

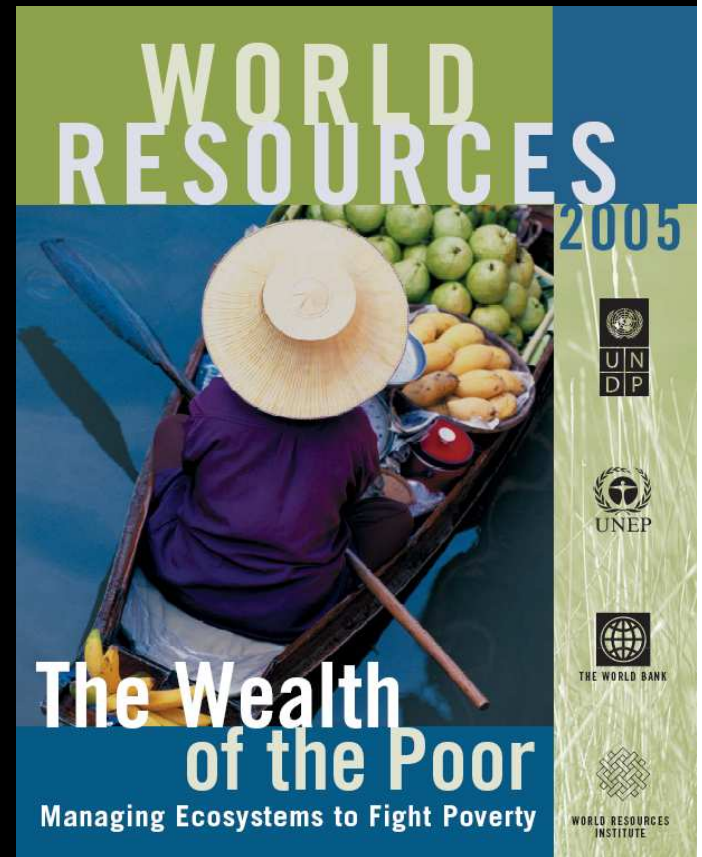
Ecosystem Service Indicators

Toward realizing the potential of the
Ecosystem Services framework for
mainstreaming biodiversity

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World Resources Institute
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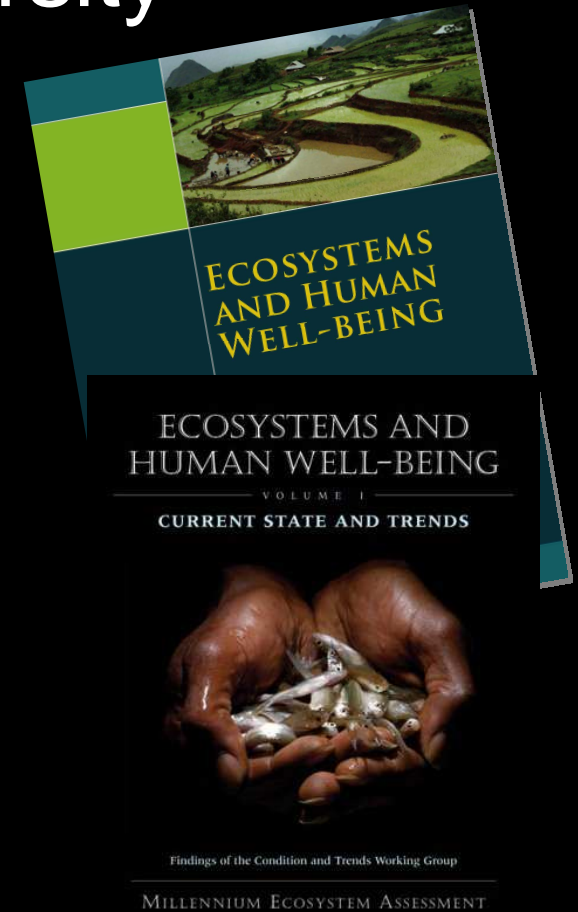
The Mainstreaming Challenge

- Falling short of biodiversity and development targets:
 - 2010 target
 - Millennium Development Goals
- Progress toward integrating environment into policy-making being made, but inadequate
 - Poverty reduction strategies
 - Penetration into sectoral planning and implementation more limited

