

Data driven approaches vs. qualitative approaches in climate change impact and vulnerability assessment.

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In the last decade the scope of climate change science has broadened significantly. 15 years ago the focus was mainly on understanding climate change, providing climate change scenarios and giving ideas about potential climate change impacts. Today, adaptation to climate change has become an increasingly important field of politics and one role of science is to inform and consult this process.

Therefore, climate change science is not anymore focusing on data driven approaches only (such as climate or climate impact models) but is progressively applying and relying on qualitative approaches including opinion and expertise acquired through interactive processes with local stakeholders and decision maker. Furthermore, climate change science is facing the challenge of normative questions, such us 'how important is a decrease of yield in a developed country where agriculture only represents 3% of the GDP and the supply with agricultural products is strongly linked to global markets and less depending on local production?'.

In this talk we will present examples from various applied research and consultancy projects on climate change vulnerabilities including data driven methods (e.g. remote sensing and modelling) to semi-quantitative and qualitative assessment approaches. Furthermore, we will discuss bottlenecks, pitfalls and opportunities in transferring climate change science to policy and decision maker oriented climate services.