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

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Motivation

Why conduct a meta-analysis?

- Local case study results are usually highly context-dependent and rich in detail, thus difficult to directly include in political processes at higher levels, e.g. migration management and climate change adaptation strategies
- Meta-analysis can help understand underlying processes, causal linkages and patterns across a larger geographical space

Why focus on drylands and Sub-Saharan Africa (SSA)?

- Drylands represent > 40% of the global terrestrial area (Pravalie, 2016)
- Approx. one billion people directly rely on dryland ecosystems for their livelihoods (UN, 2011)
- High vulnerability of SSA countries to projected climate changes, major challenges include land degradation, water stress, food insecurity, migration and political instability (IPCC, 2007; UN, 2011)

Research Aim

- Identify and characterise relevant **household adaptation and coping strategies** in the context of environmental change
- Examine relevant factors influencing adaptation behaviour
- Analyse sub-regional patterns and **adaptation pathways**

Focus on:

- Hyper-arid, arid semi-arid areas in SSA
- Rural subsistence livelihoods
- Climate variability and land degradation

Contribution to policy and practice:

- Better understanding of adaptation dynamics in drylands and the role of migration as adaptation strategy
- Support decision-makers in their efforts to promote favourable conditions for sustainable rural adaptation

Methodology

This study applies a **mixed-method meta-analytical approach** to synthesise relevant scientific knowledge. The research process is essentially iterative. We expect approx. 100 cases to be eventually included in the analysis.

