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policy analysis on growth and employment

Can Mobile Money Induce Financial and Entrepreneurial Behaviors of Members of Village Savings and Loan Associations in Rural Malawi?

EXPERIMENTAL RESEARCH PROPOSAL

Presented to

Partnership for Economic Policy (PEP)

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SECTION A – PROJECT OVERVIEW AND OBJECTIVES

1. Abstract

Over 70% of Malawians living in rural areas are excluded from the formal financial sector, which has led to a drive in government's efforts towards increasing financial inclusion through expansion of digital payment systems, leverage Village Savings and Loan Associations (VSLAs) to increase savings, and effective consumer empowerment and education, amongst others. Studies have shown that participation in VSLAs improve business outcomes as well as financial inclusion. It is also stated that digital payments have the potential to increase money circulation, making capital available where most needed. We therefore hypothesize that using digital payments in the form of mobile money in VSLAs will lead to more financial inclusion and better business outcomes. The project thus, proposes to implement a cluster randomized control trial to test the effects of the promotion of the use of mobile money plus reminder short messages services (SMSs) among participants of Village Savings and Loan Associations (VSLAs) on financial inclusion and entrepreneurial outcomes. Primary outcome indicators in the experiment will be the use of mobile money for business purposes and savings. With the current Malawi Financial Sector Development Strategy running to 2020, we expect that the outcomes of this study will assist in evaluating it and development of the successor strategy.

2. Motivation

Most Malawians, especially those from rural areas are excluded from formal financial services and make little use of digital cash transfers. The 2014 FinScope Survey estimates that in Malawi only 28% of rural adults use formal financial services compared to 63% of urban adults and that women (29%) are less served with financial services than men (37%) (GoM, 2017). When overall financial access levels are considered (including informal), access levels for women and men are similar (47% vs 50%, respectively) largely due to involvement of women in VSLAs (GoM, 2017). This situation happens at the backdrop of very low financial literacy (Chirwa and Mvula, 2014; FinMark Trust, 2014). Rural women are therefore the most financially excluded population group, and this would affect their entrepreneurial activities and outcomes because working financing mechanisms contributes to improved entrepreneurship and hence economic development of a country (Toma et al., 2014). Additionally, the role of financing mechanisms in economic development is enhanced by information and communication technologies (ICT) (Andrianaivo and Kpodar, 2011) and VSLAs have been shown to have positive impacts on business outcomes and financial inclusion (Karlán et al., 2017). We are therefore motivated by three of the six priority areas in the Malawi Financial Sector Development Strategy for 2016-2020 which are to expand reach of digital payments, to increase savings through savings groups

(VSLAs), and improve levels of financial literacy (GoM, 2017). Digital payments can be promoted through use of mobile money while expansion of savings can be attained through promotion of VSLAs. Mobile money subscription introduced in 2012 has been on the increase (RBM, 2017) indicating the potential of using VSLAs and mobile money to improve rural women's access to formal financial markets and their entrepreneurial practices because of proliferation of VSLAs and increase in mobile financial services coverage. As of 2015, there were 37,461 VSLA groups with 610,596 members across the 28 districts in Malawi (Ministry of Finance, Economic Planning and Development, 2015) and about 90% of the population was covered by a mobile signal, with mobile penetration of approximately 33%, 45% of which is rural based and 55% urban based (Buckley et al., 2015).

3. Main research questions

In Malawi, although use of mobile money and participation in VSLAs are on the rise, the level of financial inclusion remains low. Mobile phone companies promote mobile money as a commercial product without considering their developmental roles, while the government and other stakeholders are promoting VSLAs independently as development initiatives. Considering the need to improve on the level of financial literacy the trial will train members of VSLAs in the use of mobile money for business purposes and these will be reminded of the training materials through SMSs. As such, the project will be assessing if integrating the use of mobile money for business among VSLA members will lead to more formal financial inclusion and improved entrepreneurial outcomes. This would create a platform for integrating mobile money and VSLAs as a development initiative. The proposed clustered randomized control trial addresses the question on whether the use of mobile money in VSLAs impacts on financial inclusion and entrepreneurial outcomes of VSLA members in rural Malawi. Specific research questions include:

- a. Can training on the use of mobile money for business transactions plus reminder SMSs influence usage of digital financial services by VSLA members in rural Malawi?
- b. Can training on the use of mobile money for business transactions plus reminder SMSs improve savings by members of VSLAs in rural Malawi?

