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FIELD TRAINING EVALUATION SURVEY RESULTS FROM ESOKO CALL CENTER OPERATORS

Report prepared by Kate Polakiewicz, Mark Bell, and Amanda Crump

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Survey design by TW Wong



USAID
FROM THE AMERICAN PEOPLE



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EXECUTIVE SUMMARY

As part of MEAS, UC Davis conducted a workshop with call center operators (ACOs) and a subset of farmers involved with Esoko. The workshop held in Ghana during 2015 had the objectives to enhance the service provided through the call center (full objectives are detailed below). This paper reports on a post-workshop follow-up to assess the effectiveness of the workshop and to identify possible next steps.

OBSERVATIONS ON THE MAJOR TRAINING ACTIVITIES

The training event included three primary activities.

- 1) **Crop Calendar.** Survey findings suggested the Seasonality Crop Calendar exercise (Appendix B) was very useful and should be repeated at any subsequent trainings.
- 2) **Mind Map.** While considered useful, it is felt that the mind map exercise at the first training was sufficient.
- 3) **Phone Literacy.** This exercise was highly interactive and engaged the farmers in a very positive way. A number of the participants clearly benefited from an improved understanding of the basic elements of their cell phones.

OBSERVATIONS ON THE OVERALL VALUE OF THE TRAINING

All participants indicated they benefited from the course and have used information gathered or learned during the training. It was suggested that this type of training was very beneficial and should be repeated as it

- 1) builds a greater bond between service operators and farmers,
- 2) expands the understanding of the call center operators of farmers' circumstances, and
- 3) further raises awareness of the Esoko service.

Feedback suggested future trainings should include researchers and could be held every 3 months.

OBSERVATIONS ON THE TRAINING EVALUATION IN GENERAL

In terms of the actual training evaluation process, there are a number of possible short and longer-term evaluation options that could be considered. Many of these suggestions could be considered standard for any training event and relate to elements such as pre- and post-tests, measuring participant attitudes and skills immediately following or shortly after the training and assessing impact at the farm level post-training. However, it should be kept in mind that in such training impact surveys, it is actually quite difficult to assign impact to a training event per se as there are other possible sources of learning both pre- and post-training.

BACKGROUND - DESCRIPTION OF THE LARGER PROJECT

Esoko, an agricultural call center in Ghana, provides technical information to Ghanaian farmers via mobile phone services. The University of California, Davis through the USAID supported MEAS project managed by the University of Illinois at Urbana-Champaign implemented a study in part to survey farmers in Ghana and to conduct a six-month audit of Esoko. The overall goal of the study was to understand the challenges faced and to determine best practices for future engagement by agricultural call centers.

TRAINING GOALS AND OBJECTIVES

Part of this larger study included several field trainings facilitated by a UC Davis researcher and led by Esoko call center operators (ACO) and community farmers. The intended outcomes of the trainings were

- 1) to facilitate a better understanding on behalf of call center staff of the agricultural information sources used and challenges faced by community farmers with whom they primarily communicate by phone;
- 2) to ensure that the community farmers were informed of the sources and kinds of information available;
- 3) to advise ACOs of the specific production issues community farmers face;
- 4) to ensure ACOs understand how to communicate about the issues and potential solutions;
- 5) to advise farmers on best methods to treat production problems;
- 6) to learn communications styles of farmers in the field and help address farmer issues on-site;
- 7) to make sure farmers felt comfortable with basic phone functions in conjunction with Esoko products; and
- 8) to provide ACOs with a better understanding of how farmers interact with their phones.

TRAINING LOGISTICS

The field trainings were held in March and April 2015 and took place in selected communities (Bontanga, Aduyili, Kumbongyili, Aliipe). They were attended by five ACOs (Adama Attah-Kwei, Akpenga Azuta Joseph, Issifu Mohammed, Johnson Juah Yiah, Rahilu Iddrisu), one call center manager (Mary Naah), one UC Davis researcher (Erin McGuire), and 10-15 farmers. The duration of each of the trainings was two days.

