Disseminating Innovative Resources and Technologies to Smallholders (DIRTS)

Newsletter | April – June 2015

The DIRTS project is entering another exciting period as the 2015 agricultural season is about to begin. This newsletter captures the highlights of our intervention activities during the second quarter of 2015, in addition to a summary of our insurance marketing results.

Insurance Intervention

Concluding the 2015 Marketing Season

As the DIRTS team recently finished collecting premium from the community residents acting as marketers, the sales of rainfall insurance for the 2015 marketing period has come to a conclusion. Although the uptake of the FAARIGU policy was expected to be negatively affected by the fact that no payouts were recorded last year, sales still managed to nearly double last year's figure; overall, around 800 farmers in the DIRTS community actively insured a total of 1,070 acres of land through FAARIGU. In order to better evaluate the impact of the insurance on the farmers, an additional ten randomly selected farmers and a village chief in each community have also received extra insurance to cover additional acreage. During and after the farming season, we will see if shielding against drought-related risk has an impact on farmers' decisions of how much land to cultivate and using which products and techniques – i.e. whether farmers change their investment decisions into their land compared to previous years.

Communities Shows on Drought Insurance

The effort and creativity that had gone into the marketing of the insurance determined the boost in insurance take-up among community members. Continuing to address the lack of trust and information among the community members, the DIRTS team, in cooperation with the Regional and District Offices of the Department of Agriculture, conducted community video projections. Started in April and intensified in May, this activity involved showing a video drama on the choice of whether or not to invest one's own money to buy a drought insurance policy. The show took place once in each DIRTS community and was facilitated by the Regional and District Offices of the Department of Agriculture. Each show was followed by a Q&A session, during which the information crew tapped into farmers' curiosity and skepticism around the insurance product. Video vans are a popular means of delivering education and information to communities and in general are enthusiastically received by community members. The insurance video van tours were no exception and turnout was always in the hundreds of people.

An information van used for insurance video screening, provided by MoFA.

Drought Insurance Air Time

Meanwhile, the DIRTS team in cooperation with GAIP and Radio Savanna completed the program of fortnightly radio shows centered on insurance, featuring two drama celebrities in Ghana's Northern Region (Janda and Sanda). Listeners were many and their calls poured in at the end of every show, during the open line session for questions. For more details regarding this program, please refer to the January – March issue of our Newsletter.

IPA staff answering questions from listeners of Radio Savanna.

Extension Intervention

CEA Training

The Community Extension Agents (CEAs) that will deliver e-extension through a mobile device in 81 of the DIRTS communities underwent a one-month training in Tamale between March and April 2015. The training was led by Senior Researchers from the Savanna Agricultural Research Institute (SARI), assisted by 38 Agricultural Extension Agents (AEAs) from the 13 districts where DIRTS operates. The curriculum of the training was categorized into two -- theory lessons and field practice; the latter took place at a demonstration field in the Kumbungu District developed purposely for this training. The demonstration field was managed jointly by the DIRTS team and AEAs of the Department of Agriculture. Practical sessions also included visits to non-project communities where CEAs practiced the delivery of extension messages on topics they had treated to community members. The March-April training was a follow-on to the curriculum the CEAs took in 2014. This year, however, the content was expanded to include not only information on maize, but also on legume crops (groundnut, soybean and cowpea). The training also delved into administering a short farmer-level need assessment through an Android device to determine which content to share at each CEA-farmer interaction.

As part of the field training session, an AEA demonstrates to the CEAs the technique of applying chemicals.

Beginning of 2015 Operations

Maize extension messages started to be delivered on April 20th, followed by legumes messages some eight weeks later (because the legumes farming season is timed after the maize one). The default recipient of maize messages is the primary respondent of the DIRTS' main surveys – ten household-heads in 81 DIRTS communities. Legume messages, instead, are targeted to the second respondent, who is usually the first respondent's wife. The reason is that maize is the most widely cultivated crop, taking the vast majority of a household's acreage. Maize farmland is usually managed by men, and often the largest share within the household rests with the household-head. It also attracts the lion's share of labor availed by other household members. Women-managed plots, instead, are commonly legume-cultivated. Such crops are less labor-intensive and the season starts later, after the maize labor needs have been satisfied. Since the beginning of CEA activities, a total of 8,348 maize extension messages, and 3,111 legumes messages have been delivered.

