The role of non-farming activities on rural farming households in Lesotho: a gender perspective

RESEARCH PROPOSAL

Presented to

Partnership for Economic Policy (PEP)

By

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&
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Lesotho
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There are three main dimensions to all PEP-supported projects: capacity building, research and policy engagement. Each dimension must be considered with due care and attention as they will be assessed individually and concurrently to determine the overall quality of a proposal.

The PEP proposal template is structured in five sections:

1. Project overview and objectives
2. Capacity building – team composition and experience
3. Research – literature review, method and data
4. Informing policy - context, relevance, process and dissemination
5. Other considerations

SECTION I – PROJECT OVERVIEW & OBJECTIVES

1.1. Abstract (100 to 250 words)

State the main research question, the context and its relevance in terms of evidence-informed policymaking, in relation to PAGE priority issues. Complete with a brief description of the method and data that will be used.

The contribution of agriculture to the provision of rural livelihoods in Lesotho cannot be over-emphasized. Like most developing countries, agriculture has also been traditionally the dominant
sector to Lesotho's economy, contributing around 15 percent to GDP. However, with declining agricultural productivity in recent years due to adverse climatic conditions, off-farm activities, particularly in labour-intensive manufacturing industries has become the important diversification strategy for the rural farming households. The main objective of this study is to empirically analyse the role of non-farming activities on rural smallholder farming households in Lesotho, taking into consideration the gender dimension. We propose to use the Agricultural Production Survey, collected over the agricultural year of 2018/2019 by the Lesotho Bureau of Statistics. The survey is nationally representative as it covers all the 10 districts of Lesotho is conducted every year from both crop and livestock farmers. We propose use discrete choice analysis that analyse the probability of participating in non-farm activities and its covariates. To account for potential selection bias in the choice to participation in non-farm activity, the study will use Dubin-McFadden two step estimation procedure to analyse main drivers of non-farm employment and income. To identify the heterogeneous effects of participation in off-farm activities by gender, the study proposes to use the extension of the Blinder-Oaxaca decomposition proposed by Fairlie (2005). The results from study will provide important insights on how national policies and strategies developed to improve rural communities can further be improved to integrate diversification strategies through which rural farming households can safe-guard themselves against agriculture-related shocks.

1.2. **Main research questions** (max 500 words)

Explain the focus (or key questions), including the gender-sensitive aspect, of your research and its relevance for policy.

**Research questions**
The main objective of this study is to empirically analyse the role of non-farming activities on rural farming households in Lesotho, taking into consideration the gender dimension. Specifically, the study will:

- Investigate the main factors that influence participation in non-farm employment. Related to this objective, the study will further tease out the relationships, looking at the different categories of principal employment of an individual i) farm employment (ii) non-farm self-employment and (iii) non-farm wage employment and gender of those who participated in off-farm activities.

- Assess the differences in household income due to participation in non-farm employment. The study will further analyse the heterogeneous effects based on gender of those participated in non-farm activities.

- Analyse the effects of off-farm employment on household agricultural output.

**Policy relevance**
The study will provide important insights on how national policies and strategies developed to improve rural communities can further be improved to integrate diversification strategies through which rural farming households can safe-guard themselves against agriculture-related shocks. Further, the current agricultural policies do not integrate the gender dimension. The results from this study will provide evidence that will inform policymakers on how to mainstream gender into agriculture to empower women. This is very instrumental in improving agriculture production and productivity from household level in rural Lesotho. The results can re-enforce the need for Lesotho
to incorporate gender budgeting in high productive and female labour-intensive sectors such as agriculture and small businesses.

1.3. **Main contributions** (max 500 words)

Describe why and how you expect this research/evidence to contribute to addressing important knowledge gaps, both in terms of scientific contributions* and to inform policymaking.

For the gender-sensitive aspect, explain the potential usefulness of your work for gender-oriented policy.

*The literature review shall be detailed under "Research" (section III), not in this section.

The contribution of agriculture to the provision of rural livelihoods cannot be over-emphasized. Like most developing countries, agriculture has been traditionally the dominant sector to Lesotho’s economy, contributing around 15 percent to GDP. It is one of the identified productive sectors under the 2018/19-2022/23 National Strategic Plan (NSDP II) to anchor jobs and inclusive economic growth. It is also the source of food security and the improvement of the livelihoods in rural Lesotho. About 80-70 percent of Lesotho’s population lives in the rural areas, where 85 percent are engaged in smallholder farming activities. However, the increasing adverse effects of climate change in recent years have led to declining agricultural output and its general contribution to economic growth in Lesotho. These high exposure to climate risks have presented a direct threat to agriculture (Global Climate Change Alliance, 2012).

Most women in rural Lesotho engage in subsistence farming as a source of livelihood. As a result, these women do not have enough capacity to absorb major shocks compared to their male counterparts. Consequently, any negative external shock to agricultural produce is likely to have a much greater impact on women than men. The 2014 Malabo Declaration on accelerated agricultural growth and transformation for shared prosperity and improved livelihoods, among many things, does track gender issues in agriculture. The declaration tracks women participation in agriculture with the aim of promoting rural women empowerment in agriculture. There are interventions in the agriculture sector, implemented by the Ministry of Agriculture and Food Security to address poverty and hunger. The midterm report of Smallholder Agriculture Development Project (SADP), for example, showed that more than 370 farmers benefited from the programme, most of which were women. Yet it was found that in 2016, only 0.02% of women engaged in agriculture in Lesotho can make decisions about agriculture production. The proportion is very small and does pose threats the rural community in terms of food and nutrition security. One can therefore make an inference that they even do not have land rights in decision-making on household income-making activities including farming and off-farm activities.

Off-farm income, as an alternative source of household income, has therefore become an important coping mechanism against negative income shocks for many rural families and those who do not have access to land in Lesotho. This study contributes to the existing literature by analysing the role of off-farm activities on rural farming households in Lesotho. The current studies do not comprehensively analyse the direct role of non-farm income on smallholder livelihoods in Lesotho. Yet non-farm income plays an important role particularly in the presence of agriculture-related negative shocks. Empirical evidence shows that participation in rural non-farm activities lead to a pronounced impact on agricultural output, household farm decisions, rural development, food security, income and welfare (Osarfo et al, 2016). The results from this study will give direction on which non-farming sectors contribute most on farming rural income and how these in turn have heterogeneous effects on rural households. Most importantly, the study
integrates the gender dimension on the role of non-farm activities on smallholder rural farming households in Lesotho. The study also provides insights into the linkages between off-farm activities and expansion in agricultural activities. Such literature is very limited particularly in Africa. The other contribution is methodological. Studies that have been conducted in Lesotho (for example, Rants’o, 2016) do not account for the potential selection bias on participation in off-farm activities and this can lead to misleading results and misinformed policy implications if not properly addressed.

