Concept Note Liberia DIME GAFSP Liberia IE (P147170)

Created by Raneen Hassan Hasuna on 17-Feb-2016 Last Modified by Paul J. Christian on 29-Nov-2016

Form Status: ARCHIVED

Basic Information			
Product Line	Title	Country, Region or Global	Task Team Leader(s)
Impact Evaluation	DIME GAFSP Liberia IE	Liberia	Paul J. Christian, Florence Kondylis
Legal Name			Practice Manager/Manager
			Arianna Legovini
Responsible Cost Center	Requesting Cost Center	Completion Fiscal Year	Status
DECIE (8319)	AFCW1 (6547)	2019	Active
Parent GPP	Is there an associate activity/task?		
	No		
Is this IDA			
Commitment?			
No			

Development Objective & Expected Intermediate Outcome

What is the development objective that this activity is seeking to achieve? What are the expected intermediate outcomes?

The continued development of Liberia►(s agricultural sector is crucial to Liberia►(s economic growth and food security. A focus on smallholder farmers helps to ensure pro-poor growth; over 70% of Liberia►(s population is involved in farming and the vast majority of this population practice cultivation at the subsistence level, utilizing traditional techniques. The Smallholder Agricultural Productivity Enhancement and Commercialization project (SAPEC) aims to improve the productivity, income and nutritional outcomes of beneficiary farmers in 12 of Liberia►(s 15 counties. SAPEC provides farmers with agricultural technologies, constructs and rehabilitates infrastructure to support value-chains and market linkages, as well is working to improve the institutional capacity of the Ministry of Agriculture and associated research institutions. SAPEC►(s design incorporates a focus on women, youth and the disabled to better integrate these groups into the agricultural sector and improve their capacity. Given Liberia►(s relatively low life expectancy and high youth population (42% below age 15; LISGIS 2011), it is particularly important to encourage youth participation in agriculture. Declining youth participation in the agriculture sector across Africa prompts concerns that if youth are the most open to new technologies, programs promoting new agricultural methods and varieties may struggle to convince farmers to try these new methods unless they can recruit young farmers.

We propose to study the impact of seed and tool distribution on the take-up of modern farming inputs and the use of productivity enhancing tools, thereby resulting in higher agricultural yields and improved nutritional outcomes, as measured by dietary diversity scores. The wide geographic scope of SAPEC and

its focus on smallholder farmers offer a unique opportunity to generate data that can be more robustly extrapolated to the wider Liberian population. We will use data from a 2016 registration of Liberian farmers to randomly select 1,000 Liberian farmers from 100 randomly selected communities in Liberian districts serviced by SAPEC.

Using a randomization at multiple levels, we seek to determine whether the provision of 91%-subsidized improved seeds, tools, and fertilizer promote the take-up of modern farming inputs and improve diets. We will also study whether particular beneficiary sub-groups (by age and gender) are more likely to respond to SMS messaging with an agricultural focus and whether small

Choose at least one intermediate outcome and at least one indicator from the list below that reflects the development objective and is expected to be achieved by the completion of the activity.

Intermediate Outcome(s)	Indicator(s)
Policy/strategy informed	Dev't community/partner policy/strategy informed
Client capacity increased	Monitoring & evaluation capacity increased

Risks to	Achieve	Objective
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Risks to Achieve Objective			
Please rate and describe the principal	Risk Rating	Explanation	
risks to achieve the development objective within the time period envisaged and how they can be mitigated. Does the team seek any specific guidance?	Substantial	 The primary risks on this impact evaluation come from the risk of project (s implementation being delayed. Liberia is a difficult context for implementation with security risks, poor infrastructure, and a low level of field level human resources that have caused the project roll-out to be delayed significantly. Because of these factors, and particularly because of the Ebola crisis, the disbursement rate for SAPEC is behind schedule. A mid-term review for the project is on-going and the outcome of this MTR in the context of low disbursement could change the expected project activities, timeline, and targets. In order to minimize the risks of delays to effective learning from the study, we are focusing on the narrow activities most likely to occur in the current calendar year and least likely to be affected by project restructuring, the delivery of benefits to the next set of beneficiaries. Plans prior to the MTR indicate that 5,000 beneficiaries should be reached by input delivery this year. We have kept our expectations at a 	

minimum level, given the uncertainty; the project management unit has indicated that the project should reach at least 1,500 beneficiaries as a reasonable and very conservative estimate of likely reach.
In order to follow the influence of Ebola on program effects, the household survey instrument will include questions designed to measure the incidence of the Ebola crisis on the community. Collecting this data will allow the research team to evaluate whether Ebola incidence mediates program impact and allow for potential corrections to the effect of Ebola on project outcomes.