4. Priority theme

The proposed project is designed to address the priority theme on entrepreneurship and financial inclusion for inclusive growth. Rural people in Malawi especially females are the most excluded from the financial markets, which is why they are mostly involved in informal financial services in the form of VSLAs. The financial exclusion of women affects their access to capital and their

ability to establish vibrant businesses. Improvements in access to financial services through mobile money services are expected to improve the entrepreneurial capacities of this population group. This would generate inclusive economic growth.

With the use of mobile money in executing business transactions, the project is expected to improve financial inclusion among rural people. With the possibility of lining a bank account and a mobile money account, it is also expected that mobile money will help to transit rural people from the informal financial channels to the formal sector.

SECTION B – RESEARCH

1. Experiment description

Causal parameter

The experiment will evaluate the extent to which training on usage of mobile money for business transactions plus reminder SMSs strengthen the effect that membership to VSLAs is expected to have on financial inclusion and entrepreneurship outcomes.

Expected sign and magnitude

We expect the combined effects of training on the use of mobile money for business transactions plus reminder SMSs among participants in VSLAs on financial inclusion and entrepreneurship to be positive. Basing on the literature, we expect that the use of mobile money for business among VSLA members that have been treated to be 35% more than among VSLA members that have not been treated.

Null hypotheses

The experiment will test the following null hypotheses:

- a. Training in the use of mobile money for business transactions plus reminder SMSs among VSLA members in Malawi cannot influence usage of digital financial services.
- b. Training in the use of mobile money for business transactions plus reminder SMSs cannot improve savings among members of VSLAs in rural Malawi.

Outcome of interest

The experiment will have two primary outcome indicators which will both be related to financial inclusion: proportion of VSLA members that use mobile money for business purposes and the level of savings. The study will also have a number of secondary outcomes which includes proportion of VSLA members with a bank account, level of capital injected into business, and demand for credit measured as loans that have been obtained.

The experiment

The experiment will train participants in VSLAs on how to use mobile money services to conduct business transactions and other aspects of financial literacy. The trainings will be followed by SMSs that will be reminding the participants about the important contents of the training they have undergone. The two interventions (training and SMSs) will be promoted as a package because other trials (Abebe et al., 2016) have shown that training alone does not lead to significant outcomes but when combined with SMSs that remind the participants to save. The experiment will therefore have two study groups:

- i) the control arm will receive no intervention;
- ii) the treatment arm will receive face to face training on use of mobile money services for business. These will also be sent reminders on the use of SMSs.

Both the treatment group and control group members will be participants in VSLAs such that the positive impacts of VSLAs on financial inclusion and business outcomes that were established by Karlan et al (2017) and others will be assumed. The differences in outcome indicators that may be observed between the treatment and control groups will therefore be on top of the already established impacts. In Malawi, there are two major mobile money service providers namely, Airtel Malawi whose service is called Airtel Money and Telekom Networks Malawi (TNM) whose service is called TNM Mpamba. Participants will be allowed to choose the service provider of their choice.

The project will train each member of the treated group on the use of mobile money services for business purposes. Presently, most people in the rural areas use mobile money to send remittances but not as a platform to save money or conduct business transactions. The training will therefore aim at giving the participants skills on how the mobile money platform can be used for business purposes as well as some elements of financial literacy.

To facilitate quick implementation, the trainings will be implemented in two types of sessions. The first session will aim at training the research team (researchers and research assistants) by mobile money operators on how VSLAs and their members can use mobile money in their transactions. The training will also include elements on financial literacy by the Reserve Bank of Malawi. This will be considered as a training of trainers (TOT) as the research team will be involved in training the VSLAs in the study area. During the study period researchers will also act as mobile money agents with the aim of assisting the participants to open accounts and not performing other transactions. The second type of sessions will be conducted by the research team and these will train the study participants. Participants will be trained on how to use mobile money for business transactions. The participants will also be trained on how they can link their mobile money account to a bank account.

