REPORT

Liaison Group Meeting on Indicators
Montreal – 24-25th September 1999

Secretariat of the Convention on Biological Diversity

Report of the meeting of a liaison group on biological diversity indicators

The Second meeting of the Liaison Group on biological diversity indicators was held from Friday, 24 September to Saturday, 25 September at the Secretariat for the Convention on Biological Diversity (SCBD), Montreal, Canada.

The list of participants is contained in Annex I to this document.

Agenda item 1. Opening of the meeting

The meeting was opened at 10 a..m. on Friday, 24 September by Mr. H. Zedan, Executive Director of the Convention on Biological Diversity, who welcomed the participants and briefly described the work on Biodiversity indicators under the CBD.

Agenda item 2. Organisational matters

2.1 Election of Officers

The liaison group chose Dr. Ajay Parida to chair the meeting and Dr. Ben Ten Brink to act as rapporteur.

2.2 Adoption of the Agenda

The draft annotated agenda prepared by the Secretariat was considered and adopted as attached in Annex II.

Agenda item 3. Preparation of a pre-session document for SBSTTA-5

3.1 Introduction of the background document by the Secretariat

The Secretariat introduced the Technical Background Document on Biodiversity Indicators by reviewing the Mandate from COP 4, and the key questions, and criteria to be applied to the core set of indicators, which are described in detail in SBSTTA3/Inf. 13, 14 and 15, as well as other ongoing indicator initiatives.

3.2 Discussion of key issues

Mr. Ben ten Brink gave a presentation on the discussions on biodiversity indicators during the 1st. Liaison Group, SBSTTA-3, and COP; and the framework established during those meetings.

The meeting discusses several key issues such as the need for identifying simple indicators and the importance of capacity building. The issue of how the indicators should be interpreted and presented in the decision-making process was also discussed.

During a discussion on baselines, it was recognized that a flexible approach must be applied as in some countries or sectors useful data may be recovered to allow for an earlier baseline, while in other cases the data availability would not allow an earlier baseline. A fixed year baseline would allow certain data

comparability. The meeting agreed that the baseline should be at least 1993, but within certain countries and sectors, an earlier baseline would be possible.

The meeting also highlighted the need to distinguish between indicators at local level and national level. It was recognized that in most cases, the processes monitored by the indicators while showing signals at local level would not necessarily show responses at national level.

The working group recommended that the proposed core set of indicators should be accompanied by the development of technical monitoring guides, request for case studies and capacity building. The meeting also recommended that the work on indicators should be initiated at regional level

3.3 Discussion on a core set of indicators

Three working groups were established to identify a preliminary core set of indicators for the Forest, Inland Waters and Marine/Coastal thematic areas.. Common issues, applicable to all thematic areas were identified, as well as specific indicators for each thematic area.

The meeting agreed on a preliminary core set of indicators (Annex III) applicable to all thematic areas to be used by parties to establish their national indicator programs. The core set is composed of a simple set of generic indicators and the actual variables and level of sophistication of the monitoring program is to be established by each party based on capability and data availability.

The proposed core set of indicators is designed to take into account the ecosystem approach and will show trends in ecosystem processes of scientific, and socio-economic importance. The indicators propose will be most valuable when used as a set, as the information could be incorporated into different aggregated indices, such as the Natural Capital Index (NCI). However, the lack of data for certain sectors should not prevent parties from launching their national indicator programs.

3.4 Draft pre-session document for SBSTTA-5

The participants provided inputs and comments on the draft Working Document on Biodiversity Indicators to the Secretariat, which were incorporated in the final version of the document.

The meeting stressed the importance of coordination with other initiatives in the future work on indicators applicable to biodiversity carried out by other UN agencies, NGO's and sectoral organizations.

It was agreed that the Secretariat would circulate the draft report and the draft pre-session document for SBSTTA-5 on Biodiversity Indicators for comments by the participants of the meeting before finalizing the document.

4. Closure of the Meeting

Mr.K. Molongoy, on behalf of the Executive Secretary of the SCBD, thanked the participants for their valuable inputs and the effective work during this meeting.

The Chairman thanked the participants for their contributions and the Secretariat for the support provided before closing the meeting.

ANNEX I

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ANNEX II

Liaison Group meeting on Biodiversity Indicators
24-25 September 1999
SCBD
393 St. Jacques St, Suite 300, Montreal, Canada

PROVISIONAL AGENDA

1. Opening of the meeting

2. Organizational matters
   2.1 Election of Officers
   2.2 Adoption of Agenda

3. Preparation of the pre-session document for SBSTTA-5
   3.1 Introduction of the background document by the Secretariat
   3.2 Discussion of key issues
   3.3 Discussion on a core set of indicators
   3.4 Draft pre-session document for SBSTTA-5