DESCRIPTION OF TRAINING ACTIVITIES

MIND MAP

Farmers were asked about their sources of information for their farming activities and drew a diagram to visually represent the ways in which the sources are linked together. The activity started with the farm at the center of the diagram, and farmers connected it to different types of information sources they have. Each time someone brought up a similar source, more lines were drawn from that source to

the farm, symbolizing the importance of that source in the community. Farmers also talked about whom they go to for what information, creating additional lines from each source.

CROP CALENDAR

Farmers were taken through their crop calendar within the season. They were also made to identify local crop production issues at each stage using the crop calendar. This activity was held in the field where actual examples could be shown to the call center operators. ACOs were able to better understand the issues being explained to them while being physically present in the field. ACOs then explained solutions to the problems in this field setting. Farmers had the ability to talk about why one solution being offered may be difficult for them to implement, or why another might be easier. For a detailed description of the Crop Calendar, refer to Appendix B.

PHONE LITERACY

Farmers were tested about their basic knowledge of phone usage and were taken through primary phone handling skills. They were also taught how Esoko works and how to access Esoko's services.

PURPOSE OF EVALUATION

The purpose of this evaluation was to collect information about the activities and outcomes of the field trainings to assess their effectiveness and impact. The survey was designed with the intention of gathering information in order to inform decisions about future trainings. As surveyors, we wanted to determine if the objectives of the trainings were achieved. Specifically, we wanted to understand:

- the ACOs' impression of the trainings overall;
- the ACOs' opinion on the value of the three training activities (as outlined below);
- whether the trainings gave the operators a better understanding of the issues faced by the farmers they interact with (putting knowledge learned and experience gained into practice);
- whether the in-person interaction with farmers impacts phone conversations with farmers at the call center;
- whether the information gained from the trainings was subsequently shared with other call center operators;
- whether the information the operators gathered about the farmers was later applied to their work;
- whether the training was properly implemented;
- whether training content was appropriate;
- whether timing was appropriate;
- whether participants were appropriate; and
- whether the activities in the training met the needs of the ACOs and/or the participants.

For a complete list of questions asked in the survey, refer to Appendix A.

EVALUATION METHOD

As the number of call center operators who participated in the training was low (five total operators) and four out of five ACOs were available for interview, the survey was designed in an interview format with open-ended questions to give respondents an opportunity to elaborate on their thoughts freely. Most of the data sought via these interviews was qualitative information about the impact of the field trainings. The interviewer conducted semi-structured interviews, which follow a set of pre-defined questions but allow for new questions to be asked during the interview in response to the interviewee's answers. As such, the interviewer asked a series of follow-up questions when appropriate to obtain more information. All four survey questionnaires were conducted via Skype audio calls. At the beginning of each interview, respondents were informed of the purpose of the evaluation survey and were informed that their responses would be recorded anonymously.

SUMMARY OF FINDINGS FROM TRAINING SURVEY

Key takeaways from the three training activities as reported by the call center operators are outlined below.

MIND MAP

The Mind Map was successful for helping ACOs understand where farmers are getting their information.

Farmers mentioned that MoFA (Ministry of Food and Agriculture), IDA (Ghana Irrigation Development Authority), IFDC (International Fertilizer Development Corporation), and NGOs are sources for their technical agricultural knowledge base. Agrochemical dealers were cited as another source for information. Family members or elders in the community are also relied on.

One ACO pointed out that due to this reliance on family and community for information, if Esoko can get their services to just a few people in a community, it has the potential to have a much larger reach.

It was important for ACOs to learn where farmers get their information to determine whether their sources are credible and reliable.

It was helpful for ACOs to know farmers' information sources for the purpose of being able to trace a recommended practice back to the respective advisory institution.

The Mind Map was also useful for ACOs in the instance of contradictory information across advisory institutions.

It is helpful for ACOs to be aware of the differences in technical instruction given by various extension institutions. For example, when a farmer is applying glyphosate, what are the differences in how various institutions teach farmers to apply the glyphosate?

It was noted that Esoko is already in touch with some of the mentioned NGOs and input dealers.

All of the ACOs interviewed found this exercise to be helpful.

CROP CALENDAR

The crop calendar, which outlines which agronomic practices should occur at specific times throughout the year for a given crop, helped the ACOs understand whether the farmers could identify the chronological order of management activities for crop production.

