DIME-GAFSP Collaboration: Work Plan for Fiscal Year 2014

Summary: This work-plan provides an overview of the planned impact evaluation activities **DIME** will lead on GASFP projects during the Fiscal Year 2014 (FY14, ending June 30 2014). This work plan and attached budget take into account the projected activities for the sevenselected projects.

The total anticipated disbursement (including commitments for data collection) for this FY is: USD **\$ 2,923,764.16**. (See attached budget.)

A. Overall Program Activities

The majority of the activities in FY 2014 will be country-specific, and will be discussed in separate sections below. One programmatic activity will be the second DIME-GAFSP workshop, which will bring together all the DIME-GAFSP teams for capacity-building and knowledge dissemination. This will be a follow-up to the first DIME-GAFSP workshop in Kenya in April 2012. The workshop is planned to take place in late FY14 with exact location to be determined.

B. Country Activities

Country-specific activities planned for FY2014 vary across the portfolio, but common activities are:

- 1. **Concept Notes:** In FY13, three concept notes were finalized (Rwanda, Mongolia, and Bangladesh), while one (Haiti PTTA) began its review at the end of FY13 and will be finalized in FY14. In FY14 the team plans to review and finalize concept notes for all other projects: Nepal, Haiti RESEPAG II, and Liberia.
- 2. **Missions:** The DIME team plans to continue regular missions to all countries in the portfolio as needed in FY14.
- 3. **Baseline Surveys:** Baseline surveys were completed in Rwanda and Bangladesh, and started in Mongolia in FY13. In FY 14, the team plans to complete baseline surveys in Mongolia, Nepal, Haiti (for both PTTA and RESEPAG II), and Liberia
- 4. **Baseline Presentation and Reports:** After each baseline survey is completed, a presentation on the main variables of interest will be delivered to the government and operational teams. Based on feedback from this presentation, a baseline report will be produced, outlining the main results and their implications for the implementation of the project, as well as monitoring key indicators for the line ministry. In FY13, baseline presentations were delivered for Rwanda and Bangladesh, and a finished baseline report was produced for Rwanda. In FY14, baseline reports will be produced for Bangladesh, Mongolia, Nepal, Haiti (for both PTTA and RESEPAG II), and Liberia.
- 5. **Follow-up surveys and reports:** Initial follow-up surveys began in FY13 in Rwanda and Bangladesh. These will be completed in FY14, and will provide initial indications of the impact of the projects. Reports will be created illustrating the data analysis and providing operational recommendations.

OVERALL IMPACT

METHODOLOGY

Randomized Phase-in

- Treatment villages receive IAPP interventions in 2012
- Short-term control villages receive IAPP in 2014
- Long-term control villages receive IAPP in 2016

RESEARCH QUESTIONS

- To what extent does the FFS approach cause increased and sustained technology adoption?
- What level of adoption is driven from increased subsidies versus knowledge and learning?
- What are the differential effects for male vs. female group members?
- What are the long versus short run effects of IAPP? Do income effects allow continued adoption of improved crops?

DATA COLLECTION

Baseline [Aug-Oct 2012]

· Paper questionnaire with field data entry

First follow-up [Jun - Jul 2013]

· Electronic data collection

Second follow-up [Jun-Jul 2014]

Electronic data collection

Endline [Jun - Jul 2016]

· Electronic data collection

RESEARCH TEAM

<u>DIME-GAFSP Team</u>: Florence Kondylis, Senior Economist; Daniel Stein, Economist; Maria Jones, Research Analyst <u>External Researcher</u>: Mushfiq Mobarak, Yale University

Field Coordinator: Cindy Sobieski, DIME

<u>Data collection:</u> Innovations for Poverty Action.

BANGLADESH: Integated Agricultural Productivity Program (IAPP)

The Impact Evaluation (IE) of the IAPP project will contribute to understanding the drivers of technology adoption through two lenses. First, the overall project approach is being evaluated using a randomized phase-in of project villages. Second, the "Demonstration Plot Evaluation" is testing innovative implementation modalities within the approach to understand what mechanisms can deliver higher results.

