

Frameworks of Environmental Statistics and Indicators

Reena Shah

Division for Sustainable Development

United Nations Department of
Economic and Social Affairs

(Syria, 4-8 April 2004)

Frameworks for statistics and indicators

- **Framework for the Development of Environment Statistics (UNSD)**
- **Pressure-state-response framework for environmental indicators (OECD)**
- **Driving force-state-response framework (CSD)**
- **Theme indicator framework for indicators of sustainable development (CSD)**
- **Driving force-pressure-state-impact-response framework (Eurostat and EEA)**

FRAMEWORK FOR THE DEVELOPMENT OF ENVIRONMENT STATISTICS

Components of the environment	Information categories			
	Social and economic activities, natural events	Environmental impacts of activities/events	Responses to environmental impacts	Inventories, stocks and background conditions
1. Flora 2. Fauna 3. Atmosphere 4. Water (a) Fresh water (b) Marine water 5. Land/soil (a) Surface (b) Sub-surface 6. Human settlements				

Pressure-State-Response Framework

Issues	PRESSURE	STATE	RESPONSE
Climate change			
Ozone layer depletion			
Eutrophication			
Acidification			
Toxic contamination			
Urban environmental quality			
Biodiversity			
Landscapes			
Waste			
Water resources			
Forest resources			
Fish resources			
Soil degradation (desertification & erosion)			
General indicators			

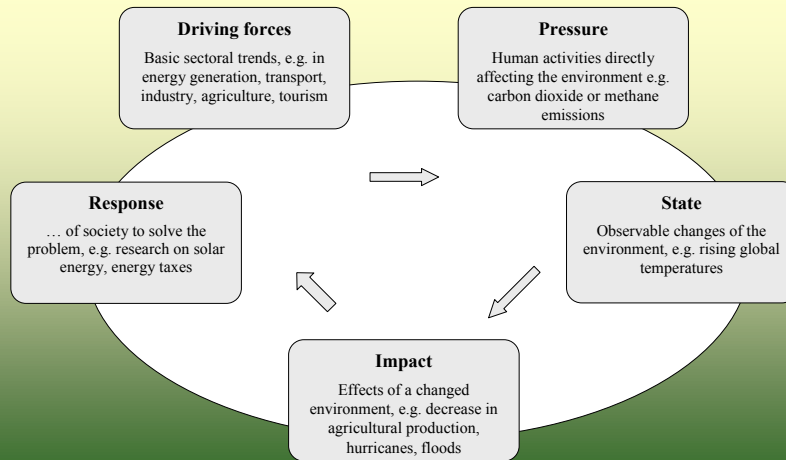
Driving force-State-Response Framework

CHAPTERS OF AGENDA 21	DRIVING FORCE INDICATORS	STATE INDICATORS	RESPONSE INDICATORS
<i>CATEGORY: SOCIAL</i>			
<i>CATEGORY: ECONOMIC</i>			
<i>CATEGORY: ENVIRONMENTAL</i>			
<i>CATEGORY: INSTITUTIONAL</i>			

CSD Thematic Framework

Dimension	Theme	Sub-Theme	Indicators
Social			
Environmental			
Economic			
Institutional			

Driving force-Pressure-State-Impact-Response Framework



Major differences between the frameworks

- **FDES/PSR – four vs. three information categories**
- **CSD theme indicator framework – no longer has a two dimensional approach as in the DSR framework**
- **FDES/DPSIR – four vs. five information categories**