Farmers present at the training could correctly identify the management practices required in the crop calendar for maize, which is predominant in the area. However, they could not always correctly identify the specific chronological order or the consequences of a delay in the implementation of certain practices.

Some farmers identified the correct practices but they would start them either two months earlier or two months later than what Esoko advises (based on the national extension calendar).

Farmers stated that yields were higher when they followed the advised Esoko management practices timelines.

The crop calendar activity was cited as being very interactive.

From the farmers' perspective, call center operators reported that the activity was helpful in that it encouraged farmers to use and benefit from Esoko's information resources, such as input application for maximum efficiency and yield gain, and minimized cost.

Farmers realized how the timing for their agronomic practices differed from those of the national extension calendar.

It was noted that two of the farmers at the trainings had been cultivating the same plots of land for 20 years.

All of the ACOs interviewed reported this exercise to be helpful.

PHONE LITERACY

The Phone Literacy exercise was useful for some of the farmers as they did not know how to access text messages, especially where the literacy rate is low; they did know how to access voicemail or to call back missed calls.

During the trainings farmers were instructed to call back the number left within the text messages even if they could not read the text, and farmers reported that they felt satisfied with this approach.

It was realized that some farmers thought that when they called Esoko, they would be listening to a recording, not speaking with an operator in real time.

It was noted that the farmers in the training had many different types of mobile phones.

The phone literacy activity was noted to be a very interactive exercise.

One ACO thought that this exercise was useful, although they thought it was questionable whether farmers will be able to retain the knowledge they were imparted with during the exercise.

All of the ACOs interviewed considered the exercise to be helpful overall.

KEY OBSERVATIONS

One of the call center operators remarked on the irrigation dam at Bontanga. All of the ACOs interviewed vividly recalled the urea deep placement practice they saw being used in rice production at the Bontanga Irrigation Project Site. One of the ACOs had read about this practice in school, but as agriculture is such a broad field, it's not possible to experience all of the practices first hand. Another mentioned that seeing this practice was quite new to him.

For some of the call center operators it was their first time being in the north of the country. They were able to feel and understand the climate and appreciate how it works, which helps in providing solutions when farmers call. Now they have a vivid mental picture of how the northern part of the country is, and what the fields look like (in the north the fields are more level than in the south). For example, in providing tilling advice, they now know what recommendations to make to farmers.

Another noteworthy observation taken from the trainings was in Aduyili on the topic of bush fire prevention. Farmers were advised not to burn residue after harvest, but to plough it into the soil. Although the farmers knew that this was the recommendation, they informed the ACOs that they still prefer burning the residue as a preventative measure in case a neighboring farmer's fire spreads to their land, risking burning their stored produce and grain.

One training involved a group of farmers who had not previously been exposed to Esoko's services and another training involved a group of farmers who already had interaction with the call center. One operator commented that once farmers have access to Esoko services, they tend to rely more on Esoko's services than on the previous sources of agricultural information. This is especially the case for weather feed data.

During the training, ACOs discussed the yield potential for certain crops given the resources available to the farmers so that they would have an idea of how much they could produce under the right conditions within the means of appropriate and feasible management practices.

After the training, the ACOs had a better understanding of the challenges faced by the farmers. One of the challenges is that farmers do not know when to plant.

When visiting the farmers in person, ACOs were informed of the real issues the farmers face; now when farmers call, they are more able to appreciate the difficulties that farmers go through.

One ACO mentioned that some topics might only come up in the in-person trainings, as farmers might not have the courage to bring them up over the phone.

Now, when farmers call, the ACOs make reference to some of the practices observed during the training such as the urea deep placement. One ACO followed up after the training to learn about the yields of the field that had used urea deep placement.

In the ACOs' experience, gender is always an issue in the northern part of the country. There were women and men all together in the training (in one district there were 20% women in attendance and in another district there were 60% women), but in this culture, women do not speak in front of men in a group setting, even in front of their husbands.

One ACO mentioned that it would be more effective to have two focus groups for the training separated by sex.

In the north, women do not own mobile phones. If Esoko could have a program to help women access mobile phones, it would help to improve agriculture in that area. In the north, when women do have access to phones they call.

