Session I
Science-Policy Interfacing

Michael Kleine

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Annex 2
 CONTENTS

- Interaction between Science and Policy
  “An attempt to explain what it is”

- The work of IUFRO’s Task Force on Science-Policy Interface

- IUFRO-SPDC Training Initiative on Science-Policy Interfacing
Science-Policy Research

- Limited application of scientific information and knowledge for policy and management

- Social studies related to the work of scientists addressing the interactions between science and society

- One of IUFRO’s strategic goals (2006-2010):
  “To strengthen links between science and policy and provide scientific information and advice for international policy-making”
Science has long been a political factor in society.

In recent times, interactions between science and politics have developed new qualities and at unprecedented levels of intensity:

- Expert scientific advice has been increasingly called upon to inform decision-making
- but, linking substantive knowledge and authoritative political decision making is a chronically difficult task
(Perceived) barriers and gaps in the interaction between science and politics:
- decision makers: “We don’t obtain the information that we need!”
- scientists: “We produce valuable information that is not used!”

Different theoretical perspectives on the science-policy interface

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Describing the Science-Policy Interface

- Two ideal-type models of science-policy interaction
- Different theoretical perspectives on the science-policy interface
- Various aspects describing important features of science-policy interactions

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Theoretical models

Knowledge Transfer Model

- Principle: “speaking truth to power” (Price, 1965)
- Implicit assumptions:
  - *spatial separation* between place of knowledge production and place of knowledge use
  - Simple transmission of *ready-made* scientific results
- Transfer model questioned for long time

Source: Jasanoff & Wynne (1998, modified)

Describing the science-policy interface

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Theoretical models

Network Model of Knowledge Diffusion

- Scientific know-how on its way into practical fields is subject to various transformations
- Science “diffuses” into society on different routes
- Scientific input to be understood as a social process
- that evolves over time and involves long-term interactions between scientists, policy makers, interest groups, and citizens

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Types of Knowledge Use

- **Transfer model:**
  Use of research in an instrumental way (considering the findings of a particular study in the context of a specific pending decision and adopting the course of action)

- **Network-model of knowledge diffusion:**
  Conceptual use of scientific findings is about gaining insights into social processes as a foundation for understanding (e.g. changing the language used in policy circles; new ideas spread gradually and become the conceptual framework of policy debates)

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Types of Knowledge Use

- Symbolic or Strategic Use of Information:
  Information is utilised to legitimate or sustain predetermined positions (e.g. taking information selectively to justify actions taken for other (political) reasons)
  - source of authority and hence legitimacy
  - justification for unpopular policies (*greenwash*)
  - mechanism for delaying or avoiding action
  - “scapegoat” and cover-up for policy change
  - …

  “Knowledge is nothing but a hook on which interests hang their case.” (Radaelli 1995)

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
The Role of Science in Policy Processes

Objective: Creating innovative procedures to bridge the gap between science and policy

Policy Assessments

⇒ Comprehensive, integrated evaluation of the causes, impacts, costs and response options in order to support the development of appropriate policy;

⇒ Help decision makers to evaluate possible action or think about a problem;

⇒ Summarising, organising, interpreting, reconciling pieces of existing knowledge, and communicating them;

⇒ Are helpful for policy deliberations.

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Policy Relevance

- Questions important to the scientific community are not the same as those important to the policy and management community.

  - Begin and end with the policy problems, not the scientific problems.

But: social systems of “science” and “politics” have different rationalities:
- researchers are primarily driven by scientific curiosity
- policy relevance is not a significant criterion
- incentive structures in the academic world are hostile to practice-oriented projects
- scientists tend to turn practice-oriented assessments into small disciplinary bits that can be easily published

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Policy Relevance

Different rationalities: (cont.)

- science and politics have different time horizons
- policy makers & managers have to react to immediate concerns and their agendas change rapidly
- the pace of science is much slower and characterised by continuity

Design options for science-policy processes:

- scientists: focus policy advice on identifiable user groups and political processes
- policy makers/managers: keep science-policy advice processes focused on the policy-relevant problems throughout the process (e.g., through debriefings or through periodic progress reports)

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Public issues go through an “issue-attention cycle”

1 pre-problem stage
2 alarmed discovery, euphoric enthusiasm
3 realising the cost of significant progress
4 gradual decline of intense public interest
5 post-problem stage

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Public issues go through an “issue-attention cycle”

- scientific inputs can come too late – when scientists answer salient questions too slowly to play a meaningful role in policy processes
- scientific inputs can come too early – when assessments arrive before advocates in the issue domain have any interest in the information

Design options for policy processes:
- generate policy questions interactively (scientists together with policy makers and stakeholders)

Source: Michael Pregernig,
IUFRO-SPDC Science-Policy Workshop 2008
Data vs. Frameworks

