"Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

Evaluation Report

July 2022

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EXECUTIVE SUMMARY

The project described in this report explored the effectiveness of using podcasts as part of a collaborative (social) learning approach to bring about the desired Social and Behaviour Change (SBC) of farm recording (in this case, the keeping of paper-based, enterprise-level financial farm-records) by rural households (hh) in the Karamoja sub-region.

A podcast is, technically, audio content that can be accessed via the internet on demand. Therefore, in areas with poor internet (frequently rural), direct access to podcasts is often limited. In this project, audio recordings were developed as mp3 files which, because they can be uploaded to the internet for sharing, can be defined as podcasts. However, because (as anticipated) the internet access of project participants was limited, the recordings were not shared with them online. Rather, the participants accessed the audio recordings via memory cards inserted into solar-powered radios (purchased by the project) or, in some cases, their mobile phones. Many shared the recordings directly with others within their communities via Bluetooth. **Thus, although developed as podcasts, the audio recordings played to audiences during this project were shared as audio files.** In the context of this project, because the only difference between podcasts and audio recordings is that podcasts are accessed online (in this case by the project officer), by ensuring that this was taken into consideration during the evaluation, the project was able to investigate the associated benefits of podcasts for social-learning within rural communities. However, other projects applying the knowledge developed by this project will need to understand and plan how audio content can best be shared and accessed by the communities they are working with, based on their access to both audio devices and the internet.

Four podcasts about farm recording were developed in partnership with Farm Radio International, as well as additional supporting materials (trainer manual, information sheets for learners, and farm recording notebooks). The podcasts were downloaded by the project officer onto memory cards (as mp3 files) and were played through a radio (with a memory card slot) to five groups of seven couples (35 husband and wife couples in total) over an eight-week period, during collaborative training sessions, termed "listening-sessions". The sessions included the playing of the downloaded podcasts (which allowed for the audio to then be paused as required, and repeated for reinforced learning), followed by demonstrations of farm recording examples by the facilitator, group discussions, and farm-recording practice. The audio recordings were also distributed on memory cards (inserted into small solar-powered radios purchased by the project) for the couples to listen to at home and share among the community, via their radios or mobile phones. The social elements of the project were two-fold: a) the listening-sessions were held with groups, and b) husbands and wives learned together.

A number of different tools were used to evaluate the project, which included surveys of participants and, to a lesser extent, agricultural officers, as well as assessments of the farm records kept by each household. The themes explored by the surveys included: changes in the attitude towards and the practice of record keeping; attitudes to learning from recorded audio content; and the experience of learning in both groups and as a couple. Surveys conducted with women alone provided added insight into their experiences and attitudes towards the project's themes. The

review of farm recording books both immediately after the listening-sessions and six weeks after, enabled investigation into whether the application of newly acquired skills were being sustained.

The project findings indicated that both the men and women had enjoyed, and felt they had benefitted from, the different aspects of the project being investigated – that is, listening to the audio content, the group learning environment, and learning as a couple. 3½ months after the end of project activities, enterprise-level financial farm records were being maintained for all the participating households. This suggests that pedagogical podcast content, when played within a social learning environment, can contribute to sustained Social and Behavioural Change amongst rural communities within the region. This is provided that, in the absence of adequate internet access, the podcast content can be made readily available. This includes considering both the communities' access to suitable devices and means of sharing - such as their use of phones or solar-powered radios with memory card slots and/or Bluetooth.

The key findings of the project are summarised below:

A. Farm Recording
1. No households were keeping enterprise-level financial farm records at the project outset. By the end of the project, all 35 households (100%) had enterprise-based records kept for their farms, including break-downs of inputs, outputs, and values, and, ultimately, gross margins. Most of these used a combination of writing, numbers, and symbols. Records were kept for a wide variety of enterprises, mainly crop or livestock related, though also extending to brewing.
2. In the majority of cases (74%), these were kept by the households themselves. The 26% of households that needed help with record keeping (from friends or other family members) was due to limitations in their literacy and numeracy skills.
3. It was mainly men who made the farm-record entries (only 20% of women wrote in the household record books), but the majority of the women regularly contributed information for their husbands to record. The lower activity of women in keeping farm records is largely attributable to their lack of education, resulting in lower literacy and numeracy abilities than amongst the men.
4. The majority of participants were youth (younger than 35 years) and, although a structured comparison of farm recording between youth and older age groups was not conducted, Monitoring and Evaluation (M&E) activities indicated that younger age groups were better equipped with the necessary numeracy/literacy skills to keep farm-records.
5. By the end of the project, all households reported that they were benefitting from the information they had collected in their record books (e.g., being able to compare earnings from maize and sorghum crops) and intended to continue farm-recording in the future. Despite their lesser role in writing the farm records, all the women reported being happy with this arrangement and that they believe farm recording to be a worthwhile activity.

B. Podcasts (including downloadable audio content)
6. Although nearly all participants reported listening to the radio fairly regularly, few had heard of podcasts before the project started. All reported that they had enjoyed listening

to the audio files about farm recording and found them interesting. They reported the advantages of learning from these compared to radio as:

- Can listen any time (when it suits them);
- Not interrupted by network problems;
- Can be repeated, reinforcing learning;
- Effective when played in social groups - can be repeated, encouraging discussion, and reinforcing learning;
- Can be shared;
- Easier to reach a target group.

These positive reports were reinforced by five surveyed agricultural officers/parish chiefs, who rated podcasts as a more effective training resource than live radio, and reported that podcasts (which should be technically defined as "audio files" in this context) could support the adoption of desired behaviour changes amongst the communities they work with.

7. The distribution of the podcasts - as downloaded audio files onto memory cards for use in small solar-powered radios (with memory card slots) to each household - allowed them to reinforce their learning at home between listening-sessions and to listen to and share the content with other family/friends. By the end of the project, at least 17 participants from three of the groups had shared the audio files (via Bluetooth) with 98 other people within their communities.

8. Within the region, some rural households, and many rural women have no access to mobile phones. Even if they do, users may be unable/reluctant to spare battery power to play audio material. Future pedagogical podcast projects should therefore consider ensuring/enabling learners' access to solar-powered devices with memory card slots, and making the podcasts available as downloaded audio files to extend learning outside organised group sessions.

9. All participants were keen to learn from audio content in the future, citing a range of topics they felt suitable, which included:
   - Gender-based violence;
   - Business skills to manage small-scale businesses;
   - Water and sanitation;
   - Health education;
   - Adult education among school drop-outs and elderly people to improve the level of literacy;
   - Peace-building strategies;
   - Family planning - suggested by some women.

C. The Social Learning Approach

The project adopted a two-pronged collaborative (social learning) approach: 1) participants learning as couples within 2) mixed farming groups.

10. Feedback on the participants' experience of learning as a couple was that they had enjoyed and benefitted from this approach. They reported that they learned better together and

could share information with each other on what to record during the sessions.

11. The women also reported that learning about (and then supporting) farm recording as a couple had benefitted their role in household financial decision-making since they were more engaged in the process of financial information gathering, and thereby management. Most of the agricultural officers also observed that both men and women had generally enjoyed learning as a couple.

12. In terms of learning as a large group, the feedback was that this improved learning because the participants could share knowledge during discussions, and so learn from each other.

13. Integral to the social learning of this project was that the listening-sessions did not just include the playing of audio files to groups. Although the main tool for message delivery, it was the integration of these with step-by-step demonstrations; group discussions; and practice sessions, facilitated by the project officer, which combined to create the collaborative learning approach being explored in the project. The participants reported that it was the combination of all these aspects of the listening-sessions that contributed to their learning about farm recording.

1. INTRODUCTION

1.1 Project Background

The "Using podcasts as part of a collaborative learning approach to bring about Social and Behaviour Change (SBC) within the farming communities of Karamoja" project has piloted a revised social learning approach to increase a specific, agricultural behaviour among smallholder farmers in Northern Uganda. The project used paper-based farm recording as the behaviour to test the approach.

The project aimed to explore whether a series of custom-designed podcasts, when used within a collaborative learning environment, could support food security projects in bringing about social and behaviour change. Podcasts (or thereby podcast material shared subsequently as audio recordings) were identified as a key focus of the project, due to the many positive attributes that commend them as a training/messaging tool. These include:

- Spoken rather than written words are more accessible to those who are illiterate.
- When used as a training tool, podcasts/audio recordings ensure consistent delivery of high-quality training content, removing an element of the variability that occurs when multiple trainers are delivering the same messages to communities verbally.
- The facilitator can pause and replay the audio content, enhancing and reinforcing learning as well as enabling opportunities for group discussions.
- They are easily accessible by those with internet access or sharable to radios/phones with memory cards. Thus, communities can listen to the audio content again at home and share it with others who own suitable devices.
- They can be played at times that suit the schedules of the listener/s, which can also revolve around the recharging of phone/radio batteries.
- Podcasts on the whole are simpler to create than radio broadcasts.
- Careful design of podcasts can enable content to be broadcast on the radio, allowing further consolidation and knowledge sharing and discussion, which are particularly important for project legacy and sustainability.
- When developed as a series, podcasts are well suited to deliver step-by-step learning and skills – as, unlike radio, listeners do not have to "tune in" on specific days or times of the day.

While, at the time the proposal was written, there had been research into the use of podcasts for behavioural change within more formal educational environments, such as schools and colleges, little had been done on their use within food security projects as a tool to change behaviour. Though many NGOs and other organisations working within the food security sector were using podcasts/audio content as a means for keeping people updated on projects, few appeared to use them as additional tools for disseminating knowledge or information at the farmer/household level.

The location of the project, in semi-rural Karamoja, was such that internet was limited. However, it was felt the project would still enable the participants to benefit from the advantages that podcasts provide. That is, as long as the project could appropriately ensure distribution of the podcast

material (which it did via memory cards), listeners would be able to benefit from story-based audio content they can relate to and which can be listened to on-demand, paused, repeated and shared.

A series of podcasts about how to farm-record was developed. The social learning approach of the project was that the podcast content was played to farmer groups during "listening-sessions", allowing an opportunity for demonstrations by the facilitator, as well as discussion and practice amongst the groups. There were five farmer groups in total, all based in Moroto District of Karamoja. An additional element to the social learning approach was that the project invited two members from each family: the head of household plus one other – which in all cases were a husband and wife. Due to the semi-rural location of the target communities and their limited internet availability, prior to the listening-sessions the project officer downloaded the podcasts onto memory cards. These were inserted into radios for playing during the listening sessions. The audio content was also distributed to the couples on memory cards inserted into smaller solar-powered radios to listen to at home or share within their communities.

As it was not within the scope of this small project to quantitatively evaluate differences in learning from different learning formats (for example, from podcasts compared to radio), this report explores whether and how learning from podcasts appeared to contribute to SBC amongst farmer groups. It looks at changes in practice, attitudes, and skills relating to farm recording, from the start to the end of the project. Differences relating to gender and, to a lesser extent, age are also studied.

Farm recording was chosen as the means to test the approach, due to both AgriTechTalk International and AgriTechTalk Africa's prior experience in this subject, as well as a lack of resources that can support farm record keeping by small-scale farmers with poor literacy levels. The process of keeping farm records is considered crucial for understanding and analysing a farm's income and outgoings, and enabling better insight and planning by farmers of their livelihoods, thus strengthening the resilience of farming communities. The podcasts thus took on the dialogue of a farmer who is beginning farm recording, assisted by a field officer, who shares his knowledge and skills, as the farmer progresses on their journey with farm recording.

There are different types of farm records. The records focused on during this project are enterprise-based records, including financial values, that enable understanding of the year-on-year profitability of different farming activities.

1.2 Key Project Activities

The project involved the development of four podcasts (in English and the local language of Karamojong) on farm recording, which were downloaded as audio files by the project officer and played to five farmer groups (in the Karamojong language) during fortnightly listening-sessions, supported by appropriate learning resources. Each group comprised husband and wife couples from seven households, making a total of 35 couples, or 70 individuals. These resources included a training manual for the project officer, key information sheets for the participants, and simple farm recording books.

The AgriTechTalk Africa project officer had worked in both extension and farm management, so had

the required experience of both working with rural communities and systems of farm recording. His role was to identify and engage with appropriate farmer groups, evaluate existing knowledge/skills, deliver and facilitate the listening-sessions, and provide follow-up advice and support to the groups throughout the course of the project. In addition, he advised on the content of appropriate audio content and supporting resources and conducted M&E activities throughout the duration of the project. He was regularly supported by two senior AgriTechTalk officers, who had extensive experience of farm recording and community engagement.

Subsequent follow-up meetings and visits by the project officer ensured that all participants were supported in applying what they had learned during the listening sessions (namely farm record keeping) to their own farming activities. The implementation of a thorough process of evaluation over the duration of the project ensured that its impact, and learning from it, could be understood and measured effectively.

The specific activities conducted during the project are summarised below. These are provided in more detail in the original project M&E plan, though with some minor changes where appropriate, agreed in consultation with IDEAL over the course of the project (**identified in bold below**). Ongoing through all these activities were the farm visits undertaken by the project officer.