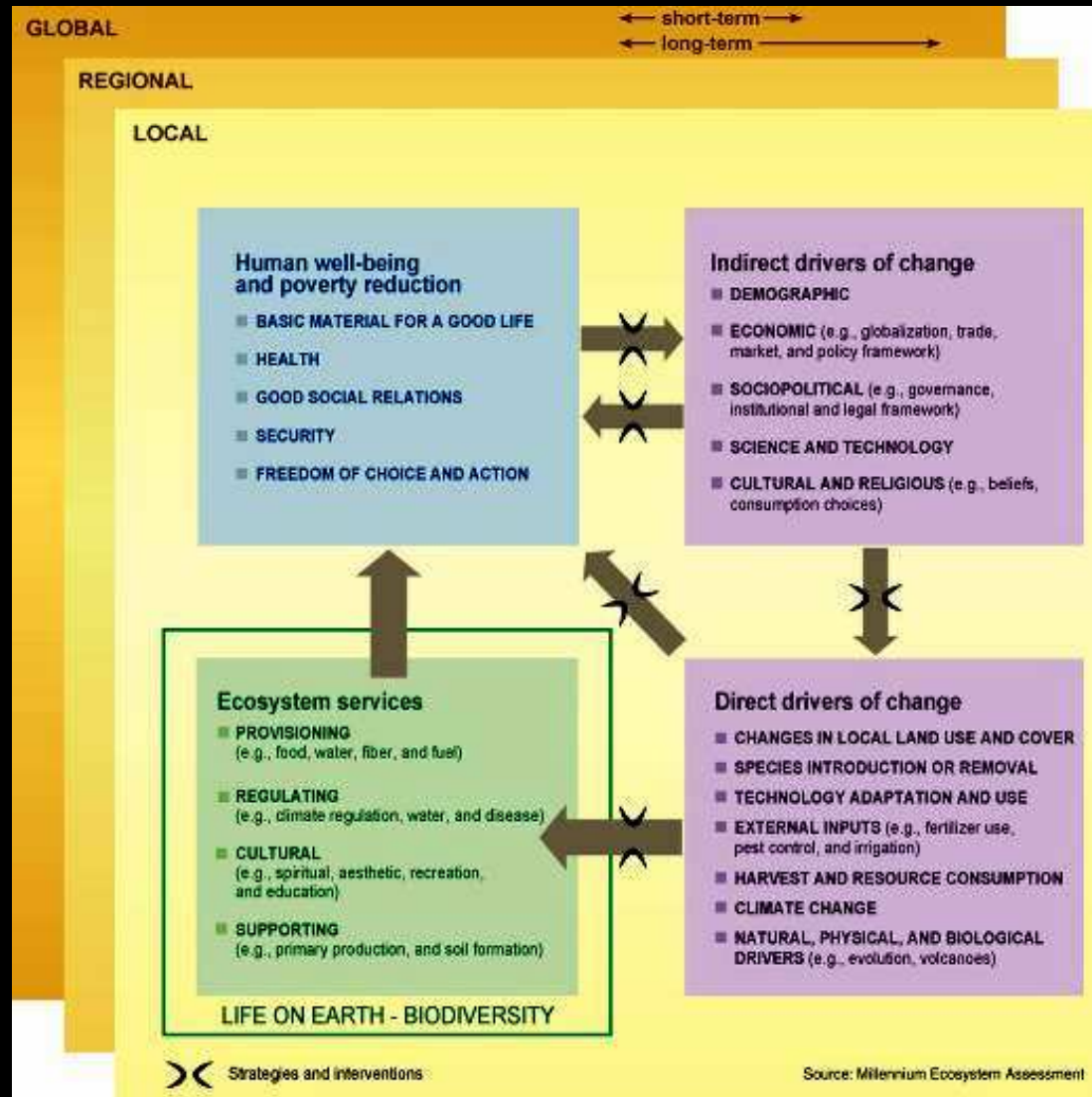


Ecosystem Services: Communicating the Value of Biodiversity

- Ecosystem services framing resonates with policy-making
 - More directly tied to human well-being and economic development: Nature for people's sake
- Biodiversity provides for ecosystem services, underpins human well-being
 - Biodiversity supports healthy ecosystem functions
 - Provide for ecosystem services



Ecosystem Services Framework



Source: MA. Ecosystems and Human Well-being: Synthesis.

Nutrient Regulation-Chesapeake Bay



Erosion Regulation-Uganda



Ecosystem Service Indicators

- Strengthen knowledge base
 - Identify ways to measure and communicate
 - Especially regulating and cultural services
- Support integration into decision-making
 - Communicate ecosystem services
 - Establish baselines, track trends and set targets
 - Trade-off analysis
 - Identify potential policy interventions
 - Monitoring and evaluation of policies
 - Necessary input to tools and approaches (SEAs, valuation, assessments)
 - Relevant at multiple scales