SECTION II – CAPACITY BUILDING

2.1. Team composition and experience

For each team member, please indicate (using the following tables – one per member):

- **Age, sex, and relevant training, experience and/or expertise** (start with team leader).
  
  Note that:
  
  - Teams must be composed of both researchers and government officials/officers:
  
    - Four (4) researchers - including one senior/experienced researcher, acting as team leader and at least two researchers aged under 30 - with a sufficient academic and/or professional background in economic policy analysis. In particular, having a master’s degree/diploma or being currently enrolled in a master’s program is considered a minimum requirement (generally, team leaders should have a doctoral degree/diploma or be currently enrolled in a doctoral program). These members should describe their relevant training and experience in the issues and research techniques involved.
    
    - Two (2) government officials/officers from (and with their involvement sanctioned by) the institution in charge of the policy/program that the research aims to inform. These government-affiliated members must have a good understanding of the relevant policy processes and priorities but are not required to have research experience.
  
  - Applicant teams must be gender mixed, with female members representing at least 50% of all members (including the team leader) and contributing substantively to the project. PEP encourages teams with a female leader.
  
  - All members of applicant teams must be African nationals (and reside in Africa for the duration of the project).
  
  - Priority is given to projects in low-income economies, and/or fragile or conflict-affected situations (LIE/FCS) but proposals are welcomed from all African countries (including North Africa).
  
  - A researcher can be funded as a team member a maximum of three times by PEP (no more than twice as team leader) and should show marked progression over time.
  
  - A researcher who is already involved in a funded project is not eligible to submit a new proposal before the approval of the final report of the currently funded project.
  
  - Each listed member must post an up-to-date CV in their profile on the PEP website – refer to “How to submit a proposal” and the eligibility criteria on the call webpage.
• **Benchmark and expected capacity building:**
  
  - Describe the capacities that **each** team member (and potentially her/his affiliated institutions) is expected to build through their participation in this project. This is an important aspect in the evaluation of proposals and should be presented in detail.
  
  - What techniques, practices, literature, theories, tools, etc. will each team member and her/his institutions learn (acquire in practice) or deepen her/his knowledge of?
  
  - How will these skills help each team member in their career (development) and/or professional responsibilities?
  
  - What is each team member’s current state of knowledge with regard to the project you are proposing?

• **Task and contributions to project:** Indicate the specific tasks each team member would carry out in executing the project.

Note that, in this particular initiative, while all outputs should be focused on the research-policy nexus and produced through a collective and coordinated effort, PEP will provide more specific training/support for:

- **Researcher** team members to take the lead in developing a high-quality scientific research paper (i.e. reporting the process of and results from methodological applications).

- **Government-affiliated** members to take the lead in developing a “policy paper” (i.e. positioning the research and findings within the country’s broader policy contexts and strategies).

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**Team leader**

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<th>Name</th>
<th>Age</th>
<th>Sex (M/F)</th>
<th>Highest degree/diploma</th>
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<tbody>
<tr>
<td>Mamello Nchake</td>
<td>41</td>
<td>Female</td>
<td>PhD in Economics</td>
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</table>

**Training and experience**

I completed my PhD in economics under the Collaborative PhD Programme by coursework and thesis, at the University of Cape Town (UCT) in December 2013. The distinguishing feature of this programme is the integration of theory, tools and applications in the academic programme. It includes a high level of theoretical training and research application grounded in empirical realities. I am currently a senior lecturer in the department of Economics, at the National University of Lesotho, where I teach economics courses at undergraduate and graduate levels.

My research interests focus on economic development issues in Africa, particularly Lesotho, South African and Botswana. I have published several regional and international journals on economic issues in Africa. These include the South African Journal of Economics, Journal of African Economies, International Review of Economics and Finance, International Journal of African Development among others. I am a...
researcher with the Southern African Labour and Development Research Unit (University of Cape Town) as the under the Trade and Poverty project where I am principal investigator. I have also conducted commissioned research for the various Government Ministries and international organizations, for which she has produced policy and technical documents. These include among others, the World Bank, the United Nations Development Programme (UNDP), Food and Agricultural Organisation (FAO), Center for Economic Policy Research (CEPR), United Nations Population Fund (UNFPA), Ministry of Finance and Development Planning, African Development Bank (AfDB), Health Economics and HIV/AIDS Research Division (HEARD) and IDRC Canada.

**Expected capacity building**

Through this project, my research leadership skills will be enhanced. I have done a lot of academic research and very limited policy-oriented research. This project provides me with an opportunity to engage in finding solutions for developmental challenges that confront my country. Through the training that will be provided by PEP, I will also enhance my skills on methodological skills on development research. Collaboration with government ministries will provide me with skills and knowledge spillovers between the two sets of experts. This will improve policy making decisions and research that is not only relevant to providing solutions to the country’s challenges, but also evidence-based policy development and implementation. Training

**Contribution to project**

Coordinate the research team and supervise and coordinate the team activities throughout the duration of the project. Lead the development of the research focus, research proposal and the data analysis and research output.

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**Researcher #2**

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<tbody>
<tr>
<td>Khothalo Mohlori-Sepamo</td>
<td>36</td>
<td>Female</td>
<td>MA in Economics</td>
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</table>

**Training and experience**

I am currently a lecturer in the department of economics at the National University of Lesotho, teaching environmental economics and microeconomics at undergraduate level. I have more than five years of research experience. I worked as an assistant economic planner at the Ministry of Development Planning where among other duties I collected, collated and analysed data for report writing. I also monitored the implementation of international/regional policy and arrangements, maintained Strategic Information Systems and disseminated national economic policies. I was also involved in the development of national policies and strategies, including the Lesotho National Strategic Development Plan 2012/13-2017. I was also responsible for
producing a chapter of Environment, Natural Resources Management and Climate Change. I have a background in use of statistical and econometric software applications such as PC-Give, E-VIEWS, SPSS.

**Expected capacity building**

The project will provide me with new skills on research methods and research writing. The project will also expand my knowledge on the standard theories of agricultural economics can be used to incorporate gender analysis. Strengthening of the knowledge of software applications and exposing to the new applications of other softwares. Boosting the knowledge of how the research output can be translated into forming the policy-based evidence. The project with contribute to research career development.

**Contribution to project**

I specialise in Environmental economics and has strong theoretical background in microeconomics and econometrics. I am a key research member of the team with knowledge of related microeconomic theories and econometric methods to address the identified research questions. I will also contribute to the data analysis and production of research output.

**Researcher #3**

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<th>Name</th>
<th>Age</th>
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<th>Highest degree/diploma</th>
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<tr>
<td>Sylvester Lelimo</td>
<td>27</td>
<td>Male</td>
<td>BA Economics</td>
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**Training and experience**

I have a BA degree in economics from the national University of Lesotho. I am currently pursuing MSc degree in economics. My research interests lie in the field of agricultural economics and rural development. I worked as a Research Assistant in School Feeding Evaluation study which World Food Programme (WFP) did to support the Ministry of Education and Training to assess contributions of school feeding to other developmental objectives including social protection, employment creation and poverty reduction objectives; and to assess the cost incurred by Government and communities in implementing the school feeding programme to inform future design adjustments.

