

Tracking Adaptive Capacities to Build the Resilience of Smallholder Farmers In Wolaita, Ethiopia



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Background and Justification of the Study

The issue of climate change is one of the most pressing topics on the agenda in the international community; SDG (13, Target 13.1), “strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.” Climate change seriously impacts poor and vulnerable people living in developing countries whose livelihoods rely largely on agriculture, and this equally applies to Ethiopia including the study area (Wolaita Zone) where recurring climate shocks and stresses frequently result in hunger.

In order to survive, these farm households are continuously having to find ways to absorb pending or future shock and stresses, and/ or adapt their livelihood strategies to keep pace with their changing climatic, economic, political and societal environment. While policy and strategy from national and regional levels dominate in countries like Ethiopia, the literature suggests that primary stakeholders (small farmers) can also significantly contribute to policy formulation and support incremental adaptations to keep pace with a highly vulnerable environment.



This study will establish a methodology to monitor ongoing changes in livelihood strategies among small farm households in areas that are particularly prone to climatic shocks and stresses. WSU's department of Rural development, Natural Resource Management, Agricultural Economics and other related disciplines will measure livelihood changes among small farm households and ascertain, based on evidence, the main drivers for these changes. It is envisaged that this longitudinal study can contribute significantly to shape future policy at the local, regional and national levels.

Research Question

How can local adaptation strategies of smallholder farmers progressively support building resilience to climate change in Wolaita zone?

Objective

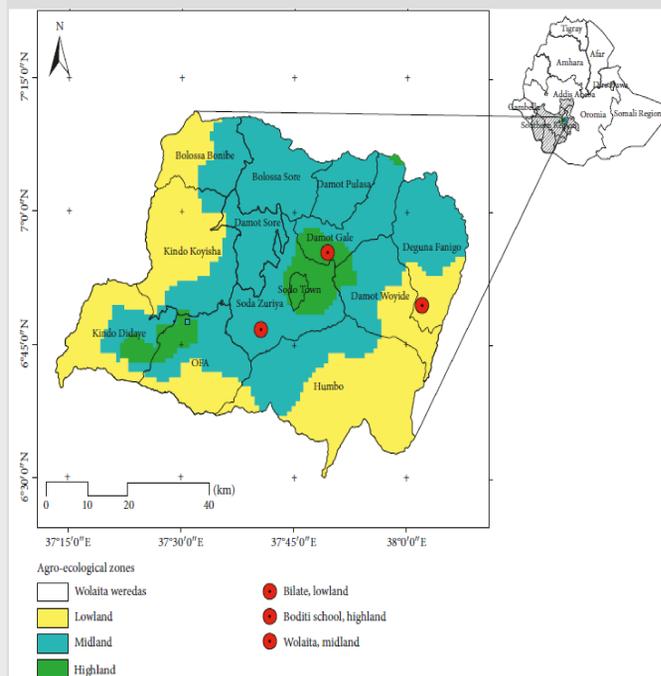
The **main objective** of this research is to develop a mechanism/ methodology to measure and monitor incremental adaptations in livelihood practices by vulnerable smallholder farmers to promote resilience.

Specific Objectives

- To establish a framework to map livelihood practices of smallholder farmers in Wolaita zone
- To develop tools to measure critical factors that drive incremental changes in livelihood practices
- To establish, using econometric modelling, the interval period between studies to optimize the contribution to policy formulation
- To identify, based on evidence, the socio-economic implications of changes at household and community levels
- To develop an appropriate dissemination strategy to contribute to policy formulation and support local smallholder contribution to resilience policy at all societal levels.

Methodology

The study will be undertaken in Wolaita Zone located in the Southern Ethiopia



Location of agroecological zones.

Data will be collected in 12 kebeles, sampled from 6 woredas of study area (Wolaita Zone, Southern Ethiopia),

Longitudinal methods of study will be applied to this study, and the study will integrate both qualitative and quantitative methods of data collection. A total of 400 questionnaires, 6 FGDs and 17 KII will be administered.

The collected data will be analyzed using both descriptive statistics and econometrics models.

Data Analysis

After the desired data are collected from the sample respondents, the researcher will employ both descriptive statistics and econometrics model, Multinomial Logit Model (MLM) [$\text{Prob}(Y=j/x)=P(U_{ik}/x)$], in order to analyze and interpret the data and give meaningful analysis.

Outcomes

- Research strategy with appropriate tools to record changing livelihood strategies for smallholder farmers
- Socio-economic model to determine appropriate time intervals to measure incremental adaptations in livelihood strategies for smallholder farmers that can contribute to policy formulation
- Research strategy and appropriate tools to determine influencing factors
- Dissemination strategy to share information on incremental adaptations of smallholder farmers

Outputs

- Questionnaire using ODK-tool to collect data on livelihood strategies of smallholder farmers
- 400 smallholder farmers have agreed to participate in this longitudinal study
- Data management system in place to allow for the safe retention of data in line with GDPR guidelines
- Training manual in place for data collectors
- Identified and weighted the key factor climatic, political, economic, social and cultural factors that contribute to incremental adaptation
- Developed selection criteria and appropriate research tools to measure reasons for changes in livelihood strategies
- Templates in place to report on incremental adjustments by study respondents

References

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