Overview of the Trade and Biodiversity Reference Manual

UNEP World Conservation Monitoring Centre
Purpose of the manual

Uses of IA:
- Inform negotiators
- Considerations during negotiations
- Implications of trade-related policies
- Sustainable development policies
- Develop policy response
Who is the manual for?

- Planners/managers/experts
- Government ministries
- Researchers
- Policy makers generally
- People formulating policy positions
- People undertaking assessment
- NGOs and civil society
International trade negotiations

Preliminary analysis & scoping

Assessment baseline

Yes: Start integrated assessment

Assessment of impacts

Develop policy recommendations

Prepare recommendations for ongoing negotiations

Prepare recommendations for domestic policies in response to implications identified by the IA

Ex-ante integrated assessment of the impact of a suggested domestic policy

Start policy implementation process

No: What are the policy alternatives?
Contents of Manual

Four sections:

• **Section A: Introduction and Rationale**
• **Section B: Integrated Assessment Process**
• **Section C: Methods and Tools**
• **Section D: Annexes**
Section A: Introduction and Rationale

1. Introduction
2. Agriculture, trade policy and biodiversity
3. The integrated assessment rationale
4. Developing a conceptual framework
Section B: Integrated Assessment Process

5. The overall integrated assessment process
6. Preliminary analysis and scoping
7. Assessment baseline
8. Assessment of impacts
9. Policy responses
10. Monitoring and feedback
Section C: Methods and tools

11. Valuation
12. Indicators for assessment
13. Other tools for IA
Development of the Reference Manual

- Diverse writing team assembled
- Process and conceptual framework developed
- Reference Manual then developed
Questions?

• Is this Reference Manual suitable for national level use?

• Is the process and framework outlined in this Manual appropriate?
Agriculture, trade policy & biodiversity

Key Questions

- What we mean by biodiversity and ecosystem services?
- How do agriculture, biodiversity and ecosystem services interact?
- What are the linkages between trade policy, agriculture and biodiversity?
- What are the linkages between biodiversity, agriculture, trade policies and livelihoods?
Agricultural biodiversity

“a broad term that includes all components of biological diversity of relevance to food and agriculture, and all components of biological diversity that constitute the agro-ecosystem: the variety and variability of animals, plants and micro-organisms, at the genetic, species and ecosystem levels, which are necessary to sustain key functions of the agro-ecosystem, its structure and processes”

CBD Decision V/5, appendix

3 components:

• Cultivated or ‘planned’ biodiversity

• Associated biodiversity

• Additional biodiversity
Ecosystem Services

Provisioning services:
- Food (crops, livestock, capture fisheries, aquaculture, wild plants and animal products)
- Genetic resources, Biochemical, natural medicines
- Fresh water, Fuel, Fibre

Regulating services:
- Pollination,
- Water regulation and purification, Erosion regulation, Disease regulation, Pest regulation
- Natural hazard regulation (such as flood control)

Cultural services:
- Cultural diversity, Spiritual and religious values,
- Inspiration, Aesthetic values (scenic qualities)
- Social relations, Sense of place, Cultural heritage values
- Recreation and tourism

Supporting services:
- Soil formation
- Primary production
- Nutrient cycling
- Water cycling
Agriculture & biodiversity

The role of agriculture in sustaining biodiversity

The role of agriculture in impacting biodiversity (land conversion and intensification and important areas)
Agriculture & biodiversity & trade

Policy process in the agricultural sector – global, regional, national

Linkages between trade policy in the agricultural sector and biodiversity
Integrated Assessment Process

- Understand the agreements and the proposed policy decisions (the most likely change)
- Select the focus of the assessment (commodities, sectors, regions)
- Develop a conceptual framework (to describe the relationships between the issues being assessed and the mechanisms of change)

- Build on the conceptual framework to develop core indicators
- Identify relevant national objectives and policies
- Collect baseline data of current situation
- Develop scenarios, considering key drivers of change
- Conduct impact assessment of different scenarios (with main objective to identify the change in core indicators for each scenario)
- Summarise the analytical results
- Develop policy recommendations including:
  1. Recommendations for ongoing negotiations
  2. Recommendations for domestic policies in response to implications identified by the integrated assessment

