

Policy relevance – a precondition for sustainability research

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A1 – Markets for Sustainability Research

presentation is not on:

- Technologies (but research and studies)
- Ecological research (but sustainability research)



- Both technological development and purely ecological research have easier way to create „markets“ for their results/products



Workshop on Ecoinformatics, EEA, 21-22 June 2007



Support to sustainability research

- Sustainable development is a core objective of the EU
- Current EU policies are based on the renewed EU SDS, where *research and development* plays an important and multifaceted role
- The FP7 has been set up to allow European research to live up to the R&D needs expressed in the EU renewed sustainable development strategy.
- The European Commission DG Research organizes a conference on “Sustainable Development: A Challenge for European Research” on 26-28 May 2009, in Brussels



Crucial issues for sustainability research

- How can the dynamic interactions between nature and society - including lags and inertia - be better incorporated into emerging models and conceptualizations that integrate the Earth system, human development, and sustainability?
- How are long-term trends in environment and development, including consumption and population, reshaping nature society interactions in ways relevant to sustainability?
- Can scientifically meaningful "limits" or "boundaries" be defined that would provide effective warning of conditions beyond which the nature-society systems incur a significantly increased risk of serious degradation?
- How can today's relatively independent activities of research planning, monitoring, assessment, and decision support be better integrated into systems for adaptive management and societal learning?

Source: Robert W. Kates (*et al*) *Science* 292: 641-642.



Sustainability research is not a standard type of research activity, ...

- But evaluation of research results is done through standard mechanisms (publications, patents, applied methodology...)



...but sustainability has some specific features

- Sustainable development is a **policy relevant concept**
(and on the whole, efforts to ensure salience are rather weak; not many research efforts are closely linked to specific decision makers and decisions)

***Policy relevance (salience)** means that research efforts/results are closely linked to policies, decisions, and politicians*



Other specific features of sustainability research

- Complexity and uncertainty, with many interlinked contributory factors
- Multiple scales (local, regional, national and global)
- Multiple agencies, organizations, groups and communities involved or affected
- Multiple perspectives on defining both the problem and potential solutions (interdisciplinarity required)
- Multiple frames of reference (e.g., economic, environmental, social, cultural)
- Conflict, power relations and vested interests making change difficult



Example of policy relevant research for sustainability

- Czech Strategy of Sustainable Development (NSSD)
- Demand to monitor and evaluate the NSSD's objectives
- Indicator-based monitoring report (Operationalising the concept of sustainability, applying environmental when appropriate, analyzing complex interactions between natural and socio-economic systems across a range of spatial and temporal scales; etc.)



Indicators based on material flow analysis

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Indicators based on material flow analysis

Chart II.C.2: Material intensity, Czech Republic, 1995-2004

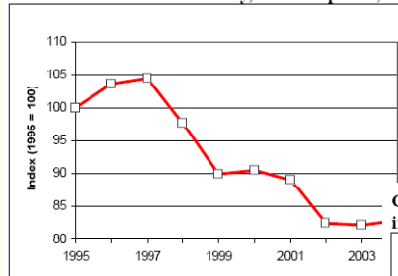
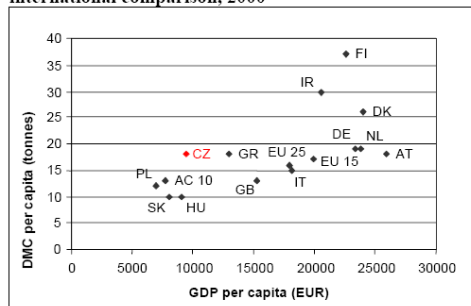


Chart II.C.3: Domestic material consumption (DMC) and international comparison, 2000



Thank you !

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