I can plan, research, implement and manage projects- I took a course in Research Project in final year. I am also a fast learner and can work well under pressure. I have competence in developing arguments from scientific, ethical and philosophical perspectives. I have the ability to gather, analyze and communicate technical data to others. I am performance-driven and self-motivated. I also pay attention to detail and I am eager to learn new things.
**Expected capacity building**
The project is going to equip me with research skills that are critical in the completion of my master’s degree and other research endeavors beyond.

**Contribution to project**
To contribute in the data sorting, data analysis and research output.

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### Researcher #4

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<th>Age</th>
<th>Sex (M/F)</th>
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<tbody>
<tr>
<td>Nkethuoa Makhorole</td>
<td>29</td>
<td>Female</td>
<td>BA Economics</td>
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</table>

**Training and experience**
I have worked as Projects Support Officer at Tangerine Consultancy for 8 months, where the main project for which I was responsible was The Hook-up Dinner otherwise known as THUD. The project was an initiative that was aimed at promoting entrepreneurship amongst the youth in Lesotho and every first Thursday of the month, an event was held at various venues (each month) where five small scale and upcoming entrepreneurs would pitch their ideas to potential investors and other audience and the best pitch would win the available prizes. We also invited a different prominent business man who became a keynote speaker (rain-maker) at each event. My tasks were to keep and update a database of small scale and upcoming entrepreneurs and prominent business women and men from which we selected the previously mentioned 5 pitchers and the keynote speaker. I was also responsible to identify and meet with potential funders or sponsors of the respective events. I also identified and briefed the selected pitchers on how to go about their presentation as per the THUD guidelines and to also brief the respective rain-maker about the event and its theme (different themes per event). I also compiled reports after every event, providing recommendations as a basis for the subsequent event.

**Expected capacity building**
The project is going to equip me with research skills that are pivotal in the completion of my master’s degree and other research endeavors beyond.

**Contribution to project**
To contribute in the data sorting, data analysis and research output.

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### Government official/officer #1

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<tr>
<td>Mabokang Makopela Bello</td>
<td>43</td>
<td>Female</td>
<td>MSc in Statistics</td>
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</table>

**Training and experience**
I have master’s degree (MSc) in Statistics from the University of the Free State, Bloemfontein, South Africa. Apart from my MSc degree, I also hold a Bachelor of Arts degree in Economics and Statistics from the National University of Lesotho. Over the years, I have been involved in quantitative
and qualitative research both at the academic and work environments. These involved planning, designing, supervision, carrying out various studies and report writing of the research output.

I also attended on the job training on Result Based Management; Computer Assisted Personal Interview and Statistical Package for Social Scientists.

<table>
<thead>
<tr>
<th>Expected capacity building</th>
<th>Broadened knowledge of research methods and selection of appropriate models.</th>
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<tbody>
<tr>
<td>Contribution to project</td>
<td>Provision of relevant data and analysis including drafting of the research output. Through the training to be provided by PEP, I will be equipped with skills on how to take the lead in developing policy papers that position the research and findings within the country’s broader policy objectives.</td>
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**Government official/officer #2**

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<th>Name</th>
<th>Age</th>
<th>Sex (M/F)</th>
<th>Highest degree/diploma</th>
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<tr>
<td>Maoala Khesa</td>
<td>35</td>
<td>M</td>
<td>Post Graduate Diploma in Monitoring and Evaluation Methods (ongoing)</td>
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</table>

**Training and experience**

I have BA in economics from the National University of Lesotho and currently pursuing a Post-graduate Diploma in Monitoring and Evaluation methods with Stellenbosch University. I have been engaged in the development of Ministry annual budgets using the tools including Budget Framework Paper under the programme budgeting system. This is an interactive and consultative exercise where policy is put into action by bringing together, activities from different subsectors of the Agriculture Sector. Then monetary unit (budget) is attached to the activities to produce outputs.

I am currently heading the Monitoring and Evaluation Section of the Ministry of Agriculture and Food Security in Lesotho. This where tracking of implementation of programmes and projects is done. I do check the actual activities against the planned activities to monitor any deviation and recommend remedial actions where necessary. Moreover, in evaluation, this is where the do check whether the intervention brought change in the lives of community member or what? Evaluation reports are therefore important for decision makers to utilise for next interventions to make evidence-based planning.

I am also leading the process of developing the National Agriculture Investment Plan, under the African Union Initiation-Comprehensive Africa Agriculture Development Plan. This plan is in line with the country’s commitments under the Comprehensive Africa Agricultural Development Program (CAADP) guidelines to allocate at least 10% of the
national budget to agricultural development to attain a sustainable annual agricultural growth rate of more than five percent per annum.

**Expected capacity building**

This research project will improve my knowledge and application of microeconomic data analysis methods, for both qualitative and quantitative data, using different and appropriate software packages. The project will also equip me on how to use evidence-based approaches in policy development, implementation, monitoring and evaluation.

**Contribution to project**

Provide evidence and contribution on the policy relevance and strategic implementation of research output. Through the training to be provided by PEP, I will be equipped with skills on how to take the lead in developing policy papers that position the research and findings within the country’s broader policy objectives.

### 2.2. List of past, current or pending (non-PEP) projects in related areas involving team members, including resulting publications (If any)

Indicate the funding institution, the title of the project and related publications, and list the team members involved.

<table>
<thead>
<tr>
<th>Name of funding institutions</th>
<th>Title of projects and related publications (link)</th>
<th>Team member(s) involved</th>
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<tbody>
<tr>
<td>United Nations Development Programme</td>
<td>Title: Lesotho Voluntary National Review on Sustainable Development Goals Publication (reference): Inclusive and sustainable growth, private sector-led job creation and decent work for all (in progress)</td>
<td>Mamello Nchake, Ntsoaki Mapetla and Mmaphoka Qhobela</td>
</tr>
<tr>
<td>African Economic Research Consortium</td>
<td>Title: The Impact of Tea Prices on smallholder farming households in Rural Tanzania. The project involves, data collection on Tanzanian tea prices and a panel of smallholder farming households’ characteristics, data cleaning and analysis Publication (reference): in progress</td>
<td>Mamello Nchake and Threza Mtenga</td>
</tr>
<tr>
<td>United Nations Development Programme &amp; Global Environmental Facility</td>
<td>Title: Sustainable Development For All Publication (reference): (i) Five pre-feasibility studies for Renewable Energy-based Mini-grids in Lesotho.</td>
<td>Molibeli Taele, Mamello Nchake and Nthabiseng Koatsa</td>
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<tr>
<td>African Development Bank/African Economic Research Consortium</td>
<td>Title: Border effects and product market integration in developing countries Publication (reference): (i) The size of the border and product market integration</td>
<td>Mamello Nchake and Lawrence Edwards</td>
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<tr>
<td>Organization</td>
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<td>Carnegie Foundation New York: Developing Emerging Academic Leaders (DEAL)</td>
<td>Product market price integration in developing countries</td>
<td>Mamello Nchake and Lawrence Edwards</td>
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<tr>
<td></td>
<td>(iii) State dependent pricing in Lesotho: Analysis of retail price data (in progress)</td>
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<tr>
<td>Center for Economic Policy Research (CEPR)/ DFID</td>
<td>Price Integration in Low Income Countries: Market Structure and Retail Price Setting Behaviour in Lesotho</td>
<td>Mamello Nchake, Lawrence Edwards and Asha Sundaram</td>
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2.3. List of past or current PEP-supported projects involving team members, including resulting publications