Apart from the training sessions, participants in the treatment group will also be

sent reminder SMSs twice every month. The content of the SMSs will be on financial literacy and use of mobile money services. The intervention (training material and SMSs) will be offered(sent) in the local language, Chichewa.

Expected findings

It is already known that members of VSLAs have better outcome indicators in terms of entrepreneurship and financial behaviors than non-members (see Karlan et al., 2017). Somewhere, it has also been shown that mobile money improves the probability of being banked (Mbiti and Weil, 2011) and that financial literacy training and reminder SMSs improves financial inclusion and business outcomes (Abele et al., 2016). The experiment in this study aims at testing the impact of training on usage of mobile money services for business purposes and reminder SMSs on use of mobile money, financial inclusion and entrepreneurship among VSLA members. It is expected that the treatment group individuals will have significantly greater values of indicators of financial inclusion and entrepreneurship than members of the control group. These results are expected because usage of mobile money services is expected to reduce transaction costs by enabling participants to transact irrespective of where they are and ensure security of the money since there will be less physical movement of cash. In times when participants are not physically available to attend a VSLA meeting (although physical meetings are emphasized in VSLAs), they will still make their contributions or take loans by using the mobile money platforms thereby improving their capital base. It is also expected that mobile money will make the participants easily accept formal banking products such as bank accounts. This is because mobile money accounts can be linked to their bank accounts and they can transact using mobile money platforms and this will act as a platform to illustrate how formal bank accounts work. The technology will also enhance accountability as both the group's treasurer and member will have a record of every transaction conducted.

These impacts are expected to be cemented by the SMSs that will remind them of what they were taught during the face to face training.

2. Related literature

Financial inclusion for the poorest and vulnerable populations is one way of attaining inclusive growth (Cordova, 2013). The intuition is that increased access to financial services will provide the poor with much needed capital for entrepreneurial activities and this will lead to inclusive and shared growth (Aryan, 2004; Kiit and Mutinda, 2011; Nandi, 2012). It has also been recognized world over that there are more mobile phone holders than bank account holders most specifically in rural areas (Nandi, 2012). This means that use of mobile money presents a great opportunity to improve financial inclusion since mobile money has been found to improve formal financial inclusion (Mbiti and Weil, 2011). Research has hence revolved around how mobile money can be used to improve formal financial inclusion (Aryan, 2004; Kiit and Mutinda, 2011; Stuart and Cohen, 2011;

World Bank, 2011; Nandi, 2012; Majanga, 2016; Abiona and Koppensteiner, 2016). Mobile money has been found to improve efficiency of formal saving mechanisms in India (Nandi, 2012) and VSLAs in Kenya (Mutinda, 2012). Further mobile money facilitates financial inclusion in Kenya, increases circulation of money, makes available capital when most needed, improves local farm employment and savings (Mbiti and Weil, 2011; Jack and Suri, 2014; Ntwiga, 2016; Ouma, et al., 2017; Demombyens and Thengeya, 2012).

Studies have been conducted on the effects of mobile money on financial inclusion and entrepreneurship (FinMark Trust, 2016; Asongu and Nwachukwu, 2017) as well as effects of VSLAs on financial inclusion and entrepreneurship (Karlán et al., 2017). These studies have found positive impacts of both VSLAs and mobile money services on financial inclusion and entrepreneurship. It is however, not known whether combining VSLAs and mobile money services would strengthen these positive impacts. Our literature search has not identified any study that has assessed the combined effects of mobile money services and VSLAs on financial inclusion and entrepreneurship in Malawi and other low-income countries. We therefore hypothesize that the combined effect of mobile money services and VSLAs would be greater than individual effects. In testing the combined effects of VSLAs and mobile money on financial inclusion and entrepreneurship, this study will therefore generate relevant information that is currently not well documented. This information can be used for designing interventions that aim at improving financial inclusion and entrepreneurship.