Table 1: Key Project Activities and Delivery Dates

	Activity	Delivered
1	Inception meeting for local Government and NGO officers.	Apr 2021
2	Creation of 5 listening groups, with baseline surveys. Additional farm visits to explore record-keeping practices in more detail.	Apr - May 2021
3	Formative research review of existing knowledge, experiences, and guidelines on the use of podcasts for social learning (AgriTechTalk International, ATTI); circulation of a survey on farm recording and radio/podcasts to agri' officers in the sub-region (AgriTechTalk Africa, ATTA); and development of a Podcast Development Guide to support subsequent development of podcast material (Farm Radio International, FRI).	Jun 2021
4	Bringing together all learning from above for the development of a Learning Plan, which included an outline of the content and structure of the listening sessions; drafting of podcast scripts; planning of appropriate supporting materials; and the development of the delivery time-table.	Jul 2021
5	Researching and meeting with local radio stations to identify the most appropriate partner for the production of the podcasts, based on their existing outreach in the region and relevant experience in broadcasting and recording content for local rural communities. Ateker FM was identified as the most suitable partner on this basis	Jun 2021
6	Preparation of draft podcast scripts (ATTA).	Jul 2021

	Activity	Delivered
7	Engaging with all partners (FRI, ATTA, and Ateker) for the finalisation of podcast content, and supporting learning materials for the listening-sessions (ATTA).	Aug 2021
8	Testing the proposed Karamojong podcast content/listening-session format with a farmer focus group.	Aug 2021
9	Translating of the podcast scripts into Karamojong by Ateker, and commencement of podcast recording in both English and Karamojong, using locally engaged actors.	Aug - Sep 2021
10	Preparation of materials (in consultation with ATTA) to support learning during listening-sessions and farm recording by the farming households (trainer manual; key information sheets; record books).	Aug - Sep 2021
11	Recording of podcasts in Karamojong.	Sep - Oct 2021
12	Commencement of listening sessions with all 5 groups.	2 held per group in Sep 2021
13	Mid-term listening-sessions evaluation survey.	Oct 2021
14	Delivery of remaining listening-sessions.	2 held per group in Oct 2021
15	Distribution of solar-powered radios with memory card slots, as well as the podcasts downloaded as mp3 audio files onto memory cards, to all project households.	Nov 2021
16	Post-listening-session evaluation surveys (focusing on the quality of podcasts and listening-session delivery).	Nov 2021
17	Agricultural officer surveys.	Nov 2021
18	Recording of short farmer interviews with a sample of selected farmers for inclusion in live radio broadcasts.	Nov 2021
19	Individual household surveys.	Nov - Dec 2021
20	End-line surveys, with whole groups and women only.	Jan 2022
21	Final adjustments to podcast recordings.	Feb 2022
22	Final scoring of record books.	Feb 2022
23	The broadcast of live radio programmes about farm recording in Karamojong by Ateker FM, a leading local radio station that broadcasts throughout the sub-region. These included an introduction by the ATTA farm officers; the recorded farmer interviews; readings from the Karamojong podcasts; and a question-and-answer text/phone in.	Mar 2022

1.3 Composition of Farmer Groups

Altogether, 35 households participated in the project. These households were split into five groups, located in four villages. Each group comprised seven couples (a husband and wife). In all households, the male was the head of the household. Two of the groups were existing groups that had worked with AgriTechTalk Africa previously[1]. During that project, AgriTechTalk officers regularly collected farm data from member farmers, piquing the farmers' interest in this practice. This was a key incentive for both selecting these two groups and this targeted behaviour change. Two of the groups were part of the Mercy Corps' Apolou programme. Mercy Corps recommended these groups because of the benefits it perceived they would acquire from keeping simple farm records. The project proposal had envisaged working with four groups, but because the baseline revealed that several households from one group were already keeping fairly detailed farm records, a new group was introduced. This group was not attached to any existing project.

Table 2: Names and locations of the groups involved in the project

Group	Sub-county	Parish	Village
Etiyata Kaapei	Katiketile	Musas	Nadiket
Betelemu	Rupa	Lobuneit	Kidepo
Apule	Rupa	Nakadeli	Natapojo
Etop	Rupa	Nakadeli	Natapojo
Omora Kaapei	Rupa	Musupo	

This project aimed to explore behaviour change in youth (under 35 years). It should be acknowledged that the age of project participants was not closely managed during project set-up. The majority of participants were younger than 35, but there were a number of couples where one family member was over 35 years and the other younger than this. Four couples in total included men and women who were both over 35 years old. Because of this lack of age structure, general differences in response were observed between the two age groups over the course of the project, but there were no detailed or quantified comparisons. The groups' age structure is shown below:

Table 3: Household structure of the groups

Group	Av. Age of males	Av. Age of females	Av. hh size	Age range of hhs	No. of youth	No. >35 years old
Etiyata Kaapei*	41	38	8.4	<1 – 70 yrs	7	7
Betelemu	31	27	4.9	2 – 45 yrs	12	2
Apule	34	25	4.7	< 1 – 54 yrs	11	3
Etop	27	23	4.5	< 1 – 39 yrs	12	2
Omora Kaapei*	36	30	6.1	<1 – 56 yrs	11	3

*reviewed since original baseline, where not all data were collected

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[1] On the UK Space Agency funded Drought and Flood Mitigation Service project (2017-2020).

The education levels of the individuals varied considerably. As shown in Table 4, generally, the women had received far less education than the men. Of the 32 households interviewed individually during the baseline, only 14 women had received any education, and that was only to primary level. Of the men, one had trained as a craftsman, 12 had attended secondary school, 12 primary school, and 7 were uneducated.

Because the project had not selected participants on the basis of age, education, or literacy, in part because of the desire to work with existing groups, and because differences in literacy levels were not evaluated at the start of the project, the project's ability to objectively explore the effectiveness of podcasts/audio recordings in bringing about behaviour change was limited, necessitating a more qualified approach to understanding these benefits.

Table 4: Education levels of households

Group	No. hhs taking part in individual hh survey	Education level of males	Education level of females
Etiyata Kaapei	5	4 to Senior level; 1 to primary level	1 to Senior level; 2 to Primary level; 2 uneducated
Betelemu	7	2 to Senior level; 5 to Primary level	2 to Primary level; 5 uneducated
Apule	7	1 vocationally trained as a craftsman; 1 to Primary level; 5 uneducated	1 to Primary level; 6 uneducated
Etop	6	3 to Senior level; 2 to Primary level; 1 uneducated	2 to Primary level; 4 uneducated
Omora Kaapei	7	3 to Senior level; 3 to Primary level; 1 uneducated	6 to Primary level; 1 uneducated

2. EVALUATION OVERVIEW AND METHODS

2.1 Introduction

This report evaluates if and to what extent the project's key themes (namely learning about farm recording from audio material developed as podcasts; as hh couples; and in groups) can contribute to Social and Behavioural Change, by exploring changes in practice, attitudes, and skills from the start to the end of the project. The specific responses that are investigated in this report include:

- Changes in the practice of farm recording over the project
- Development of farm recording skills
- Changes in attitudes towards farm recording, and anticipated continuation of this behaviour amongst participating households in the future
- Participants' experiences of learning from podcasts
- Participants' experiences of learning collaboratively, as households
- Combined experience of learning from podcasts in a social setting

The project used a combination of M&E activities, which included surveys, attendance sheets, weekly reports, record book reviews, and interviews.

The 'demonstration and observation' method for evaluating baseline skills levels described below was also applied where considered more appropriate.

Surveys were conducted with whole farmer groups, individual households, and, as part of the final evaluation process, with women. Surveys were also delivered to a small number of agricultural officers who had attended listening sessions, in order to gather their impressions of how well playing audio files to couples in a social-learning environment worked as an approach to skills transfer. Most questions involved answers which could be quantified so that comparisons of attitudes and practices could be made objectively over the duration of the project.

In terms of measuring changes in farm recording skills, although quantified tests are a common approach to evaluating competencies before- and after- delivery of skills-based training, it was felt that this approach would be potentially intimidating, particularly for those with lower levels of numeracy/literacy skills than their peers (most especially women or older participants). Therefore, during the initial baseline assessments, an informal 'demonstration and observation' approach was used, where the facilitator presented and worked through a simple set of farm records, inviting opinions and inputs from the group participants. This provided insight into the ability of the participants to engage in record keeping, as well as the complexity of information that should be included in the podcasts and related material. The responses of the participants were observed and recorded by a separate observer, which included disaggregation by gender and age.

All M&E activities were planned in close consultation with our partner organisation ATTA. Every survey was drafted and shared with ATTA for input and adjustment by email. All surveys and other M&E-related events were also discussed with the ATTA team during virtual meetings, ensuring a thorough briefing and a mutual understanding of aims and objectives.

The specific M&E activities implemented during the project included:

Description/Specific Questions	Audience Size	Data Collection Method
Baseline Survey at group and individual level to evaluate: 1) Existing knowledge/practices of farm recording amongst participants. 2) Existing experience of/attitudes towards learning from radio/podcasts amongst participants. 3) The broad assessment of existing numeracy/literacy skills amongst participants. 4) Participants' preferred thematic content and data set types. 5) Other underlying challenges.	Group surveys conducted with all 5* groups (7 couples per group). Individual surveys conducted with at least 5 couples per group.	Surveys (blank survey sheets customised to project – on paper). Scanned to ATTI.
Karamoja Agricultural Officer Survey: To understand their perceptions of how familiar farmers are with radio/podcast learning and farm recording, and how they think farmers	Surveys sent to a network of INGOs, as well as Ministry	Google Docs survey emailed to officers with follow-up emails. Hard

Description/Specific Questions	Audience Size	Data Collection Method
could benefit from improved farm recording systems as well as learning via radio/podcasts about Farm Recording.	District Agric'& Vet' Officers: 3 responded.	copies were also distributed.
Farm Recording Notebooks: Farmers record their farming activities in line with the listening sessions.	One notebook per couple.	Customised Farm Recording Notebook kept by the farmer. Reviewed and "scored" by the field officer during the project and at the end. Scanned to ATTI.
Farm Visit/Notebook Reports: Detail the visits made to farmers by the project officer so behaviour change can be recorded and quantified more closely. This includes a simple system of reviewing the quality of farm records as well as the farmers' attitudes, experience, and uptake of farm recording.	All couples visited multiple times.	Blank report sheets customised to project – on paper. Scanned to ATTI.
Mid-term Podcast Session Evaluation: This was conducted after the second listening session, in order to gauge the participants' reactions and opinions on the podcast audio content so far and to inform appropriate adjustments that could improve the quality of the subsequent two listening sessions.	All 5 groups.	Survey (blank survey sheets customised to project – on paper). Scanned to ATTI.
Endline Officer Interviews: Assess opinion on the impact/successes/challenges of the project from those agricultural officers directly involved in training (attended sessions to observe).	4 Agric Officers & 1 Parish Chief.	Surveys (blank survey sheets customised to project – on paper). Scanned to ATTI.
Post-Listening Session Evaluations: To gauge the application of new knowledge/ skills/practices in farm recording, as well as attitudes/learning from the podcasts.	All groups.	Surveys (blank survey sheets customised to project – on paper). Scanned to ATTI.
Individual household follow-on surveys: to see to what extent they were applying the knowledge/skills from the listening sessions.	Individual hhs.	Surveys (blank survey sheets customised to project – on paper). Scanned to ATTI.
Final Endline Survey to gauge: 1. Whether the practice of farm recording learned during the project was still being practiced 3 months after the end of the "training" period. 2. Broadly compare the patterns of farm	All groups.	Surveys (blank survey sheets customised to project – on paper). Scanned to ATTI.

Description/Specific Questions	Audience Size	Data Collection Method
recording practiced by male and female participants and youth vs older participants. 3. Investigate if/how participating hhs felt they were benefitting from their farm records. 4. Explore the extent to which the downloaded podcasts had been listened to and shared with others since the training period. 5. Identify the level of interest in learning from podcasts/downloaded audio files in the future.		
Women only survey to: 1. Understand the roles of the women participants in farm record-keeping activities adopted by the households during the project. 2. Understand and characterise the challenges faced specifically by the women in farm recording. 3. Understand the extent to which the women could carry out farm recording activities independently, and whether any had gained enough experience to share their knowledge with others. 4. Understand the limitations women experienced in accessing the podcast material at home. 5. Understand whether the women felt that learning with their partners was beneficial or detrimental to them, and explore the reasons for this in more detail. 6. Understand whether the women felt that learning in groups was beneficial or detrimental to them, and explore the reasons for this in more detail. 7. Explore whether, by playing a role in farm record keeping, the women perceived that they had developed a greater role in financial decision-making than previously.	All women from each group.	Surveys (blank survey sheets customised to project – on paper). Scanned to ATTI.
Podcast Downloads: Statistics on the download and use of podcasts saved onto SIM cards/shared by Bluetooth by officers and farmers.	Statistics from sharing of podcasts from all of the hhs.	Recorded by the agricultural officer in the individual end-line surveys

2.2 Officer surveys

(April 2021) **(Annex 1)**
A survey of Ministry, NGO, and Agency agricultural officers working in the sub-region on the existing use of farm recording and radio/podcasts amongst small-scale Karamoja farmers (conducted as part of the formative research process).

2.3 Baseline Surveys

(26th to 30th April, 2021 for the first 4 groups; May 31st for the 5th group).
Two surveys were conducted with the farmer groups at the beginning of the project to baseline all participants' existing knowledge, skills, and practice of farm recording:

Group level baseline survey **(Annex 2)**

This was conducted with all groups during the project introductory event, and:

1. Explored existing farm recording practices amongst the participants, as well as by gender and age group.
2. Explored existing levels of learning from radio/podcasts by the participants, as well by gender and age group.
3. Included a demonstration and observation session, described in Section 1.2 above:
   a. This started with a simple practical demonstration by the facilitator (written onto flipcharts and circulated as handouts) of how a fictional small-scale farmer kept records for one year of a farming enterprise. It was followed by a demonstration of the same farmer's second year of farm records while inviting answers from the audience. Finally, the knowledge gained by this farmer from her records was compared with a farmer who did not practice farm recording. This process both demonstrated the value of farm recording to the participants and allowed their current understanding and abilities to be broadly gauged, as described below:
      i. Their general understanding of what was presented – by observing and qualitatively scoring the level of response and engagement.
      ii. Their broad levels of numeracy/literacy – by observing and qualitatively scoring the level of response and engagement. This helped identify the most appropriate systems of farm recording to be covered during the training phase.
4. Closed with the facilitator asking and discussing with the group whether, having followed the examples above, they were interested in learning about farm recording and, with training and support, could see themselves adopting this practice in the future.