Audience				
Please describe the primary audience to be reached. Are there any secondary or indirect audiences? If yes, please explain.	Primary Audience Government	Explanation The primary audience will be the government of Liberia, who are the main clients. The AfD (supervisor of the project), the Global Agriculture and Food Security Project (GAFSP), and World Bank project teams are other audiences.		

Dissemination / Outreach Strategy

Describe the dissemination strategy and other outreach activities to engage the principal audience.

(e.g.: Will the product be: made available in the local language? made available on a website? discussed with senior policy-makers? presented at a workshop, conference, seminar or on-line discussion? covered in the general or specialized media?)

We will be actively involved in the dissemination of evidence acquired during the course of this process to policy makers, practitioners and academics. First, we have been actively involved with policy makers at different levels during the design phase. A rapid response survey commissioned by SAPEC was designed and overseen by DIME to ensure high quality data was obtained to plan deliveries and to design the impact evaluation. Baseline and monitoring data will help the provincial administration during the program implementation of the project as well as inform the broader agriculture investments made in the country at the national level. Upon completion of the evaluation we will work closely together with all stakeholders to elaborate relevant policy briefs and dissemination events. A report will be produced by the research team to be shared with project staff, the TTL (s and policy makers from relevant departments to summarize learning, solicit suggestions and improvements, and generate new uses for the resulting data.

Second, through the global DECIE network we are working closely with different stakeholders in the development arena. The network brings together governments, TTLs from different MDBs, multiple donors and academics. The IE was proposed and designed with participation from TTL >(s, project staff and the core research team and a subset of that group met in Kigali in June 2014 as part of

DECIE (s broader initiatives in the areas of agriculture and food security. The results will be disseminated widely across the community of practice through the annual workshops as well across the irrigation projects specifically through close collaboration between the research teams. In addition, we plan to make our finding broadly available to other WB and independent agriculture and irrigation related projects to emphasize the role of community targeting of public goods. Finally, we plan to develop a series of research papers from the experiment and the results and engage the broader academic community to both contribute to and shape the knowledge from this IE. We hope that such academic work is widely regarded in seminars and conferences and eventually published in an academic economics or general interest journal of the top caliber.

All data will be made available online through the IE database, following the Bank≻(s open data policy.

Results will be shared as they are produced with the GAFSP CU to ensure that learning from this IE can be incorporated

Is translation of some or all of the activity planned? No

Client Ownership

Has the client asked for this activity?

Yes

Has the client agreed to the concept/scope/design?

Yes

Will the client be substantially involved in carrying out the activity?

Yes

Will the client help finance the activity?

Yes

Comments

Activity and Client Contact Information

Activity title (Edit if needed to make the title recognizable to any clients identified below.) **DIME GAFSP Liberia IE**

Organization Name				
African Development Bank				
Organization Role	Organization Type	Country		
	Bilateral/Multilateral Agency	Liberia		
First Name	Last Name	Title		
Patrick	Agboma			
Preferred Language	Phone	Primary Email		
English		p.agboma@afdb.org		

Include in Client Feedback Survey?	
Yes	

If the activity title provided above (just under the "Activity and Client Contact Information" bar) would be recognized by this client, please leave blank. Otherwise, provide an activity/output title recognizable to this client.

Organization Name			
Smallholder Agriculture Productivity E	Inhancement and Commercialization	on	
Organization Role	Organization Type	Country	
	Line Ministry/Ministerial Department	Liberia	
First Name	Last Name	Title	
William	Kalawalu	Project Coordinator	
Preferred Language	Phone	Primary Email	
English		william. kawalawu@gmail.com	
Include in Client Feedback Survey?			
Ves			

Yes

If the activity title provided above (just under the "Activity and Client Contact Information" bar) would be recognized by this client, please leave blank. Otherwise, provide an activity/output title recognizable to this client.

Partners/Others' Activities

Are other partners doing similar activities? If yes, have you ensured this activity is not duplicative and/or has value-added?