4. Closure of the meeting

Annex III: Proposed core set of biodiversity indicators

State	Indicator	Thematic areas[1] F	M/C	IW	D[2]	M	Ag[3]	Data Sets	Methods	Comments
ECOSYSTEM QUANTITY	**1.Habitat** 1.1 Self-regenerating 1.2 Man-made	 * *	 * 	 * *	 * *	 * *	 *	Remote sensing data, vegetation maps, national forest cover inventories, coastal zone maps, wetland and freshwater inventories	Overlay maps, GIS, Aerial surveys, Ground truthing	Measured as % area/total land. Shows the extent of the area and whether habitat is being gained or lost in recent times
ECOSYSTEM QUALITY – ECOSYSTEM	**2.Habitat Fragmentation/Conversion** 2.1 native vegetation fragmentation 2.2 wetland drainage and filling 2.3 conversion of coastal areas 2.4 erosion 2.5 irrigation	 * * * 	 * * * * 	 * * * 	 * * * *	 * * 	 * *	Landuse plans, remote sensing data, surveys FAO data	GIS, overlay maps	Shows trends in significant habitat disturbance
ECOSYSTEM QUALITY – ECOSYSTEM	**3. Species Richness**	*	*	*	*	*	*	National biodiversity data base. Surveys, transect, sampling reports	Monitoring and research programs, Inventories	Species richness data is being collected widely (at different taxonomic levels) but its use as indicator is limited by the uncertainty of the total number of species present and taxonomical difficulties
ECOSYSTEM QUALITY – SPECIES	**4 Change in abundance and/or distribution of a selected core set of species**	*	*	*	*	*	*	Wide area, transect, sample results	Surveys and monitoring programs depending on the species involved	Can provide information on ecological changes and early warning signals regarding eco-system processes. Species in the set to be included based on country-specific conditions (e.g. rare, endemic, keystone, flagship, economic, invasive, pests, livestock/grazers, scientific interest, eco-system functions. etc.)
ECOSYSTEM QUALITY – SPECIES	**5. Threatened species** 5.1 % of total species or certain taxonomic groups 5.2 % endemic species threatened 5.3 threatened species in protected areas	 * * *	 * * *	 * * *	 * * *	 * * *	 * * *	Endangered and threatened species data sets	Surveys and monitoring	Indicate species for which most urgent actions are needed
ECOSYSTEM QUALITY – GENETIC	6.1 Replacement of indigenous crops 6.2Replacement of land races with few imported ones	*	 	* *	* *	* *	* *	Allelic diversity, Karyotype variants	Morphological analysis, offspring parent regression, DNA sequencing, electrophoresis, karyotypic analysis	Will provide information on inbreeding depression, out-breeding rate, rate of genetic drift, genetic flow, etc.

1 Thematic Areas: F- Forest Biodiversity; M/C- Marine &Coastal Biodiversity; IW- Inland Water Biodiversity; D- Dryland Biodiversity; M- Mountain Biodiversity; Ag- Agrobiodiversity

2 Also reviewed by the Liaison Group on Drylands

3 Not discussed by the Liaison Group on Biodiversity Indicators

	Pressure and Response Indicators	Thematic Areas F	M/C	IW	D	M	Ag	Data Sets	Methods	Comments
PRESSURE INDICATORS	**7. Population density** 7.1 y habitats 7.2 in/adjacent to Protected Areas	 * *	 * *	 * *	 * *	 * *	 * *	National or local statistical data or surveys	Existing administrative data, translated to habitat level, socio-economic surveys, census	Rapid growth likely to indicate negative impact on biodiversity. Increase inside or adjacent to protected areas might suggest illegal incursion
	8. Harvesting/use 8.1 production totals 8.2 export totals 8.3 imports total 8.4 local processing capacity 8.5 domestic consumption 8.6 catch/effort 8.7 changes in proportion of commercial species	 * * * * * *	 * * *	 * * *	 * * * * * *	 * * * * * *	 * * * * * *	National statistics, commercial production records, records by community groups	Record keeping and monitoring of selected data	Trends in amount harvested, changes in harvest/effort can give early warning signals on over-harvesting. The data is most useful when compared as a set of several indicators
	9. Infrastructure 9.1 road and transportation networks 9.2 dams 9.3 rate of housing development	 * *	 	 * 	 * * *	 * * *	 	National statistics, commercial records, remote sensing, surveys, records by community groups	Record keeping, overlaying maps, field reports,	Trends associated with increased human pressure, extraction, habitat destruction, etc.
	10. Pollution 10.1Soil quality 10.2 Water quality 10.3 Air quality	 * * *	 * 	 * 	 * * *	 * * 	 * * *	Import, production, sale records, Emission records, monitoring data	Record keeping, emissions and field monitoring	Indicator set to be developed on country-specific needs. Can be based on data regarding production, import, sale, use, emissions, contaminant load, or levels in the environment of salinity, dust, agrochemicals and harmful substances.
	11. Alien/Invasive species 11.1 % habitat colonized by invasive species 11.2 % protected areas colonized by invasive species	 * *	 * *	 * *	 * *	 * *	 * *	Surveys, transects or sample results, patrol reports or reports from local communities	Monitoring of trends in distribution	
	12 Climatic change	*	*	*	*	*	*	National statistics, records	Monitoring of trends	Several variables to be selected based on country-specific issues to be monitored and data availability (droughts, sea-level, temperature, storm frequency, etc.)
RESPONSE INDICATORS	**13. Habitat Management** 13.1 % protected (IUCN 1 – 3) 13.2 % protected (IUCN 4 – 5) 13.3 % managed for production 13.4 no. of fires/area burned/yr	 * * * *	 * * * 	 * * * 	 * * * *	 * * * *	 * * * 	Spatial plans, national statistics, remote sensing	GIS, overlay maps	Shows changes in conservation status and land-use
	14. Special habitat 14.1 % remaining 14.2 % protected	 * *	 * *	 * *	 * *	 * *	 * *	Spatial plans, national statistics, remote sensing, surveys	GIS, overlay maps,	Shows trends and conservation status of fragile, threatened, biodiversity-rich habitats (e.g. Mangroves, peat-swamps, coral reefs)