Baseline Report: The final version of the baseline report will be released in the first quarter of FY14,

Follow-up Report: Two reports will be prepared and disseminated in FY14: a summary of initial findings for the overall impact of IAPP, and a midline report on the demonstration plots evaluation. A BBL organized with the Bangladesh Country Office to disseminate these results.

Missions: DIME will join a supervision mission to Bangladesh mid FY14, to share findings from the follow-up survey and initial results from the Demonstration Plots Evaluation.

Follow-up Survey: a brief monitoring survey for the fisheries component of IAPP is planned for the first quarter of FY14.

Risks & Challenges: We expect that the political context in Bangladesh will continue to pose challenges to our work in Bangladesh, as national strikes are likely to continue. There is a risk that impact evaluation activities will be disrupted if unrest worsens as elections approach.

DEMONSTRATION PLOT EVALUATION

METHODOLOGY

Randomized Control Trial (RCT) compares 3 approaches to demonstration plots (DPs)

- Regular DPs: standard model
- Shared DPs: 2-6 farmers share demonstration plot
- *Incentives for Self Demonstration*: all farmer group members offered a small incentive to demonstrate on their own plots

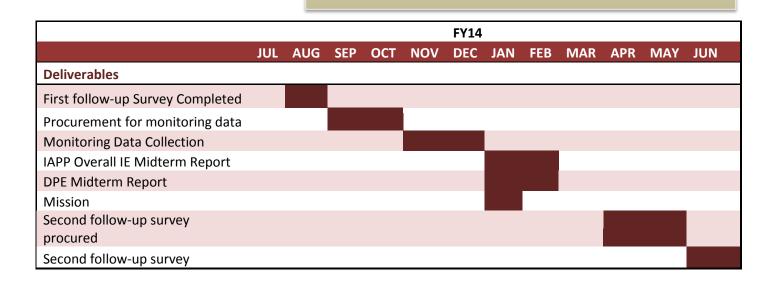
RESEARCH QUESTIONS

- To what extent can "learning by doing" increase technology adoption over "learning by observing"?
- Which approach to demonstration plots results in the highest level of technology adoption?

DATA COLLECTION

Data will be collected on the same schedule as for the Overall Impact Evaluation

Bangladesh FY14 Workplan



RWANDA: Land Husbandry, Water Harvesting & Hillside Irrigation (LWH)

OVERALL IMPACT

METHODOLOGY

Pairwise matching at watershed-level

- Treatment sites receive LWH interventions starting 2012
- Control sites do not participate in LWH

RESEARCH QUESTIONS

 What is the impact of the full package of LWH interventions on agricultural productivity, household income, and food security?

DATA COLLECTION

Baseline [May-Aug 2012]

 paper questionnaire with field-data entry, funded by LWH with technical support from DIME

First follow-up [May - Jun & Oct-Nov 2013]

electronic data collection

Second follow-up [Oct - Nov 2014]

Electronic data collection

Endline [Oct - Nov 2016]

• Electronic data collection

The Rwanda impact evaluation includes three main components: an overall impact evaluation of the LWH approach, a rural finance component testing new saving products for farmers and an agricultural extension component testing farmer feedback mechanisms.

Missions: we anticipate three missions to Rwanda in FY14, in September/October, February, and May. The objective of the September mission will be to introduce the new field coordinator, to share preliminary analysis from the first follow-up survey, and to prepare for the second follow-up survey. The objective of the January mission will be to share preliminary findings from the second follow-up survey, participate in the WB supervision mission, and plan the irrigation component evaluation. The objective of the May mission will be to disseminate final reports for the agricultural extension and rural finance component evaluations, and to prepare for follow-up data collection.

Follow-up Survey: data will be collected for a second follow-up household survey in the second quarter of 2014.

