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Meta-Analysis of Rural Household Adaptation Strategies to Environmental Change in Sub-Saharan African Drylands

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Abstract

Drylands encompass approx. 40 % of the global earth surface and arguably constitute one of the world regions that are impacted the most by global environmental and climate change. It is estimated that about one billion people in drylands directly depend on natural resources for their livelihood. These people suffer particularly from worsening environmental conditions and often have few capabilities to compensate for lacking resources or the consequences of extreme weather events.

Local case studies have proven to be an effective instrument to investigate adaptation behaviour of different population groups in the context of environmental and climate change. The knowledge generated by these studies is crucial for the strategic development of climate change adaptation measures, natural resource and migration management on national, regional and international level. However, given context-specific local framework conditions, case study results are rarely directly applicable to bigger regions. Consequently, synthesis methods are needed to generate transferable results that can be incorporated into political processes. A major strength of these methods is the possibility to promote an understanding of underlying processes, causal linkages and patterns while maintaining the descriptive richness of local case studies.

This presentation outlines the approach and preliminary results of a comprehensive meta-analysis of household adaptation strategies in the context of environmental change with a focus on Sub-Saharan African drylands. The aim of this study is to identify relevant strategies adopted by rural households to adapt to or cope with different types of environmental change and a variety of factors influencing their behaviour. Particular attention is paid to potential 'adaptation pathways' and regional/sub-regional patterns.

This meta-analysis is part of a dissertation project within the framework of MigSoKo, an interdisciplinary junior research group investigating the complex dynamics between environmental change and human migration in the tropics. The analysis outlined above will essentially contribute to a better understanding of the role of migration as environmentally-induced adaptation strategy.

Keywords: Adaptation, coping, environmental change, meta-analysis, sub-Saharan Africa

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