Women's role is to sell the goods produced by the men, so if women had access to mobile phones, they could benefit from knowing market prices.

It was noted that farmers were interested in a program in which they could trade their produce in exchange for receiving mobile phones.

It was noted that the trainings were a good opportunity for team bonding amongst the Esoko call center operators.

At the time of the training, all of the ACOs at Esoko were present for the training. Since then, ACOs have been able to share the information they learned with new ACO hires. When meeting new staff not present for the trainings, ACOs had a discussion with them about what they saw when in the field. Also after returning, ACOs wrote a report about the training, which is available for wider distribution.

For some of the farmers who do already use Esoko services, they were able to put a real face to a voice, which was described as "quite a sight to behold."

Overwhelmingly, there was a very human and emotional element to the farmers meeting the call center operators in person for the first time.

None of the ACOs could think of anything negative that they would attribute to their experience of the training.

RECOMMENDATIONS

TRAINING TOPICS

Related to the specific training activities, one ACO mentioned that the Mind Map activity might not need to be repeated as it was quite elaborate and from the farmers' standpoint, they're now very willing to call the call center, but it would be worth it to repeat the Seasonality Crop Calendar training activities. Another recommended action is to include call center operators in the development of training content. Finally, ACOs mentioned that in future trainings it would be helpful to have a researcher accompanying the ACOs to give supplemental information and to fill in any knowledge gaps.

TRAINING FREQUENCY

One ACO mentioned that in order to make more people aware of Esoko's services and able to benefit from Esoko's support along the way, they need to do many more field visits and more training. Frequent field trainings should be encouraged since they help build a strong bond between the operators and farmers. It was concluded that it would be helpful to do more field trainings like this at least once per year, or once per cropping season. It's important to do field visits regularly to have exposure to new

field conditions and patterns that arise. It's also important to interact with farmers in person to observe some practices that cannot adequately be described by phone. One ACO thinks that the frequency with which farmers are visited depends on how many farmers they want to cover. For example, if the target is 3,000 farmers, in one day it would be feasible to train 100-150 farmers, meaning that in a week it would be possible to train 500 people, and so six field visits would be needed to reach 3,000 people. In general, operators thought that the trainings should be held every three months; some of the farmers at the training requested that the trainings be held as frequent as every month. ACOs agreed that visits themselves should be a bit longer; these two-day trainings were rather packed and some of the sessions were too rushed.

TRAINING EVALUATION IN GENERAL

The evaluation of the training itself could be improved by measuring the response of the participants immediately following or shortly after the training date. Further, the farmers who participated in the training, not only the call center operators, should be surveyed to fully determine the training's success. Ideally, farmers' responses to the training should not only be measured directly following the training; they should be measured in the form of an impact survey over time (1-3 months following the training) to assess how the behavior of the participants has changed over time due to their participation in the training. Possible topics to evaluate to determine the effect of the training for farmers include measuring changes in attitude and rates of adoption. A survey of the farmers' practices post-survey could examine whether or not they use the Esoko call center to access information, whether phone literacy has improved, and whether production has increased due to increased contact with the call centers, for example. One recommended action for future trainings is to conduct a pretest and posttest for farmer participants. Pretests are used to evaluate the knowledge of participants before their engagement in the training. The same test may be used after the training to assess content learned.

APPENDIX A. TRAINING SURVEY FOR CALL CENTER OPERATORS

Date: _____

Interviewer: _____

To be read to participants:

Hello, how are you? My name is Kate Polakiewicz and I am working with UC Davis and USAID to do a survey about the trainings held in March. Call center operators interacted with farmers through several activities such as: a mind map, calendar identification, and basic phone usage. The goal of this survey is to ascertain the impact of this training as well as ideas for future trainings. The following questions ask about your thoughts on the training, your relationship before and after the training with farmers, and suggestions for the future.

If you don't want to participate, that's fine; we will end this call now. The survey has eight questions and should take about 20-30 minutes of your time. Are you okay with proceeding?

If yes, thank you for taking the time to speak with us. Do you have any further questions right now?

Please write down any notes or information that you might find relevant in the space provided below.