Experiment implementation

3. Targeted population

The target population for this experiment are rural VSLA members from Malawi. The experiment will involve rural individuals because these are the ones that are mostly excluded from formal financial services. The study targets individuals that are members of VSLAs to establish the impact of mobile money training plus reminder SMSs on VSLA members. We have used the population of VSLA members to allow us assume the positive effects that were established by Karlán et al (2017). This will enable us to imply the conclusions about the combined effect although the study is not directly measuring the combined effects. Although the study is not stratifying based on gender, analysis will be disaggregated between males and females to measure their differential effects.

4. Recruitment protocol and sample size

Recruitment of individuals into the experiment

Following Ksoll et. al (2014), the crucial challenge for an impact evaluation is to

construct a credible counterfactual that is not sensitive to selection bias, arising typically due to non-random program placement and self-selection into program participation. To address the problem of non-random program placement therefore and indeed to avoid creating disincentives for participants in the control group as well as sharing of information between individuals from the treatment and control groups, following and adapting Ksoll et al (2014) and Karlan et al (2014) approaches, we will randomize the roll-out of the intervention at the group village head level (cluster randomized control trial where a group village is a cluster). A group village head is a traditional jurisdiction area that consists of about 8 villages. Assuming a single VSLA in a village, each cluster will therefore consist of about 8 VSLAs. All VSLAs within a group village headman will participate in the study and they will belong to one experimental group to reduce the effects of contamination between experimental groups. Following Ksoll et al (2014) the randomization will be carried out with supervision by officers from CARE Malawi or other implementing NGOs such as Emmanuel International.

Study location

The experiment will take place in rural communities of three districts of Malawi. The three districts will be selected purposively basing on the likelihood of finding VSLAs. To reduce cost of the study, these districts will be within the southern and eastern part of Malawi. Information on likelihood of finding entrepreneurs in VSLAs will be collected from CARE Malawi while information on the likelihood of finding mobile money users will be obtained from mobile money operators and Reserve Bank of Malawi.

Sample size and power calculations

We used Optimal Design Software to estimate sample size. We based our power calculations on our main outcome variables; savings and usage of mobile money. Other similar studies (see Abebe et al; 2016, Karlan et al., 2014), using almost similar outcome variables and study timeline, have found impact rate of up to 42%. We therefore assume a modest impact rate of 40%. With regard to Intra-Cluster Correlation (ICC) there are two ways of estimating the ICC. On the one hand, ICC of a given variable is typically determined by looking at pilot or baseline data for your population of interest. On the other hand should you not have the baseline data, another way of estimating the ICC is to look at other studies examining similar outcomes and justify your choice from them. Similar studies in similar contexts have used ICC of between 0.04 and 0.05(see Abebe et al., 2016 & Ksoll et al., 2014). We therefore assume that ICC is 0.04. Using these parameters we have established that we will have a sample size of about 1008 individuals (i.e. 504 individuals per arm) (see figure 1). This implies that we will have about 4 group village headmen's areas per arm. Literature (see Ksoll et al., 2014 & Karlan et al., 2014) has shown that there are about 18 members per VSLA. Bearing in mind chances of attrition, noncompliance and contamination, we adjust the 864 sample size accordingly.

Assuming attrition rate of 3% (see Ksoll et al., 2014) and noncompliance of 25 % (see Ksoll et al., 2014) the sample size increases to about 1290 individuals. This will result in power of about 80%.