Provisioning

Regulating

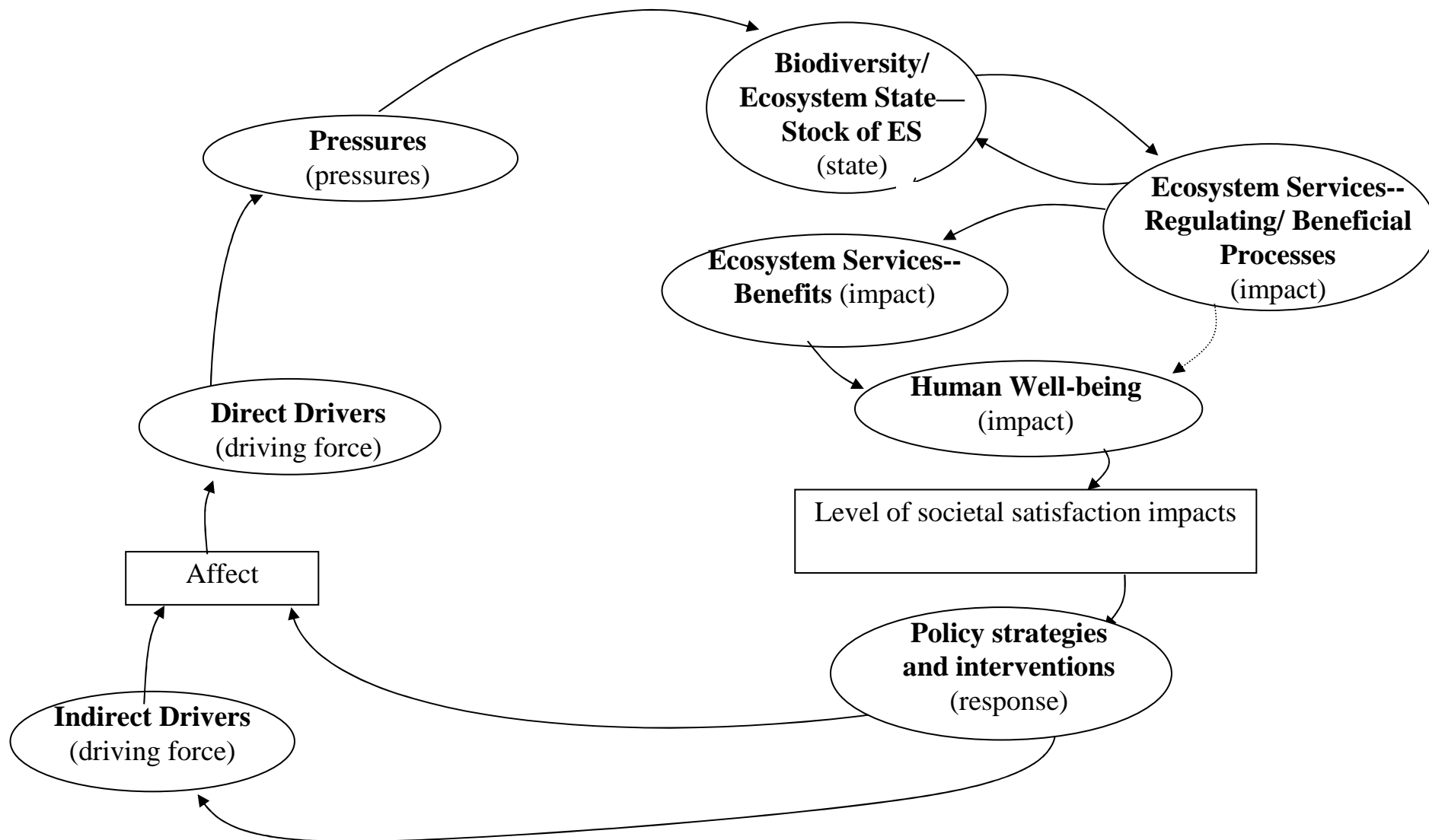
Cultural

	Ecosystem Service	Number of Indicators Identified	Ability to Convey Information	Data Availability	Gathering Organization
Provisioning					
Food					
	Crops	4			FAO
	Livestock	3			FAO
	Capture fisheries	7			FAO
	Aquaculture	2			FAO
	Wild foods	1			None
Fiber					
	Timber	6			FAO
	Cotton, hemp, silk, etc.	4			FAO
	Fuel	4			FAO
	Freshwater	5			FAO
	Genetic resources	3			None
	Biochemicals, natural medicines and pharmaceuticals	2			None
Regulating					
	Air quality regulation	2			None
	Climate regulation				
	Global climate regulation	7			IPCCC
	Regional and local climate regulation	4			None
	Water regulation	2			None
	Erosion regulation		No Indicators Identified		
	Water purification and waste treatment	3			None
	Disease regulation	3			None
	Pest regulation		No Indicators Identified		
	Pollination		No Indicators Identified		
	Natural hazard regulation	7			None
Cultural					
	Aesthetic values	4			None
	Spiritual and religious values		No Indicators Identified		
	Recreation and ecotourism	5			None
Legend					
High: Indicators and data availability are sufficient to inform policy-making					
Medium: Indicators and data are sufficient to partially inform policy-making					
Low: Indicators and data inadequate for support policy-making					

Improving Ecosystem Service Indicators

- Integrated Indicators Framework
 - Framework to organize and present indicators
 - Based on ecosystem services and DPSIR
- Database of indicators needed for integrated assessments and policy dialogs
 - Broaden access to indicators and community of contributors
 - Collaborate with sub-global assessments
 - Support national statistical compendia (e.g. Uganda developing environmental indicators)
- Strengthening indicators
 - Develop indicators for regulating, cultural services
 - Improve provisioning services
- Spatial tools for displaying indicators data





Application

- National governments
 - Inform national indicator sets
 - Integrate into policies
- Development partners
 - Poverty-Environment Initiative
 - MA follow-up partnership
 - Country-specific activities
- Sub-global assessments
 - EURECA, UK assessment, TEEB
 - Sub-global assessment secretariat
- Other fields
 - Vulnerability to climate change

Thank you

Ecosystem Services Benefits