- 1) Did you personally participate in this training course?
 () Yes
 () No
 a. If no, what is your relation to the operator? _____

- 2) What do you remember most vividly about the training?

Follow-up Questions:

Is this because you hadn't seen this done before, because you used it once and liked it, etc.?

- 3) Analysis of Activities for Satisfaction and Quality (*if not previously mentioned*)

Activities	Comments
Mind Map	
Calendar	
Phone Literacy	

- 4) After the training, did you feel that you had a better understanding of the issues faced by the farmers?

() Yes

() No

a. Why or why not?

- 5) Have you applied any of the new information and/or skills from the training as you assist farmer clients when you interact with them through the call center?

() Yes

a. How did the training help you assist clients when interacting with them via the call center?

() No

a. Why or why not?

- 6) Have you shared any of the new information and/or skills from the training with others?
() Yes
a. With whom did you share it?
() No
a. Why or why not?
- 7) Are there any other ways in which the training positively or negatively affected how you do your job?
- 8) Do you have any suggestions for future? What are some subjects we could focus on for future trainings? *Open ended question; please enter/write anything they say. Feel free to ask clarifying questions.*

APPENDIX B. IDENTIFYING PROBLEMS. FARMER FOCUS GROUPS – SEASONAL CALENDAR

Developed by Neda Yousefian, Frederik Sagemuller and Mark Bell

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Farmer focus groups are used to identify the needs within a community. The approach below uses a seasonal cropping calendar as the central discussion tool.

How to conduct a farmer Focal Group

1. Introduction. Welcome and Goals. The moderator welcomes the farmers, and

- 1.1 Introduces any visiting group members
- 1.2 Outlines the purpose of the meeting – e.g., to identify jointly with the farmers the major problems they face.
- 1.3 Notes that discussions will be recorded on posted sheets for ease of discussion
- 1.4 Notes that participant comments remain anonymous.
- 1.5 Asks for respect – i.e., do not interrupt others while speaking and note there are no wrong or right answers.
- 1.6 indicates the meeting will last or take less than 1 hour.

2. Materials and Format

The facilitator uses two large sheets of paper. One is used to record both the crops for each season and any special management practices for the crops (Figure at top right). On the other sheet, record problems as stated by the farmers. These sheets are posted (when possible) so that the farmers can see the notes as they are taken (Figure at left).

The moderator introduces the seasonal cropping calendar to the group which is used as a visual aid with the questions (below). The questions start at a seasonal level, then go down to the crop level and then to specific management and business activities and problems for important crops. Ideally, this approach brings attention to all major aspects of the farming system in a given community.

Questions

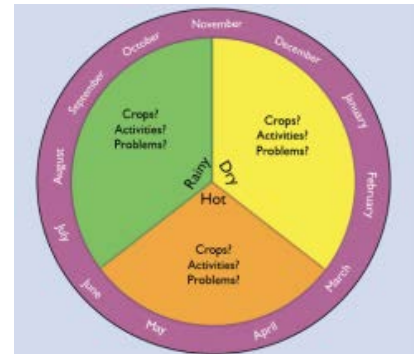
1. What are the main constraints corresponding to each season?
2. What crops do you grow in each season?
3. What are major constraints or problems for each crop?
4. Are there crops that you used to grow but have since abandoned? If yes, why?
5. Please explain the farming activities that are carried out for the major crops (including purchase of inputs, production, postharvest, marketing)?
6. What are constraints for each activity?
7. What other problems are occurring?

3. Grouping, Ranking and Scoring of Problems

The moderator presents the flip-chart paper to the group with all of the recorded problems. The problems are numbered and the farmers are given pens and small pieces of paper. The farmers are asked to write the numbers corresponding with the three most important problems. The results are tallied and presented to the farmers. (In our experience, illiterate farmers were able to do this because all of the problems were read out loud and others could help write the numbers even if the farmer could not.) Some discussion may follow the ranking of problems and the facilitator will continue to record these comments.

4. Closing

The farmers are thanked for participating in the focus group discussion. A small, culturally appropriate, gift of appreciation may be given to the farmers. (In Cambodia, bars of soap were appropriate.)



Example of seasonal cropping calendar.



Notes are made on the posted sheets.

Use field visits to confirm problems identified during discussions.