- **Traditional view**: what policy makers & managers want is just what researchers are best qualified to supply: data, findings, research conclusions

- **New insights**: policy-relevant science includes a high degree of evaluation and meta-level analysis, rather than the elaboration of new facts
  - less tangible outcomes of research are also very important (e.g., improved mental models of the problem)
  - research knowledge serves as a foundation for understanding
  - introduces new concepts and thus incrementally alters the language used in policy-circles
  - affects policies in diffuse ways (knowledge “creeps” into policy)

- **Frameworks, more than data, are the key to successful science-policy consultation.**

**Source**: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Repeated personal interactions over a longer period help …

- build up professional networks
- increase technical capacity
- ensure respect and credibility
- build understanding by policy-makers

Policy actions are not “decided” in brisk and clear-cut style but decisions rather take shape gradually, they “accrete”

- *singular events* (e.g., workshops, hearings) have a very limited chance to affect such processes
- more *process-oriented* forms of policy advice (e.g., series of related workshops, steady advisory bodies) are more effective

Invest resources to stimulate cooperation & communication

Source: Michael Pregernig,
IUFRO-SPDC Science-Policy Workshop 2008
Leaving a Legacy

Institutionalisation:
- some of the most important outcomes of science-policy advice processes only accrue to participants themselves,
- as these participants change jobs, the benefits begin to erode
- create new institutions to preserve technical capacity and professional relationships (e.g., standing advisory committees, periodic workshops, electronic mail list servers)

Evaluation:
- lessons about how to conduct science-policy assessments should be identified and applied in future processes
- conclude assessment processes with evaluation of what worked and what did not

Source: Michael Pregernig, IUFRO-SPDC Science-Policy Workshop 2008
Lessons Learnt for Policy Processes

- Understanding the difference between the scientific process and the policy process
- Ensuring the relevance of scientific information for policy making
- Considering the point in time when a particular scientific information is inserted into the policy process
- Importance of frameworks and concepts
- Evaluation of science-policy advice (results to be applied in future processes)
To develop a better understanding about the ways that forest research results have influenced the development and implementation of policies to protect, manage, and utilize forests and forest resources.

To develop a set of guidelines for researchers and policy makers that increases the likelihood that future policies will be built on a solid scientific foundation.
IUFRO Task Force

„Working Effectively at the Interface of Forest Science and Forest Policy“

- Work of IUFRO Task Force (over 5 years)
- Evaluation of some 60 case studies
- Annual task force meetings
- Presentation of Best Practices Guidelines (IUFRO-World Congress, Brisbane 2005)
IUFRO Task Force

Four Major Categories

I. Focusing research on questions that are relevant to policy issues;

II. Conducting research in a communicative and collaborative manner;

III. Understanding, serving and engaging in policy processes;

IV. Creating organisational capacity and culture that enables and encourages work at the science-policy interface.

http://www.iufro.org/science/task-forces/interface/
IUFRO-SPDC Training Initiative on Science-Policy Interfacing

Training Workshop Objectives

*Provide concepts and methods to researchers*

- *on how to plan, conduct, and organise research activities, so that*

- *results can more quickly and easily be transformed into usable information for problem-solving and policy-making*
Training Workshop

"Working Effectively at the Interface of Forest Science and Forest Policy"

Nairobi, Kenya, 4-6 December 2007
Training Workshop

"Working Effectively at the Interface of Forest Science and Forest Policy"

African Context

- Guidelines for forest science and policy interface
- Forest science in the context of policy concerns;
- Focus on stakeholder needs that enhance effectiveness of forest research and its influence on policy-makers;
- The importance and relevance of interdisciplinary research;
- The role of traditional forest knowledge
- The need for policy research, including organisational issues and impact assessment;
- The importance of partnership and communication among scientists, policy-makers and the public; and
- Capacity building.
Training Workshop

"Working Effectively at the Interface of Forest Science and Forest Policy,"

Sabah, Malaysia, 4-8 June 2007

Maliau Basin Field Studies Centre
Training Workshop
"Working Effectively at the Interface of Forest Science and Forest Policy,,
Sabah, Malaysia, 4-8 June 2007

Training Content

• Best practices guidelines
• International forest-related policy processes
• National forest programmes
• Pro-poor policies
Training Workshop

Mountain Forestry Development

„Working Effectively at the Interface of Forest Science and Forest Policy"

Vienna, Austria, 31 March to 1 April 2008
Mountain Forestry Development
„Working Effectively at the Interface of Forest Science and Forest Policy”

Participants

22 participants from 10 different countries in Africa and Asia
Science-Policy Workshops 2008


- Forest Policy Interfacing Training (IUFRO Conference on Traditional Forest Knowledge in Africa, Accra, Ghana, October 2008)

http://www.iufro.org/science/special/spdc/