<table>
<thead>
<tr>
<th>Project code (e.g. PMMA-12345)</th>
<th>Title of project and related external (non-PEP) publications, if any</th>
<th>Team member(s) involved</th>
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<td>NONE</td>
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SECTION III – RESEARCH, METHOD AND DATA

This section should be completed by the team leader and/or research members

3.1. Literature review (1000 to 1500 words)

Explain the specific gaps in the existing literature that your research aims to fill. You might want to explain whether this question has been previously addressed in this context (including key references), and if so, what you intend to achieve by examining the question again. Be sure to include literature that provides conceptual foundations for the gender analysis to be undertaken in your research.

The theoretical explanation defines participation in off-farm sector as an economically motivated activity that generate revenue for rural households (VanWey and Vithayathil, 2013). Rural households utilize the available resources to improve their livelihoods and to diversify their income sources. This can be achieved through a collective effort of individuals residing in one farming household to capitalize on strengths and combine assets to maximise income and minimize risk. The composition of assets of a farm properly influences the livelihoods diversification strategies of households, which includes the likelihood of individuals working off the farm (Ellis, 2000). Off-farm activities play an important role in sustainable development and inclusive growth, particularly for the rural population. They involve participation in remunerative work outside the individual’s farming territories. Non-farm activities in rural areas usually include trade, manufacturing and services. Many farming households participate in non-farm activities to diversify their income options. They allocate their productive resources among an array of income generating activities including on-farm and off-farm work. In some households, off-farm activities supplement agricultural activities while in other households, those activities are the main source of income. Therefore, diversification of income sources may be deliberate household strategy or a response
to a shock (Barret, 2008). Off-farm activities can also be considered as a resource accumulation to the already well-off households or a safety net for poor households. It can also act as an alternative source of financing agricultural production (Gordon, 1999). Theoretically there are two possible effects of off-farm employment on agricultural output. On the one hand, off-farm activities can enhance farm production by providing the finance needed for farm inputs and technologies while on the other hand, they may have an unfavourable effect on farm output by competing farming for labor. Farming household members who engage in off-farm activities can therefore invest in improved farming technologies to enhance farming production.

A large body of the empirical literature has demonstrated the importance of non-farm sector on household food security and in poverty reduction. Many studies have reported the beneficial impact of the rural non-farming sector in providing employment, household income diversification and security and market linkages for agriculture in developing countries (Haggblade et al, 2007 and Haggblade et al., 2002). However, some studies also showed that although non-farm activities have been a pathway out of poverty, the actual impacts depend on the type of non-farm activity, land tenure patterns, physical and human capital requirements in question (Newman and Canagarajab, 2000).

Previous studies have also argued that the most prominent non-farming employment opportunities have the highest entry barriers such that the poor, with less resources and less access to credit facilities, are often unable to benefit from these opportunities to increase their income (Barret et al., 2008). As a result, several determinants of participation in off-farm activities have been explored in the literature. Barret et al. (2001), for example, found that household members participating in non-farm activities were more educated, had access to electricity and telephone than their counterparts. Vasco and Tamayo (2017) also confirmed that well-educated individuals from wealthier households engage more in non-farm wage employment while less-educated individuals from poor households choose to work in farm wage employment in Ecuador. The study also reported that access to farming land and proximity to economic centers were some of the key drivers of non-farm employment in Ecuador.

In Africa, several studies also investigate the various determinants of participation of off-farm activities. Abdulai and Delgado (1999) analysed the main drivers of non-farm earnings of married couples in Northern Ghana over the period 1992. Using a variant of the Heckman two-step procedure, the study found that level of education and experience of an individual was essential in increasing non-farm earnings and time allocation in non-farming activities. The study also found location characteristics, particularly the quality of infrastructure and population density, to be important in explaining participation in non-farm work in Northern Ghana. Matshe and Young (2004) analysed the off-farm labour decisions of small-scale agricultural household members in Zimbabwe. Their results indicate that land area accessible to the household, productive assets, remittances and the agricultural terms of trade were important in influencing the off-farm labour decisions of rural household members. Several other studies have examined the direct impact of non-farm income on household income. Holden et al. (2004) found that more earnings from non-farm work yielded significant positive impact on household income.

Another group of studies have also empirically analysed a direct relationship between non-farm activities and agricultural production. Nkgele et al. (2018) revealed that in Ghana, non-agricultural activities complemented farm work income henceforth the income is equally distributed amongst sectors. Income from the off-farm employment eases capital limits, boosts affordability of framers to buy inputs and augment the livelihood of the rural households. Moreover, Dzanku (2019) found that the food security was boosted by off-farm activities.
The literature that looks at the gender distributional effects of off-farm participation is very limited in developing countries. Berdegué et al. (2001) found that female-headed households with good education and access to credit were more likely to participate in non-farm work in Chile. Similarly, Elbers and Lanjouw (2001) also found that well-educated women from non-cultivating households were more likely to participate in rural non-farm activities while men were more likely to participate in high-productivity non-farm jobs. Yet the literature remains ambiguous on the net effect of participation in non-farm sector between females and males. Matshe and Young (2004) found that the probability of participation in off-farm work was lower for female adults than for male adults, reflecting greater time commitments for women within the household (such as having small children) and significant gender biases in labour time allocations. In addition, the results indicated that women who worked in off-farm sector were mostly employed in less paying and low productivity jobs but working more hours than their male counterparts. Similar results were noted by other studies such as Abdulai and Delgado (1999) and Pereira and Lanjouw (2001). On the contrary, other studies concluded that women benefited more due to their higher participation in off-farm activities. Ali et al. (2015), for example, estimated the role of female and male participation in non-farming activities in Pakistan. Their results showed that the opportunities for females were limited, with more socio-economic constraints on women participation in off-farm work than their male counterparts. Van den Broeck, Kilic (2019) further added that marital status and fertility reduced the opportunities for women to participate in non-farm employment. Other studies which found similar results include (Lanjouw and Lanjouw, 1995; Lanjouw 1999; Newman and Canagarajah, 2000). In Lesotho, research show that many women migrate to the Republic of South Africa for employment opportunities such as domestic employment to diversify their income sources. The empirical evidence, for example Rants’o (2016) further shows that the contribution of women migrants from Lesotho is around 16.4% of all incoming female migrants compared to other Southern African countries. This demonstrates that rural non-farm activities can therefore fill the gap left by the sector (Rants’o, 2016). It is therefore important to analyse the extend to which male and female participation on off-farm activities contribute to household livelihoods in the case of Lesotho. This area of research is very limited in Africa. Further, these studies do not account for potential endogeneity arising from selection of those who participates or not participate in off-farm activities.