Rural Finance evaluation: For the first phase of rural finance evaluation, a midterm report is expected mid FY14, including data from product registration and the first agricultural season. A final report, including administrative data on account usage and the first two agricultural seasons, is planned for late FY14. For the second phase of rural finance testing, a

RESEARCH TEAM

<u>DIME-GAFSP Team</u>: Florence Kondylis, Senior Economist; Daniel Stein, Economist; Maria Jones, Research Analyst <u>External Researcher</u>: Mushfiq Mobarak, Yale University <u>Field Coordinator</u>: Jasmeen Batra, DIME

<u>Data collection:</u> Synovate Uganda

RURAL FINANCE EVALUTION (Phase 1)

METHODOLOGY

Randomized Control Trial with 3 treatment arms

- Targeted Savings Account (no withdrawal restrictions)
- Commitment Savings Account (withdrawals only allowed at times set by farmer on account opening)
- Control: no new accounts offered

RESEARCH QUESTIONS

- What are the determinants of take up for the new saving products?
- Is the commitment savings product more effective than the targeted savings product in increasing the use of agricultural inputs and decreasing loans?
- Are withdrawal restrictions associated to significant welfare losses, and to what extent do they offset the benefits of the product in helping farmers invest in inputs?

RURAL FINANCE EVALUATION (Phase 2)

METHODOLOGY

Agricultural Extension Scorecards - Randomized Control Trial

- Treatment groups receive 1 of 3 types of scorecards: graphic-based, individual interview, or phone interviews
- · Control: no scorecards

Farmer Feedback Loops - Randomized Control Trial

- Treatment 1: Farmer groups fill out logbook
- Treatment 2: toll-free hotline introduced
- Control: No new feedback loops

RESEARCH QUESTIONS

- Do scorecards empower farmers to demand better agricultural extension services? What type of scorecard is most cost-effective?
- Will new feedback tools lead to better service provision?
- Does the behavior of extension officers change when scorecards are introduced in their area?

DATA COLLECTION (For Rural Finance & Extension)

First follow-up [May - Jun & Oct-Nov 2013] → electronic

Second follow-up [Oct – Nov 2014] → electronic

preliminary report on the launch and registration of new products in Rwamagana district will be available in the second quarter of FY14.

Agricultural Extension evaluation: A midterm report is expected mid FY14, reporting on the three rounds of agricultural extension scorecards and the household survey data after the first season. A final report is expected late FY14, reporting on all scorecards, feedback loops, and behavior changes over two agricultural seasons.

New directions: DIME will work closely with the LWH team to design an impact evaluation for the irrigation component of the project. A brief concept note for this evaluation will be available by the end of the fiscal year.

AGRICULTURAL EXTENSION EVALUTION

METHODOLOGY

Agricultural Extension Scorecards - Randomized Control Trial

- Treatment groups receive one of 3 types of scorecards: graphic-based, individual interview, or phone interviews
- Control: no scorecards

Farmer Feedback Loops - Randomized Control Trial

- Treatment 1: Farmer groups fill out logbook
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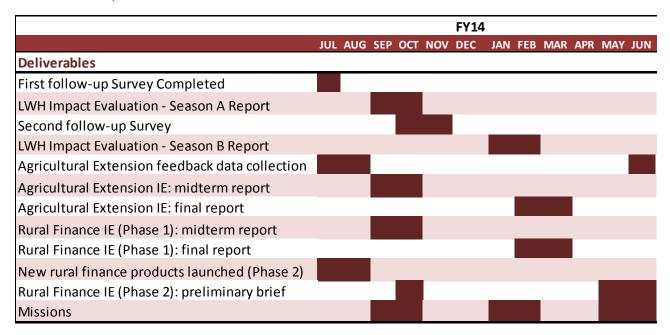
RESEARCH QUESTIONS

- Do scorecards empower farmers to demand better agricultural extension services? What type of scorecard is most cost-effective?
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- Does the behavior of extension officers change when scorecards are introduced in their area?

DATA COLLECTION (For Rural Finance & Extension)

Same schedule as for the rural finance evaluations.

