

Title: Exploring the Role of Rural Youth in Agricultural Innovation and Transformation

The role of rural youth in driving agricultural innovation and transformation has been a topic of debate among scholars. While some argue that farming is often seen as a last resort by youth, others contend that it should not be assumed as unattractive to them. In light of these contradicting views, this master's thesis aims to investigate whether youth can be expected to lead innovation and transformation in rural areas of developing countries.

Objectives: This study seeks to achieve the following objectives:

1. Conduct a Comprehensive Literature Review on Farming, Youth, and Agricultural Transformation:
 - Review and analyze existing scholarly literature to understand the perspectives and theories surrounding the involvement of rural youth in agricultural innovation and transformation.
 - Identify key factors that influence youth engagement in farming and examine the potential for youth-led initiatives to drive agricultural transformation.
2. Explore Descriptive Evidence from Diverse Data Sources:
 - Utilize publicly available datasets, such as the IFPRI Dataverse or World Bank microdata, to gather descriptive evidence from different developing countries.
 - Conduct a comparative analysis of youth involvement in agriculture, examining factors such as education, access to resources, market opportunities, and youth-led initiatives.
 - Utilize statistical software such as R or STATA to analyze the data and draw meaningful insights.

Required Skills: The successful completion of this thesis will require the following skills:

- Proficiency in conducting a comprehensive literature review, critically analyzing academic sources, and synthesizing key findings.
- Ability to search for publicly available and relevant datasets, particularly from sources like the IFPRI Dataverse or World Bank microdata.
- Competence in statistical analysis using software such as R or STATA to explore and interpret the gathered data.
- Strong writing skills to effectively communicate research findings and draw conclusions.

By investigating the role of rural youth in agricultural innovation and transformation, this research aims to provide valuable insights into strategies for engaging and empowering youth in the agricultural sector of developing countries. The findings can inform policy formulation and interventions aimed at harnessing the potential of youth to drive positive change in rural areas.

Title: Mobile Financial Services for Smallholder Welfare: A Review of Evidence in Sub-Saharan Africa

The rapid expansion of digital tools has sparked growing interest and investment in addressing key challenges faced by smallholder farmers in the Global South. Among these tools, Mobile Financial Services (MFS) have shown promise in improving access to microfinance and empowering smallholders in input and output related transactions. This master's thesis aims to critically examine the existing literature on MFS in Sub-Saharan Africa (SSA) with a focus on understanding their impact on smallholder welfare.

Objectives: This study seeks to achieve the following objectives:

1. Summarize the Current State of Mobile Financial Services in Sub-Saharan Africa:
 - Provide an overview of the current state of MFS adoption and implementation in SSA.
 - Identify key trends, challenges, and opportunities related to the use of MFS in smallholder agriculture.
2. Systematically Review the Available Evidence on the Impact of MFS on Smallholder Welfare:
 - Employ a systematic review methodology to assess the existing empirical evidence on the impact of MFS on smallholder welfare indicators such as income, productivity, and resilience.
 - Analyze the strengths, limitations, and gaps within the literature, and propose potential areas for further research.

Required Skills: The successful completion of this thesis will require the following skills:

- Experience in conducting systematic reviews or a strong desire and willingness to learn the methodology.
- Proficiency in critically analyzing academic literature and synthesizing key findings.
- Strong language and analytical capabilities to effectively communicate the research findings and draw insightful conclusions.

By shedding light on the impact of MFS on smallholder welfare in SSA, this research will contribute to the existing body of knowledge, inform policymakers, and potentially guide the development of more effective strategies to enhance the well-being of smallholder farmers in the region.

Title: Enhancing Productivity, Market Orientation, and Dietary Outcomes: An Analysis of Smallholder Farms

Introduction: Improving productivity in smallholder farms has the potential to positively impact dietary outcomes through two main pathways: increased availability of own produce for direct consumption and income generation through sales, which ensures economic access to food. For example, recent evidence suggests that diversified agricultural production can lead to better dietary outcomes for households that are distant from markets or have limited market orientation. <https://doi.org/10.1007/s12571-020-01098-9>

Objectives: This study aims to achieve the following objectives:

1. Assess the Impact of Productivity-Enhancing Technologies and Extension Information on Dietary Outcomes:
 - Conduct a comprehensive review of the existing literature to examine the effects of productivity-enhancing technologies and extension information on dietary outcomes.
 - Analyze the potential mechanisms through which productivity enhancements influence dietary outcomes, including increased availability of own produce and income generation.
2. Investigate the Role of Market Orientation and Access as Mediating Factors:
 - Explore the extent to which the impact of productivity-enhancing interventions on dietary outcomes is mediated by household-level market orientation and access.
 - Utilize publicly available datasets, such as those from the IFPRI Dataverse or World Bank microdata, to examine the relationship between market orientation, access, and dietary outcomes. Note: The research country is not defined. The candidate is expected to search for publicly available and relevant datasets from sources like IFPRI Dataverse or World Bank microdata. For example: <https://doi.org/10.7910/DVN/JCXY6E>
 - Employ statistical analysis using software like R or STATA to investigate and quantify the mediating effects.

Required Skills: The successful completion of this thesis will require the following skills:

- Proficiency in conducting a comprehensive literature review, critically analyzing academic sources, and synthesizing key findings.
- Competence in statistical analysis using software such as R or STATA to estimate the impact of productivity-enhancing technologies on dietary outcomes.
- Ability to search for publicly available and relevant datasets, particularly from sources like the IFPRI Dataverse or World Bank microdata, to explore the role of market orientation and access.
- Strong analytical and writing skills to effectively communicate research findings and draw meaningful conclusions.