

# Disseminating Innovative Resources and Technologies to Smallholders (DIRTS)

Newsletter | January-March 2015



In this edition, you can read about our exciting annual survey findings (page 4). In addition, you can read highlights of the implementation arms of the project, which include our recent experience with marketing drought index insurance to rural farmers on radio in Northern Ghana, training 81 Community Extension Agents (CEAs) on Android-based extension services and preparing them for the upcoming farming season and a workshop conducted with ten input retailers on results of 2014 work and how to improve the supply chain in 2015.

## Insurance Intervention

### Radio Savannah Listeners Tune into a Special Program

After focus group interviews with farmers, the DIRTS team identified that lack of trust and information among farmers about the insurance product might be the main barrier to uptake.

To increase farmers' awareness, the DIRTS team partnered with GAIP and Savannah Radio to produce and air a special program on drought insurance combining a drama show and live Q&A with listeners. Radio Savannah has significant coverage in the Northern Region, its programs being fraught with announcements and popular programs targeting listeners from rural communities.

Alhaji Muhammed Katu (General Manager of GAIP), Yakubu Mahama (a farmer who insured his farm through IPA in 2013 and 2014) and members of the GAIP marketing team working in the Northern Region were on the Q&A panel. The show was aired biweekly in March and April. The DIRTS team insured that the drama and live Q&A were aired at prime time, during the "Batoro" show.



*Farmer Yakubu Mahama (left) and GAIP General Manager- Alhaji Muhammed Katu (right) during a live Q&A Savannah Radio Studio, Tamale, March 28<sup>th</sup>, 2015*

## Android-based Extension Intervention

### 81 CEAs Attend a Refresher Training to Prepare for 2015 Farming Season

Starting on March 2nd, the DIRTS team conducted a four-week long training for 81 Community Extension Agents (CEAs). Such training provided a learning and discussion platform for CEAs, DIRTS partners from SARI, the District Departments of Agriculture and Agriculture Extension Agents (AEA); the training sessions and interactions among participants allowed to refine the planning for CEA activities for the 2015-farming season.

Northern Regional Director of the Department of Agriculture William Boakye-Acheampong opened the training addressing the CEAs with an enticing speech, praising the results of their hard work in 2014 and reminding them of the unique opportunity each one has to contribute towards the improvement of the agriculture sector in Northern Ghana.



*Northern Region Director of the Department of Agriculture- William Boakye-Acheampong opening four-week long CEA training Tamale. March 1<sup>st</sup>. 2015*

The training combined lecture-style sessions and field visits to a demonstration field to teach the CEAs best practices in the cultivation of maize and legumes. CEAs were also given Android devices with a large screen for better visualization of the extension videos during interactions with farmers. CEAs were trained to use these new devices and taken to the communities for practice runs.



*Group of CEAs pose of a picture after testing their new Android devices at a practice run. Botanga, Northern Ghana*

## Agro-input Intervention

### DIRTS Invites Partner Agro-Input Retailers to Plan for 2015 Farming Season

*"We used to record zero sales during the off-farming season, but with the introduction of the project some inputs were sold at that time as well" - Fuseni Dokurugu, (Input retailer from Mion District)*

On January 12th the DIRTS team hosted a workshop with the input dealers who are partners and implementers in the Inputs Marketing project component. The workshop provided a platform to discuss 2014 activities, sales results of chemicals and certified seeds, share lessons and finalize the planning for 2015. As one of the workshop sessions, the input dealers were given a presentation on the DIRTS Insurance intervention. Farmers often turn to their local agro-input dealers for extension advice and information on products and services to support their farms. Informing retailers of the FAARIGU insurance product enabled them to answer farmers' questions moving forward.

During the same workshop, the DIRTS team and retailers reviewed and updated the agro-input catalog for 2015, which now includes around 120 products (fertilizers, weedicides, insecticides, storage chemicals, certified seeds and other equipment).



Agro-input Retailers explore ways to improve sales in 2015 farming season. Tamale, January 12<sup>th</sup>, 2015

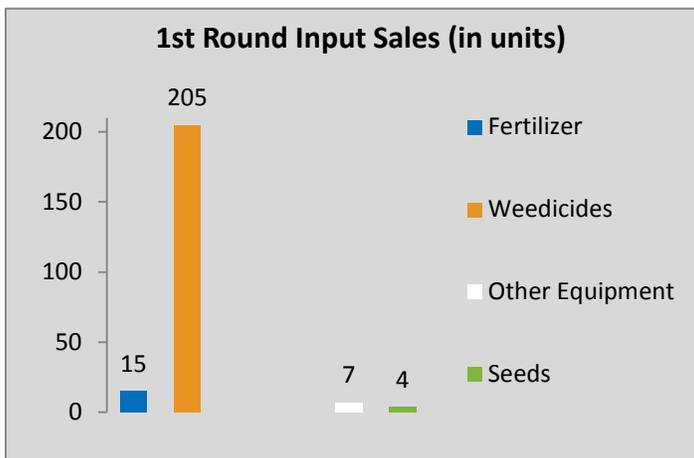
Throughout the first round of input orders, DIRTS team observed farmers' absolute preference of inputs they used in the past. Loyalty to brand and packaging was crucial to the farmers who reject substitute brands of the same chemicals. While chemical companies change their product appearance often, farmers are not informed or educated about input differences and/or similarity. Hence, majority farmers left confused and even frustrated that they cannot find the same input product they used in the past.