Rwanda FY14 Workplan



HAITI: Project for Technology Transfer to Small Farmers (PTTA)

OVERALL IMPACT OF PTTA

METHODOLOGY

Randomized phase-in of project areas

- Treatment area residents can participate in PTTA in 2013
- Control areas residents are eligible for PTTA in phases, starting in 2014

RESEARCH QUESTIONS

- Can a single infusion of all necessary inputs for a technology result in sustainable improved yields?
- What are the short-term effects of the extensive assets provided by the project? What are the longer-term effects on learning, use of agricultural inputs, and capital accumulation?
- What is the overall impact of the PTTA on agricultural productivity, food security, and income?

DATA COLLECTION

Baseline [October-December 2013, expected] → Paper

First follow-up [Jun - July 2014]

Second follow-up [Nov - Dec 2014]

Third follow-up [Jun - July 2015]

Fourth follow-up [Nov - Dec 2015]

The PTTA project provides "packages" of vouchers to farmers, which are redeemable for goods and services necessary to adopt a more productive farming practice. Farmers are eligible to receive a package only once. The PTTA impact evaluation will test this "big push" theory for agricultural inputs by carefully measuring the effects of the packages both in the short and medium term. The PTTA IE is being conducted as a partnership between DIME and the Paris School of Economics (PSE).

PTTA Concept Note: During late FY13, the PTTA concept note was submitted for review. It will be finalized and distributed in early FY14.

Baseline for PTTA: The baseline questionnaire for the PTTA IE has been designed, and procurement of a baseline firm began in FY13. The PTTA intervention is demand-driven, meaning that participants are only selected after they have expressed interest in the program. The implication for the evaluation is that only farmers who have registered for program support will be sampled. Hence, the baseline survey can only begin after the farmer registry is completed in the evaluation areas. Based on current estimates, this will be in October or November 2013. After the baseline has been completed, a baseline report will be produced

First Follow-up Survey: The first follow-up survey for PTTA is planned for late FY14. This is meant to be coordinated with the first harvest after PTTA vouchers are distributed. If the voucher distribution is delayed, then the first follow-up will not happen until FY15.

RESEARCH TEAM

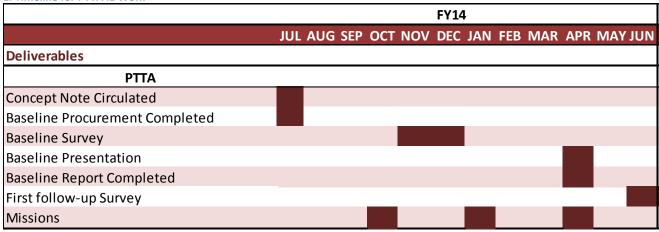
DIME-GAFSP Team: Florence
Kondylis, Senior Economist; Dan
Stein, Economist; Maria Jones,
Research Analyst
External Researchers: Karen
Macours & Jeremie Gignoux, Paris
School of Economics
Field Coordinator: Sebastien
Gachot, Paris School of Economics

Missions: The DIME team plans to visit Haiti regularly during FY14. One mission will support the PTTA data collection, in around

October. The second will be to assess the randomization strategy for PTTA and provide support to the RESEPAG II data collection, around January. The third mission, in April, will be to disseminate the results of the baseline survey and to prepare for the first follow-up.

Risks & Challenges: The political context in Haiti makes impact evaluation work challenging, specifically due to the risk of political unrest and very high operating costs. First, the government team is supportive of impact evaluation and has agreed to the randomized phase-in in principal, but reserves the right to cancel the randomization if it causes unrest in the project areas. The geographic phase-in is planned to extend over multiple seasons, but it is not clear how long it will last in practice. As a result, the IE team will need to collect frequent follow-up surveys, in case the integrity of the control group is compromised. Second, costs in Haiti are very high. The competitive bids for the survey work show a per-questionnaire cost of around \$125, which is much higher than the cost of surveys in other countries. Implementation challenges require frequent data collection to ensure the integrity of the control group; however, this will make the impact evaluation run significantly over budget. Sample size is still under discussion, yet current estimates put the cost of the data collection at over \$1,000,000 dollars.