Individual household survey **(Annex 3)**

It was intended that this survey would be conducted with only a sample of the 35 households selected for participation in the pilot. However, with the support of our partner organisation ATTA, it was conducted with the vast majority across all groups. The survey included a more in-depth investigation into:

1. The farmers' knowledge of, and interest in, farm recording and the types of recording systems that would suit them best.
2. Their radio/podcast listening habits, and use of radio/podcast content for agricultural learning purposes.

<u>Follow-up visits (May 23rd)</u> **(Annex 4)**

Because some of the four groups/individuals claimed to already be practicing some form of record keeping during the above surveys, follow-up visits were made to investigate this further. Farmers were asked to explain (or, with their consent, show) what records they kept so the project could ensure it was not focusing on a behaviour already being practiced by these participants.

2.4 Testing podcast content

(August 17th) **(Annex 5)**
Following the development of the draft podcast scripts, M&E activities resumed with the testing of the proposed podcast content/format with a focus farmer group (Etop). It aimed to explore and record the reactions of the focus group, in terms of how much they understood, enjoyed, related to, and were engaged by the podcasts. This drew largely from the guidance included in USAID's Communication for Change Bulletin (no. 8)[2]. The project officer read out the draft scripts of the first podcast, then asked the focus group questions about what they had heard, recording their responses into an answer template. These responses were disaggregated by gender and age.

2.5 Mid-term Podcast Session Evaluation

(October 4th – 8th 2021) **(Annex 6)**
A short mid-term evaluation was conducted with all 5 groups after the first two listening-sessions to gauge the participants' reactions and opinions on the podcast audio content so far and to inform appropriate adjustments that could improve the quality of the two subsequent listening-sessions.

2.6 End-line Evaluations

<u>Post-Listening-Session Evaluations (November 8th- 12th 2021)</u> **(Annex 7)**

These were conducted once all four listening-sessions were complete to gather further feedback from participants on the quality of the listening-sessions and podcast contents; to explore if and how the downloaded podcasts would be used/listened to in the future; to gauge the uptake of farm recording at home so far; and to assess (at a broad level) how learning from farm records was being applied. The survey was delivered as a group activity, facilitated by the project officer, to optimise the opportunity for discussion and exchange. Responses to specific questions were recorded by the Project Officer.

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[2] https://www.thecompassforsbc.org/sites/default/files/strengthening_tools/8-%20Testing%20SBCC%20Materials.pdf

Officer surveys (also conducted post-listening sessions) **(Annex 8)**

Surveys were conducted with four Agricultural Officers and one Parish Chief, who had been present at listening-sessions conducted with 4 of the groups (all except for Apule). They collected information on the quality of audio content and the other aspects of the listening sessions; the engagement and enjoyment of the listeners; and, based on this, their impressions of the potential for podcasts in bringing about SBC within the communities they work with in future.

Individual household follow-on surveys (November 29th – December 7nd 2021) **(Annex 9)**

Approximately a month after delivery of the listening-sessions, the project officer visited all project households to see whether enterprise-based financial farm records were being kept for their farms and, if so, the practices around this (such as who was keeping them, how often, using what system, and their ability to perform related calculations). A structured record book evaluation checklist avoided effects of any bias by the project officer during this process. The confidence levels of the groups in relation to farm recording were also investigated, as well as whether they intended to continue with farm recording in future. The continued use and sharing of the downloaded podcasts (using the simple radios purchased with project funds) was also explored during these follow-upon visits.

Final End-line Surveys (10th – 14th January 2022)

As anticipated during development of the proposal, it was apparent that the abilities of women to engage in the practice of record keeping were generally lower than those of their husbands and that, as a result, it would be necessary to explore their experiences in greater detail by holding female-only group evaluations, as well as mixed-group evaluations.

Thus, two surveys were developed, for mixed groups and women only. These involved simple questions and answers, but applied a quantifiable answer format to support understanding and interpretation of the project findings.

Mixed group survey **(Annex 10)**
This was conducted with all groups. This survey aimed to:
1. Investigate whether the practice of farm recording learned during the project was still being practiced 3 months after the end of the "training" period.
2. Broadly compare the patterns of farm recording practiced by male and female participants and youth vs older participants.
3. Investigate if and how the participant households felt they were benefitting from the information compiled in their farm records.
4. Explore the extent to which the downloaded podcasts had been listened to since the training period; and shared with others.
5. Identify the appetite for learning from podcasts/downloaded audio files in the future.

Women only survey **(Annex 11)**
These were conducted with all women from each group, in order to:
1. Understand the roles of the women participants in farm record-keeping activities adopted by the households during the project.

2. Understand and characterise the challenges faced specifically by the women in farm recording.
3. Understand the extent to which the women could carry out farm recording activities independently, and whether any had gained enough experience to share their knowledge with others.
4. Understand the limitations women experienced in accessing the podcast material at home.
5. Understand whether the women felt that learning with their partners was beneficial or detrimental to them and explore the reasons for this in more detail.
6. Understand whether the women felt that learning in groups was beneficial or detrimental to them and explore the reasons for this in more detail.
7. Explore whether, by playing a role in farm record keeping, the women perceived that they had developed a greater role in financial decision-making than previously.

Scoring of Record Books (7th – 12th February 2022) **(Annex 12)**

General support and advice on keeping enterprise-based farm records was given to the households throughout the second half of the project during the regular farm visits made by the project officer. This involved reviewing the books, answering questions, and providing general support.

After what was considered a sufficient period of time (while fitting into the project timeframe) to assess whether behaviour change adopted during the project was sufficiently embedded to be sustained by the participants into the future, their farm record books were reviewed and scored by the project officer. A simple, but quantifiable, scoring system was developed and implemented for this purpose.

An example record book is provided in **Annex 13**.

2.7 Level of participation in M&E activities

A summary of the level of participation in the M&E activities described above is presented in Table 5. Attendance at the evaluation events was very good, with 100% attendance for most of them.

Table 5: Participation in evaluations

Group	Baseline				Mid listening session		Post-listening session				Endline				
	Group (men and women)		Individual hh		Listening Session Evaluation		Listening Session Evaluation		Hh progress surveys		Group (men and women)		Group (women only)		Scoring of Record Books
	Hhs	Ind's	Hhs	Ind's	Hhs	Ind's	Hhs	Ind's	Hhs	Ind's	Hhs	Ind's	Hhs	Ind's	Hhs
Etiyata Kaapei	7	14	5	10	6	11	7	14	7	14	14	7	7	7	7
Betelemu	7	14	7	14	7	14	7	14	7	14	14	7	7	7	7
Apule	7	14	7	14	7	14	7	14	7	14	14	7	7	7	7
Etop	7	14	6	12	7	14	7	14	7	14	14	7	7	7	7
Omora Kaapei	n/a	n/a	7	14	7	14	7	14	7	14	14	7	7	7	7

n/a = not applicable as not conducted

3. FINDINGS

This section of the report reviews the outputs and findings of the M&E activities for the responses outlined in Section 2.1. For these responses, it brings together the findings of relevant M&E activities, in order to assess patterns of change in attitude, skill, and behaviour over the project. This leads to an evaluation of the value of podcasts (as downloaded audio files), played in a collaborative learning environment, in bringing about behaviour changes amongst rural communities and a discussion of their potential value in achieving other types of SBC in the future.

3.1 Changes in practice of farm recording over the project

Baseline levels of farm recording

<u>Baseline surveys</u>

The 5 officers who completed surveys about farm record keeping (it should be noted that only 5 completed surveys were received in total) reported that they have rarely/sometimes observed farm records being kept for individual farmers/farmer groups in Karamoja; and that in nearly all cases, these were kept for farm groups/cooperatives (mainly by a male designated book-keeper) rather than by individual farmers.

The baseline group surveys conducted with four project groups at the outset of the project initially indicated that a surprisingly high number of households (75%) had records kept for their farms. It seems that this high incidence could have been prompted by confusion regarding the nature of enterprise-based farm records amongst some participants. For example, some householders reported that they keep farm records, when later investigations revealed that these were animal identification/garden records being kept by a farmer group, as described by the officers above.

Several households from two out of these four groups, Etiyata Kaapei and Betelemu, reported that they kept farm records themselves. Most of the members from these two groups had learned about the concept of farm recording during the Drought and Flood Mitigation Service (DFMS) project. It appears that the legacy of this project was that some farmers did start to keep records.

Table 6: Farm recording practices reported during group baseline survey

Group	Total number households who responded	Have farm records kept for their farms (household)	Keep their own farm records (household)	Keep their own farm records (women)	Keep their own farm records (youth)
Etiyata Kaapei	7	5	5	5	5
Betelemu	7	7	7	0	7
Apule	7	2	0	0	0
Etop	7	7	0	0	0
Total	**28**	**21**	**12**	**5**	**12**
All groups	**28**	**75%**	**43%**	**18%**	**33%***

n/a = 12 out of 42 youth for these 4 groups

Because of this higher than anticipated level of farm recording activity, a fifth group was created (Omora Kaapei), which reported no previous experience of farm recording.

During the household survey (conducted with five groups), some households provided different answers to the question of whether they kept farm records themselves, though the overall percentage was quite similar (43% compared to 41%). The results for the level of record keeping by Betelemu group members remained high.

Table 7: Farm recording practices reported during group household survey

Group	Individual hh surveys: Have farm records kept for their farms and do this themselves (number out of total who responded)	
	Total number hhs who responded	Total number hhs who said they keep records for their farms
Etiyata Kaapei	5	3
Betelemu	7	6
Apule	7	2
Etop	6	2
Omora Kaapei	7	0
Total	**32**	**13**
Percentage		**41%**

The group interviews indicated that, where farm recording was practiced, it was generally the men who did this, with only 18% of women reporting that they help keep their farm's records. Within the Etiyata Kaapei group, all the women reported that they helped keep farm records, whereas no

women in the Betelemu group reported doing this. However, in Etiyata Kaapei, the discussions during the individual surveys indicated that this number was in fact lower.

This project was more focused on supporting behaviour change by youth (under 35 years) than by older age groups. In terms of the practice of farm recording by youth at the household level, 11 out of the 24 (46%) youth-headed households (<35 years) reported practicing farm recording, while only two out of the eight (25%) households led by older age groups reported this. Although this suggests that young age groups have more positive attitudes towards/experiences of farm recording, with so few older age groups included in the project, it would be inappropriate to draw conclusions from these data.

Reasons given for not keeping farm records included not knowing how to write, not realising their importance, and not knowing how to record. In some households, the farmers thought that their ability to remember activities and costs involved in their small farming enterprises meant that they did not need to keep farm records.

In terms of the detail of the financial records reported by 13 households during the household surveys, six said that they itemise cost/income data, and all 13 that they calculate the level of profit/loss they have earned from their activities.

Table 8: Level of detail of existing farm records

Group	Out of total who keep farm records	Detail of recording	
		Separate out cost and income data	Calculate profit and loss from their data
Etiyata Kaapei	3	1	3
Betelemu	6	3	6
Apule	2	2	2
Etop	2	0	2
Omora Kaapei	0	0	0
Total	**13**	**6**	**13**
Percentage		**46%***	**100%***

*for those who keep records only

Existing Farm Records Reviews

This relatively high level of detail was surprising and demonstrated an increasing awareness of the importance of record keeping amongst DFMS and Apolou farmers. These findings prompted the organisation of a repeat visit to the original four project groups by the ATTA field team, in order to better explore the recording systems being used.

Records for Apule and Etop groups were not available for review during these visits, as they reported that they discard them at the end of the season. However, these records were reported to

be fairly simple, and the fact that they had been discarded suggests that they would not meet the purpose of enterprise-based financial records being covered by this project (which aim to enable year-by-year comparisons of performance). As part of the Apolou programme, Apule and Etop groups reported that fairly detailed records, relating to some aspects of their farming activities, were kept by their respective Village Savings and Loan Associations (VSLA's), but that these were kept by the group secretary, and again did not examine the performance of individual enterprises. These records were also not available for inspection.

Betelemu was the group that reported the most extensive farm recording activities. Six of its households were met on farm, and their record books reviewed. In all cases, these were kept by the male household heads (as indicated by the initial surveys). At first glance their records appeared to be relatively thorough and were generally neat and well laid out, confirming that these men had learned some record-keeping practices during the previous DFMS project. However, closer inspection revealed that the records were only partly complete and could not be used for any meaningful purpose, as they did not include information relating to total input costs, or any information on enterprise output (and so could not in fact have been used to calculate profit and loss, as these six households had reported).

Only three of the four households from the Etiyata Kaapei group, who had reported that they keep farm records, were available during the follow-up visit. Of these, only one (a male household head) was still keeping records, and (as for Apule and Etop) reported that he had destroyed records from previous years.

Summary of baseline farm recording practice

To summarise the baseline levels of the practice of farm recording amongst the groups - the surveys and farm visits indicated that, despite a higher-than-expected number of farming households reporting keeping farm records, where such records were kept, they were not complete or detailed enough to provide any meaningful insight into farm performance over time.

The baseline studies also revealed (the quality of the records aside), a far higher level of farm recording activity amongst men than women, and suggested a higher involvement of youth (under 35 years) than older age groups in this practice (though numbers of older participants were insufficient to draw meaningful conclusions from the data).

