



M2: Sea-level rise and coastal migration

Host: **Jochen Hinkel** (*Global Climate Forum, Germany*)

Rapporteur: **Lena Reimann** (*Kiel University, Germany*)

Summary of themes covered in workshop

This session covered three presentations dealing with empirical, local-scale data on coastal migration due to climate change in Europe, Ghana, Bangladesh and India and two studies aiming at modelling migration on local to global scale.

In the empirical studies, the drivers of coastal migration and perceptions of risk are investigated on a household level, showing that environmental drivers are not perceived as the primary drivers of migration in the majority of cases. However, migration decisions can often be traced back to environmental drivers that are overshadowed by other drivers.

The modelling studies use two different approaches. In the first study, a modelling framework is being developed based on empirical data, aiming at representing the most significant migration variables at the local level. The global-scale study uses a cost-benefit approach to explore plausible scenarios of coastal protection, considering migration as an adaptation option.

Most controversial question that came up in this workshop?

How is it possible that the research community regards migration due to climate change as a major future challenge, but that the actual migrants do not see climate change as a main driver of their migration decision?

How can we ensure that migration is well-managed as sea-levels rise? Where will people go (especially considering low-lying countries)? How should politics be involved?

Results of the discussion

Migration is a multi-causal process and environmental drivers are not perceived as the major migration driver.

It is extremely difficult to make assumptions about future migration flows due to climate change and to develop a modelling framework that accounts for future migration drivers.

Migration due to sea-level rise is expected to differ considerably among countries, depending on current and future coastal protection.

Uncertainty regarding sea-level rise projections is very high, so that large-scale relocation is not (yet) seen as a feasible adaptation option.

The needs of the population affected by sea-level rise need to be considered more in research and policy-making.

Research gaps identified

Existing studies are just a snapshot in time; longitudinal studies are needed.

Knowledge about the institutional processes surrounding the relocation of people is limited.

Next steps

Combine qualitative and quantitative empirical social science approaches ('mixed methods') to better understand the drivers of migration.

Model the influence of sea-level rise and coastal protection decisions on the distribution of the population.

Empirical research on social and institutional experiences with planned relocation.

Other

NA

3-5 keywords that characterize the session

Sea-level rise-induced migration, risk perception, migration culture, protection vs. migration, planned relocation