3.2. **Methodology** (1200 to 1600 words)

Present the specific techniques that will be used to answer the research questions and how exactly they will be used to do so.

- Explain whether you will use a particular technique normally used in other contexts or whether you intend to extend a particular method and how you will do so.
- Explain if these methods have already been used in the context you are interested in (including key references).
- Explain how these methods incorporate and/or are appropriate for addressing gender considerations in your research.
- For PMMA (microeconomic analysis) proposals only: It is generally expected that the proposed methodology aims to empirically estimate a causal relationship. In such a
case, you should explain potential sources of endogeneity in the context of your research and how the proposed technique(s) would allow the identification of the relevant parameters. You are strongly encouraged to discuss the potential impact mechanisms i.e., the channel[s] through which the “treatment” impacts on your outcome[s]. Also, make sure you clearly present the outcome[s], the “treatment” and the sample used in the analysis.

The analytical framework of this study draws from the agriculture household models inspired by the economic theory of household production and behaviour in Singh, Squire and Strauss (1986), Huffman (1991) and Ellis (1999). Rural farming households seek to maximise their returns subject several constraints such as cash, time and technology. A decision to participate in on-farm or off-farm activities is a joint decision between adult male and female members (Singh et al., 1986) and is based on return accrued from time spend on farming activities or off-farm activities (Abdulai and Delgado, 1999).

**Participation in non-farm work**

The first stage of our empirical strategy is to model the decision of an individual to participate in off-farm activity. The willingness for a household member to participate in non-farm activity is a function of their productive assets such as skill, ability, motivation, financial and structural status of household as well as other available opportunities. Household members located in rural areas enter the non-farm sector until the utility is attained from working in the non-farm sector equals that is attained from working in the farm. Subsequently, we model the probability of an observed individual participating in off-farm sector or not. Since the decision to work in a non-farm sector is not observable, we model this binary decision ($Z^*_i$) using a standard probit model:

$$Z^*_i = \beta' x_i + \mu_i \tag{1}$$

Where $Z_i = \begin{cases} Z^*_i, & \text{if } Z^*_i > 0 \\ 0, & \text{if } Z^*_i \leq 0 \end{cases}$

As can be observed, $Z_i$ is a binary variable which takes the value of 1 if an individual in household $i$ participates in off-farm activity and 0 otherwise; $x$ is a vector of explanatory variables (individual, household and location characteristics); $\beta$ indicates a vector of corresponding parameters and; $\mu$ is the error term. The probability that an individual participates is given by: $Prob(Z_i = 1) = 1 - F(-\beta' x_i)$ where F is the cumulative Normal distribution function.

The empirical model for individual’s decision to participate in off-farm work can then specified as follows:

$$Z_i = \beta_0 + \beta_1 age_i + \beta_2 age^2 + \beta_3 edu_i + \beta_4 exp_i + \beta_5 exp^2 + \beta_6 hsz_i + \beta_7 chd_i + \beta_8 old_i + \beta_9 cred + \beta_{10} nlinc + \beta_{11} Land + \beta_{12} lnfr + \gamma_d + \mu_i \tag{2}$$

Where $age_i$ is age of individual (years); $age^2$ is the squared term of the variable ($age$) to control for the non-linear life cycle; $edu_i$ is the number of years of schooling completed by an individual; $exp_i$ is number of years accumulated of work experience. It is computed by subtracting an individual’s age from years of schooling less 6 (total years of pre-school period in Lesotho) (Abdulai and Delgado, 1999); $exp^2$ is the squared term of experience to account for non-linearity in working life-cycle of an individual; $hsz_i$ is the total number of members in the household aged above 6 years
and below 65 years; \( chd \) is the number of children aged below 6 years in the household; \( old \) is number of members of household aged above 65 years; \( cred \) is a dummy variable=1 if any of family members received credit in the past year and zero otherwise; \( nlin \) is a dummy variable=1 if any of family members received any form of non-labour income in the past year and zero otherwise; \( Land \) a variable that captures land ownership/access of a family; \( Inf \) represents any infrastructure variable (for example, electricity, telephone, road); and \( y_d \) is district fixed effects to capture any location-specific characteristics common across households but may varies from district to district.

Given that households typically have more than one economically active member, household income sources are more diversified than individual income sources (Vasco and Tamayo, 2017). To expand our analysis based on equation (2), we will also model \( Z \) as a categorical variable with four types of principal occupation of an individual as (i) farm self-employment (ii) farm wage-employment (iii) non-farm self-employment and (iv) non-farm wage employment.

We assume that individuals within the household choose a category of employment \( c \) among three alternatives, based on the latent conditional utility \( H^*_c \):

\[
H^*_c = k_c \sigma_c + \varphi_c, \quad c = 1,2,3 \tag{3}
\]

Where \( k_c \) is a vector of individual, household and location characteristics as specified in equation (2); \( \sigma_c \) a vector of estimators and \( \varphi_c \) is the disturbance term. \( H_c \) take the value of 1 if employment category is chosen and 0 otherwise.

**Income and participation in non-farm work**

The second stage of our analysis is to model the amount of income earned from participating in off-farm activities. Consequently, we model the log of earnings \( Y \) for a chosen category:

\[
Y = x_i \beta_i + \mu_i \tag{4}
\]

Where \( x \) is a vector of explanatory variables and \( \mu \) is the disturbance term. The idenfication restriction is the exclusion of some of the variables in \( k \) in equation (3) from the list of variables in equation (4). Equation (4) also assumes that \( Y \) is observed only when employment category 1 is observed conditional on:

\[
H^*_c > \max(H^*_c) \quad c \neq 1
\]

\[
\varepsilon_1 = \max(H^*_c - H_1); \varepsilon_1 < 0 \quad c \neq 1 \tag{5}
\]

Drawing from the theoretical proposition by McFadden (1973), equation (4) can be modelled using multinomial logit model of the form:

\[
P(k_1 \sigma_1 > \varepsilon_1) = \frac{\exp(k_1 \sigma_1)}{\sum_{c=1} \exp(k_c \sigma_c)} \tag{6}
\]

