EU Action on Forests and Valuation of Ecosystems

Workshop on a Pan-European Approach to Valuation of Forest Ecosystem Services

Belgrade, 25/09/2014

Strahil Christov, European Commission
Content

• EU Biodiversity Strategy to 2020
• EU Forest Strategy
• Links between Biodiversity Strategy and valuation of forests
• Study on Ecosystem Services valuation and accounting
EU Biodiversity Strategy to 2020
The mandate

Long term vision

By 2050, European Union biodiversity and the ecosystem services it provides – its natural capital – are protected, valued and appropriately restored for biodiversity’s intrinsic value and for their essential contribution to human well-being and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.

Mid term headline target

Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.
**Forest actions**

**Action 11: Encourage forest holders to protect and enhance forest biodiversity**

11a) Member States and Commission will encourage the adoption of *Management Plans*, *inter alia* through the use of rural development measures and the LIFE+ programme.

11b) Member States and the Commission will foster innovative mechanisms (*e.g. Payments for Ecosystem Services*) to finance the maintenance and restoration of ecosystem services provided by multifunctional forests.

**Action 12: Integrate biodiversity measures in forest management plans**
EU Forest Strategy
EU Forest Strategy

No provision for a common forest policy in the Treaty

But many EU policies affect forests and forest-based sectors

EU-wide coordination through Standing Forestry Committee, and some other committees

Actions are voluntary and based on 'strategic orientations'
Relevant parts

Objectives

'To ensure and demonstrate that all forests in the EU are managed according to sustainable forest management principles [...] contributing to balancing various forest functions, meeting demands, and delivering vital ecosystem services'

Strategic orientations

'Member States will, with the Commission's assistance, develop a conceptual framework for valuing ecosystem services, promoting their integration into accounting system at EU and national levels by 2020. They will build on the Mapping and Assessment of the state of Ecosystems and of their Services.'
Links between Biodiversity Strategy and valuation of forests
### Target 2 (TEEB) in EU Biodiversity Strategy

**By 2020, ecosystem services are maintained and enhanced through the establishment of Green Infrastructure and the restoration of at least 15% of degraded ecosystems**

| Action 5: Improve knowledge about ecosystems and their services in the EU |
| Action 6: Set priorities to **restore** and promote the use of **Green Infrastructure** |
| Action 7: Ensure **no net loss** of biodiversity and ecosystem services |
Action 5, T2 (TEEB) in EU Biodiversity Strategy

**Action 5:**
*Improve knowledge of ecosystems and their services in the EU*

*Member States, with the assistance of the Commission, will map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.*
MAES Conceptual Framework

ecosystems

functions

ecosystem services

biodiversity

drivers of change

state
present and future

socio-economic systems

ehuman well-being

benefits

value

response

- institutions, businesses
- policies (agriculture, forestry, fishery, environment, ...)
- stakeholders and users

- ecosystem use and management
- other capital inputs

- nutrition, clean air and water
- health, safety, security
- enjoyment, ...

- economic value
- health value
- shared (social) value
- other values
MAES Working Group (WG)

- Create an analytical framework for ecosystem assessment following CICES (the Common Classification of Ecosystem Services).
- Create Indicators for ecosystem assessments
- WG on Mapping and Assessment on Ecosystems and their Services (MAES) four pilots focused on Europe’s main ecosystem types:
  - agro-ecosystems
  - forest ecosystems
  - freshwater ecosystems
  - marine ecosystems
- Two further pilots were also implemented:
  - use of conservation status data for assessing the state of ecosystems
  - natural capital accounts
Study on Ecosystem Services valuation and accounting
A synthesis of approaches to assess and value ecosystem services in the EU in the context of TEEB

• Task 1 - Review of Initiatives using standard format

• Task 2 - Analysis and synthesis of approaches

• Task 3 - Develop common framework

• Task 4 – Conclusions and Recommendations

• NOT ONE SINGLE STANDARD APPROACH!
Conceptual framework

Consistent with MAES framework and CICES classification

Adapted from Bateman et al. (2011), Mace et al. (2011) and UK NEA (2011)
Applying the Conceptual Framework: Choices

**Choice level 1:** what do you want to achieve?

**Choice level 2:** what are the relevant ecosystem services?
- Classification of ecosystem services
- Final and/or intermediary services
- Role of biodiversity
- Actual or potential ecosystem services

**Choice level 3:** what are the relevant valuation principles?
- Monetary or nonmonetary quantification of ecosystem services
- Definition of economic value
- Marginal or total values
- Spatial and temporal scales

**Choice level 4:** what are the appropriate valuation methods?
- Market valuation
- Non-market valuation
- Value transfer
Thank you

For more information visit:

**Forest Strategy** - [http://ec.europa.eu/agriculture/forest](http://ec.europa.eu/agriculture/forest)


Backup
EU Biodiversity Strategy to 2020

2050 Vision

2020 headline target

6 Targets:

1. Fully implement nature legislation
2. Maintain & restore ecosystems & services
3. Increase contribution of agri. & forest. to biodiversity
4. Achieve Maximum sustainable yield
5. Combat Invasive Alien Species
6. Help avert global biodiversity loss

Actions / Monitoring

Cross-cutting issues: Financing, Involvement of the private sector
New EU Forest Strategy

Forest Strategy
(for forests and the forest-based sector)

A holistic view of forests and all related policies, addressing also the value chain.
Task 4: Conclusions and Recommendations

- No single standard "TEEB" approach on valuation (see graph)
  - Different definition of economic value Es/ES
  - Most efforts on mapping ES, limited in valuation and accounting
  - Real and hypothetical adjustments (controversial in SNA!), actual and potential ES(stock/flow), Spatial scale and variability in ES values

- Choices to be made by MS when applying conceptual framework

- Crucial to establish links between biophysical provision of ES and their economic values

- When integrating in national accounts, important to maintain coherence with SNA based on guidance developed by statistical offices

- Careful, stepwise integration via satellite accounts seems most promising way in order to keep core SNA intact. Full integration requires close collaboration between statistical offices

- Further integration and implementation of CICES, MAES, SEEA is needed

- Step forward is to launch MS initiatives, allow them to mature through monitoring and refining based on empirical experiences (MAES Pilots)
Resources

- Co-financing of forestry measures under the Rural Development Regulation has been and will remain the main means of EU-level funding (€5.4 billion in 2007-2013).

- Forestry measures under RD should be dedicated to contributing to the objectives of this strategy, and in particular to ensuring that EU forests are managed according to sustainable forest management principles.
Other Resources

- **LIFE+** (nature conservation, climate change adaptation, information and protection needs)
- **Structural funds** (cohesion projects)
- **Horizon 2020** (research and innovation actions, including the public-private partnership on bio-based industries).
- **Development and climate change policies** (financing for third countries, in particular through EU development funds, REDD+ and FLEGT.)