End-line levels of farm recording

The group-level post-listening-session evaluations provided the first formal opportunity to assess the level of uptake of enterprise-based financial farm recording by participating households, covered in the listening-sessions. All 35 households reported that they now kept such records for their farms. This was confirmed during the follow-up visits to the farms in November/early December by the project officer, where each household was met individually, and their record books reviewed. All 35 sets of record books were reported to be enterprise-based and well organised.

In order to gather evidence as to whether the behaviour change of enterprise-based farm recording learned over the project is likely to be sustained in the future, the final end-line surveys were delayed (following a request to the IDEAL team) until mid-January. The results of these surveys

indicated that all households were continuing the practice of farm recording at this time. Scoring of the record books, using the simple scoring system outlined in the introduction, was conducted.

The level of enterprise-based farm recording at the baseline and end-lines stages of the project are compared below:

Table 9: Comparison of record-keeping practices reported at baseline and end-line

Group	Baseline			End-line		
	Total number of households surveyed	Number who reported keeping farm records	Number who keep organised enterprise based farm records	Total number of households surveyed	Post listening sessions	Final end line surveys
Etiyata Kaapei	5	3	0	7	7	7
Betelemu	7	6	0	7	7	7
Apule	7	2	0	7	7	7
Etop	6	2	0	7	7	7
Omora Kaapei	7	0	0	7	7	7
Total	**32**	**13**	**0**	**35**	**35**	**35**
Percentage		**41%**	**0%**		**100%**	**100%**

These results indicate considerable changes in the practice of farm recording over the project, with full uptake of enterprise-based record keeping by the households, compared to zero at the outset. The levels of skills developed over the project are explored in Section 3.2 below.

3.2 Development of farm recording skills

Skills levels at baseline stage

During the initial baseline assessments, the informal 'demonstration and observation' approach was conducted to broadly gauge participants' functional literacy levels, providing insight into the anticipated level of participant engagement in record-keeping activities, as well as the complexity of information that should be included. The responses of the participants were observed and recorded by a separate observer, which included disaggregation by gender and age. These responses, summarised in Tables 10 and 11 below, indicated that, although levels of interest and engagement of women and older members in the processes of farm recording generally seemed good, it was often the younger men who were best able to respond, demonstrating a consistently higher understanding of the types of information required to keep enterprise-based farm records and how to perform necessary calculations. Thus, it did appear from the outset, that for Etop and Apule groups specifically, it was the younger men who would be best equipped with skills to engage in farm recording activities during the project.

Table 10: Responses to recognising different costs and outputs; and the value of this information*

Group	General Level of response	Recognising different types of agricultural costs		Recognising different types of agricultural output		How to use cost/ income information	
		Gender	**Age**	**Gender**	**Age**	**Gender**	**Age**
Etiyata Kaapei	Good	Men & women[aa]	All age groups[aa]	Men & women[aa]	All age groups[aa]	Men & women[aa]	Mainly youth[ym]
Betelemu	Good	Men & women[aa]	All age groups[aa]	Men & women[aa]	All age groups[aa]	Mainly men[ym]	All age groups[aa]
Apule	Good	Mainly men[ym]	Mainly youth[ym]	Mainly men[ym]	Mainly youth[ym]	Mainly men[ym]	Mainly youth[ym]
Etop	Good	Men & women[aa]	Mainly youth[ym]	Men & women[ym]	Mainly youth[ym]	Mainly men[ym]	Mainly youth[ym]
Omora Kaapei	No group survey conducted						

***** aa = good responses by all age/gender groups; ym = good responses by younger men only

Table 11: Responses to calculating costs, income, and profit and loss*

Group	General Level of response	Calculating costs/ income (multiplication)		Calculating totals (addition)		General understanding of how to calculate Profit/loss (subtraction)	
		Gender	**Age**	**Gender**	**Age**	**Gender**	**Age**
Etiyata Kaapei	Good	Men & women[aa]	Mainly youth[ym]	Men & women[aa]	Mainly youth[ym]	Men & women[aa]	Mainly youth[ym]
Betelemu	Good	Mainly men[ym]	All age Groups[aa]	Men & women[aa]	All age groups[aa]	Men & women[aa]	All age groups[aa]
Apule	Good	Mainly men[ym]	Mainly youth[ym]	Mainly men[ym]	Mainly youth[ym]	Mainly men[ym]	Mainly youth[ym]
Etop	Moderate	Men & women[aa]	Mainly youth[ym]	Mainly men[ym]	Mainly youth[ym]	Mainly men[ym]	Mainly youth[ym]
Omora Kaapei	No group survey conducted						

***** aa = good responses by all age/gender groups; ym = good responses by younger men only

During the household surveys, more specific investigations were also made into the most appropriate recording systems that should be developed for the participants. This was based on their preference for using symbols versus text/numbers, confidence in performing calculations, access to a calculator (e.g., on a mobile phone), and daily routines.

This revealed that the majority of households (75%) favoured a combination of tally charts, symbols, text, and numbers. Similarly, most were confident that they could perform the addition (72%) and multiplication calculations (68%) required to develop a comprehensive set of enterprise-based farm records, with 78% of households reporting access to a calculator (on a mobile phone) which could

be used for these calculations.

Understanding the daily routines of the groups was important to avoid training sessions that clash with other commitments and to provide recording systems that would not be overly demanding in terms of time. All the participants reported that (subject to their health) they could foresee no time limitations with regards to attending training and carrying out farm recording. Holding the listening sessions within the communities was one way of facilitating attendance and involvement in the project.

As reported in section 3.1 above, although 75% of households in the 4 original groups had reported that farm records were kept for their farms and 41% of all 5 groups reported that they did this themselves, further questioning and farm visits had revealed no instances of meaningful enterprise-based financial recording at the outset of the project and so, it can be surmised, few - if any - existing farm recording skills. Section 3.1 also revealed how, at the time of the end-line, all households were keeping enterprise-based financial records.

Skills levels at end-line stage

The individual household surveys aimed to provide more in-depth investigation into the participants' confidence in keeping farm records, and problems they were encountering. The key findings are presented below:

Table 12: Confidence levels and problems encountered with farm recording at end-line

Group	Numbers confident calculating total amounts and values		Numbers confident calculating profits and loss		Number who reported encountering problems – and what these were		
	men	women	men	women	men	women	Problems reported by men (M) and/or women (W)
Etiyata Kaapei	7	7	7	7	0	0	-
Betelemu	7	7	7	7	0	0	-
Apule	7	6	6	3	1	6	Literacy (M & W); Lack of time (W)
Etop	7	5	6	4	2	6	Literacy (M & W); Lack of time (W)
Omora Kaapei	6	6	6	3	3	3	Language used too complex (M); Literacy (W); Lack of time (W)
Total	**34**	**31**	**32**	**24**	**6**	**15**	
Percentage	**97%**	**89%**	**91%**	**67%**	**17%**	**43%**	

The project officer reviewed the record books for each household in turn. This showed that the methods of keeping the records books varied, with some (presumably the more literate) favouring complete use of written text and numbers, and others a combination of writing and symbols.

A simple system was developed to score the quality of the record books at the end line stage, assessing the following criteria:

1. Keeps at least one record book
2. Tidy, well laid out, and understandable
3. Has costs on one side, outputs on other (or if no outputs, just costs on one side)
4. Appears to have a comprehensive list of all activities (and outputs if there are any)
5. Appear to have been kept regularly and does not have long gaps
6. Has included the month
7. Includes breakdown of units and costs per unit, not just totals
8. Calculations of cost (or output) completed for each activity/output type
9. Total costs of value of outputs over time have been calculated
10. GM has been calculated (where applicable)

Table 13: Quality of record books kept at end-line

Group	Using record books provided by the project	Have record books for multiple enterprises	Records are neat, well organised, and appear comprehensive	Overall record books score (out of 10)	Agricultural enterprise records kept for:
Etiyata Kaapei	7	7	7	9	Crop and Livestock Enterprises
Betelemu	7	7	7	10	Crop and Livestock Enterprises, Brewing
Apule	7	7	7	9	Crop and Livestock Enterprises, Brewing
Etop	7	7	7	9	Crop and Livestock Enterprises
Omora Kaapei	7	7	7	9½	Crop and Livestock Enterprises
Total	**35**	**35**	**35**	**46½**	
Percentage	**100%**	**100%**	**100%**	**93%**	

These results clearly indicate that well-organised farm records were being kept for the enterprises of all participating households.

Both end-line surveys studied who was responsible for keeping these records. These results were consistent with each other and are presented below:

Table 14: Farm-recording roles amongst participating households

Group	Record keeping shared equally by husbands and wives	Husband mainly but wife provides information to be written down	Another family member	A friend	A farmer group member
Etiyata Kaapei	2	2	1	2	
Betelemu		7			
Apule	1	1			5
Etop		5			2
Omora Kaapei	4	2	1		
Total	**7**	**17**	**2**	**2**	**7**
Percentage	**20%**	**48%**	**6%**	**6%**	**20%**

Overall, 69% of the couples reported that they keep their own farm records, while 74% manage to keep them as a family. Although this is a strong majority, 26% appeared to be reliant on outside help. Although the earlier end-line surveys had indicated very high levels of confidence (amongst men particularly) in record-keeping abilities amongst the participants, 17% of men and 43% of women had reported problems. They attributed these to inadequate literacy skills, lack of time, and, in one group, because they found the language used in the podcasts complex and hard to understand. Most households reliant on outside help were from Apule group, in which only one man had previously reported problems in record keeping, so this does seem somewhat inconsistent.

In terms of the farm recording activities performed specifically by women, as shown in Table 14 above, in only 20% of households were the women actively involved in the recording process, while 48% reported that they provided information to their husbands to write down. For the households where the men do the recording, the following reasons were collected from the women:

Table 15: Reasons provided by women for why their husbands do most of the recording

Group	Total number	Reasons: He is better at it – I am happy that he does it	Reason: He tends to dominate – I am capable of doing more but he takes over
Etiyata Kaapei	2	2	0
Betelemu	7	7	0
Apule	1	1	0
Etop	5	n/a	n/a
Omora Kaapei	2	2	0
Total	**17**		
Percentage	**48%**		

* n/a = no answers collected

Although calculations of overall percentage responses are not appropriate (counts were low, and some responses were not collected for Etop group), it seems that the women were happy for their husbands to keep the records, with them providing information to be recorded. The women said this was easier for them because the husbands were more literate/numerate. For the 7 women (20%) who reported that they share their record-keeping equally with their husbands, only 3 reported that they can do this unassisted, with the other 4 needing help from their husbands.

Summary of the development of farm recording skills

The M&E activities described above indicated that the ability of households to keep enterprise-based farm records increased from zero to 74%. 20% of the women said that they contributed to the process directly. Although the activities were generally performed by men (48% of all households), the women were happy with this arrangement as they were still able to contribute relevant information to the process. In 9 of the households (26%), friends of farmer group members were keeping the records on the households' behalf, suggesting that the level of skills acquired was not, in all cases, adequate to enable the households to do this themselves. This is discussed more in section 3.3 below.

3.3 Changes in attitudes towards farm recording, and anticipated continuation of this behaviour amongst participating households in the future

During the baseline, it was clear that farm recording was perceived as a beneficial practice, though there appeared to be a lack of clarity on what this entailed, particularly with regards to enterprise-based farm recording. Although many farming households reported that they kept records for their farms, there were no instances where these were found to be comprehensive, enterprise-level records that could provide financial insight into profit or losses made over time.

Over the duration of the project, as reported in the sections above, comprehensive farm recording was adopted by all the households, though in some cases this required outside help from a friend or farmer group member.

During the final end-line surveys, the groups were asked whether they had benefitted from the information compiled in their record books already, and in what way. The following responses were received:

Table 16: Benefits of record keeping, reported at the household level

Group	Are you benefitting from the information produced in your record books?	Reasons/Examples
Etiyata Kaapei	7	Ability to compare financial performance of enterprises – helps performance
Betelemu	7	Able to compare the profitability of different enterprises – e.g., the profit from brewing a bag of sorghum
Apule	7	Ability to compare financial performance of enterprises – helps performance

Group	Are you benefitting from the information produced in your record books?	Reasons/Examples
Etop	7	Provides information on transactions made over time
Omora Kaapei	7	Able to compare the profitability of different enterprises – e.g., could see that a loss had been made from that year's maize crop; but a profit from poultry; realised losses related to growing sorghum over the year (attributed to poor rainfall)
Total	**35**	
Percentage	**100%**	

When asked whether they intended to continue the practice of keeping enterprise-based farm records into the future, all households agreed (see Table 17). However, as 9 of the households (26%) appeared not to keep the records themselves, their ability to continue the practice would depend on the cooperation of friends, and the motivation of all parties to find time to do this.

Table 17: Number of households intending to continue farm recording in the future

Group	Intend to continue comprehensive farm recording in the future
Etiyata Kaapei	7
Betelemu	7
Apule	7
Etop	7
Omora Kaapei	7
Total	**35**
Percentage	**100%**

Despite the greater role played by men in farm recording, the women all perceived it as being beneficial and worth the effort, as summarised below:

Table 18: Attitudes of women towards the practice of farm recording at the end-line stage

Group	It takes very little time	It takes time but is worth the effort	It takes time and is not worth the effort
Etiyata Kaapei	0	7	0
Betelemu	0	7	0
Apule	0	7	0
Etop	0	7	0
Omora Kaapei	0	7	0
Total	**0**	**35**	**0**
Percentage	**0%**	**100%**	**0%**

<u>Summary of changes in attitudes towards farm recording, and anticipated continuation of this behaviour amongst participating households in the future</u>

The end-line findings show that the participants felt they had already benefited from the information collected into their record books since the listening-sessions started – this was attributed to their ability to compare the financial performance of different enterprises. Despite the problems encountered by some householders (most commonly, limitations in literacy skills), all households intended to continue keeping farm records in future, though some would have to do this with outside support. Although most women were not able to keep records themselves, due to their involvement in contributing information to the record-keeping process they appeared well engaged in the process, and displayed a positive attitude towards the process of farm recording.

