Lessons Learned from Forest Sector Reporting

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Bottom Line Up Front

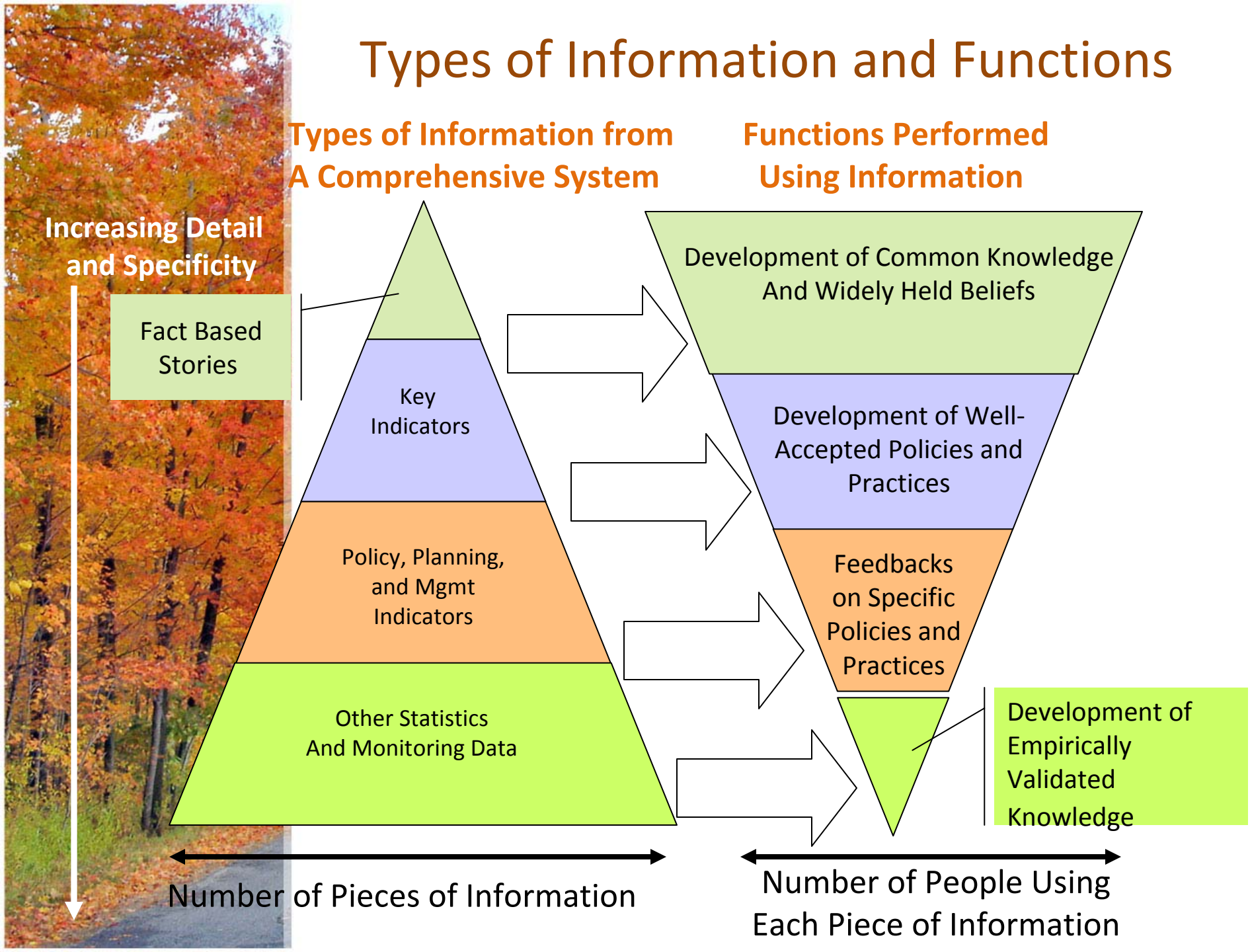
- Forest sector has made great strides globally since UN-CED in:
  - Developing and using a sound framework of ecological, economic, and social criteria and indicators to track and report on forest conditions and trends
  - Influencing national dialogues about forests
- The USA has tested environmental indicators beyond the forest sector in several projects
- Lessons learned provide optimism for FDES

Progress in Forest Sector

After UN-CED, 9 clusters of nations emerged around shared interests

- USA active in Montréal Process and International Tropical Timber Organization
- Frameworks were developed and tested

Types of Information and Functions



Criteria and Indicators

- Criteria are:
  - A category of conditions or processes by which sustainable forest management may be assessed
  - Stated as positive values, desirable attributes; express aspirations
    - ***Conserve*** biological diversity
    - ***Maintain*** productive capacity
- Indicators are:
  - A quantitative or qualitative variable which can be measured or described, and when observed over time, demonstrates trends
  - Indicative; not exhaustive nor complete

11 Years After UN-CED

CICI - The International Conference on Criteria and Indicators for Sustainable Forest Management attracted a global audience to Guatemala City

- 51 countries
- 10 international organizations
- 9 secretariats of regional processes
- Assorted non-governmental organizations

