



Scientific Consultation on an Intergovernmental Panel on  
Biodiversity and Ecosystem Services (IPBES)  
April 27, 2010



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**Panel: IPBES and the Science-Policy Interface**

**Thoughts on Assessments and What can we Learn from Past  
Assessments?**

## Fundamental Characteristics of Assessments that Influence their Effectiveness across the International and Domestic Science-Policy Interface:

- **Saliency:** The Issue is view as very important, it is relevant to societies and nations as a current policy issue,
- **Credibility:** The implementation engages the best of science in the relevant fields, is open, transparent and uses independent peer-based review processes, and
- **Authoritative:** The Assessment is endorsed, engages the communities impacted by the assessment, most often this means, nations and international bodies of the UN or NGOs such as ICSU, IUCN or others.



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## An Expansion of these three Essential Elements of Effective Assessments:

- 1. A clear strategic framing** of the assessment process, including a well articulated mandate, realistic goals consistent with the needs of decision makers, and a detailed implementation plan.
- 2. Adequate funding** that is both commensurate with the mandate and effectively managed to ensure an efficient assessment process.
- 3. A balance between the benefits** of a particular assessment and the opportunity costs (e.g., commitments of time and effort) to the scientific community.



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## An Expansion of these three Essential Elements of Effective Assessments (Continued):

- 4. A timeline** consistent with assessment objectives, the state of the underlying knowledge base, the resources available, and the needs of decision makers.
- 5. Engagement and commitment of interested and affected parties**, with a transparent science-policy interface and effective communication throughout the process.
- 6. Strong leadership and an organizational structure** in which responsibilities are well articulated.
- 7. Careful design of interdisciplinary efforts** to ensure integration, with specific reference to the assessment **痴** purpose, users needs, and available resources.



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## **An Expansion of these three Essential Elements of Effective Assessments (Continued):**

- 8. Realistic and credible treatment of uncertainties.**
- 9. An independent review process** monitored by a balanced panel of review editors.
- 10. Maximizing the benefits** of the assessment by developing tools to support use of assessment results in decision making at differing geographic scales and decision levels.
- 11. Use of a nested assessment approach**, when appropriate, using analysis of large-scale trends and identification of priority issues as the context for focused, smaller-scale impacts and response assessments at the regional or local level.



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## **An Expansion of these three Essential Elements of Effective Assessments (Continued):**

**12. Plan and Engage a Communications Program and Organization** from the Beginning of the Assessment, which addresses the players within the Assessment, the Sponsors of the Assessment and the Communities Interested in and Rngaged in the Assessment.



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## **Some Excellent Resources and Studies About Assessments:**

- Cash, D. W., and S. Moser. 2000. Linking global and local scales: Designing dynamic assessment and management processes. *Global Environmental Change* 10:109-120.
- Cohen, S. J. 1997. Scientist-stakeholder collaboration in integrated assessment of climate change: Lessons from a case study of Northwest Canada. *Environmental Modeling and Assessment* 2:281-293.
- Farrell, A. E., S. D. VanDeveer, and J. Jager. 2001. Environmental assessments: Four underappreciated elements of design. *Global Environmental Change* 11:311-333.
- Farrell, A. E., J. Jager, and S. D. VanDeveer. 2006. Overview: Understanding design choices. In *Assessments of Regional and Global Environmental Risks. Designing Processes for the Effective Use of Science in Decisionmaking*, A. E. Farrell and J. Jager (Eds). Washington, D.C.: Resources for the Future.
- Jager J., J. Cavender-Bares, N. M. Dickson, A. Fenech, E. A. Parsons, V. Sokolov, F. L. T·h, C. Waterton, J van der Sluijs, and J. van Eijndhoven. 2001. Pp. 7-30 in *Learning to Manage Global Environmental Risks: Volume II, A Functional Analysis of Social Response to Climate Change, Ozone Depletion, and Acid Rain*. Social Learning Group (Ed.). Cambridge, Mass.: MIT Press. Pp.7-30
- MacCracken, M. C., E. J. Barron, D. R. Easterling, B. S. Felzer, and T. R. Karl. 2003. Climate change scenarios for the U.S. National Assessment. *Bulletin of the American Meteorological Society* 84:1711-1723.
- Mitchell, R. B., W. C. Clark, D. W. Cash, and N. M. Dickson, Eds. 2006. *Global Environmental Assessments: Information and Influence*. Cambridge, Mass.: MIT Press.
- Morgan, M. G., and H. Dowlatabadi. 1996. Learning from integrated assessment of climate change. *Climatic Change* 34:337-368.
- Moser, S. C. 2005. Impact assessments and policy responses to sea-level rise in three US states: An exploration of human-dimension uncertainties. *Global Environmental Change* 15:353-369.
- NRC. 2006. *Understanding and Responding to Multiple Environmental Stresses*. Washington, D.C.: The National Academies Press.
- NRC 2007. *Analysis of Global Change Assessments: Lessons Learned*, Washington, D.C.: The National Academies Press.
- Parson, E. A. 1995. Integrated assessment and environmental policy making. *Energy Policy* 23:463-475.
- Schneider, S. H., and J. Lane. 2005. Integrated assessment modeling of global climate change: Much has been learned—Still a long and bumpy road ahead. *Integrated Assessment* 5:41-75.
- Social Learning Group (Ed.). 2001b. *Learning to Manage Global Environmental Risks: Volume II, A Functional Analysis of Social Response to Climate Change, Ozone Depletion, and Acid Rain*. Cambridge, Mass.: MIT Press.