### First Round of Input Orders implemented in 60 DIRTS Communities

The first round of input orders from 60 DIRTS communities ended in mid February. Sales records show that weedicides were the best selling inputs making up a total of 89 percent of the orders by farmers, followed by fertilizers, and then all other items.



A poster with input dealer contacts was placed in each DIRTS community

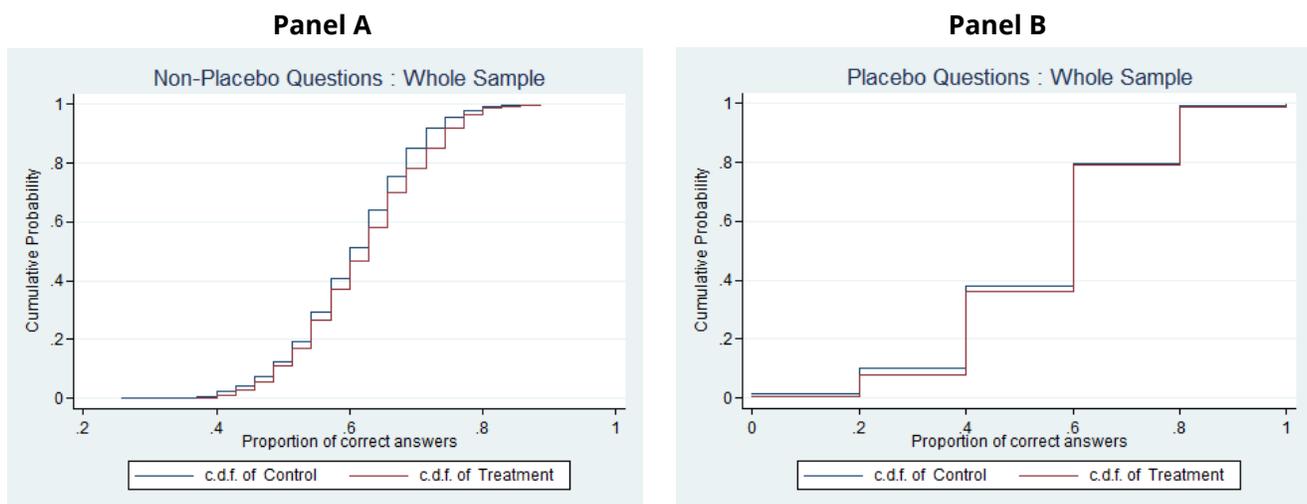


## Research Management Column

The Knowledge and Practice survey, rolled-out from beginning December 2014 throughout to January 2015, aimed to explore the intermediary assumptions of the DIRTS project' second treatment (android-based extension services). In other words, the survey was intended to identify whether farmers were, firstly, absorbing new knowledge, and, secondly, changing their practice accordingly.

The survey was structured in two sections. The Knowledge section, was designed as a quiz on typical extension service contents, much of which being covered by IPA's extension treatment. The second section, Practice section, collected information on which were the practices actually being implemented by the farmers. Furthermore, the Knowledge Section questions were divided into two categories – non-placebo and placebo. The non-placebo questions were based on topics covered by IPA's extension services, while the placebo ones did the opposite. The rationale was to distinguish between a set of questions for which you would expect to see no significant difference between control and treatment (placebo questions) as opposed to other subjects covered (non-placebo questions).

Analysis shows that farmers who received the extension messages from the Community Extension Agents (CEA's) did significantly better on the non-placebo questions while there was no significant difference on the placebo questions (as was expected). The figures below show the results of farmers' answers over the entire sample (The graphs show the probability that people got the corresponding proportion of answers, or less, correct on the x-axis). Panel A shows that farmers in the receiving treatment have higher scores at the same cumulative probability than control farmers for the non-placebo questions, whereas, Panel B shows no significant difference for the placebo.



The non-placebo questions were further divided into three categories – qualitative (eg: during land preparation, in what direction should you plough?), quantitative (eg: for maize, how many times should fertilizer be applied?) and true/false (eg: drying maize on the field is better than at home). Analysis shows that treatment farmers did significantly better on qualitative questions, while there was no difference in the other two categories.

Likewise, the Practice Section was used to create an index of agricultural practices considered as beneficial. Analysis of this household index in each community shows that the extension treatment has a significant impact on promoting the adoption of these 'good practices'.

For both sections, analysis also shows that there are positive impacts on learning, as well as adopting good practices, from knowing, being related to or discussing plot matters with the CEA. This indicates that proximity to a CEA is correlated with knowledge accumulation and better practices' adoption amongst farmers. There has not yet been any significant spillover finding between treatment and control households, in treatment communities, thus showing no evidence of knowledge being spread through social networks, as would be hoped for.



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**LOCATION:** Ghana

**SAMPLE:** 3,240 households in 162 farming communities

**TIMELINE:** 2014-2017

**THEMES:** Agriculture

**POLICY GOALS:** Technology Adoption

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