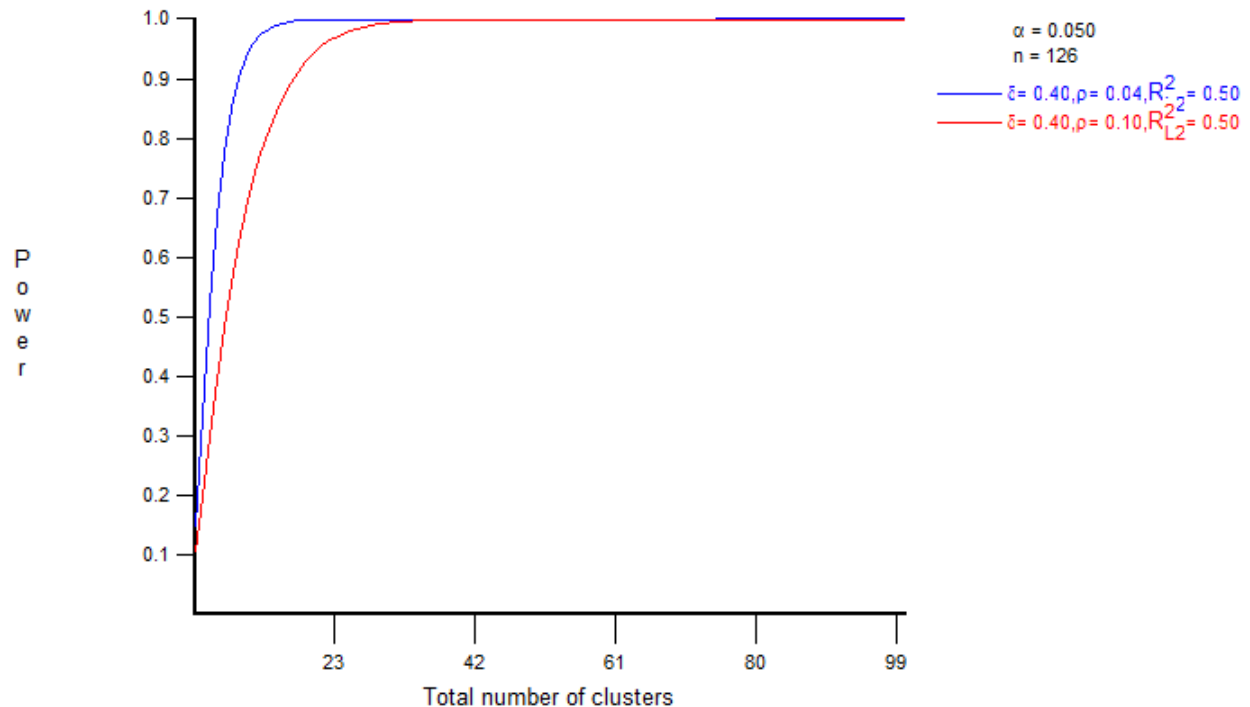


Figure 1: Optimal Design output of power calculations

5. Experimental protocol

The experiment will have two experimental groups: (i) the control group which will receive nothing; (ii) the treatment group which will receive face to face training on use of mobile money services for entrepreneurship, plus financial literacy messages through SMSs. Both the treatment and control groups will be expected to be members of VSLA groups. This means that the most important inclusion criteria in the experiment is the membership to a VSLA.

The analysis of the data from the experiments will exploit both within and between subject variations. Within subject variations will look at gender, education and age while between subjects variations will look at the treatments.

6. Timeline

Activities	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Inception meeting, work plan development, development of study tools												
Submission of tools for ethics												
Recruitment of Research Assistants												
Recruitment of study participants and treatment assignment												
Training of trainers												
Baseline survey												
Training of participants												
Sending of remainder SMSs												
End line survey												
Presentation of preliminary results to key stakeholders												
Final report presentation to PEP												
Final report submission to PEP												

7. Budget outline

Activity	Estimated cost (US\$)
Development of training materials and study tools	1000
Partner engagement cost (Travel and per diems)	871
Participant recruitment & treatment assignment (Travel and per diems)	1,770
Training of Trainers (Researchers)	2,019
Training participants	8,430
Tablets and programming	1,200
Baseline survey	12,365
SMS Services	692
End line survey	12,365
Presentation of preliminary to key stakeholders results	1,704

Total	42,417
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SECTION C – CAPACITY BUILDING

1. Team composition and experience

Team leader

Name	Age	Sex (M, F)	Highest degree/diploma
Levison S. Chiwaula	40	M	PhD
Training and experience	Trained as an Economist and working as an Associate Professor of Economics. He has a lot of research experience in designing and implementing studies in agricultural economics, poverty analysis, health economics, and applied econometrics. He has been involved in clinical trials and has also attended short training in impact evaluations.		
Expected capacity building	Field experiments and behavioural economics		
Contribution to project	Overall grant management and coordination of the grant, designing experiments, and econometric analysis, lead in report manuscript preparation.		