3.4 Participants' experiences of learning from podcasts

Baseline levels of learning from podcasts (directly or indirectly, as audio material downloaded from podcasts) and radio

<u>Radio listening</u>

Because radio is used so extensively, and has been for decades, to deliver key agricultural messages to rural communities in the region, this project explored the value of podcasts (as downloaded mp3 audio files) in bringing about SBC in relation to that of radio.

The uses of radio and podcast content for bringing about SBC are also covered in this project's Formative Research Report.

Thus, M&E activities relating to podcasts started with studies of existing radio listening habits amongst the farmer groups. These are shown in Table 19 below:

Table 19: Radio listening habits of the householders at baseline

Group	Total who answered	Listen to the radio	Listen with others	Listen at least weekly	Listen to agricultural programmes	Have changed farming practices as a result of learning from radio programmes	Would like to listen to the radio more
Etiyata Kaapei	**5**	5	5	2	5	5	5
Betelemu	**7**	7	4	5	7	7	5
Apule	**7**	7	7	5	7	6	6
Etop	**6**	6	6	6	6	6	5
Omora Kaapei	**7**	7	7	7	7	7	7
Total	**32**	**32**	**29**	**25**	**32**	**31**	**28**
Percentage		**100%**	**91%**	**78%**	**100%**	**97%**	**88%**

These results show that all households listen to the radio. Many reported doing this using their mobile phones. Levels of phone access are shown in Table 20 below. There were very low levels of phone ownership/access within Etiyata Kaapei group, however. This was the oldest age group,

which may be surmised as the reason for this.

Table 20: Baseline levels of access to mobile phones within groups

Group	No. who answered	Own or have access to a phone
Etiyata Kaapei	5	1
Betelemu	7	7
Apule	7	3
Etop	6	6
Omora Kaapei	7	4
Total	**32**	**21**
Percentage	**100%**	**65%**

During the group level surveys, 82% of the women reported that they listen to the radio, though several said that their listening time was limited because their husbands own the family phones and often go out with them.

Of the households interviewed, 78% reported that they listen to the radio at least weekly. Most households (88%) reported that they would like to listen to the radio more, but that limited options for phone recharging often reduce their listening time.

The types of programmes listened to include: news; security (including cattle rustling and disarmament); weather forecasts; health and education programmes; religious programmes; farming programmes; politics; talk shows; and music.

All the surveyed households listen to agricultural radio programmes. As a result of these programmes, 97% said that they had changed some form of agricultural practice. These changes included planting crops in rows, spraying, mulching, timings of plantings, and establishing nursery beds. Many reported that they time their crop planting activities around weather forecasts that they hear on the radio.

Podcast listening (accessed directly from the internet, or indirectly as pre-recorded audio files)

The survey conducted with agricultural officers (though notably only 5 of these were completed) suggested that podcasts were little used in the sub-region for agricultural message sharing at that time.

The baseline household survey results were in line with this, providing the following information on existing knowledge and experience of podcast content by the project participants:

Table 21: Familiarity with podcasts at baseline

Group	Total who answered	Have heard of/listened to podcasts	Listen to podcasts regularly (more than monthly)	Have listened to agricultural advice podcasts	Have changed farming practices as a result of learning from agricultural podcasts*
Etiyata Kaapei	**5**	4	0	2	2
Betelemu	**7**	5	1	1	1
Apule	**7**	2	0	2	2
Etop	**6**	5	0	4	4
Omora Kaapei	**7**	0	0	0	0
Total	**32**	**16**	**1**	**9**	**9**
Percentage		**50%**	**3%**	**56%**	**100%***

*of those who listen to agricultural podcasts only

Of the 16 households who reported having listened to a podcast before, only one said they listened to them often, with the remaining not having listened to a podcast for some years. Few women reported having listened to podcast content before, except in the Etop group where they said they had heard them being played in town when they visit the market. The podcast content they had heard was listened to in a variety of ways, including being played from memory cards inserted into radios or phones.

Those respondents who were familiar with podcasts reported that they had enjoyed listening to them, not just the content but also the ability to play/replay them at convenient times and copy them for sharing with others.

Nine out of the 16 households who had listened to podcasts (56%) said these were agricultural programmes. All nine households reported they changed some form of agricultural practice as a result. Given that some of these changes were similar to those given for the radio, it may well be that the definition between podcasts and radio is a grey area and the two are not always clearly defined, particularly as some radio programmes can be downloaded to phones.

Suggestions regarding ways in which podcasts could be improved included: adding video content for demonstration purposes (though this would result in them being videos, not podcasts); inclusion of musical/drama interludes or content that has more "charm"; and key messages for children. The importance of a reliable power source was also noted.

End-line experience of learning from podcasts

In the post-listening survey, the term podcast refers to the podcast content that was downloaded (in mp3 format) prior to the listening sessions by the project officer, for playing during the listening sessions.

Table 22 shows that, during the post-listening survey, all listeners, both male and female, reported having enjoyed listening to the podcasts.

Table 22: Participants' experience of learning from podcasts

Group	Enjoyed podcasts and found them interesting	
	men	women
Etiyata Kaapei	7	7
Betelemu	7	7
Apule	7	7
Etop	7	7
Omora Kaapei	7	7
Total	**35**	**35**
Percentage	**100%**	**100%**

During the early stages of the project, ATTI and ATTA jointly agreed that providing small radio sets (that can accommodate memory cards) would allow the households to reinforce their learning at home more easily – and that this would particularly benefit the women whose husbands leave their homes with the family radios/mobile phones. Due to their affordability, there were sufficient budget funds to enable small solar-powered radio sets to be purchased for each household. These were circulated at the end of the last listening-session. The downloaded Karamojong podcasts were installed onto every radio, using memory cards. The post-listening session survey also provided insight into how much the participants had listened to this podcast content again:

Table 23: Extent to which households had listened to the podcasts again within their homes/ communities

Group	Have listened to the podcasts again		Have done this many times		Have done this a few times	
	men	women	men	women	men	women
Etiyata Kaapei	7	7	7	7	0	0
Betelemu	7	7	5	5	2	2
Apule	7	7	7	7	0	0
Etop	7	7	7	7	0	0
Omora Kaapei	7	7	7	7	0	0
Total	**35**	**35**	**33**	**33**	**2**	**2**
Percentage	**100%**	**100%**	**94%**	**94%**	**6%**	**6%**

All had listened to the downloaded podcasts again, in between the listening session. 94% of them (both men and women) said they had done this many times. All said that they had listened with other friends and family. As shown in Table 24 below, 48% of households from 3 groups had managed to share their podcast content from their memory cards with others within their communities – with Etop members reporting to have done this 58 times. This was done using Bluetooth.

Table 24: Extent to which the households had listened to and shared podcasts with others

Group	Have listened with other friends/family	How many times shared by downloading (total by group)
Etiyata Kaapei	7	0
Betelemu	7	0
Apule	7	36 (by 7 hhs)
Etop	7	58 (by 7 hhs)
Omora Kaapei	7	4 (by 3 hhs)
Total	**35**	**98**
Percentage	**100%**	**by 48% of hhs**

The women-only end-line studies explored the ability of the women to listen to the downloaded podcasts at home independently of their husbands. All the women had done this; 94% of them had done so many times. The majority (66%) had listened with friends in their communities who were outside their immediate family and their listening group.

Only a few women reported that they had started trying to get their friends started with record keeping, though a few women from Etiyata Kaapei said they planned to do this soon, when the new cropping cycle starts.

Table 25: Extent to which the women had listened to podcasts again

Group	Have listened again without husbands present – many times	Have listened again without husbands present – a few times	With other hh members	With friends from the farm recording groups	With friends from outside the farm recording groups	Have helped friends get started with farm recording since the listening sessions
Etiyata Kaapei	7	0	3	2	2	0
Betelemu	5	2	7	0	0	0
Apule	7	0	0	0	7	3
Etop	7	0	0	0	7	0
Omora Kaapei	7	0	0	0	7	0
Total	**33**	**2**	**10**	**2**	**23**	**3**
Percentage	**94%**	**6%**	**28%**	**6%**	**66%**	**8%**

As shown in Table 26 below, all the participants said that they would like to listen to other pedagogical podcasts in future. The topics they said they would like to learn about from podcasts are also shown:

Table 26: Responses on future learning from podcasts

Group	Would like to listen to other teaching-related podcasts in future		Topics
	men	women	• Gender-based violence among the community members since women are still underlooked in some communities • Business skills to manage small-scale businesses • Water and sanitation which is still the major challenge in most communities in the region • Health education concerning diseases and their control • Adult education among school drop-outs and elderly people to improve the level of literacy • Peace-building strategies – as the region is experiencing a lot of insecurity • Family planning – suggested by some women
Etiyata Kaapei	7	7	
Betelemu	7	7	
Apule	7	7	
Etop	7	7	
Omora Kaapei	7	7	
Total	**35**	**35**	
Percentage	**100%**	**100%**	

The participants were also asked to describe which, if any, advantages they thought there were in learning from pre-recorded podcast format, compared to live radio.

Table 27: Participants' comparisons between learning from podcasts and radio

Group	Are there any advantages of learning from podcasts, compared to live radio? If so, what are they?
Etiyata Kaapei	Can listen any time (when it suits you); Not interrupted by network problems; Can be repeated, reinforcing learning
Betelemu	Can listen any time (when it suits you); Can be translated into local languages; Effective when played in social groups – opportunity for discussion
Apule	Easily repeated; Gives you more control (can listen any time); Can be shared
Etop	Can listen any time (when it suits you); Not interrupted by network problems; Effective when played in social groups - can be repeated, encouraging discussion and reinforcing learning
Omora Kaapei	Can listen any time (when it suits you); Easier to reach a targeted group

These can be summarised as:

- Can listen any time (when it suits you) – gives the listener more control
- Can be repeated, reinforcing learning
- Not interrupted by network problems, as live radio is
- Can be translated into local languages

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- Can be shared
- Effective when played in social groups – opportunity for discussion
- Easier to reach a targeted group

The latter two reasons provided largely relate to the advantages of listening to podcast content in a social learning environment, which are discussed more in sections 3.5 and 3.6.

These findings were largely reinforced by the surveys conducted with the four agricultural officers and parish chief who had attended the listening-session/s with four of the groups. Some of their observations are summarised in Table 28 below:

Table 28: Officers' opinions on value of pedagogical podcasts after attending the listening-sessions

Interviewee	Position	Group/s	How they rate podcasts as a training resource compared to live radio	Reasons	Think podcasts could be an effective tool for bringing about behaviour change amongst communities they work with
1	Agri-Officer	Etiyata Kaapei	Much better	Can be paused (and replayed) – more interactive	yes
2	Agri-Officer	Betelemu and Etop	Much better	More interactive (*presumably as can be paused and replayed*)	yes
3	Agri-Officer	Omora Kaapei	Much better	Better access than radio as not relying on live-transmission signals	yes
4	Parish Chief	Omora Kaapei	Much better	Can be played – reinforces messages	yes
5	Agri-Officer	Omora Kaapei	Much better	More interactive (*presumably as can be paused and replayed*)	yes

The questions above related specifically to podcasts downloaded as audio files. However, when the officers/chief were asked about accessibility to equipment that can accommodate memory cards to play podcasts, such as mobile phones, the following answers were received:

Table 29: Officers' opinions on ability of communities to play podcasts with existing equipment

Interviewee	Position	Group/s	Do communities you work with have the right equipment* to play podcasts	If so, would the women in these families have access to them too?	Comments
1	Agri-Officer	Etiyata Kaapei	A minority	Rarely	Men tend to dominate devices
2	Agri-Officer	Betelemu and Etop	About half	A little	Men tend to dominate devices
3	Agri-Officer	Omora Kaapei	Very rarely		
4	Parish Chief	Omora Kaapei	A minority	Yes	
5	Agri-Officer	Omora Kaapei	A minority	No	Men tend to dominate devices

*namely radios/phones that can accommodate memory cards

These findings suggest lower levels of phone access than within the groups that took part in the project (see Table 20) and that, though the officers rated learning from podcast content very highly, broadcasting messages by radio or podcast will, until patterns of ownership change, be limited by lack of access to appropriate devices.

3.5 Participants' experiences of learning collaboratively as households

During the end-line survey, the following responses were received regarding the listening-sessions being conducted as mixed gender groups, and whether there had been advantages to learning in this way:

Table 30: Women's experience of learning as a mixed group*

Group	Enjoyed learning in mixed groups (women only)	Learning about farm recording in mixed groups has helped learning (women only)	Reasons/Examples
Etiyata Kaapei	7	7	Can share knowledge during discussions – learn from each other
Betelemu	7	7	Can share knowledge during discussions
Apule	7	7	Can share knowledge during discussions
Etop	7	7	Can share knowledge during discussions
Omora Kaapei	7	7	Can share knowledge and ideas during discussions
Total	**35**	**35**	
Percentage	**100%**	**100%**	

* Equivalent data for men are not available

In terms of the collaborative learning approach of this project, the main focus was on how effective

pedagogical podcasts (downloaded as mp3 audio files) are when played in groups. However, an added aspect of this project was to invite a household head plus one other family member to the learning sessions, so that learning at the household level would also be collaborative, rather than individually. In all cases, the family member that the household heads brought along was their wife (this had indeed been the project's preference, but it would not have been fair to request this specifically).

