

# S4: Household surveys to inform climate change impact research and monitoring progress on the SDGs

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## Summary of themes covered in workshop

- Agricultural household surveys: spatially interpolating household characteristics and mapping, temporal extrapolation using remote sensing for creating pseudo-panel / time-series of survey data
- Analysis of agricultural livelihoods and food security in low- and middle income countries (case studies from Uganda, Ethiopia, India, Mozambique)
- How to better collect household surveys and the importance of using standardized indicators
- Improving representation of socio-economic heterogeneity in an integrated assessment model (application for food demand and food supply projections)
- Aim: Assess whether agricultural household surveys are a useful source of information for informing large-scale climate change impact assessments, considering that they are usually collected only for a small area and at one point in time.

### Most controversial question that came up in this workshop?

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#### Results of the discussion

- Despite issues with data quality in some household surveys, they seem a useful source
  of information for analyzing agricultural household's vulnerabilities in climate change
  impact assessments and for monitoring the progress towards the SDGs in low- and
  middle-income countries
- Taking the approaches presented for case study countries to a larger geographical scale pose some challenges, however.
- It can't be assumed that data collected in the same survey are of the same quality, e.g.
  the Living Standard Measurement Study (LSMS) of the World Bank collected data for
  different African countries, and their quality varies a lot (e.g. regarding data gaps,
  plausibility, documentation)
- Socio-economic heterogeneity matters for global change analysis

#### Research gaps identified

- Standardization of indicators for livelihood and food security studies
- Accessing and harmonization of household surveys remain a challenge (data sharing policies absent or not enforced, missing or incomplete documentation and meta data, geographic coordinates missing or too aggregated)
- Upscaling research findings from case studies a challenge
- How can lessons learnt from a reduced form global model that takes into consideration a more comprehensive set of drivers be fed back into the full global model

#### **Next steps**

 Organize a follow-up workshop with a larger group of people interested in using agricultural household surveys for agricultural livelihood analysis to continue working on the research gaps identified

Other		
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# 3-5 keywords that characterize the session

socio-economic heterogeneity, agricultural livelihoods, up-scaling