Team member #2

Name	Age	Sex (M, F)	Highest degree/diploma
Miriam Matita	35	F	MA
Training and experience	Holds and MA in Economics and is currently registered for a PhD at the University of Malawi. Her research interests are in microeconomics, agricultural economics, and applied econometrics, commercialisation of smallholder agriculture, social protection and poverty analysis.		
Expected capacity building	Applied econometrics, design and implementation of field experiments and analysis of field experiment data.		
Contribution to project	Defining experimental interventions, design data collection tools, and lead field surveys. She will also assist in overall grant management.		

Team member #3

Name	Age	Sex (M, F)	Highest degree/diploma
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Tayamika Kamwanja	28	F	MA in Economics
Training and experience	Trained as an Economist with a Masters degree in Economics and Bachelors degree in the same field from the university of Malawi. Currently working as a lecturer at the Department of Economics at the University of Malawi for the past 3 years, and pursuing a doctorate degree in the field of financial inclusion. Research areas are financial inclusion and household finance, micro and macro-econometrics and Macroeconomics.		
Expected capacity building	Applied microeconometrics and analysis of field experiment data.		
Contribution to project	Data collection and management and analysis		

Team member #4

Name	Age	Sex (M, F)	Highest degree/diploma
Lucius Cassim	26	M	Bachelor of Social Science
Training and experience	Holds a Master of Arts in Economics and Bachelor of Social Science degrees both obtained from the University of Malawi. He is currently working as an Assistant Lecturer in Economics		
Expected capacity building	Design of field surveys, field experiments, manuscript preparation, applied econometrics		
Contribution to project	Data collection, management, and analysis; Field monitoring		
Justification	This member is required in the team because the two female members are both PhD Candidates and may not have a lot of time for field work		

*Standard research teams are expected to include 4 members (including the team leader) - a 5th member requires additional justification

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

Name of funding institution, title of project and related publications, list of team members involved

Name of funding institutions	Title of projects and related publications (link)	Team member(s) involved
<p>Canada's International Development Research Corporation</p>	<p><i>Title: Improved processing and marketing of healthy fish products in inland fisheries in Malawi (CultiAF)</i></p> <p><i>Publication (reference):</i></p> <ol style="list-style-type: none"> 1. Gender Differences in Willingness to Pay for Capital Intensive Agricultural Technologies: the case of Fish Solar Tent Dryers in Malawi –<i>Journal of Agricultural and Food Economics</i>, 2018; 6(1) 2. Nutrition, microbial and sensory quality of solar tent dried (<i>Samva Nyengo</i>) and open sun dried <i>C. virginalis</i> (Pisces; cichlidae). <i>International Journal of Marine Sciences</i>, 2017; 7 (11): 96-101 	<p>Levison Chiwaula</p>
<p>World Health Organisation and Canada's Department of Foreign Affairs, Trade and Development (DFATD)</p>	<p><i>Title: PMTCT Uptake and REtention (PURE) Clinical trial in Malawi</i></p> <p><i>Publication (reference):</i></p> <ol style="list-style-type: none"> 1. The value of informal care in the context of option B+ in Malawi: a contingent valuation approach. <i>BMC Health Services Research</i> (2016) 16:136 2. Improving PMTCT Uptake and Retention Services Through Novel Approaches in Peer-Based Family-Supported Care in the Clinic and Community: A 3-Arm Cluster Randomized Trial (PURE Malawi). <i>Journal of Acquired Immune Deficiency Syndrome</i> 2017;67: S114–S119 3. Exploring the Experiences of Women and Health Care Workers in the Context of PMTCT Option B Plus in Malawi. <i>Journal of Acquired Immune Deficiency</i> 	<p>Levison Chiwaula</p>

