



Ecosystem Services and Tradable Markets


Oregon APA Conference
May 14, 2010



Topics

- Measuring the Environment
- Ecosystem Services
- Tradable Market Systems

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Developing a Measure

Measurement is a persistent challenge

- Lack of integration
- Inconsistent protocols
- Difficulty sharing

How do we know we've done well?




Courtesy: Memotaro @ Flickr
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Developing a Measure

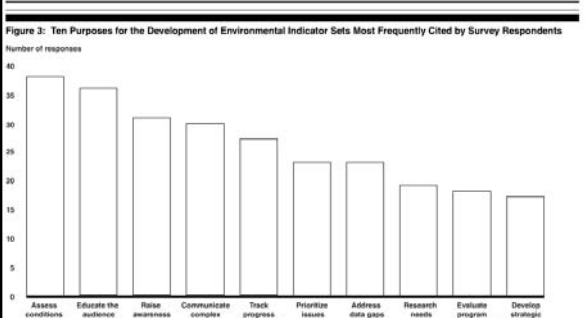


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Purpose for Measurements


Figure 3: Ten Purposes for the Development of Environmental Indicator Sets Most Frequently Cited by Survey Respondents



Purpose	Number of responses
Assess conditions and trends	38
Educate the audience	36
Raise awareness	31
Communicate complex issues	30
Track progress toward goals	28
Prioritize issues	24
Address data gaps	23
Research needs	19
Evaluate program performance	18
Develop strategic plans	17

Source: GAO, 2005

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Ecosystem Services

It is impossible to devise effective environmental policy unless it is based on sound scientific information... In particular, there has never been a comprehensive global assessment of the world's major ecosystems.

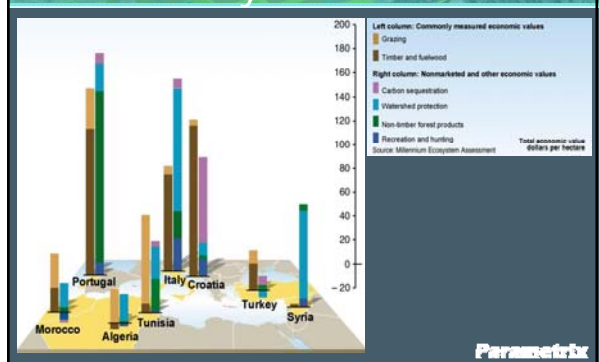
~Secretary General Kofi Annan

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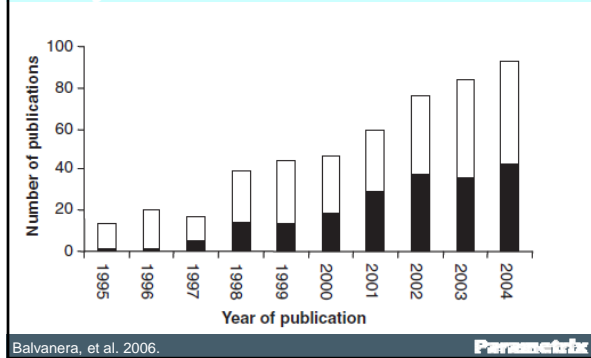
Why think in services?



What are they?



Ecosystem Services

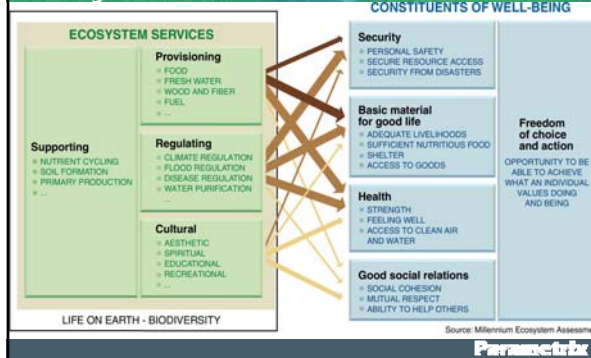


Classification for Measure

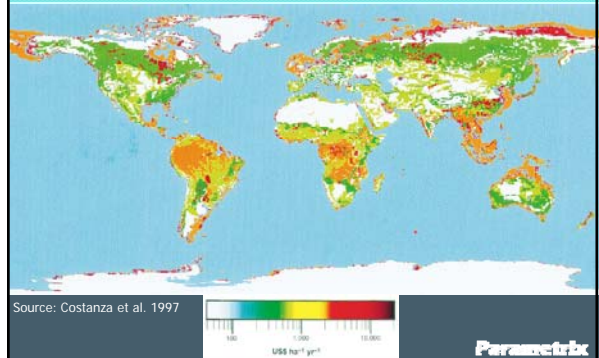
- Provisioning Services
- Regulating Services
- Cultural Services
- Supporting Services



Ecosystem Services



Value across Earth



Tradeable Markets

- Combine Clear Measure
- Integrate with Services
- Create Tradable Options



Courtesy: Congamian © Flickr

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Nature of Goods

Consumption or Rivalry

High Low

Exclusion or Control

High

Low



Once its eaten... its eaten

No one controls access = yet.

Access and use is controlled

Use by one person does not

Prevent others from enjoying it

In the other users = mostly

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Nature of Goods

Consumption or Rivalry

High

Low

Exclusion or Control

High

Low

Private Goods

Toll Goods

Common Pool

Public Goods

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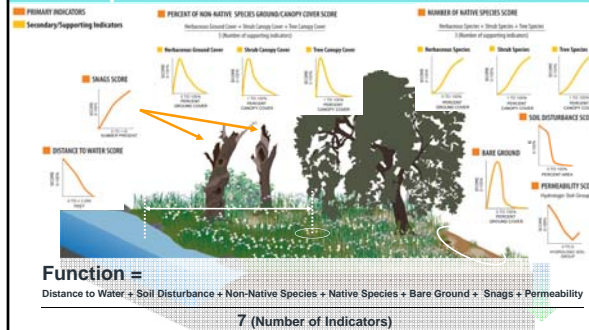
Dimensions of Credits

- Type: Quality or Integrity
- Spatial: Extent or Applicability
- Time: Lifespan of Credit



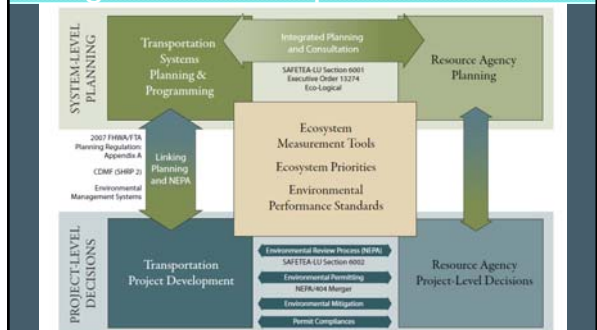
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Example of Measurement



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Integration Example



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Looking Ahead

- International Initiatives:
 - UN, World Business Council, Business for Social Responsibility
- Federal Initiatives:
 - DOI, USDA, USGS, USFS, and on and on
- Local:
 - Open space and land use planning

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