Policy Breakthrough
– CEA Pilot in the Mion District

After seeing CEA in action in 2014, the Mion District Office of the Department of Agriculture, the local government body in charge of administering resources and policy making at the District level in the agriculture sector, expressed the wish of replicating the CEA model in a handful of communities outside of the DIRTS sample. The Pilot was organized by the Mion District Director in cooperation with the DIRTS team. Some variations were effected to the model, including the fact that the CEA has group interactions, unlike in the original model where the CEA meets individual farmers. The core of the model is maintained: the message delivered is determined by farmers' future activities on the farm. At the end of the message, the CEA deals with questions and relays to the AEAs whenever questions asked get too technical. In the framework of this pilot, an average of 62 farmers per community are receiving weekly messages from the CEAs. IPA's assistance consists of providing extension material (videos and handouts), tablets for video extension delivery and a laptop to store the extension content and reports coming from the pilot communities.

Agro-input Intervention

Updating List of Inputs

DIRTS staff has been working on updating the list of available agro-inputs. This operation was made necessary by the frequent change of name, packaging, or brand of the same agro-inputs, which created confusion among farmers. Marketing of agro-inputs in the second quarter was divided in 5 rounds. In the first round (January-February) sales were very low. To solve this problem, more information was provided to the farmers on planning for the upcoming season. In the second and third round sales started to improve. During the fourth round (June-July), at the peak of the farming season, sales (especially weedicides) went extremely well. In the fifth round (ongoing) farmers are even buying inputs at market price, without worrying about obtaining subsidized prices.

The marketing of inoculants was initiated during the third round. Inoculants are a particular type of input that provides Nitrogen to the crop in order to accelerate growth and increase yield. SARI was identified as the main distributer of inoculants. In cooperation with SARI, flyers and posters were realized in order to explain how to use inoculants on legumes. Inoculants were received and started being distributed during the fourth round.

A farmer receiving agricultural inputs he had ordered through the Input Intervention team.