The following responses to learning as a couple were received from the men and women during the group survey held at the end of the listening sessions:

Table 31: Participants' experience of learning as a couple

Group	Have enjoyed learning as a couple		Feel that learning as a couple has helped their learning		Reasons
	men	women	men	women	
Etiyata Kaapei	7	7	7	7	If one partner forgets information, the other can help
Betelemu	7	7	7	7	Can better share information with each other on what to record
Apule	7	7	7	7	
Etop	7	7	7	7	Can better share information with each other on what to record
Omora Kaapei	7	7	7	7	Can better share information with each other on what to record
Total	**35**	**35**	**35**	**35**	
Percentage	**100%**	**100%**	**100%**	**100%**	

Thus, all participants reported that they had enjoyed learning with their respective partners.

In order to encourage the women to share their feelings more openly, during the final end-line women-only survey, they were asked again about their experience of learning about farm recording with their husbands and whether they felt it had impacted their involvement in financial decision-making within their households. The following answers were received:

Table 32: Women's responses to learning as a couple; effect on household financial decision making

Group	Enjoyed learning with their husbands	Learning about farm recording as a couple has benefitted their role in hh financial decision making	Reasons/Examples Received
Etiyata Kaapei	7	7	Share in the financial planning of how to spend household profits
Betelemu	7	7	
Apule	7	7	Are involved in the process of farm recording – sharing information on financial transactions
Etop	7	7	
Omora Kaapei	7	7	Has enabled them to share responsibility for this as a couple
Total	**35**	**35**	
Percentage	**100%**	**100%**	

These results indicate that this aspect of social learning (that is, learning as a couple) can improve collaboration within a household, increasing the profile of women within a given process.

These observations were endorsed by the feedback from the agricultural officers/chief, who generally felt that both men and women had enjoyed learning as a couple (see Table 33). However, one officer expressed concerns that the women had shied away from fully participating with men present (though had reported that they believed the women had enjoyed learning with their husbands). Another expressed concerns that the women sometimes shied away from telling the whole truth in front of their husbands. One officer said she felt the women were hopeful that such an approach could increase men's support for their wives in providing for the family.

Table 33: Officers' responses to household learning as a couple

Interviewee	Position	Group/s	Enjoy learning as a couple - men	Enjoy learning as a couple - women
1	Agri-Officer	Etiyata Kaapei	Really enjoyed	Really enjoyed
2	Agri-Officer	Betelemu and Etop	Did not care	n/a
3	Agri-Officer	Omora Kaapei	Enjoyed	Enjoyed
4	Parish Chief	Omora Kaapei	Enjoyed	Enjoyed
5	Agri-Officer	Omora Kaapei	Really enjoyed	Really enjoyed

3.6 Combined experience of learning from podcast content in a collaborative environment

Integral to the social learning of this project was that the listening-sessions did not just include the playing of podcast content to groups. Although the main tool for message delivery, it was the integration of these audio files with step-by-step demonstrations, group discussions, and practice sessions, facilitated by the project officer, which combined to create the collaborative learning approach being explored in this project.

The following responses regarding this collaborative learning approach were gathered during the survey conducted at the end of the listening-sessions:

Table 34: Participants' experience of learning from the different aspects of the collaborative listening sessions

Group	Said that the combination of podcasts, demonstrations, discussions, and practice sessions contributed most to learning*		Have learned enough new skills from the listening-sessions to start keeping meaningful enterprise-based farm records	
	men	**women**	**men**	**women**
Etiyata Kaapei	7	7	7	7
Betelemu	7	7	7	7
Apule	7	7	7	7
Etop	7	7	7	7
Omora Kaapei	7	7	7	7
Total	**35**	**35**	**35**	**35**
Percentage	**100%**	**100%**	**100%**	**100%**

* as opposed to any one of these. Note: Podcast refers to the downloaded podcasts as mp3 audio files

In terms of the responses of the officers/parish chief to why they rate podcasts (when downloaded as audio files) as a better training resource than live radio (see section 3.4), their reasons largely focused around the fact that they were more interactive (presumably as they can be paused and replayed), which suggests that they also appreciated the collaborative approach taken by the project (as opposed to podcasts being played in isolation). This appreciation of the integrated, collaborative approach of the listening-sessions by the officers/chief is also demonstrated by the generally high scores they attributed to their various components, as shown below:

Table 35: Officers' feedback on the components of the collaborative learning approach delivered during the project

Interviewee	Position	Group/s	Quality of podcast* content (out of 5)	Quality of podcast* production (out of 5)	Quality of demonstration examples by Project Officer (out of 5)	Quality of discussions amongst the groups (out of 5)	Quality of Record Keeping practice components (out of 5)
1	Agri-Officer	Etiyata Kaapei	4	4	4	4	4
2	Agri-Officer	Betelemu and Etop	4	4	5	5	4
3	Agri-Officer	Omora Kaapei	5	5	4	4	3
4	Parish Chief	Omora Kaapei	4	3	5	4	4
5	Agri-Officer	Omora Kaapei	4	4	4	4	4

* Podcasts downloaded as mp3 audio files

More discussion of the application of podcasts in a collaborative setting for bringing about SBC amongst smallholder farmers is presented in the final section of this report.

4. CONCLUSION

This project explored the effectiveness of using podcasts as part of a collaborative learning approach in bringing about the desired behaviour change of farm recording among farming groups in the Karamoja sub-region.

Four podcasts were developed in English and Karamojong, along with supporting training and recording material, and were delivered to five groups of seven couples over eight weeks during collaborative listening-sessions. Due to the semi-rural location of the project and the lack of internet, prior to the listening-sessions the podcasts were downloaded by the project officer as mp3 audio files. They were also copied onto memory cards for distribution to the couples attending the sessions.

The baseline studies described in this report demonstrate that, although 75% of the participants reported that farm records were kept for their farms, and 43% reported that they kept these records themselves, these were not enterprise-based and could not be used to explore the profitability of different farming enterprises, such as one crop versus another, or how a single crop performed over time.

The baseline studies also demonstrated the lower levels of literacy and numerical confidence of women compared to men. Men demonstrated greater confidence in their abilities to perform necessary calculations for these records compared to women throughout the project, though some men did indicate challenges with literacy as a problem in keeping farm records.

However, by the end of the project, all 35 households (100%) had enterprise-based records kept for their farms, including break-downs of inputs, outputs and values, and, ultimately, gross margins. This was done for a wide variety of enterprises, mainly crop or livestock related, though also extended to brewing. This practice was continuing at the final end-line (3½ months after the final listening-session), indicating that it was being sustained as a behaviour change well after program activities had stopped. At this stage, all household record books were reviewed and scored by the project officer. All were neat and well organised, scoring at least 90% in terms of overall quality.

Further evaluations at the end-line stage indicated that record keeping was not always conducted by the couples themselves. Only 20% of women reported that they shared the actual process of writing down information into the records equally with their husbands. 48% of record books were maintained by husbands alone, but with their wives contributing information that required entry. Despite this, these women said they were happy with this arrangement, as their husbands were better than they were at recording (rather than because they dominated the record books). All the women perceived farm recording as being beneficial and worth the effort.

26% of the households had to seek help outside their families to keep their record books. This suggests that the level of farm recording skills acquired during the listening sessions was not, in all cases, adequate to enable the households to do this themselves. This can largely be attributed to limitations in literacy and numeracy skills amongst the participants, most especially the women.

At the end-line stage, all households reported that they were benefitting from the information produced in their record books. Examples of this included the ability to compare financial performance of different enterprises - for example, comparisons of earnings from maize and sorghum crops.

All households said that they intend to continue with farm recording in the future, despite that fact that it is demanding of their time. However, the reliance of some households on external help means that their continuation will depend on the commitment of both parties.

The baseline studies indicated that all participants listen regularly to the radio, often via their mobile phones. They reported often listening to agricultural programmes. Nearly all had implemented changes to their farming practices as a result of what they had heard in these programmes. Very few participants had prior experience with podcasts, which was supported by the feedback from agricultural officer surveys.

At the end-line, all participants reported that they had enjoyed listening to the Karamojong audio recordings and found them interesting. Each household was provided with a small solar-powered radio by the project, onto which the recordings were installed as mp3 audio files, using memory cards. The post-listening session surveys indicated that nearly all the participants (men and women) had listened to them many times since the listening-sessions, often with other friends or family. 17 participants from three of the groups had shared the audio files (via Bluetooth) with 98 other people within their communities.

The advantages the participants experienced in learning from the podcast content, compared to live radio included:

- Can listen any time (when it suits you);
- Not interrupted by network problems;
- Can be repeated, reinforcing learning;
- Effective when played in social groups - can be repeated, encouraging discussion and reinforcing learning;
- Can be shared;
- Easier to reach a target group.

These findings were reinforced by the surveys conducted with five agricultural officers and the parish chief who had attended listening-session/s with four of the groups. They all rated podcasts (downloaded onto audio files) as a more effective training resource than live radio, and think that this approach could support the adoption of desired behavio

r changes amongst the communities they work with.

All participants were keen to learn from podcasts in the future, citing a range of topics they felt suitable:

- Gender-based violence;
- Business skills to manage small-scale businesses;
- Water and sanitation;
- Health education;
- Adult education among school drop-outs and elderly people to improve the level of literacy;
- Peace-building strategies;
- Family planning - suggested by some women.

The findings summarised above indicate that podcasts can be an effective tool, as part of a collaborative learning approach, for bringing about SBC in rural communities. In areas with limited internet access, this would require the podcast content to be downloaded before delivery. However, other aspects of the collaborative approach used by the project are also believed to have contributed to the SBC demonstrated by the participants: namely, that the farmers learned as couples within mixed farming groups and received the continued support of a project officer for the duration of the project.

All learners enjoyed and felt they had benefited from learning as a couple within a mixed group. Although some officers expressed concern that the women would be dominated by the men during these sessions, the levels of female engagement were reported to be high for all groups.

In terms of learning as a large group, the feedback was that this improved learning because the participants can share knowledge during discussions, and so learn from each other. Feedback on the participants' experience of learning as a couple was that they can learn better together, and share information with each other on what to record during the sessions. By the final end-line, the women reported that learning about (and supporting) farm recording as a couple had benefitted their role in household financial decision-making since they are more engaged in the process of

financial information gathering, and thereby management. Most of the agricultural officers also observed that both men and women had generally enjoyed learning as a couple.

Integral to the social learning of this project was that the listening-sessions did not just include the playing of audio files to groups. Although the main tool for message delivery, it was the integration of these with step-by-step demonstrations, group discussions, and practice sessions, facilitated by the project officer, which combined to create the collaborative learning approach being explored in the project. The participants reported that it was the combination of all these aspects of the listening sessions that contributed to their learning about farm recording.

The circulation of the podcasts as downloaded mp3 audio files to all households on solar-powered radios ensured that all the participants could listen to them at other times (as well as with others in their communities) during the project. Given the high number of times the participants reported that they had listened to the audio files at home, this repeat listening would have reinforced their learning about farm recording.

Within the region, some rural households, and many rural women, have no access to mobile phones. Even if they do, users may be unable/reluctant to spare battery power to play audio material. Future pedagogical podcast projects should therefore consider ensuring/enabling learners' access to solar-powered devices that can replay content (normally using memory cards) to extend learning outside organised group sessions.

The audio files were also circulated directly both by the learners (via Bluetooth) and the project, which distributed 50 memory cards onto which the podcasts have been recorded (in English and Karamojong) to agricultural officers and lead farmers within the sub-region. The podcasts are also being incorporated into live radio-show broadcasts during the weeks of March 2022. The format of the shows shall comprise an introduction, then playing of a recording of the podcast, followed by a question-and-answer call-in session.

Bringing together the end-line results described above indicate that both men and women had enjoyed and felt they had benefitted from the different aspects of the project being investigated in this project – that is, the podcast audio content, the social learning environment, and learning as a couple. Comparisons between baseline and end-line results indicated that a social learning approach that makes use of audio files to deliver content and serve as a technical reference was considered effective by participants, for the following reasons:

In terms of the audio file content:

1. Because they can be listened to at a convenient time; in terms of both daily schedules and when devices are fully charged
2. Audio files have no network connection issues
3. They can be paused and replayed, reinforcing learning
4. They work well for group learning: because they can be paused and replayed, they allow good opportunities for discussion.

Relating to learning in groups, this was attributed to good opportunities for discussion and the

exchange of ideas.

Finally, the benefits of learning as a couple were attributed to the fact that partners can remind each other of what they learned and are better able to keep complete records, as both know what information is required, and so what to record. Some women also reported that, by learning as couples and practicing farm recording with their husbands at home, they felt more involved in domestic financial management.

Considering the benefits of podcasts specifically (rather than audio files accessed offline) to implementing agencies and their staff, it can be inferred that they can provide benefits of consistent good-quality messaging, cost-saving, and access, so could greatly enhance Training of Trainer activities in the future.

ANNEX 1 – OFFICER SURVEY TEMPLATE (BASELINE)

SURVEY ON FARM RECORDING AND PODCASTS FOR FIELD OFFICERS, MAY 2021

AgriTechTalk is conducting a study, funded by the USAID IDEAL programme, to investigate the potential for farmers in Karamoja to improve their performance through farm record keeping; and whether they can be encouraged and trained on how to do this via group training using podcasts*. Bearing in mind the lack of literacy amongst the farming community, it would explore the use of both written ledgers and symbols/simple counting systems. As a start, we are exploring farm recording practices in the sub-region, barriers to farm recording, as well as the use of podcasts for training. We would be grateful if you could complete this short questionnaire. Thank you!

