

A global analysis of adaptation case studies: state of the art

Jenny Tröltzsch¹, Benjamin Boteler¹, Katrina Abhold¹, Gil Penha-Lopes², Ana Lúcia Fonseca², Inês Campos², Anders Branth Pedersen³, Anne Jensen³, Femke Schasfoort⁴ and Mark Zandervoort⁴

¹EcoLogic Institute, ²FFCUL, ³Aarhus University, ⁴Deltas

Research objectives

- To collect examples, or case studies, of implemented adaptation measures used both globally and in Europe
- To extract lessons learned for the broader adaptation and research community
- To characterize adaptation measures and methods for measure selection and development by “randomly” selecting case studies
- To analyse the existing adaptation measures reported in the major EU and Global Adaptation platforms, especially on economic assessment methods and participatory methods

Methodology

- Review of relevant European and international databases focusing on adaptation case studies, e.g. INFOBASE, Global Adaptation Network, Climate-ADAPT, CAKE, weADAPT, UNFCCC, MEDIATION
- Complemented with general internet search and review of national portals such as www.klimaanpassung.at and www.klimatilpasning.dk
- Geographic spread: Europe, North America, South America and Singapore (19 countries covered)
- 136 case studies selected based on following inclusion criteria:

- Geographic scope of analysis,
- Clear Indication of type of measure,
- Indication of applied methodology (stakeholder-based and/or economic assessment methods)
- Clear indication of implementation of measure (proposed measures with no indication of implementation were excluded)
- Sufficient data availability
- In-depth assessment of 9 case studies

Characterization of 136 case studies

Figure: Sectors in reviewed case studies

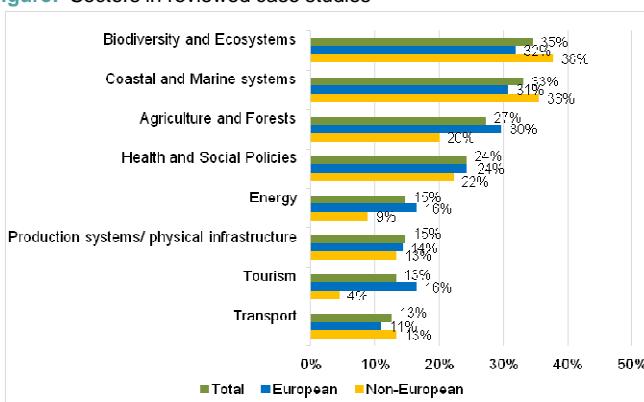


Figure: Economic decision support tools in reviewed case studies

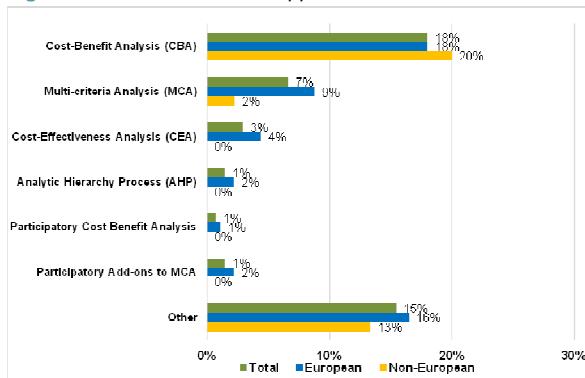
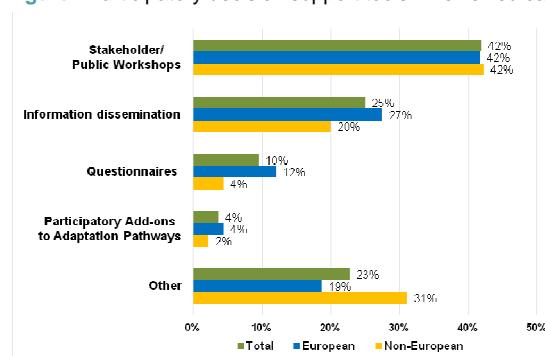


Figure: Participatory decision support tools in reviewed case studies



Conclusions

- Databases vary in the amount of information provided and are often lacking information, such as on the decision-making process or assessment tools used.
- Participatory methods are often very fruitful and can be critical to the success of projects. -> An innovative way to include knowledge from local stakeholders, research partners and clients
- Very little information in regard to economic methods and their application is available.
- A mix of measures seems to be for many circumstances advantageous e.g. the combination of grey and green infrastructure measures for flood protection.
- Documentation of adaptation projects should include information on methods and reasons for selection of measure.

Reference and Contact

Boteler, B. et al (2015): Experiences in bottom-up adaptation approaches in Europe and elsewhere. Available online at: <http://base-adaptation.eu/>



Jenny Tröltzsch

jenny.troeltzsch@ecologic.eu