1. Timeline for PTTA IE Work



HAITI: Relaunching Agriculture (RESEPAG II)

The RESEPAG II project (supervised by the IADB) financed matching grants to agricultural service providers. In FY13, the Ministry of Agriculture (MARNDAR) and World Bank teams for RESEPAG II decided to use their own project funds to finance an impact evaluation of RESEPAG II, and have asked DIME for

OVERALL IMPACT OF RESEPAG II

METHODOLOGY

 Still under discussion and will depend on number and type of matching grant applications received

RESEARCH QUESTIONS

- What is the overall impact of RESEPAG II on farmer yields and income?
- What is the effect of additional training on the income of female entrepreneurs?

DATA COLLECTION

technical assistance. DIME has begun working on developing an impact evaluation plan for RESEPAG II. The team has also received a grant from the "Women's Leadership in Small Medium Enterprises" program in order to study how additional training and organization of women can increase womens' benefits from RESEPAG II.

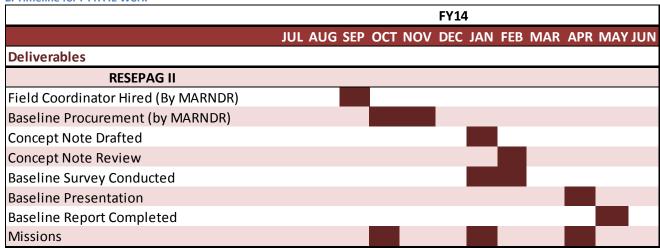
Concept Note: Resepag II is a demand-driven program, and opportunities for impact evaluation will depend heavily on the number and type of proposals for matching grants received. DIME has produced a document with a number of possible strategies depending on the number of applications. These strategies will be expanded into a full concept note once there is further clarity on the number of proposals that will be received. This expected to happen around December 2014.

Field Coordinator: MARNDR has agreed to hire a field coordinator to oversee the RESEPAG II impact evaluation. This coordinator will work closely with the DIME team to finalize the IE design and oversee the baseline survey.

Baseline: The baseline for RESEPAG II will be conducted once the proposals for matching grants are received, expected around December 2013. Survey procurement and preparation will begin before this so that the survey can begin shortly after applications are received.

Missions: The DIME team plans to visit Haiti regularly during FY14. A mission in October (timed to support the PTTA data collection) will provide an opportunity to refinet he RESEPAG II design. The second mission will support the RESEPAG II data collection, around January. The third mission, in April, will be to disseminate the results of the baseline survey.

2. Timeline for PTTA IE Work



MONGOLIA: Livestock & Agricultural Marketing Project (LAMP)

OVERALL IMPACT

METHODOLOGY

Randomized control trial with pairwise matching

- Treatment: soums receive LAMP interventions
- Control: *soums* will not receive LAMP unless the government decides to scale up LAMP
- Eligible soums were grouped into matched pairs based on observable characteristics, then divided into treatment and control by lottery

RESEARCH QUESTIONS

- What is the impact of LAMP investments on HH income from livestock and horticultural products? On output of livestock products (meat, milk, wool, cashmere)? On investments in livestock quality?
- What are the effects of the LAMP on herd sizes and compositions? On the share of marketed products going through contracts and established companies?

DATA COLLECTION

Baseline [April - July 2013]

Midline [April-July 2015]

Endline [April - June 2017]

All rounds have electronic data collection.

The impact evaluation of Mongolia uses random assignment of program areas to causally determine the impact of LAMP as a whole. The project became effective in April 2013, with activities on the ground beginning in FY14.

Baseline Survey: The baseline data collection ran from April-July 2013. A presentation on preliminary baseline data will be delivered to the ministry and operational team in August, and the final baseline report will be released in September

After baseline activities are completed, there are no other activities planned for the Mongolia IE for FY14.