CICI Recommendations

"That countries ***consider using criteria and indicators as essential tools*** *to report to UNFF on progress towards sustainable forest management to help ensure that the forum's dialogue be clearly focused on sustainable forest management and that it* ***recognize the contribution of criteria and indicators****, as well as sustainable forest management,* ***to other sectors and to sustainable development****."*

CICI Recommendations

In considering the potential benefits of a common set of criteria based on existing sets elaborated by regional and international processes, ***participants acknowledged seven common thematic areas****:*

1. *extent of forest resources,*
2. *biological diversity,*
3. *forest health and vitality,*
4. *productive functions of forest resources,*
5. *protective functions of forest resources,*
6. *socio-economic functions, and*
7. *legal, policy and institutional framework.*

CICI Recommendations

- *Countries should have national forest assessments and inventories*
- *Criteria and indicators should be the main elements in national forest assessments*
- *FAO should use the seven thematic areas common to all regional and international sets of national-level criteria in the overall framework for the Global Forest Resources Assessment (GFRA),*

CICI Recommendations

- *GFRA information should facilitate use of criteria and indicators nationally and internationally, including in UNFF, and improve the compatibility of information from different sources.*
- *The FAO Committee on Forestry (COFO) should reaffirm implementation of criteria and indicators as an FAO priority, including*
  - *Technical assistance and capacity building through the National Forest Programme Facility, and*
  - *Strengthen FAO's role in facilitating collaboration among criteria and indicator processes.*

Since CICI

- FAO has adopted the 7 thematic areas/criteria
- Montréal Process, Pan-European Process, and ITTO have held two workshops
  - Bialowezia, Poland in 2006
  - Joensuu, Finland in 2008
  - Third meeting being considered for 2011

Recommendation for FDES

- Forests cover 30 percent of the globe's land masses.
- For the forest sector in FDES, choosing from the suite of criteria and indicators already in use by FAO and regional processes would be a "quick win"

Lessons Learned Along the Way

- The choice of criteria or thematic areas is inherently a ***political*** one, not a scientific one
- The choice is best made through broad-based, open and transparent dialogue ***with political officials***
  - Open and candid dialogue is essential for building trust, clear understanding, and commitment
  - Leaving some choices to be made by participating countries also adds to commitment

Lessons Learned Along the Way

Key attributes of environmental indicators

- **Simple** to explain to policy-makers and populace
- **Relevant** to important values
- **Easy** to implement consistently across space and time and scalable from global to politically important sub-national levels
- **Affordable**, given budgets and technical capacity
- **Body of science** supports the indicators
- **Effectively screens risks** to depict meaningful differences in key values

Lessons Learned Along the Way

Relative priority of the key attributes of environmental indicators

- Simple to explain to policy-makers and populace
- Affordable, given budgets and technical capacity
- Relevant to important values
- Easy to implement consistently across space and time and scalable from global to politically important sub-national levels
- Body of science supports the indicators
- Effectively screens risks to depict meaningful differences in key values

Lessons Learned Along the Way

Building three suites of indicators can create the flexibility countries need to make more effective use of C&I

- **Core**: Implemented everywhere using the required protocol
- **Core-Optional**: Choice of whether to implement or not; but if implemented, then use the required protocol
- **Optional**: Choice of whether to implement; suggestions on feasible protocols

Lessons Learned Along the Way

Every indicator needs a **protocol**—a set of technical specifications that create consistency and assure comparability over space and time—and a process to manage the protocols

- Data required, measurement methods, accuracy and precision
- Models used to convert data to information
- Analysis methods used to summarize the information
- Quality assurance/quality control
  - Data measurement
  - Peer review of models being developed before they are implemented
  - Peer review of analytical results before they are released

State of the Nation's Ecosystems

- Presented at last year's meeting
- Built a state-based set of indicators covering 6 sectors

