

## **STATISTICS ON BIODIVERSITY**

Jerome GUEFACK, ICT officer IUCN-ROCA

## Workshop on Environment statistics Addis Ababa,16-20 July 2007



## **Headlines of the presentation**

- Challenges on Biodiversity conservation
- Policy and management issues
- Definitions
- Policy and Management issues
- Latest Policy related issues
- Indicators of sustainable use of biological diversity (Agenda item 23)
- Status of biodiversity-related indicators:
   2010 Biodiversity Indicators Partnership (CBDBIP)





## **Definitions**

### Biodiversity

The 1992 Convention on Biological Diversity (CBD) carries an internationally accepted definition of biodiversity as "... the variability among living organisms from all sources, inter alia, terrestrial, marine and other aquatic ecosystems and ecological complexes of which they are part, this includes diversity within species, between species and of ecosystems" (Glowka *et,al.*, 1994).

### Protected Areas

The IUCN defines a protected area as: An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.



### **Challenges on Biodiversity conservation**

- While the idea of conserving the environment has steadily gained political acceptance over the past few decades, people still misunderstand and ignore the goods and services that nature, biodiversity and ecosystems provide to us.
- For example, 16,119 species of animals and plants are threatened with extinction and many ecosystems wetlands, forests are being degraded and destroyed, while we know that natural ecosystems provide humans with a large range of highly valuable services.
- The importance of well-functioning ecosystems in helping reduce poverty and improve livelihoods, societies and economies is increasingly clear to scientists. This knowledge needs be integrated into the decisions and actions of local, national and international policy makers in all sectors, as well as business leaders.
- The World Conservation Union continues to improve scientific understanding of what natural ecosystems provide to humans. But the Union also seeks to ensure this knowledge is used in practical ways by bringing together scientists, policy makers, business leaders and NGOs to impact the way the world values and uses nature.



## **Policy and Management issues**

### > The Convention on Biological Diversity (CBD)

The The Convention on Biological Diversity is one of the most broadly subscribed international environmental treaties in the world. Opened for signature at the Earth Summit in Rio de Janeiro in 1992,

it currently has 190 Parties—189 States and the European Community—who have committed themselves

to its three main goals:

- the conservation of biodiversity;
- sustainable use of its components and ;
- the equitable sharing of the benefits arising from the utilization of genetic resources.

Since the launching of the CBD, 8 meetings of the Conference of the Parties to the Convention on Biological Diversity. The COP8 was held at Curitiba, Brazil, 20-31 March 2006.

The headquarters of the Secretariat of the Convention is located in Montreal Contact : United Nations Environment Programme 413 Saint-Jacques Street, Suite 800 Montreal, Quebec, Canada H2Y 1N9 www.cbd.int and Email: secretariat@cbd.int





### **Latest Policy related issues**

## Paris – 13 July 2007. The second meeting of the Ad Hoc Open-ended Working Group on the Review of the Implementation of the Convention (WGRI-2

The second meeting of the Ad Hoc Open-ended Working Group on the Review of the Implementation of the Convention (WGRI-2), held with 360 participants at the headquarters of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris from 9 to 13 July 2007. Since the launching of the CBD, 8 meetings of the Conference of the Parties to the Convention on Biological Diversity. The COP8 was held at Curitiba, Brazil, 20-31 March 2006.

The meeting was preceded by training sessions on national biodiversity strategies and action plans (NBSAPs) that were organized with the Global Environment Facility (GEF) and the United Nations Environment Programme (UNEP) and the United

Nations Development Programme (UNDP). The training, hosted by the Natural History Museum.

#### Paris – 11 July 2007. Mr. Ahmed Djoghlaf, Executive Secretary of the Convention

While singning a MOU with IUCN, said "It is befitting that the Memorandum be signed at a time when the G8, under the German presidency, has put biodiversity on its agenda, which has paved the way for Japan as the Chair of next year's G8
Summit to also pledge to make biodiversity a priority agenda item . It is also befitting that this agreement is being signed here

in Paris at time when the 365 participants to WGRI 2 are discussing the ways and means to integrate biodiversity into development plans and strategies for achieving the Millennium Development Goals."



Sustainable use of biological diversity is a central objective of the Convention on Biological
 Diversity (Articles 1 and 10). It is being addressed as a cross-cutting issue under the work
 programme.

The 6th Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) decided to "... achieve, by 2010, a significant reduction of the current rate of biodiversity loss at the global, regional and national levels..." (decision VI/26). Decision VI/9 provides an initial step to address this goal by establishing the CBD Global Strategy for Plant Conservation. At the World Summit on Sustainable Development in 2002 the world's leaders agreed to achieve "... a significant reduction in the current rate of loss of biological diversity" by 2010.