Are there one or more partners who are either funding this activity or contributing expertise?

Yes

Partners				
Organization Name Type	Contact	Title	Office Phone	Email
Is this a joint work with No IFC?				
Does this activity support a CAS of	ojective ?			
✓ A Country Strategy (e.g. CAS,	CPS, ISN)			
A Regional Strategy				

Strategic Relevance

Does this activity support a CAS objective ?

- ✓ A Country Strategy (e.g. CAS, CPS, ISN)
- ✓ A Global Strategy (e.g. Sector Strategy)
- None of the Above

Why is this activity type (IE) being used to address the objective? Is it linked to other Bank activities or tasks? Explain

Efforts to improve Liberia (s agriculture sector have been a core component of Liberia (s peacebuilding and reconstruction efforts since the transitional government took power, following the end of the civil war. Strategies for restoring the country (s agricultural productive capacity have featured in the Government of Liberia (GoL) (s first Results-Focused Transitional Framework (2004), its revision (2005), the subsequent interim Poverty-Reduction Strategy (2006), Poverty-Reduction Strategy (2008), and the current Agenda for Transformation (2012), which covers the period from 2012-2017. A focus on pro-poor growth in Liberia demands that the smallholder farmers that dominate the Liberian agricultural sector incorporate improved technologies as a means to increase production beyond a subsistence level (Republic of Liberia Ministry of Agriculture 2007). Access to assets (including knowledge assets) and infrastructure have been identified as key constraints. Increased production of crops meant for the domestic market will also reduce the real cost of food (as well as Liberia) (s import burden), thereby improving food security for the average Liberian. The lack of available and robust data on the Liberian agricultural sector is a major obstacle to the assessment of present policies and the creation of improved, evidence-based policy frameworks. The study is also timely, as the data produced can be used by the new government, following the elections that will take place in October 2017.

Since SAPEC was established as a key part of LASIP, the impact evaluation of the project will be relevant to the policy initiatives as an evaluation of this transformation strategy. It will also provide some feedback on one aspect of the Liberian Agriculture Transformation Agenda (LATA), a complementary program currently being rolled out by the Ministry of Agriculture, with support from its international development partners, focuses on value chain support for cash crops. In doing so, the LATA will also improve access of all smallholder farmers to technology: under LATA, SAPEC financed the registration of over 184,000 farmers in a mobile wallet program that will allow these farmers access to subsidized fertilizer and other inputs. Eventually, the government plans to use the service to improve access to extension services through the use of SMS messaging. This messaging platform will be used as the frame from which the messaging intervention will be implemented and the beneficiaries for the RCT of the delivery of inputs will be chosen.

The SAPEC program is sponsored by the Global Agriculture and Food Security Program (GAFSP), a multilateral initiative created to meet the pledges made by the G20 in 2009 to improve income and food and nutrition security in low-income countries by boosting agricultural productivity. The GAFSP has partnered with DIME to conduct impact evaluations of it's projects in five of the 30 countries where GAFSP programs are active (Bangladesh, Haiti, Liberia, Nepal, and Rwanda). The results from this evaluation will be shared with the GAFSP and used to improve approaches and learning from the GAFSP's efforts.

Summary Task Description

Provide a brief description of the activity and briefly outline key issues expected to be addressed to meet

the Development Objective.

The Smallholder Agriculture Productivity Enhancement and Commercialization (SAPEC) project conducts three core activities:

A. Sustainable Crop Production Intensification, which includes the dissemination of improved technologies for rice, cassava and vegetable farming;

B. Value Addition and Marketing, which includes the construction and rehabilitation of roads linking farms to rehabilitated markets;

C. Capacity Building and Institutional Strengthening, which includes the training of farmers in contemporary, evidence-based farming practices.

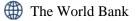
To assess the constraints to adopting improved technologies for crop intensification and the efficacy of methods promoted by SAPEC, we will compare farming households who receive SAPEC benefits with households that do not. This comparison will be achieved in two ways.

First, 100 communities in SAPEC treatment and control districts will be randomly selected to take part in the study, using the list of SAPEC-eligible communities in the LATA database as a sampling frame. Each community will have a minimum of 25 farmers. 50 of the selected communities will be treatment communities and 50 will be control communities. Since SAPEC can deliver inputs and technical assistance to a maximum of 5,000 farmers in a given year and the potential number of beneficiaries in all SAPEC-eligible communities is much larger than this 5,000, the random assignment of potential treatment communities to the set of controls only changes the order of who receives the benefits next, rather than withholding benefits from anyone in particular.