- Underline the agreements and the proposed policy decisions (the most likely change)
- Select the focus of the assessment (commodities, sectors, regions)
- Develop a conceptual framework (to describe the relationships between the issues being assessed and the mechanisms of change)
## The Integrated Assessment Process

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Stage A: Preliminary analysis and scoping

- Understand policy and legal framework and decide scope of assessment
- Review, conceptual framework, indicators, scenario building
- Responsible govt. dept, IA practitioner, policy experts, stakeholders, other experts
Stage B: Assessment baseline

- Determine current situation
- Baseline review, updating conceptual framework
- IA practitioner, experts, stakeholders
Stage C: Assessment of impacts

- Predict likely impacts of the policy using scenarios
- Assessment of impacts using methods and tools
- Experts and stakeholders
Stage D: Policy responses

• Develop possible policy recommendations

• Use results from assessment to develop policy recommendations

• Experts, stakeholders and policy makers
Stage E: Monitoring and feedback

- Monitor outcomes and policy reviews
- Design monitoring programme and mechanism to allow results to inform future policy
- Stakeholders, relevant government departments, policy makers
Example conceptual framework for assessment of trade, agriculture and biodiversity linkages

- Changes in international trade agreement (tariffs & quotas)
- Changes in national prices of agricultural products
- Income of farmers
- Rural employment
- Non-farming livelihoods
- Poverty & well-being
- Agricultural production
- Ecosystem services
- Biodiversity
- Area & fragmentation of land in natural state & modified as agro-ecosystems
- Status of PAs & other areas of biodiversity importance
- Choice of crops, extent & intensity of farming
- Income of farmers
- Poverty & well-being
- Agricultural production
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- Choice of crops, extent & intensity of farming
- Income of farmers
- Poverty & well-being
- Economic
- Social
- Environmental

Other national to local drivers of change in agriculture & land use (Policies, laws, economy, demography, culture, infrastructure, land availability, farm type, etc.)

The framework includes short-term and long-term effects on different dimensions: economic, social, and environmental.
Indicators

Indicators are measurements or expressions that convey information about more than just themselves, and indicate the change or status of something.

Indicators are purpose-dependent and open to interpretation, and so should be presented with an explanation of the purpose or issue that they are an indicator of.

Often an issue will require more than one indicator to give an understanding of its status.
Issues for indicators -1

International trade policy
National development objectives and policies
Regional socio-economic context
Agricultural product prices
Farm types and objectives of production
Change in extent of farming
Change in intensity of farming
Agricultural production
Issues for indicators -2

Area of land in natural state, slightly or highly modified

Fragmentation of natural land

Area and condition of protected areas and other areas of biodiversity importance

Biodiversity and ecosystem properties

Ecosystem services – supporting, provisioning, regulating, cultural

Regional socio-economic well-being and poverty
Valuation techniques

The role of valuation in environmental policy

- Assigning weights to environmental resources e.g. $$$
- Policy purposes – resources are assets
- Non economic values – spiritual & cultural – biodiversity has an intrinsic value
- Trade offs
Methods for assessing biodiversity value

Preference based valuation methods

- Revealed preferences
- Stated preferences
- Environmental pricing
- Comparing valuation and pricing
Participatory and deliberative approaches

- Citizens jury approach
- Consensus conferences and planning cells

Expert Based Approaches

- Multi-Criteria Analysis (MCA)
- The Delphi technique
- Using ecological indicators and biodiversity valuation
Challenges

• Accuracy of environmental estimates – credibility

• Discounting of biodiversity costs and benefits

• The cost of environmental valuation studies
Using valuation in integrated assessment

• Apply a demand side perspective on valuing the trade liberalisation impacts of biodiversity change

• Supply side may be more complex

• Decision tree for choosing valuation methods
Suitability of the Manual?

Have we covered all the necessary topics?
Logical development?
Style – language, presentation, …
Level of detail and explanation?
Ease of use?
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