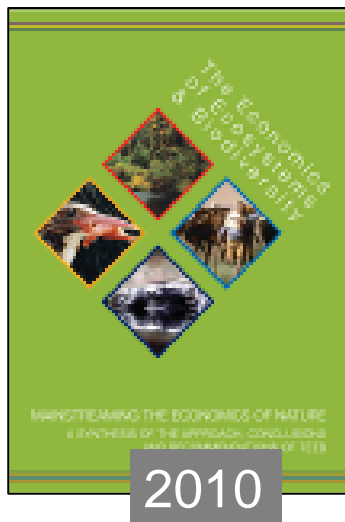
Use the TEEB recommendations for scoping

- This list can serve as a checklist to identify areas of concern for a given country, and also to structure what kind of information is already available and what kind of policies are already in place, addressing some of the issues



Use the TEEB recommendations for scoping

1. Make nature's values visible
2. Assess the value of ecosystem services and integrate these into decision making
3. Account for risks and uncertainty
4. Value the future
5. Measure better to manage better
6. Work with nature for poverty reduction
7. Encourage corporate disclosure
8. Change the incentives
9. Designate, manage and invest in protected areas
10. Invest in ecological infrastructure
11. Mainstream the economics of nature



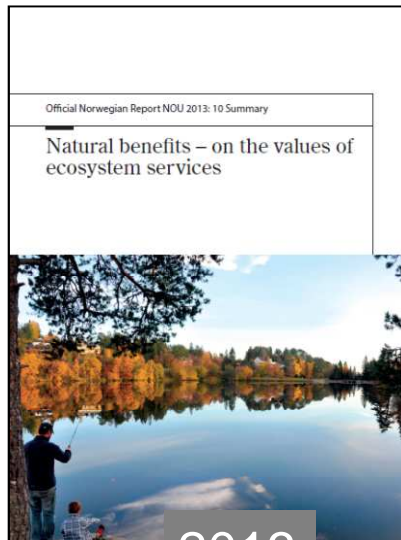
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National Expert Commission on Values of Ecosystem Services (Norway)

Expert Commission established in 2011 with a mandate:

- To base its work on the conclusions and recommendations of the TEEB study, and assess which elements and recommendations are particularly relevant to Norway
- Consider if and how ecosystem services terms and approaches may be relevant for human well-being in Norway.
- Describe the status and trends for ecosystems and ecosystem services in Norway.
- Review methods for valuation and recognition of values of ecosystem services, and to consider advantages and disadvantages of monetary valuation.
- Investigate values of Norwegian ecosystem services based on existing studies.
- Review and consider methods for demonstrating values of ecosystem services in public decision-making.
- Consider possible means for capturing values of ecosystem services in economic and regulatory instruments.
- Review and consider ways of estimating or calculating values of ecosystem services as part of Norway's national wealth.



2013

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Independent of your starting point, scoping process should allow to prioritize:

- Key issues in terms of policy
- Objectives of the study
- Key questions to address in main study and an adequate conceptual framework that facilitates addressing these questions
- Outputs of the study
- Some idea on desirable formats of these outputs

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Saint Lucia: TEEB integration in NBSAP

- Ecosystem valuation can help to **justify protected area policy**, identify funding and investment opportunities and inform conservation priorities Ch 8.4.2 TEEB (2011)
- Can help **assess natural assets to enhance water supply and treatment**, Ch4.3, TEEB (2012); TEEB for Water and Wetlands (2013)
- Use TEEB to **obtain findings geared to interests of influential persons**, use effective communication strategies like champions to spread findings, Ch4.2, TEEB (2013)
- TEEB will also be **used for resource mobilisation** for biodiversity management in revised NBSAP



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Georgia: Launch of TEEB Scoping Study

Sectors in the TEEB Scoping Study have been prioritized by taking account of various policy programmes of the government of Georgia and inputs from policymakers. These sectors have also been chosen to **maximize synergies between TEEB work and thematic components identified under NBSAP2**



1 October 2013



Building evidence...

- Monetary value

and /or...

- More cost effective solution
- Number of people affected/serviced
- Number of jobs affected or created
- Special benefits for poorer segments of society
- Health or safety implications
- Multiple benefits
- Low opportunity costs, easily implementable solutions

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... to shape convincing narratives

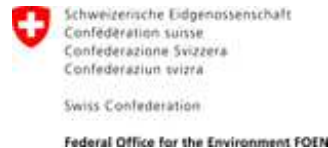
- Rethink incentives from subsidies and taxes
- Integrate BES into spatial and development planning
- Promote integration of biodiversity & ecosystem services in national accounting
- Analyze social impacts and dependencies, for instance for poverty reduction strategies, job creation
- Uncover impacts and dependencies of different industry sectors and regulation implications (“level playing field”)
- Influence important sectoral policies
- Strengthen resource mobilization, including for protected areas



Take home messages: TEEB is...

1. **TEEB is particularly relevant to revision and review of NBSAPs** in light of new Strategic Plan for Biodiversity 2011-2020, particularly Aichi targets 2 & 3
2. **TEEB is more than economic valuation:**
 - Economics is about the relationship between humans and ecosystem services, choices, public goods, trade-offs
 - Complementary argument: Economic argument should complement not replace other arguments.
3. **TEEB is an instrument rather than a goal:**
 - it can help address policy and management concerns
4. **TEEB is not (just) a study but a process:**
 - “Valuation as conversation” Kai Chan, Univ British Columbia
 - Dialogue in society to decide the kind of life we want to live: Globally, nationally, regionally, locally

TEEBweb.org





Guidance Manual for TEEB Country Studies (2013)



- **Acknowledgements.** This document draws on previously prepared material, including Heidi Wittmer's presentation on the "Guidance Manual for TEEB Country Studies" launched on the occasion of the 7th Trondheim Conference on Biodiversity (May 2013); material from the Guidance Manual itself; as well as the presentation by Heidi Wittmer, Julian Rode, Christoph Aicher, Johannes Förster and Florian Manns (2012) "TEEB - The Economics of Ecosystems and Biodiversity: using the ecosystem service concept at the science policy interface". Information on WAVES projects is from Urvashi Narain, October 2013 "WAVES Global Partnership: Challenges of Implementing NCA". Saint Lucia slide adapted from Anita James, "Saint Lucia's experience", prepared for the Global workshop on reviewing progress and building capacity for the National Biodiversity Strategies and Action Plans revision process (Nairobi, 11-15 November 2013); "Take home messages" slide adapted from key messages from UNEP/UFZ/BfN Vilm workshop (May 2013). TEEB logos from respective country initiatives.