

Cross-sectoral Vulnerability, Risk and Economic Assessments for Adaptation Strategies

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Cross-sectoral impact-based assessments:

Usefulness for Adaptation Strategies

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Purposes of cross-sectoral climate impact assessments

1. Policy Perspective:

- identifying priorities of adaptation needs
- ➤ **What is most important?** ;
- ➤ **What should we do?** ning
- CC impacts in connection with other developments

2. Science Perspective:

- investigation of climate and socio-
 - ➤ **What can we learn?** heir
 - ➤ **What can we create?** n
- development of new methodologies and tools

Differences in definitions and methods

1. Definitions:

- **key term: amount of damage potential of climate change impacts**

2. Methods:

- **assessments/models based on climate projections, socio-economic scenarios and policy assumptions**

Common challenges

Assessing potential future effects and COMPARE damage potential across sectors:

- uncertainties in projections (future!), data constrains
- make things comparable, which are not comparable
- normative judgments: what is important for whom?
- visualize, interpret,

**COMMUNICATE and USE results
to steer adaptation actions**

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Recommendations

- I. Use a system approach by investigating effects of cc on **services/functions and interdependencies or spill over effects**.
- II. Next to cc, also **other stresses and changes** need to be considered.
- III. Start with **effects of current climate variability and current adaptation deficits**.
- IV. **Communication and cooperation** is needed throughout the work.

Mismatch of policy expectations and scientific possibility, because:

1. **Scientific assessments do not fit end-user needs**

Adaptation targets and risk tolerance poorly defined

Mismatch of policy expectations and scientific possibility, because:

- | | |
|--|---|
| 1. Scientific assessments do not fit end-user needs | Adaptation targets and risk tolerance poorly defined |
| 2. Complex scientific results need careful communication to prevent misuse | Policy makers expect practical and rather simple answers and evidence |



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1. **Scientific assessments do not fit end-user needs**

Adaptation targets and risk tolerance poorly defined

2. **Complex scientific results need careful communication to prevent misuse**

Policy makers expect practical and rather simple answers and evidence

3. **Science-policy-practise communication is seen as one-way road.**

Cross-sectoral processes are time-consuming



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Key Recommendations

Policy-oriented output:

1.1 Policy: Define adaptation targets and risk tolerances

1.2 Science: Take off from existing policy environments and options (windows of opportunity)


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Key Recommendations

Using results in the political process:

2.1 Policy: Cross-sectoral assessment at national level are useful background information, but not for concrete adaptation planning

2.2 Science/Policy: Assessments and political process should co-evolve


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Key Recommendations

Dialogs across borders:

3.1 Policy: Start cross-sectoral communication and policy processes

3.2 Science/Policy: See communication as a two-way process, based on knowledge exchange, leading to co-production


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→ **Boundary institutions and organisations** Bundesamt für Umwelt BAFU

Contact Details

Further information at:

http://www.circle-era.eu/np4/CrosSectoral_WS_Presentations.html

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