	<p>2017; 74:517–522</p> <p>4. Impact of Facility- and Community-Based Peer Support Models on Maternal Uptake and Retention in Malawi's Option B+ HIV Prevention of Mother-to-Child Transmission Program: A 3-Arm Cluster Randomized Controlled Trial (PURE Malawi). <i>Journal of Acquired Immune Deficiency Syndrome</i> 2017;75: S140–S148</p>	
<p>UK's Department for International Development (DFID)</p>	<p><i>Title:</i> Optimizing clinical care strategies and laboratory monitoring for cost Effective rollout of ART in Africa: The labLite Project</p> <p><i>Publication (reference):</i></p> <ol style="list-style-type: none"> 1. Patient-level benefits associated with decentralization of antiretroviral therapy services to primary health facilities in Malawi and Uganda. <i>International Health</i>, 2018 2. Measuring and Valuing Informal Care for Economic Evaluation of HIV/AIDS Interventions: Methods and Application in Malawi. <i>Value in Health Regional Issues</i>, (2016), 10:73-78 3. Shifting human resources for health in the context of ART provision: qualitative and quantitative findings from the Lablite baseline study. <i>BMC Health Services Research</i>, (2016) 16:660 4. Population level usage of health services, and HIV testing and care, prior to decentralization of antiretroviral therapy in Agago District in rural Northern Uganda. <i>BMC Health Services Research</i> (2015) 15:527 5. The Lablite project: A cross-sectional mapping survey of decentralized HIV 	<p>Levison S. Chiwaula</p>

	service provision in Malawi, Uganda and Zimbabwe. <i>BMC Health Services Research</i> 2014, 14:352	
UKAID through Economic and Social Research Council (ESRC) under Institute for Poverty, Land and Agrarian Studies (PLAAS)	<i>Title: Space, Markets and Employment in Agriculture Development: Malawi</i>	Mirriam Matita
	<i>Publication (reference):</i> 1. Chirwa E. W and Matita M., (2015) Space, Markets, Employment and Agricultural Development, Malawi country report, Research Report No. 45, Cape Town: Institute for Poverty, Land and Agrarian Studies (PLAAS).	
UK's Department for International Development (DFID) with Institute for Development Studies	<i>Title: Agriculture Policy Research in Africa- Malawi</i>	Mirriam Matita
	<i>Publication (reference): None yet</i>	

2.3. List of past or current PEP-supported projects involving team members, including resulting publications

Indicate the PEP project code, title and external (NON-PEP) publications if any, as well as those of your team members who were involved in each project.

Project code (e.g. PMMA-12345)	Title of project and related external (non-PEP) publications, if any	Team member(s) involved
	<i>Title:</i>	
	<i>Publication (reference):</i>	
	<i>Title:</i>	
	<i>Publication (reference):</i>	
	<i>Title:</i>	
	<i>Publication (reference):</i>	

SECTION D – POLICY ENGAGEMENT

3.1. Policy relevance

3.1.1. Describe policy context and needs

Describe the specific policy issues or needs that your research aims to address; how your potential outcomes and findings may be used in policy making? Please be as precise as possible, indicating specific current or prospective policies and the specific contributions your research would make.

Also, justify timing of your research in terms of policy and socioeconomic needs and context – e.g. reference to existing, planned or potential policies at the national, regional or local level; specific political context; international examples of similar policy problems or solutions, etc.

Poverty in Malawi is more widespread in rural areas (National Statistics Office Malawi, 2010) where most of the smallholder farmers reside. These farmers have very limited access to formal financial institutions and services, and therefore lack the opportunity to invest in agricultural inputs to increase their income (Karlan, et al., 2017) and also lack capital to invest in any enterprise. These rural areas are characterized by long time spans between input and output of the agricultural production, uncertainty and weather dependency, making “ability to smooth consumption, access credit, and employ risk coping strategies very important” (Ksoll, et al., 2013). To that extent, policy implementation aims at improving people’s living standards. Recently Malawi launched Financial Sector Development Strategy for 2015 -2020 to champion financial inclusion as an important tool for reducing poverty and inequality. Financial services expansion to those that are currently excluded from formal markets through digital payments and expanding savings in groups are catalysts to achieve aspirations in the strategy.