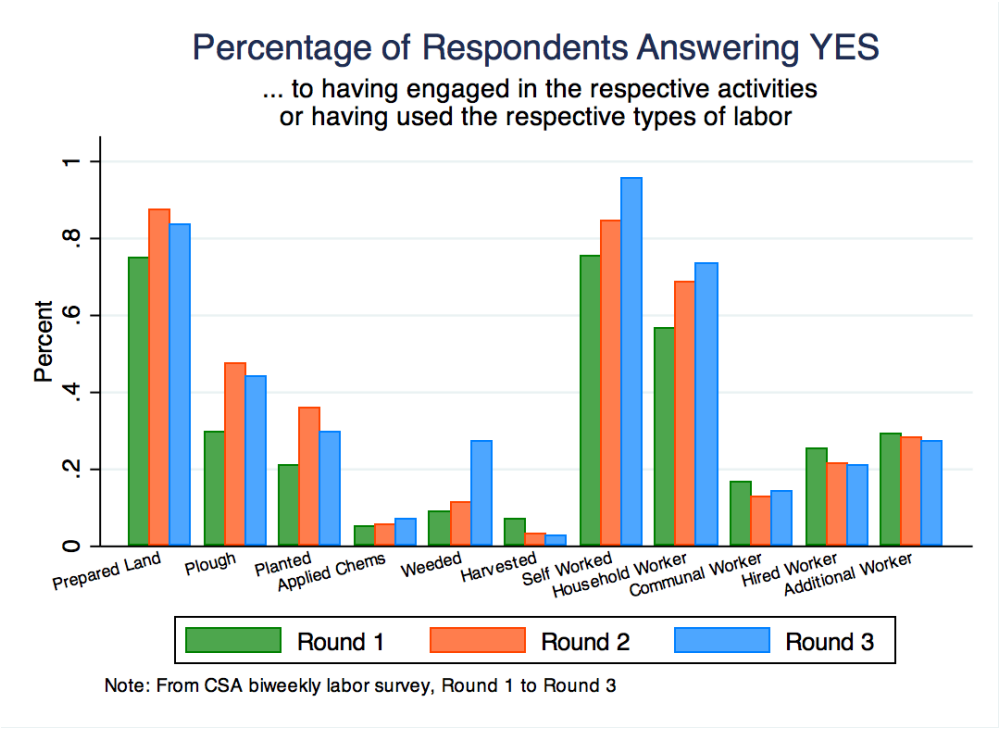
Research Management Column

Biweekly Labor Survey

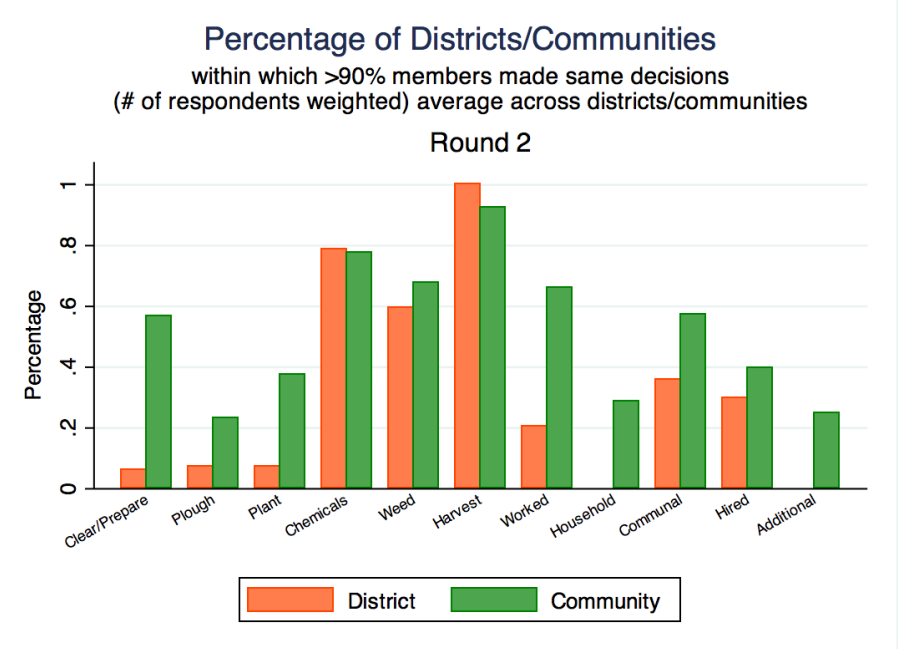
The latest survey launched was the Labor Survey, a longitudinal data collection exercise, with biweekly frequency, that will last from the beginning (April) to the projected end (October) of the rainy season, covering the entire study sample (3236 households). The purpose of this survey is to collect sufficient data to substantiate more detailed exploration of the role of labor costs in the overall context of agricultural investment decisions and new technologies adoption.

The survey starts with questions about the agricultural activities the household has been engaged in during the past two weeks (clearing plots, ploughing, planting, applying chemicals, weeding, harvesting), as well as a few details regarding how the activities had been carried out. Then for each type of labor (self, household member, communal member, hired labor, additional labor), the Community Survey Assistants (CSAs) ask for the following information: the number of male laborers of this type, the number of female laborers of this type, the total number of days the male laborers have worked, the total number of days the female laborers have worked, and the average time this type of laborer has worked.

To date, three rounds of surveys have been fully carried out, and the fourth one will be finalized on the 3rd week of July 2015. Preliminary analysis of the first three rounds' data has shown that the most popular forms of labor are self-labor and the use of household members. As expected, barely any farmers have engaged in harvesting and applying chemicals, while around 80% of the respondents have been preparing land for planting during the past period.



Moreover, most of the agricultural practices of members within a community seem to be more similar to each other than when these practices are compared across communities. This pattern can be seen from the Round 2 example's figures below, including the percentage of districts or communities within which more than 90% of the members made the same decision (i.e., for the community level, it is the percentage of communities where at least 18 out of 20 respondents in that community made the same decision regarding whether or not to harvest, whether or not to work, etc.). This pattern holds true for most of the types of activities that farmers have been performing, as well as all the labor decisions regarding whether or not to use a particular type of labor.



RESEARCHERS: Dean Karlan, Christopher Udry, Mathias Fosu, Shashidhara Kolavalli

PARTNERS: Ghana Department of Agriculture
International Food Policy Research Institute (IFPRI)
Savanna Agricultural Research Institute (SARI)
Ghana Agricultural Insurance Pool (GAIP)

LOCATION: Ghana

SAMPLE: 3,240 households
in 162 farming communities

TIMELINE: 2014-2017

THEMES: Agriculture

POLICY GOALS: Technology Adoption

CONTACT
Elettra Legovini: elegovini@poverty-action.org
Website: www.poverty-action.org

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