* NOTE: *A podcast is a digital audio recording, which can be played and shared digitally, by a radio, tablet or phone with access to the internet or a SIM card.*

Name of Officer _____

Name of Organisation _____

Do you work in Karamoja?
( ) Yes
( ) No

Where are you based? _____

1. During your work, have you observed farm records being kept for individual farmers/ farmer groups in Karamoja?
( ) Often
( ) Sometimes
( ) Rarely
( ) Never

2. If you have, were these records kept for:
[ ] Farm Groups/Cooperatives (go to 3)
[ ] Only large Farmers (go to 4)
[ ] Small and large Farmers (go to 4)
[ ] Other: _____

3. If you ticked Farm Groups/Cooperatives in Question 2, was the recording done by:
( ) A farm officer on behalf of the group
( ) The designated book keeper of the group

( ) The designated book keeper with support from a farm officer
( ) Other: _____

4. If you ticked Farmers (large or small) in Question 2, was the recording done by:
( ) A farm officer on behalf of the farmer
( ) The farmer himself or herself
( ) A member of the farmer's family
( ) Other: _____

5. If you have observed farmer groups/farmers keeping their own records, was the recording mainly done by:
[ ] Men and Women (it was quite balanced)
[ ] Mainly men only
[ ] Mainly women
[ ] People of all ages
[ ] Mainly older people (> 35 years)
[ ] Mainly younger people (<35 years)
( ) Other: _____

6. If you have observed farmer group/farmers' records, were these kept as:
( ) Organised ledgers, with quantities, costs and sales itemised and neatly displayed
( ) Simple notebooks/ledgers including only lists of total costs and sales
( ) Other recording systems such as pots of pebbles
( ) Other: _____

7. If you have observed farmer group/farmers' records, did they use:
( ) Written text, numbers and calculations
( ) Symbols representing different types of input and output
( ) Tally charts for counting
( ) Counters (eg pebbles) for counting
( ) Other:

8. Would you like to see more farmers using farm recording?
( ) Yes
( ) No
( ) Not sure

9. If you answered yes to above, why?

_____

_____

_____

10. What are the main barriers to farm recording amongst farmers in Karamoja?
[ ] Lack of literacy/numeracy skills
[ ] Lack of awareness of the benefits of farm recording
[ ] Lack of understanding how to keep farm records (if literate/numerate)

[ ] Other: _____

11. Any other experiences or thoughts you would like to share about Farm Recording?

_____

_____

_____

12. Do you think radio is an important source of advice and information for the farming communities you work with?

( ) Yes

( ) No

13. What was the reason for the answer you gave above?

_____

_____

_____

14. Have you used podcasts, either as a listener or trainer?

( ) Yes, as a listener and to deliver training

( ) Yes, to deliver training

( ) Yes, as a listener only

( ) No

( ) I don't know what a podcast is

15. If you have used podcasts to receive/deliver training, what was your experience of this? Do you have any suggestions to make?

_____

_____

_____

16. If you have not used podcasts to receive/deliver training, do you think they could be a useful tool for training delivery (you may find it useful to refer to the opening questionnaire description to answer this question)? Please explain your answer.

_____

_____

_____

17. What kind of phone/tablet do you use for your work?

[ ] Tablet

[ ] Smart phone

[ ] Simple mobile phone

18. To your knowledge, could your phone or tablet accommodate a SIM card to play audio clips (podcasts)?
( ) Yes
( ) No
( ) Not sure

ANNEX 2 – GROUP LEVEL BASELINE SURVEY TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

GROUP BASELINE ASSESSMENT, April 2021

Purpose:
a) To demonstrate and assess existing experience/understanding of farm recording amongst the farming hhs, as well as to gauge attitudes towards it;
b) To broadly gauge existing numeracy/literacy levels and to identify the most appropriate farm recording systems to be covered in the training content;
c) To assess the farming hhs' experience of and attitudes towards learning from radio programmes and podcasts.

Two field staff are required: One (the facilitator) to act as the key presenter; the other (the supporter) to support, observe and score/record the group's responses for this baseline.
This session will be split into 5 stages:

    1. INTRODUCTION
    2. EXISTING PRACTICE OF FARM RECORDING AMONGST THE FARMERS
    3. EXISTING LEARNING FROM RADIO AND OR PODCASTS
    4. DEMONSTRATION OF FARM RECORDING AND HOW IT CAN BE OF BENEFIT
    5. DISCUSSION

Data are collected for Stages 2 onwards. Many answers will be written lists; but many will be quantified or categorised:

For Stages 2 and 3, responses which can be quantified (e.g., a show of hands) should be recorded as: a) the total number of hhs (because there are 2 individuals per hh attending) who say yes; b) the number of individuals who say yes; c) the number of women who say yes (the number of men can be calculated by subtraction later); and d) the number < 35 years (youths) who say yes (the number of people > 35 can be calculated by subtraction later).

For Stage 4, responses are harder to count. These are instead recorded as the general level of response being good/moderate or poor. This is recorded for the whole group, and by age and gender. Stage 5 is a mix of both scoring systems.

Group name and location _____

STAGE 1. INTRODUCTION (no scoring required) AND FARM GROUP INFORMATION

- The facilitator presents the project to introduce the practice of farm recording to the farming households, and that this will be done using podcasts as the main means of delivering the training on how this is done. By learning in groups with another family member, the project also aims to improve learning, so that all participants can learn together and provide support to each other.
- Farm recording involves keeping records over time of what is bought (costs) and what is produced (income) by a farm. This allows farmers to keep track of what they have done each year, and what farming practices and decisions have paid off. For example, if a farmer chooses to sow cheap, poor quality seed that produced a poor crop – might he/she have been better off buying more expensive seed that produced a higher yield? Farm records can help the farmer make sense of different farming decisions
- Farm recording does take time and needs some level of knowledge and skill. However, even simple farm records can provide useful insight for farmers. *Show two examples of some farm records – one very simple and one more complicated.*
- That there are 4 groups in Moroto.
- Each group comprises 2 people from 7 hhs – to see if learning in pairs makes it easier to understand and learn.
- That they will each be asked to attend 4 training sessions, one every 2 weeks over the following 4 weeks. These training sessions will use podcasts – that is, learning from audio recordings which can be paused and replayed.
- The training only starts from Month 6 because the project wishes to consult with the farmers on what they want to be included before developing the training materials, this takes time. So, the training only starts from Month 6.
- Because the crop season starts before this time – that is when farmers carry out a lot of activity on the farm and buy inputs like seed, etc. – they will be given a basic blank notebook to write down/list a) the time they or others spend on different activities on the farm and b) the amount of money that is spent on growing their crops during the early months. This shall include all payments for labour, seed, etc.
- Once they have received training, they should transfer this information and record all future information into the farm recording notebooks that will be developed specially for them later in the project (these are not prepared earlier because their format will depend on what the farmers want).
- The officer will make regular visits to the communities to see how the learners are getting on and to provide support.
- The learners will have different skills. The records they keep will match their abilities. Some may choose to keep written records (show example) while others may prefer to keep simple charts using symbols and tally charts (show example).

GROUP NAME	
GROUP LOCATION	
TOTAL NUMBER OF PARTICIPANTS IN THE GROUP	
NUMBER OF PARTICIPANTS ATTENDING BASELINE EVENT	
DATE OF BASELINE EVENT	

Group name and location _____

STAGE 2. EXISTING PRACTICE OF FARM RECORDING

The facilitator will ask for a show of hands (and the supporter counts and records the answers for the number of hhs **and** the number of individuals, by gender and age group):

QUESTIONS

1. Who is familiar with farm records?

For each group, count and enter the number who said yes			
No. individuals	**No. hhs**	**No. women**	**No. youth**

2. Does your farm/garden/herd have records kept for it?

For each group, count and enter the number who said yes			
No. individuals	**No. hhs**	**No. women**	**No. youth**

For those whose farms/herds DO have farm records:

3. Are these records for:

	For each group, count and enter the number who said yes			
Option	**No. individuals**	**No. hhs**	**No. women**	**No. youth**
Your farmer group				
Your own herd/farm alone				

4. Who keeps the records?

	For each group, count and enter the number who said yes			
Option	**No. individuals**	**No. hhs**	**No. women**	**No. youth**
You				
Another family member				
A friend				
A farm officer				
A farmer group member				

5. What made you decide to start record keeping?

Group name and location _____

6. What types of records do you keep?

| |
| |
| |
| |

For those whose farms/herds do NOT have farm records:

7. For those that do not keep records, why not?

| |
| |
| |
| |

STAGE 3. EXISTING LEARNING FROM RADIO AND OR PODCASTS (see scoring table)

The facilitator will ask for a show of hands (and the supporter counts and records the answers for the number of hhs **and** the number of individuals, by gender and age group) for:

SECION A: Radio
A1. Who listens to the **radio**?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

For those who DO listen to the radio:

A2. Where do you listen to the radio? At your own home, at a friend's home, or elsewhere?

	For each group, count and enter the number who said yes			
Option	No. individuals	No. hhs	No. women	No. youth
At home				
At a friend's home				
Elsewhere				
If elsewhere, where?				

Group name and location _____

A3. Who do you listen to the radio with? Alone, with your family, with friends, or others?

	For each group, count and enter the number who said yes			
Option	No. individuals	No. hhs	No. women	No. youth
Alone				
With family				
With friends				
With others				
If with others, who?				

A4. Which particular programmes are of more interest to you?

A5. Do you listen to farming information/advice programmes?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

For those who DO NOT listen to farming information/advice programmes:

A6. Why don't you listen to these programmes?

For those who DO listen to farming information/advice programmes:

A7. Do you find these informative/useful?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

A8. Do you enjoy learning in this way?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

Group name and location _____

For those who DO NOT listen to the radio:

A9. Why don't you listen to the radio?

Option	For each group, count and enter the number who said yes			
	No. individuals	No. hhs	No. women	No. youth
Don't own /have access to one				
I don't like the radio				
Other reason				
If other reasons, what are these?				

SECTION B: Podcasts

B1. Have you ever listened to a **podcast**?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

For those who have listened to a podcast:

B2. When and where?

B3. Were the podcasts useful?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

B4. Did you enjoy listening to the podcasts?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

B5. What was most interesting/useful?

Group name and location _____

B6. What do you think should be improved?

STAGE 4. DEMONSTRATION OF FARM RECORDING AND HOW IT CAN BE OF BENEFIT

PURPOSE

The exercise will:

- Demonstrate a simple practical example of how farm recording can help farm decision making to small farmer groups.
- Gauge the understanding of what is presented – this is done by observing and qualitatively scoring the level of response and engagement.
- Gauge the numeracy/literacy skills of these individuals and, as a result, identify the most appropriate systems of farm recording to be covered during the training phase – this is done by observing and qualitatively scoring the level of response and engagement.

RESOURCES REQUIRED

A flipchart and markers of different colours to demonstrate the farm recording examples. Paper and pencils for each farming couple to conduct calculations if they wish.

OUTLINE OF DEMONSTRATION

The facilitator demonstrates a farm recording scenario onto a flipchart. This presents farm outgoings (costs) and income (output) data for a fictional farmer (Alice) over 2 years. It shows how farm recording helped Alice assess the results of different farming decisions: In this case, whether her decision to incur higher costs (by spending more on quality seed, cultivation and grain storage) and, as a result, increase her sales (earning more from larger amounts of high quality grain) resulted in her being better off overall (having higher profits).

The facilitator needs to work through these examples step-by-step, clearly, and slowly.

It is very important that the audience is invited to participate and provide answers through every stage of the process:

This is so that the observer can watch the audience and gauge existing knowledge and understanding**.** The facilitator should try to direct some questions to the group, especially those who are very quiet. This is a very qualitative assessment but we do not think that formal tests are appropriate and would be off-putting.

The observer also takes this opportunity to inform the groups about the individual questionnaires.

DEMONSTRATION CONTENT:

Every item should be written onto a clearly laid out flip chart as it is covered (see tables below).
Explain that they could use symbols and tallies, or written text and numbers. The example below uses symbols and numbers.

Group name and location _____

The flipchart table should be drawn out before data entry starts.

QUESTIONS:
1. What are the different types of cost you face*? The group is asked to provide examples of different types of cost a farmer might face – e.g., seed, labour etc. EXPLANATION: These are called inputs. They make up the costs.*

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

2. What do you do with your output? *The group is asked what they do with what they produce, e.g., sell, store, eat, give away. EXPLANATION: This is called output. It brings in an income to the farmer.*

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

3. How can the farmer use the cost and income information to work out how much money has been made or lost? *EXPLANATION: The facilitator explains that the difference between income and costs provides total profit or total loss. If costs are greater than income then a loss is made. If income is greater than cost, a profit is made.*

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

YEAR 1, FARMER ALICE:

- Bought 5 cups of seed from a neighbour to sow her maize field at 2,000 shillings per cup. The weather was good but the seed did not grow so well.
- She paid someone to weed her fields for 10 days. They charged 3,000 UGX per day.
- She harvested and threshed 3½ sacks of grain. She stored the grain in an old grain store near her homestead, losing a lot of grain to rodents and rot. She was left with 3 sacks of grain. The grain was not of good quality.
- Alice kept 2 sacks of grain for eating. The grain in each sack was worth about 80,000 UGX.
- Alice sold the grain from the last sack. She sold it in cans. She sold 30 cans from the sack for 3,000 UGX per can.

Group name and location _____

ALICE'S COMPLETED DATA TABLE YEAR 1

Costs				Income			
	COST PER UNIT	NUMBER UNITS	TOTAL		VALUE PER UNIT	NUMBER UNITS	TOTAL
Seed	2,000	5	10,000	Eaten	80,000	2	160,000
Weeding	3,000	10	30,000	Sold	3,000	30	90,000
TOTAL			**40,000**	TOTAL			**250,000**

YEAR 2, FARMER ALICE:

- She bought 5 cups of seed from a local merchant at 5,000 UGX per cup – the weather was good and the seed grew well.

QUESTION 4: What was the amount she spent on seed? (Answer: 5 x 5,000 = 25,000 UGX).

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

- She paid two people to cultivate and weed her fields this year for 20 days. They charged 3,500 UGX per day.