From a model the income gaps between households due to participation in off-farm activities, two categories of non-farm employment are considered (non-farm self-employment and non-farm wage employment). However, individuals in one category may differ significantly from the other categories, thereby influencing earnings (Elbers and Lanjouw, 2001; Lanjouw, 2001; Vasco and Tamayo, 2017). Therefore, the above estimation strategy may not be appropriate to explain the differences in income between individuals who participate in the non-farm sector and those who do not participate in non-farm activities, including those unemployed. This estimation problem can arise because of two reasons. First, the fact that we cannot observe earnings before
participation into the off-farm activities. If both pre- and post-entry earnings were observable, the benefits of non-farm employment for everyone who participates can be determined by averaging the difference of the earnings before and after the participation into the off-farm sector. Second, the decision to participate or not to participate in non-farm employment may be dependent on the benefits accrued from participation (Owusu et al., 2011). As a result, those who participate may be very different from those who do not, creating a difference between participants and non-participants that can lead to a biased estimate of returns to non-farm participation. In principle, if factors that select some workers into non-farm sector, such as ability were observable, then they could be considered to obtain a true estimate of the return to non-farm sector.

To correct for this potential selection bias, studies have used various selection bias correction methods in modelling earnings from participation in non-farm activities. Some studies have used the standard two-step method (for example, Matshe and Young 2004; Jonasson and Helfand, 2010; Anang and Yeboah, 2019) while others propensity score matching method (Owusu et al., 2011 and Orsafo et al., 2016).

To account for potential sample selection bias in estimating the income gaps between the categories, the study proposes to use the Dubin and McFadden two-step estimation approach (see McFadden, 1973). This method represents the multinomial generalisation of the Heckman selection approach and estimates the decision to participate in on-farm or off-farm activities and income gap between participation in both sectors. The first step of this method is to estimate the probability of an individual working in either on-farm sector or off-farm sector and its determinants. The second step is to estimate the determinants of individual income, given the category of occupation in the first step. The second step also includes a selection correction term which is computed from the first step to control for any potential correlation of errors between the two stages of estimation. The study adopts the specification proposed by Bourguinon, Fourier and Gurgand (2007), with the extension from Vasco and Tamayo (2017):

\[ Y_1 = x_1 \beta_1 + \alpha \left( \rho_1 m(P_1) + \sum_{c=2}^{C} \rho_c \frac{P_c}{P_{c-1}} m(P_c) \right) + \tau_c \]  

(7)

Where \( m(P_1) \) and \( m(P_c) \) are the probabilities and \( \alpha \rho_1 \ldots \ldots \ldots \alpha \rho_c \) are the coefficient terms for the correction of the selection bias and \( \tau_c \) is the orthogonal error parameter with zero mean expectation. \( x \) is the vector of explanatory variables as in equation (2). The advantage of this approach is that it performs well even if the assumption independence of irrelevant alternatives (IIA) (Vasco and Tamayo, 2017).

**Participation in non-farm activities and agricultural production**

Finally, to model the effect of off-farm employment on agricultural output for participating farming households, we draw from the framework used in Abdulai and Delgado (1999). Assuming a technology farm production represented by a twice differentiable and concave production function:

\[ Y = Y(T, H, M, X, L, P) \]  

(8)

Where \( Y \) is the output produced from the farm, \( T \) is the labour allocated to farm production, \( H \) is hired labour, \( M \) represents non-labour inputs, \( X \) is household characteristics that affect production decisions, \( L \) is a vector of fixed factors such as land and \( P \) is a vector of location fixed effects such as population density (total population per village).
**Gender differences in non-farm participation: Fairlie decomposition approach**

The second component of the analysis would be to identify the gender distributional effects of participation in off-farm activities. To analyse the effects of participation in off-farm activities by gender, we will perform the Fairlie decomposition, which was first proposed by Fairlie (1999) and extended in (Fairlie, 2005). This is possible since the information on the gender of participants in off-farm sector is available. This method is an extension of the Blinder-Oaxaca decomposition technique, which particularly useful for identifying and quantifying the distinct contributions of group differences in measurable characteristics, such as education, experience, marital status, and geographical location to gender gaps in outcomes (Fairlie, 2005). It can be applied particularly in cases where the outcome is binary such as participation in non-farm employment. For a linear regression, the standard Blinder-Oaxaca decomposition of the gender gap in the average value of the dependent variable ($Y$) can be expressed as:

$$ \bar{Y}^M - \bar{Y}^F = [(\bar{X}^M - \bar{X}^F)\hat{\beta}^M] + [\bar{X}^F(\hat{\beta}^M - \hat{\beta}^F)] $$

(9)

Where $\bar{Y}^j$ is the outcome variable, $\bar{X}^j$ is a row vector of the average values of the explanatory variables and $\hat{\beta}^j$ is a vector of coefficient estimates for gender $j$. We extend the analysis in equation (9) to account for the case where the dependent variable $Y^j$ is non-linear (binary or categorical). The decomposition for the non-linear equation $Y = F(X\hat{\beta})$ becomes:

$$ \bar{Y}^M - \bar{Y}^F = \left[\sum_{i=1}^{N^M} F(x_{iM}\hat{\beta}^M) - \sum_{i=1}^{N^F} F(x_{iF}\hat{\beta}^M)\right] + \left[\sum_{i=1}^{N^F} F(x_{iF}\hat{\beta}^F) - \sum_{i=1}^{N^F} F(x_{iF}\hat{\beta}^F)\right] $$

(10)

Where $N^j$ is the sample size for gender $j$. The first part of equations (9) and (10) represents the term of gender gap that results from group differences in the distribution of $X$ while the second term represents the section resulting from group differences in the group processes determining the levels of the outcome variable $Y$. The second term also captures for the share of gender gap due to group differences in the unobserved endowments.

To estimate the decomposition, $\bar{Y}^j$ is defined as the average probability of the binary outcome on interest of gender $j$ and $F$ as the cumulative distribution function from the logistic distribution. We include the constant term in equation (10) so that the average value of the dependent variable is equal to the average value of the predicted probabilities in the sample. The first term of equation (10) then provides the estimate of the contribution of gender differences in the set of independent variables to the gender gap in participation in off-farm activities.

To identify the contribution of group differences in various determinants to the gender gap, it is assumed that $N^M = N^F$ such that there exists a natural matching of the male and female observations (Fairlie, 1999). Using the coefficient estimates from a logit regression for a pooled sample, $\hat{\beta}^*$, the independent contribution of $X_1$ to the gender gap can then be expressed as:

$$ \frac{1}{N^F} \sum_{i=1}^{N^F} F(\hat{\alpha}^* + X_{i1}\hat{\beta}_1^* + X_{i2}\hat{\beta}_2^*) - F(\hat{\alpha}^* + X_{i1}\hat{\beta}_1^* + X_{i2}\hat{\beta}_2^*) $$

(11)

Ans similarly the contribution of $X_2$ to the gender gap becomes:

$$ \frac{1}{N^F} \sum_{i=1}^{N^F} F(\hat{\alpha}^* + X_{i1}\hat{\beta}_1^* + X_{i2}\hat{\beta}_2^*) - F(\hat{\alpha}^* + X_{i1}\hat{\beta}_1^* + X_{i2}\hat{\beta}_2^*) $$

(12)

We can infer from equations (11) and (12) that the contribution of each variable to the gap is thus equal to the change in the average predicted probability from replacing the female distribution.
with the male distribution of that variable while holding the distributions of the other variable constant.