The second dimension to create a counterfactual for beneficiaries will be the random selection of specific beneficiaries within SAPEC treatment communities. From the list of all farmers registered in the e-platform system, we will randomly select an average of 10 per community to be SAPEC beneficiaries in the next round. This will allow us to sample farmers within treatment communities as well as farmers who were randomly selected to not receive them this year, allowing us to see the causal impact of this input provision on the delivery of tools.

In order to help SAPEC achieve its target of 30% of its participants being less than 35 years old, we propose to use the Ministry of Agriculture (s LATA e-platform system to recruit SAPEC beneficiaries through targeted messaging delivered via SMS. As of August 2016, there were over 183,000 farmers registered in the e-platform, including over 15,000 farmers under the age of 35 located in SAPEC districts. This database creates a pool of potential recruits for SAPEC (s program. Each of these farmers has registered a mobile number where the farmer can be reached with information about extension.

To test whether messaging can help recruit youth to farming, we will send SMS invitations to farmers informing them that if they report to a SAPEC office to request that the local focal person registers them, they will receive subsidized inputs. We will randomly assign the messages on two dimensions, whether the farmer receives the text message invitation (SMS invitation treatment) and conditional on being in the SMS invitation treatment, the specific content of the message. SAPEC expects to enroll 5,000 beneficiaries in its next wave of distributing subsidized inputs: the impact evaluation hopes to focus on at least 1,500 of these. To recruit these beneficiaries, we will send text messages to a randomly selected set of farmers in the e-registry, with at least 20 farmers being recruited in each treatment community: at least 10 farmers below age 35 and 10 farmers above age 35.



The core content of the message will be a brief description of the inputs that SAPEC provides including quantity and variety of rice seeds or cassava cuttings and description of tools \succ (and an invitation to come and be registered to receive these inputs.

Household surveys of both beneficiaries and non-beneficiaries will be used to assess impacts.

Practice Area Mapping

Contributing Practice Areas

Agriculture

Climate Change

Did the activity	address	adaptation	mitigation	or both throug	h۰
Did the activity	audicss	auaptation,	minigation	or bour unoug	п.

	Adaptation	Mitigation	Explanation
Diagnostic and Policy Advice	No	No	
Tools and Data	No	No	
Knowledge Management	No	No	

Gender Tag

Does the activity support (select all that apply)

Analysis and/or consultation on gender related issues

Yes

Specific actions to address the distinct needs of women and girls, or men and boys, or positive impacts on gender gaps

No

Mechanisms to monitor gender impact to facilitate gender-disaggregated analysis

Yes

Team Composition

Bank Staff

Name	Role	Title	Specialization	Unit	Office Phone	Location
Paul J. Christian	Team Leader ✓ ADM Responsible	Economist	ECONOMIS T	DECIE	202-473- 8746	WASHINGT ON, DC
Florence Kondylis	Team Leader	Senior Economist	Sr. Economist	DECIE	473-0965	WASHINGT ON, DC

Extended Team

Name	Title	Office Phone	Location

Budget & Funding (Amount in USD)

Note: Please make sure the budget includes estimated cost of dissemination/communication of final output as described in Objectives Section.

Expenses to Date: 144886.07 Funding

	Bank Budget		Bank-executed Trust Fund		Other (including client)		
FY	Total	Of which Variable	Total	Of which Variable	Total	Of which Variable	Total
2014			7,235.91				7,235.91
2015			56,071.19				56,071.19
2016			53,409.08				53,409.08
2017			372,635.00				372,635.00
2018			342,635.00				342,635.00
Total	0.00	0.00	831,986.18	0.00	0.00	0.00	831,986.18
			Amount			Cost Center	
Reimbu Advisor	irsable ry Services	No					

Comments

Milestones					
Milestone	Original	Forecast	Actual		
AIS Sign-off	30-Aug-2013		04-Oct-2013		
Concept Review	16-Dec-2016				
Management Approval of Concept *	23-Dec-2016		28-Feb-2017		
Decision Review					
Management Endorsement of Deliverable *	11-Sep-2018				
Deliver Output to Client/Stakeholders					
Final Delivery/Completion Summary *	28-Dec-2018				