Forests	Freshwater
Croplands	Coasts and Oceans
Rangelands	Urban

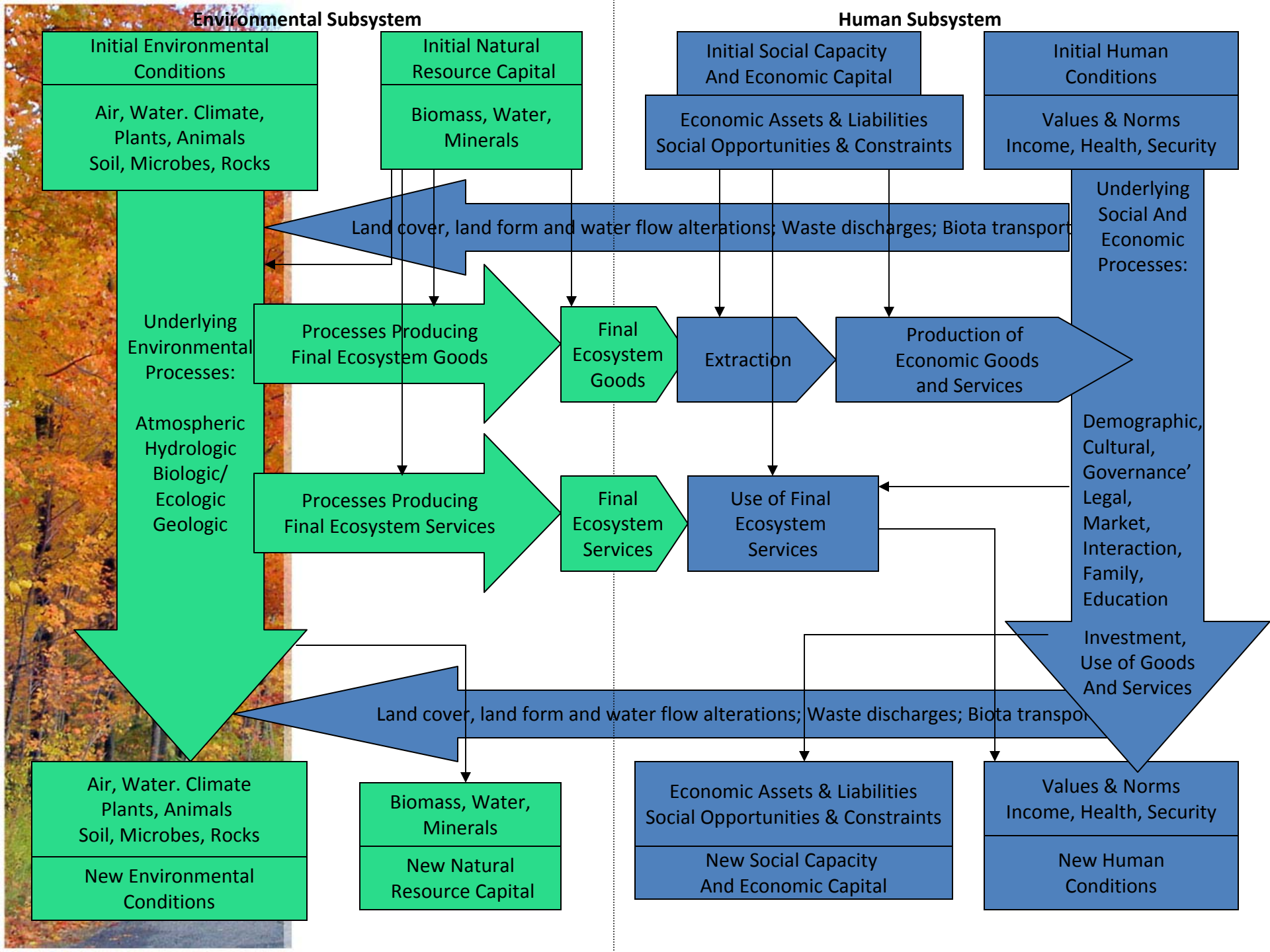
- The process used was as important as the results
  - Open and transparent dialogue among four groups of interests
  - Didn't begin with pressures; "finger-pointing"

Domestic Indicator Projects

- Pros and cons of SOTNE
  - + Dialogue rebuilt trust among interests
  - + Solid coverage of 6 sectors
  - + Demonstrated technical feasibility
  - – Too many indicators chosen: 115
  - – Indicators served scientists, not politicians
  - – Current inventory and monitoring programs outside forest sector found insufficient ➔ unaffordable

Frameworks

- Can be simple or elaborate
  - Simple is better
  - No single “ideal” framework exists
- Main functions are to:
  - Illustrate central concepts to political interests
  - Focus scientists and systems thinkers on the “vital few” values and the key indicators


Environmental Subsystem
Human Subsystem
Initial Environmental Conditions
Air, Water. Climate, Plants, Animals Soil, Microbes, Rocks
Initial Natural Resource Capital
Biomass, Water, Minerals
Initial Social Capacity And Economic Capital
Economic Assets & Liabilities Social Opportunities & Constraints
Initial Human Conditions
Values & Norms Income, Health, Security
Land cover, land form and water flow alterations; Waste discharges; Biota transport
Underlying Social And Economic Processes:
Underlying Environmental Processes:
Atmospheric Hydrologic Biologic/ Ecologic Geologic
Processes Producing Final Ecosystem Goods
Final Ecosystem Goods
Extraction
Production of Economic Goods and Services
Processes Producing Final Ecosystem Services
Final Ecosystem Services
Use of Final Ecosystem Services
Demographic, Cultural, Governance' Legal, Market, Interaction, Family, Education
Investment, Use of Goods And Services
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New Social Capacity And Economic Capital
Values & Norms Income, Health, Security
New Human Conditions

Summary

- Extensive experience in forest sector with C&I shows workable approaches
  - Recognize that criteria choices are political ones, best made through open dialogue
  - Best indicators are simple and affordable
  - Well-defined protocols are essential for credibility and comparability over space and time
- Domestic experience shows it is possible to “over-design” and “over-science” statistics and indicators

Summary

- Land use and land management activities in forests have a direct impact on human health and prosperity
- Forest inventories, monitoring, and reporting are essential to track impacts of land use and land management choices and evaluate risks to forests, human health, and prosperity
- Adopting existing forest C&I will add momentum to ongoing monitoring and reporting activities in the global forest sector, benefitting peoples everywhere