Estimation of the total contribution is calculated using the two sets of predicted probabilities and taking the difference between the average values of the two.

### 3.3. Data requirements and sources (1000 to 1300 words)

This is a critical part of the proposal. Explain the reason for your choice of databases. You must establish that they are ideal for the policy question you wish to address (including in terms of gender analysis) and that you have or will have access to these data before your project begins. Please consult the “Guide for designing a research project proposals” for more detail.

**Data requirements and sources**
The data that will be used is from the Agricultural Production Survey (APS), collected by the Lesotho Bureau of Statistics (BOS) on annual basis. The advantage of this survey is that it is nationally representative covering both crop and livestock farmers in the parts of Lesotho. For selection of households, two-stage sampling is used, where the first stage involves selection of Primary Sampling Units (PSUs) and the second stage involves stratification of households by farming activities. A sample of households from each farming category – crop farming and livestock farming - is selected. This sample varies depending on the number of farming households available in the PSU. These households are followed throughout the Agricultural Year to collect various information on individual, households, location and community characteristics. For the purpose of this study, we will only use the 2018/2019 survey, which has a total sample of 1208 crop and 1041 livestock farming households.

Apart from farming related activities, the APS also covers information on household characteristics such as household size, number of adults, number of children and infants, savings status, access to credit, land holding and use, sources of household income and marital status of household head. The survey also covers location characteristics such as village, district and GPS coordinates. Finally, the survey also the socio-economic information of all household members such as age, gender, education level, employment status, participation in off-farm activities and income level earned.

**Justification on selection of key variables and their description**
The decision to participate in off-farm activities is dependent on several factors.

(i) **Human capital.** Farming household arrange labour across different types of work such that they take advantage of difference in human capital to maximise economic returns. Drawing from the literature, human capital determines the role in which an individual works off-farm and the type of occupation he/she does (Lanjouw, 1999 and Ruben, 2001). Income, job security and other returns to human capital, such as status, are generally higher in the non-farm sector (government, services, trade, mining, construction). The assumption is that those with low levels of skills (measured by the level of education) are likely to remain on the farm or work in the agricultural sector off-farm due to low levels of skills. On the contrary, individuals with higher levels of education are likely to participate in paying jobs in the formal labour market. Age and the level of education has a
non-linear relationship. The probability of working off-farm initially increases with age but eventually declines.

(ii) **Household size.** Family size increase the probability of more income diversification for a farming household. The family size can determine the quantity of labour supplied on and off-farm. Household dynamics can also affect labour supply. The presence of child dependents, for example, can reduce the time allocated to other activities such as work on and off-farm (Matshe and Young, 2004). Child care can restrict the ability of a caregiver (usually the mother) to dedicate her time to work off- the household activities. On the other hand, the elderly can also contribute to off-farm income (de Carvalho, 2008). If the elderly earns a pension or receives a social transfer, this can add to family income diversification.

(iii) **Non-labour income:** Availability of other sources of income such as remittances and credit enable the household to increase the quantity of time allocated to leisure demanded as the cost of non-farm work (Abdulai and Delgado, 1999).

(iv) **Gender.** With the assumption that men participate in heavy manual work and formal employment while women engage in housework, smallholder farming and informal household enterprises. It is expected that the more women participating in off-farm work, the higher the resources available for household use and expansion in the farming activities.

**SECTION IV – INFORMING POLICY**

*This section should be completed by the government-affiliated members, and validated by the head of their institution (to be confirmed in the required acknowledgement letter).*

4.1. **Government affiliation**

   a) Name the government institution at which you are employed, and describe its general mandate

   N.B. This does not engage the institution itself to sanction, take part in and/or sponsor the proposed research project, other than authorizing the employees identified in section 2.1 (and below) to take part in the related work on a personal basis.

   **Ministry of Agriculture and Food Security:** is mandated to promoting sustainable production for attainment of national food security through development and implementation of relevant Agricultural policies, strategies, innovations and programmes that address the sectoral priorities.

   **Bureau of Statistics (BOS):** is mandated to coordinate the National Statistics System (NSS) and to produce official statistics for purposes of evidence-based planning, research, policy formulation, monitoring and evaluation and others.

   b) What is/are your specific role(s) (as employees) in the institution

<table>
<thead>
<tr>
<th>Government official/officer #1</th>
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<tr>
<td><strong>Name</strong></td>
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<td><strong>Title/position</strong></td>
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<td><strong>Role/responsibilities</strong></td>
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</table>
**Government official/officer #2**

<table>
<thead>
<tr>
<th>Name</th>
<th>Maoala Khesa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title/position</td>
<td>Senior Economic Planner</td>
</tr>
</tbody>
</table>
| Role/responsibilities | (i) Facilitation of implementation of agricultural sector programmes;  
                          (ii) Development and review of the integrated monitoring and evaluation system;  
                          (iii) Development of management information system;  
                          (iv) Coordination of sectional activities;  
                          (v) Preparation of sectional budget; and  
                          Fully on board in the implementation of the Comprehensive Africa Agriculture Development Programme (CAADP) process in Lesotho as the Lesotho CAADP Focal Point. |

4.2. **Describe the policy context and needs**

a) Describe the specific policy issue(s), questions or needs faced by your institution and that the research project aims to inform - both in terms of socioeconomic outcomes (identify the target/beneficiary population), and the related policy processes (whether it is at the stage of debate, decision, design, implementation, review, reform, etc.).

Explain why the evidence to be produced with this research is important/useful to inform decision-making, especially with regard to your institution’s specific mandate and strategies.

In the agriculture sector, there is a need to address food security and nutrition security both at household and national level. It has been observed that most able-bodied people, especially women, have left agriculture (household farming) and joined other income generating sectors to address hunger and poverty. However, the hunger and poverty remain the problem in the country. Why, at first, did women abandon household farming activities? How do non-farm activities serve as income and consumption smoothing strategies? What is it that can be done to restore, resuscitate and sustain rural household farming to address hunger and poverty?

In the presence of responses to the above concerns, and many other questions, evidence will be provided to formulate rural development strategies to target rural communities particularly women and the poor households. Addressing food security issues particularly among the rural communities will also be addressing high poverty incidence and inequality, which is one of the country’s key strategic goals as documented within the National Strategic Development Plan (2018/19-2022/23) and Vision 2020.