➢ The Addis Ababa Principles and Guidelines for Sustainable Use of Biological Diversity were adopted at the 7th meeting of the Conference of the Parties in 2004 in decision VII/12. They provide a framework for governments to develop and implement policies that will foster sustainable use of biological diversity. They also provide guidance to resource managers on how to enhance the sustainability of their uses of biological diversity.

The World Conservation Union (IUCN) at its 3rd World Conservation Congress in 2004 endorsed the Addis Ababa Principles and committed itself to work with the Parties and the Secretariat to further their development and implementation (WWC RES 3.074: *Implementing the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity*). At COP7 Parties also adopted a *Strategic Plan: Future Evaluation of Progress* (Decision VII/30). The 4th Goal of this Plan addresses the need for uses of biological diversity resources to be sustainable.



> Three sub-targets were adopted and indicators have been proposed by SBSTTA (Recommendation X/5) See Table 1.

Sub-Targets		Proposed Indicators
4.1:	Biodiversity-based products derived from sources that are sustainably managed and production areas managed consistent with the conservation of biodiversity	Area of forest, agricultural and aquacultural ecosystems under sustainable management.
		Proportion of products derived from sustainable sources.
4.2:	Unsustainable consumption, of biological resources, or that impact upon biodiversity, reduced	Ecological footprint and related concepts
4.3:	No species of wild flora or fauna endangered by international trade	Change in status of threatened species



- These proposed indicators are at different stages of development and involve several institutions,
   e.g., the 2010 Biodiversity Indicator Partnership (BIP), FAO, EEA SEBI 2010 (European Union), IUCN, and OECD.
- Because of the complex issues that need to be addressed in the development of indicators related to

sustainable use, IUCN through the SSC, Sustainable Use Specialist Group (SUSG) and in partnership with the UNEP-World Conservation Monitoring Centre, established an Ad Hoc Working Group on Sustainable Use Indicators to foster closer collaboration and consultation amongst those involved.

- The members of the Working Group are: EEA SEBI 2010, FAO, IUCN SSC, IUCN Secretariat, UNEP-CITES Secretariat, UNEPWCMC, Canada, Namibia, United Kingdom, Birdlife International, DICE – Kent University, Diversitas, Fauna and Flora International, Natural History Museum – France, Swedbio, TRAFFIC International, TRAFFIC South America, Wildlife Conservation Society, and the Zoological Society of London.
- Four globalscale datasets are broadly available that have relevant data and sufficient temporal depth to document changes in status over time:
  - IUCN-SSC Red List Database;
  - CITES trade-related data;
  - The World Database on Protected Areas and
  - FAO datasets on fisheries, fish stocks, and forest inventories.



- International customs records may also be relevant to measure :
  - Ievels of legal use of certain biodiversity resources that are classified as commodities, e.g., gum Arabic, tropical timber, or medicinal plants etc.
  - > Use gender to help conserve biodiversity
  - The World Conservation Union (IUCN) has highlighted the need to ensure gender is a crucial component of national biodiversity strategies.

When developing indicators it is important that they be:

- Scientifically defensible;
- Meaningful with the public;
- Policy relevant;
- Scalable between global, regional and national levels, and
- Easy and cost-effective to apply.

Ideally, data should be readily available for compilation and analysis and should be capable of documenting change in the status of biodiversity resources over time..





### **Status of biodiversity-related indicators:**

### > To achieve the 2010 Target we need to know:

- > What is the overall status of biodiversity?
- > At what rate is biodiversity being lost?
- > Where is biodiversity being lost?
- > What are the causes of decline and loss of biodiversity?







### Status of biodiversity-related indicators (Cont)

### > To achieve How can we measure the rate of loss of biodiversity?

- 1. Extent of biomes/habitats
- 2. Abundance/distribution of species
- 3. Threat status of species
- 4. Genetic diversity of domesticated animals & cultivated plants
- 5. Coverage of protected areas

6. Area of forest, agricultural and aquaculture ecosystems under sustainable management

7. Number and cost of alien invasions



## Status of biodiversity-related indicators: 2010 Biodiversity Indicators Partnership (CBDBIP)

- The Partnership links biodiversity indicators initiatives at national, regional and global scales and will contribute information to a number of international mechanisms and initiatives, including the <u>Convention on Biological Diversity</u> (and its various programmes of work), the <u>Ramsar Convention on Wetlands</u>, the <u>Convention on Migratory Species</u>, the <u>Convention on International Trade in Endangered Species</u>, and the Millennium Development Goals.
- The 2010 Biodiversity Indicators Partnership will continue to meet the needs of users at national and international levels for the best available information on biodiversity trends, and to explore the various ways in which the global indicators can be applied and communicated through to 2010 and beyond.
- 2010 Biodiversity Indicators Partnership (list of indicators)

Note: A set of UNEP/UNSD/AEO indicators are proposed on the hard copy Document