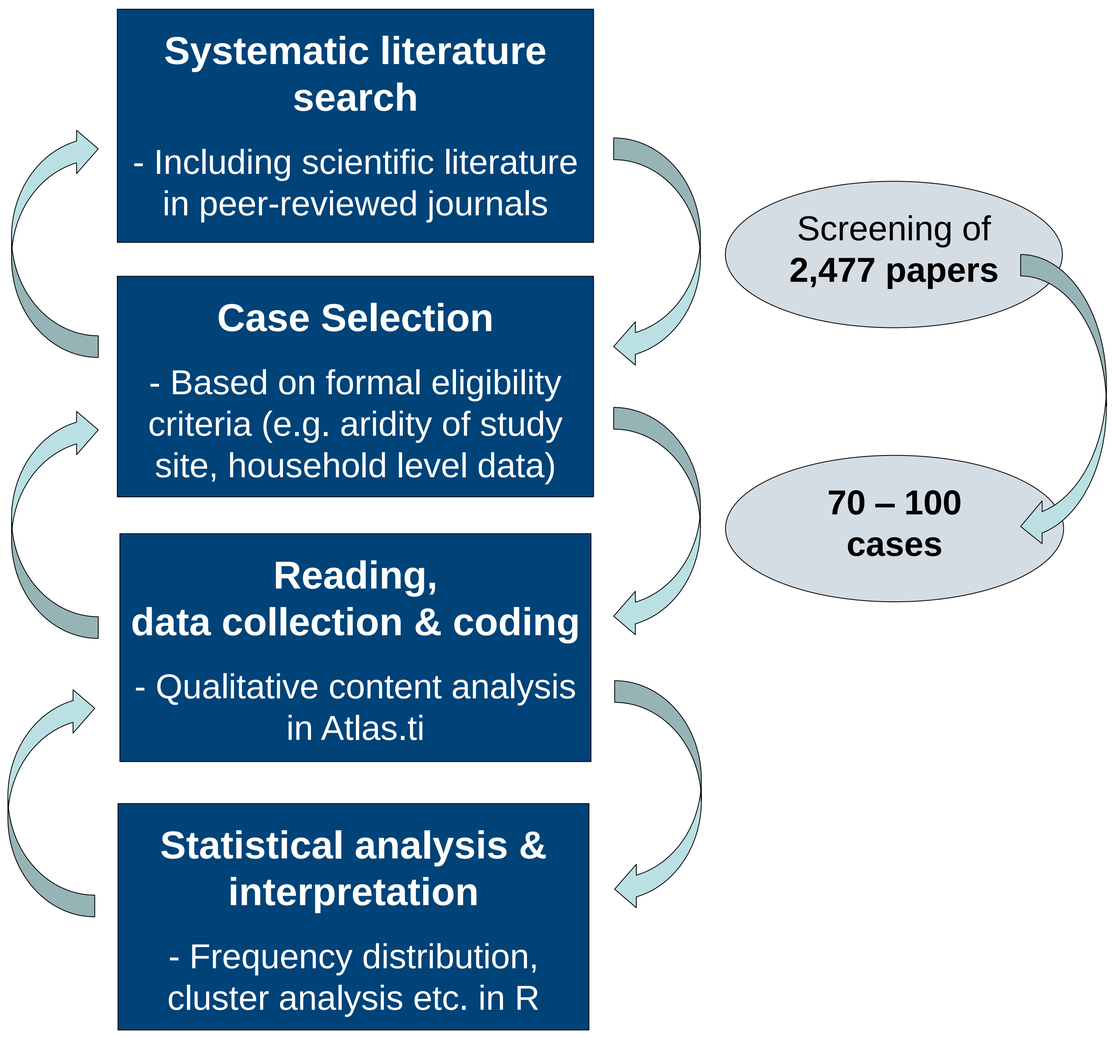

Figure 1. Methodological approach.

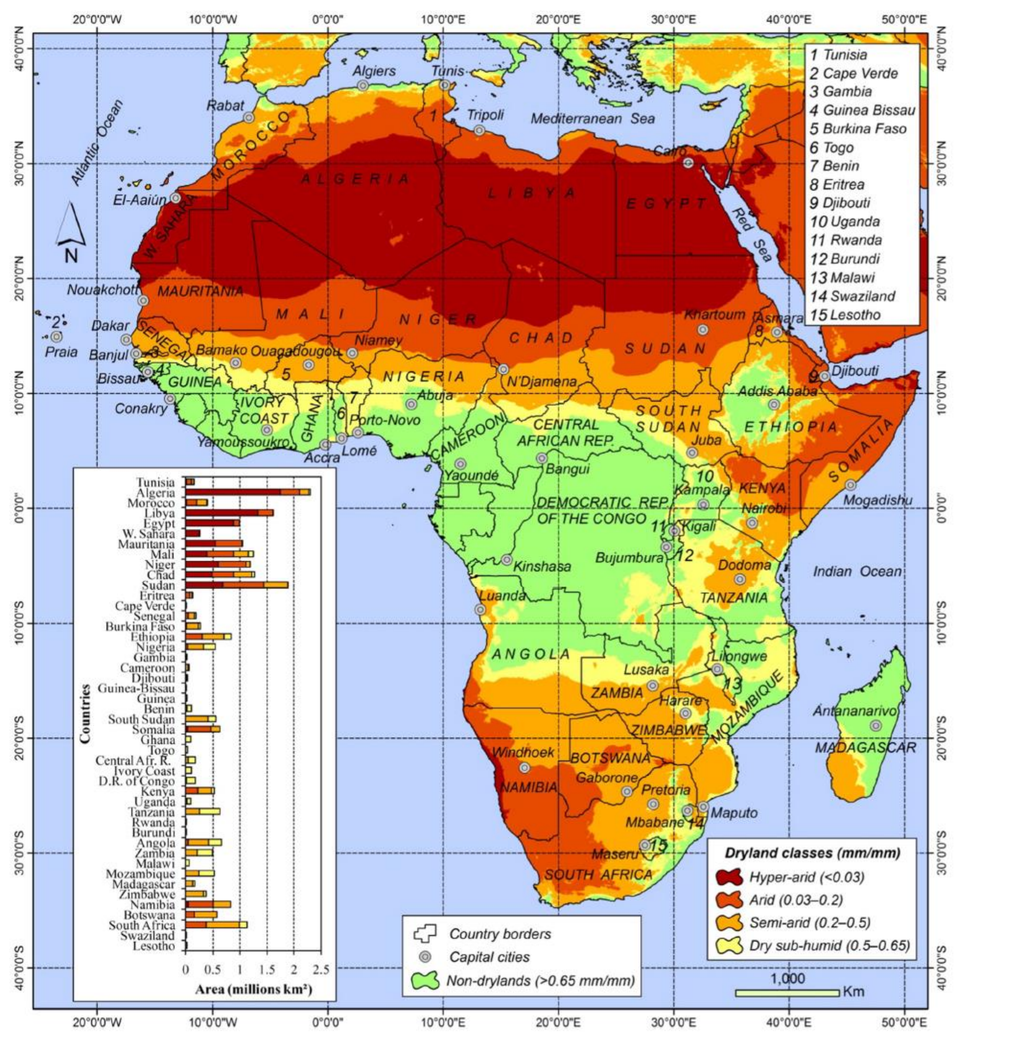

Figure 2. Spatial representation of dryland systems in Africa. Source: Pravalie, 2016.

References:

IPCC (2007). Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC, Geneva.

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