Savings group like VSLA avails to the informal sector those services that the formal sector provides such as savings accounts, access to loans, and insurance. However, the potential of VSLA to mobilise sufficient savings for entrepreneurial engagements can be enhanced through among other things active use of digital payments. Thus, this study is relevant as it will try and test these linkages with purpose of informing policies for inclusive financial sector development.

3.1.2. Consultations to date

Name of institution/organization #1	Ministry of Finance, Economic Planning and Development
List the key representative involved in consultations (names and titles/positions)	- Mr Ambrose Mzoma, Director of Pensions and Financial Sector Policy
Describe main outcomes of consultation – feedback or inputs received	

The Ministry will be ready to work with us

Name of institution/organization #1	Reserve Bank of Malawi
List the key representative involved in consultations (names and titles/positions)	- Mr Patrick Ibrahim, Deputy Director, Payment Systems
Describe main outcomes of consultation – feedback or inputs received	The Bank will be willing to collaborate with the Department of Economics in this project. They will support the initiative

Name of institution/organization #2	TNM Malawi – Telephone Company
List the key representative involved in consultations (names and titles/positions)	- Mr Chikhulupiliro Mphatso – Manager, TNM Mpamba
Describe main outcomes of consultation – feedback or inputs received	TNM has given us a formal approval to work with us.

Name of institution/organization #3	Airtel Malawi – Telephone company
List the key representative involved in consultations (names and titles/positions)	- Mr Makoloma, Airtel Money - Mr Sukasuka, Head - Airtel Money
Describe main outcomes of consultation – feedback or inputs received	They have indicated willingness to work with us but this is just waiting for formal approvals

Name of institution/organization #3	CARE Malawi
List the key representative involved in consultations (names and titles/positions)	- Mr Clement Bisai - Country Office Monitoring, Evaluation and Learning Advisor - Rose Tchwenko - Assistant Country Director Programs - Geoffrey Kumwenda - Programme Director, Programme Development - Auster Gondwe - VSLA Technical Lead
Describe main outcomes of consultation – feedback or inputs received	CARE will allow us to work with their VSLAs. They also encouraged us to meet some NGOs such as Emmanuel International.

3.2. Engagement strategy

3.2.1. Identify target audiences

Name of institution/organization #1	Ministry Gender, Children and Social Welfare
Explain relevance of this user to inform key decisions	
The Ministry will use the information from the study to link VSLAs and formal financial institutions	

Name of institution/organization #2	Research Bank of Malawi
Explain relevance of this user to inform key decisions	
The Bank is mandated to regulate the financial market and will use this information to design strategies for regulating VSLAs and mobile money.	

Name of institution/organization #3	NGOs
Explain relevance of this user to inform key decisions	
NGOs that are involved in VSLAs will understand how they can use mobile money to improve the performance of VSLAs.	

3.2.2. Define outreach and engagement strategy

We will be organising stakeholder meetings with key Ministries and stakeholders. Additionally, the project will be presented to District Executive Committees before the field experiments are implemented. From the research results, policy briefs will also be developed. We expect these to feed into financial education currently being championed by the Reserve Bank.

3.2.3. Outline your preliminary dissemination strategy

The project results will be disseminated through presentations to stakeholders and development of policy briefs, and research publications. Reserve Bank Financial Inclusion Newsletter will also be utilised to popularise results of the linkages among policy makers and general populous
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1. Ethic approval

Discuss ethical issues involved with the experiment.

Does your institution require ethical approval Yes No

If not, then PEP will submit your project to a "Research Ethics Review Committee (www.pep-net.org/research-ethics-review-committee)

There are no serious ethical issues involved in our proposed study. We will however, submit the research protocol for ethical approval by the National Commission for Science and Technology in Malawi.

2. Ethical, social, gender or environmental issues or risks in relation to your experiment (300 words max.)

The experiments do not pose any serious ethical, social or environmental issues or risks since the participants will be using mobile phones they are already using and they will just be expected to improve on the utilisation of their mobile phones. Gender issues may exist in the control of money and assets but these may not be generated by the interventions. The experiments will however be monitoring if any of these will arise in course of implementing the project.

3. 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.

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