RESEARCH TEAM

<u>DIME-GAFSP Team</u>: Florence Kondylis, Senior Economist; Dan Stein, Economist; Maria Jones, Research Analyst

<u>Field Coordinator</u>: Aaron Szott, DIME <u>Data Collection</u>: Mongolia Center for Development Studies & MEC LLC

3. Timeline for Mongolia IE Work

	FY14											
	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Deliverables												
Baseline Data Collection Completed												
Baseline Presentation												
Baseline Report Completed												

NEPAL: Agriculture & Food Security Project (AFSP)

The AFSP project became effective in FY13, and project activities will begin in FY14. The general IE design has been agreed upon with the project team, though some details are still being finalized. The government would like to use impact evaluation to understand how supply-side nutritional interventions (kitchen gardens, livestock, etc) can be most effectively combined with demand side interventions (behavioral change communication [BCC], nutritional education, etc.).

Concept Note: A concept note has been drafted, and continues to be refined as details of the IE are finalized. The concept review will take place during the first half of FY14..

Baseline Survey: DIME has selected New Era as the data collection firm, and procurement will be completed in early FY14. The baseline cannot begin until project areas are chosen, which is expected to happen in August 2013. The baseline survey is expected to begin in Sept 2013. A baseline presentation and report will be delivered after data collection is completed.

RESEARCH TEAM

<u>DIME-GAFSP Team</u>: Florence Kondylis, Senior Economist; Dan Stein, Economist; Maria Jones, Research Analyst <u>Additional Researchers</u>: Soham Sen, World Bank (SASSP); Slesh Shrestha, National University of Singapore <u>Field Coordinator</u>: Ritika D'Souza, DIME

OVERALL IMPACT & Nutrition Evaluation

METHODOLOGY

Randomized phase-in at the level of the village development committee (VDC)

- Treatment VDCs receive AFSP interventions starting in 2013
- Control VDCs receive AFSP interventions no earlier than 2015
- BCC interventions will also be phased in randomly.

RESEARCH QUESTIONS

- What is the impact of AFSP on agricultural productivity, food security, and household income?
- What is the relative effect of supply versus demand side interventions on nutrition practices?

DATA COLLECTION

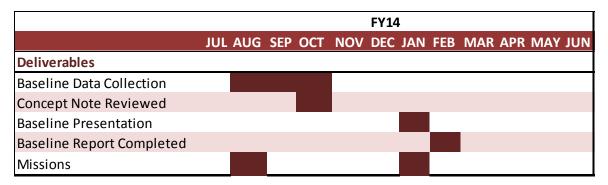
Baseline [Aug-Oct 2013] -> Paper

Follow-up data collection timeline to be determined after project phased-in implementation schedule is finalized.

Missions: Two missions are planned for FY14. The first will take place in August to support the baseline data collection. The second, in around January, will present the results from the baseline survey and continue planning for the nutrition evaluation.

Nutrition Evaluation: DIME is working closely with the PIU and the Ministry of Health in Nepal to finalize the design of the IE of the nutrition component of AFSP. There will be a separate randomized phase-in at the VDC level of the BCC component of the project, which will allow separate measurement of the effects of the agricultural interventions versus BCC on nutritional outcomes. The BCC component of AFSP is not expected to begin until early FY15.

4. Timeline for Nepal IE Work



Liberia: Smallholder Agricultural Productivity Enhancement and Commercialization (SAPEC)

The SAPEC project was added to the DIME-GAFSP portfolio in late FY13. The DIME team has had an initial conference call with the operations team, and the IE should be designed in FY14. Given DIME's limited involvement in the project so far, it is not possible to create a detailed timeline for the activities in Liberia. However, a DIME team member will likely join the operations team on the next supervision mission, scheduled for some time in Fall 2013. Likely activities for the Liberia project in FY14 are: hiring of a field coordinator, drafting and reviewing a concept note, and conducting a baseline survey.