The results are important for the Ministry of Small Business, cooperatives and Marketing in collaboration with the Ministry of Agriculture, which have a mandate to provide enabling policy environment that facilitates the expansion of non-farm income generating activities through establishment of small rural enterprises create a policy environment that can yield some positive synergies between non-farm activities and expansion of agricultural production. In addition, the government has mandated itself through the NDSP II to ensure private-sector led growth that generates decent jobs for all, including jobs for the poor, women and rural population. This has
been set to be achieved through economic diversification strategies, private sector development and increase in agricultural productivity and output.

b) What are the current policy options/scenarios, faced by (or available to) decision-makers - in terms of potential interventions, approaches, etc. - in relation to this particular issue?

If possible, also provide a brief history of policy initiatives (and related reforms, if any) implemented in the past to address the issue, indicating generally what worked and what didn’t (i.e., why is this still an issue?).

There are policy instruments available in Lesotho, which are Food Policy, Food and Nutrition Policy and Seed Policy to mention a few. These have led to implementation of some interventions in the country to upscale smallholder farming to commercialisation stage. Resources have been mobilised to assist households to produce, and to access markets for their produce. Most farmers are successful and are now independent. Some did not make it, as in some instances, they diverted money from farming activities to other personal matters. Hence, failed. It is therefore instrumental to engage in social capital as one of the many support systems needed to make interventions sustainable.

c) How do you expect this evidence will be used/assimilated effectively into the relevant policy decision/advisory processes? Be as precise as possible, indicating the specific decisions or recommendations that have to be made by your institution.

Are you aware of any cost- or budget-related considerations that should be taken into account in the context of these policy decision/advisory processes?

Also, justify the timing of the proposed research project - how does it fit with the calendar of the related policy decision/advisory processes?

There is a need to enhance capacity for women off-farm and on-farm income generating activities in order to alleviate rural poverty and address food security issues.

To complement the existing dataset with community level and other data (such as access to infrastructure and other important location and community characteristics) there may be a need to collect additional data. This may involve visiting the survey areas and conducting several consultations with key stakeholders. As a result, financial resources may be needed for this additional data collection. Presentation of research findings is another level of stakeholder engagement, where these findings need to be highly interrogated and validated by key stakeholders and concerned institutions.

4.3. Stakeholder mapping and dissemination
List all other potential stakeholder institutions, i.e., institutions that you consider as potential users of the same research evidence (other than your own). These can include other ministries and government agencies, as well as civil society organizations, NGOs, private sector, etc.

<table>
<thead>
<tr>
<th>Name of institution/organization #1</th>
<th>Ministry of Small Business, Cooperatives and Marketing</th>
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<tbody>
<tr>
<td><strong>List the key representatives or target research users (policy makers or influencers)</strong></td>
<td></td>
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<tr>
<td>- Mr Setlaba Monaheng, Director of Small Business</td>
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<tr>
<td>- Mr Lerata Pekane, the Principal Secretary</td>
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<tr>
<td><strong>Describe briefly why and how you believe this institution could use the evidence</strong></td>
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<tr>
<td>The mandate of the ministry is to promote growth of private enterprises for inclusive growth and poverty eradication in Lesotho. The results of this study will provide evidence on how to further create an enabling environment for growth of income generating activities in farming and non-farming sectors and in which sectors to focus more on.</td>
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<th>Name of institution/organization #2</th>
<th>Rural Self-Help Development Association (RSDA)</th>
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<tbody>
<tr>
<td><strong>List the key representatives or target research users (policy makers or influencers)</strong></td>
<td></td>
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<tr>
<td>- Mrs Mampho Thulo</td>
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<tr>
<td><strong>Describe briefly why and how you believe this institution could use the evidence</strong></td>
<td></td>
</tr>
<tr>
<td>The mandate of this association is to eradicate extreme hunger and improve the lives of rural Basotho by supporting sustainable agriculture, facilitating self-help and enabling rural communities to become sustainable. The association also advocate for empowerment of smallholder farmers and women through provision of appropriate farming practices and technologies that will improve household farming through women involvement. Moreover, they well informed about social capital, hence suitable association to deliver the message to the community. RSDA currently works with eight dairy associations and over 50 small-scale farming groups organised into federations in Maseru, Mafeteng and Mohale’s Hoek districts.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of institution/organization #3</th>
<th>Lesotho National Farmers Union (LENAFU)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List the key representatives or target research users (policy makers or influencers)</strong></td>
<td></td>
</tr>
<tr>
<td>- Mr Khotso Lepheana</td>
<td></td>
</tr>
<tr>
<td><strong>Describe briefly why and how you believe this institution could use the evidence</strong></td>
<td></td>
</tr>
<tr>
<td>The organisation deals with farmers nationwide, from smallholder farmers to commercial farmers for both crops and livestock. They findings of the research will provide insights to the organisation in terms of how best they can, as farmers’ organisation, can organise women in the communities to make change in the food supply chain (from farm to fork).</td>
<td></td>
</tr>
</tbody>
</table>
4.4. Outline your engagement/dissemination strategy

Describe how you intend to engage with these other stakeholder institutions (listed in 4.3) to ensure that they:

1) Contribute to informing the research work (i.e. consultations)
2) Are kept informed of the research progress and findings

The contacts with most institutions in the sector, including the ones listed above, are established. Developing sector strategies, investment plans, policies and other sectorial papers, has already broad all relevant parties together. At this point therefore, through bilateral consultations, meetings and in stakeholder workshops, where they will be invited to participate to share views, lessons, and success stories on the topic under review. This consultation therefore will make them own the whole process, so that at the end, the findings will inform their future policy-making decisions.

A national stakeholder workshop will also be held upon the completion of the project research report to disseminate the findings from the study and for validation process.

SECTION V – OTHER CONSIDERATIONS

5.1. Describe any ethical, social, gender or environmental issues or risks that should be noted in relation to your proposed research project.

There are no ethical, social, gender or environmental issues risks foreseeable that should be noted in relation to the project proposed.

5.2. References and plagiarism:

Applicants should be very careful to avoid any appearance of plagiarism. Any text of five or more consecutive words that is borrowed from another source should be carefully contained between quotation marks with a reference to the source (including page number) immediately following the quotation. It is essential that we be able to distinguish what you have written yourself from what you have borrowed from elsewhere.
Note also that copying large extracts (such as several paragraphs) from other texts is not a good practice, and is usually unacceptable. For a fuller description of plagiarism, please refer, for example, to the following website:

- http://writing.yalecollege.yale.edu/advice-students/using-sources/understanding-and-avoiding-plagiarism

PEP will be using a software program to detect cases of plagiarism.

References


Global Climate Change Alliance (2011) Using Innovative and Effective Approaches to Deliver Climate Change Support to Developing Countries. European Commission Publications.