QUESTION 5: What was the amount she spent on labour? (Answer: 20 x 3,500 = 70,000 UGX).

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

- She also purchased 5 strong new sacks for her grain at 1,000 UGX per sack.

QUESTION 6: What was the amount she spent on sacks? (Answer: 5 x 1,000 = 5,000 UGX).

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

QUESTION 7: What were her total costs? (Answer: 25,000 + 70,000 + 5,000 = 100,000 UGX).

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

- She harvested and threshed 4 sacks of grain. She kept the sacks of grain dry in a covered shed. She lost almost no grain and it kept its quality. Alice kept 2 sacks of grain for eating. The grain in each sack was worth about 100,000 UGX.

QUESTION 8: What was the value of the grain Alice kept for eating? (Answer: 2 x 100,000 = 200,000 UGX).

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

- Alice sold the grain from the other 2 sacks in cans. She sold 60 cans for 4,000 UGX per can.

QUESTION 9: How much did Alice earn from the grain she sold? (Answer: 60 x 4,000 = 240,000 UGX).

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

QUESTION 10: What was the total value of Alice's output in year 2? (Answer: 200,000 + 240,000 = 440,000 UGX).

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

ALICE'S COMPLETED DATA TABLE, YEAR 2

Costs				Income			
	COST PER UNIT	NUMBER UNITS	TOTAL		VALUE PER UNIT	NUMBER UNITS	TOTAL
Seed	5,000	5	25,000	Eaten	100,000	2	200,000
Weeding	3,500	20	70,000	Sold	4,000	60	240,000
Sacks	1,000	5	5,000				
TOTAL			**100,000**	TOTAL			**440,000**

COMPARING LAST YEAR WITH THIS YEAR:
Last year the costs for Alice to produce her maize were only 40,000 UGX. This year she spent a lot more, 100,000 UGX, because she purchased better quality seed, paid for extra labour to weed the crop, and bought new sacks.

She knows she harvested and sold more grain this year, and that it reached a higher price because of its better quality. She made 440,000 UGX compared to 250,000 last year.

But was she better off overall?

QUESTION 11: How can she work out which year made her better off? Ask the group to describe how this might be done. (**Answer:** Last year she made: 250,000 minus 40,000 = 210,000 UGX profit on her maize. This year she made: 440,000 minus 100,000 = 340,000 UGX profit on her maize)

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

THE FARMER WHO KEPT NO RECORDS

Alice's neighbour, Samuel, keeps no records. All he remembers is that he spent 4,000 UGX on seed and produced 3 sacks of grain. He has kept no records of labour costs at all. He has no idea about how well his crop performed.

CLOSING REMARKS

The exercise demonstrates how farm recording can be of benefit to a small farmer and help him understand what decisions are best financially.

Alice can see how she was better in year 2, when she spent more on caring for her crop but benefited from a higher yield. She also knows just how much she benefited by.

Her neighbour, Samuel, who kept no records, had no idea of what money he had made or lost in growing his crop.

The example involved a full calculation of costs and income, but much simpler systems can be used (show previous example using symbols again).

STAGE 5. DISCUSSION (see scoring table)

The group should now have a clear understanding of what farm recording involves and that these may involve simple symbols and tally charts, or more complex calculations and tables.

The facilitator should now ask and discuss with the group (and the observer records – households, individuals, by age group and gender):

QUESTIONS:

1. Can you see the benefits of farm recording for your farms (ask them to recap what the benefits of farm recording are)?

General level of response (good, moderate or poor)	Mainly men answering	Mainly women answering	Men & women answering	Mainly older people answering	Mainly youths answering	All, age groups answering

Group name and location _____

2. If you received training in farm recording, could you see yourself doing this in the future?

For each group, count and enter the number who said yes			
No. individuals	No. hhs	No. women	No. youth

3. What do you think the limitations might be to adopting farm recording?

	For each group, count and enter the number who said yes			
Option	No. individuals	No. hhs	No. women	No. youth
Time				
Ability				
Other reasons				
If other reasons, what?				

4. If you do start to practice farm recording, how often do you think you would do this? And what time of day?

DEMONSTRATION HANDOUTS

ŋibeyon

	Etyae	Egyelit daadaŋ niyai
		ŋaeneta (ŋatoyata) ŋarei

Ekopo angikinyom

Aenet (Atoyat)

卌丨 = 5

ŋikan

卌丨 卌丨
= 10,000 ugx

ŋisilinga ŋalipio ŋatomon

Emeleku

卌丨 卌丨
= 10

ŋarwa ŋatomon

卌丨 卌丨
卌丨 卌丨
卌丨 卌丨
= 30,000 ugx

ŋisilinga ŋalipio ŋatomoniuni

Akicap

ŋisiliŋga daadaŋ alotoma ekaru = **40,000 ugx**

ŋisilinga ŋalipio ŋatomoniomwon

ŋisilinga ŋulu ariamun

	Etyae	Egyelit daadaŋ
		ŋaeneta ŋatomoniuni kaŋarei

Ecwe aŋimomwa angulu imujitae

‖ = 2

ŋiarei

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ŋisilinga ŋalipio amiat kaŋatomoni kanikapei

ŋaeneta (ŋatoyeta) ŋakanikapei

ŋikopoi ŋiyae egyelaritae

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= 30

ŋatomoniuni

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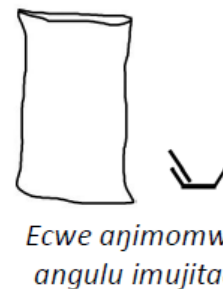
ŋisilinga ŋalipio amiat kaŋatomoni kanikomwon

ŋisiliŋga ŋulu ariamum daadaŋ alotoma ekaru = **250,000 ugx**

ŋisilinga ŋalipio ŋamiyae ŋarei kaŋatomonikan

Akisiom kapei ŋuna etapito ngimanikorin

DEMONSTRATION HANDOUTS

COSTS

MARCH

Type	Quantity	Cost per unit (ugx)	Total cost (ugx)
seed	5 cups	5,000	25,000
cultivation & weeding	20 days	3,500	70,000

JUNE

Type	Quantity	Cost per unit (ugx)	Total cost (ugx)
sacks	5	1,000	5,000

TOTAL COST FOR YEAR = 100,000 ugx

INCOME

JUNE

Type	Quantity	Value per unit (ugx)	Total value (ugx)
grain for eating	2 sacks	100,000	200,000

AUGUST

Type	Quantity	Value per unit (ugx)	Total value (ugx)
grain for selling	60 cans	4,000	240,000

TOTAL INCOME FOR YEAR = 440,000 ugx

LEARNING TOGETHER ABOUT FARM RECORDING

ANNEX 3: INDIVIDUAL HOUSEHOLD SURVEY TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

BASELINE ASSESSMENT FOR INDIVIDUAL HOUSEHOLDS, April 2021

Purpose: To further understand the attitudes and understanding the households and its individual members (those included in the project) have around farm recording.

To be completed once the group baseline has taken place. The group baseline also serves as an introduction to the project.

One field staff member per household.

The questions will be split into the following sections:
- **Recap on the project**
- **Questions re the family structure and the likely impact these will have on farm recording. To include daily routines and time limitations.**
- **Content of the podcasts and approach to training**
- **Attitudes towards, and use of, radio and podcasts**

INDIVIDUALS NAMES & GROUP NAME:

SECTION 1 – RECAP ON THE PROJECT (no scoring required)

Brief recap of the project and what will be expected of the household.

The officer should note whether they think the household fully understand the project.

SECTION 2: FAMILY STRUCTURE

Interviewee 1: Name, Age, Gender			
Interviewee 2: Name, Age, Gender			
Are either of you the head of your hh? If so, who?			
Relationship to each other (e.g., husband/wife or mother/daughter, etc.)			
How many members in your household?			
Ages of household members (e.g., 38, 36, 17, 15, 10)			
Gender of household members (e.g., 3 x M; 2 x F)			
Daily routines which would need to be considered with regard to training			
Time limitations with regard to training and to farm recording			

INDIVIDUALS NAMES & GROUP NAME:

SECTION 3: CONTENT OF THE PODCASTS AND APPROACH TO TRAINING
1. What do you hope to get out of the training/how do you think keeping farm records will help you?

2. Knowledge of farm recording

Have you used farm recording before? Yes No
If not why not?

If you have used farm recording before then:

Do you record your farm activities yourself? Yes No   If not who did?
Do you record using (tick whatever applies): written text symbols tally charts numbers
Do you write down all cost/income figures together; or keep them separate?
Do you calculate total amounts used/spent yourself? Yes No   If no does somebody else (who)?
Do you still keep records? Yes No   If no why not?
Did you calculate profits and losses from your farm records? Yes No Not sure
Do you know anyone else who uses farm recording? Yes No   If yes, are they a friend, living in the village etc.

3. Would you like the following to be in the training: *(please tick if yes)*

Advice on which costs to record
Advice on which outputs to record
Advice on how often to record
Advice on how to record units (eg. sacks/bags) as well as total amounts
Information on what profits and losses are and how to calculate them

4. What would your preferred methods of recording be: *(please tick if yes)*

Tally charts	Numerals
Symbols	A combination of the above
Writing	

INDIVIDUALS NAMES & GROUP NAME:

5. What sort of record book would you prefer: *(please tick if yes)*

Blank so you can fill it in when you complete an activity
Structured so it is divided into months with columns and rows
Not sure

6. Basic numeracy skills – would you be confident to: *(please tick if yes)*

Add up monthly totals of your outputs or costs
Multiply units and costs per unit to find totals   Eg. 10 bags x 3,000 = 30,000 UGX
Do you have a phone with a calculator?

SECTION 4 – ATTITUDES TOWARDS, AND USE OF, RADIO AND PODCASTS

1. Does your household own/have access to a radio? Yes No

If yes:

How do you listen to the radio? E.g., phone, radio

2. Do you ever listen to the radio? Yes No

If yes:

Where do you listen to the radio?
Do you listen to the radio with other people? Yes No If yes with who?
What types of programmes do you listen to?
How often do you listen? Daily weekly monthly not very often
Do you listen to agricultural advice programmes? Yes No
Have you changed any of your farming practices or other aspects of your farm as a result of what you have learned from the radio? Yes No If yes what have you changed?
Would you like to listen to the radio more? Yes No

3. Has your household heard of podcasts? Yes No

If yes:

How often do you listen to podcasts? Daily weekly monthly not very often
How did you listen to the podcasts? E.g., on a phone
Have you listened to farming advice programmes via podcasts? Yes No If yes, did you find them informative? Yes No
Did you change any of your practices as a result of what you have learnt from these podcasts? Yes No If yes, how?
What other types of programmes have you listened to as podcasts?

ANNEX 4: FOLLOW UP VISIT FORM TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

Purpose: To evidence the actual record keeping practices of farming hhs who reported that they keep farm records in the baseline surveys

Group Name/Farmer ID: _____

Item	Observations
Type of record kept (animal identification; stock supplies; financial)	
Brief description of the records kept	
How long have these records been kept?	
How often are the records updated?	
Who enters the record data, e.g., hh head (include gender and if <35 yrs or >35 yrs)	
If the records are financial, please tick which of the below apply:	**Tick for yes**
Records are kept on a whole farm basis	
Records are kept separately for each enterprise (e.g., animals separate to crops; maize separate to sorghum). If so, please describe.	
Records include costs as totals only	
Records include output as total value of crop produced (or stock owned)	
Records include output as value of what is sold, eaten, stored and given away	
Records include outputs as value of what is sold only	
Each cost is itemised (listed separately)	
Each sale is itemised	

ANNEX 5: TESTING PODCAST CONTENT FORM

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

Guide for Pre-testing of Podcast Scripts

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INTRODUCTION

Social and behaviour change communication (SBCC) materials need to be tested before they are finalised, in order to confirm that they are effective, appropriate, understandable, attractive, and culturally relevant. This document outlines the steps that will be taken to pre-test the materials (predominantly audio podcasts, with some supporting hard copy materials) developed by the CLAFRIP project. These include:

1. **Concept testing** happens before time is invested in fully drafting materials.
2. A **stakeholder review** by partners and gatekeepers occurs after materials have been drafted.
3. **Pre-testing** happens after concept testing and stakeholder review and reviews/tests with the intended audience.
4. **Field testing** happens after these steps, and allows SBCC practitioners to observe SBCC materials in the field in action, i.e., whether they are used in their intended settings and context.

Concept testing (step 1) of CLAFRIP's farm recording podcasts was conducted during initial induction events with the farmers. Stakeholder review (Step 2) has been conducted by the ATTA field team, FRI, and Ateker (the partner radio station), and the podcast scripts adjusted accordingly.

The steps that should be followed in pre-testing (Step 3) CLAFRIP's podcasts/ materials with the target audience are described below.

PRE-TESTING OF CLAFRIP PODCASTS AND SUPPORTING MATERIALS

The pre-testing process is conducted to measure:

- Comprehension by the audience
- Attractiveness/appeal of the outputs
- Acceptance of what is being provided
- Involvement of the audience
- Whether the material induces action

In planning the pre-test, the following steps need to be taken:

1. The testing method selected
2. Testing design developed
3. Questions for pre-testing compiled
4. Format of pre-testing session planned
5. Participants recruited
6. Results summarised,interpreted, and incorporated into materials for finalisation

These steps are presented sequentially below:

1. Testing Method
The key output of the project includes four audio podcasts. There are also supporting materials, including farm record books and key information sheets. It would cause significant delays, and be

costly, to pre-record first versions of the podcast scripts for testing, and then adjust and re-record the scripts. The method we have chosen, therefore, is to pre-test the podcasts by presenting the overall approach (scenario and context) to a sample of the target audience (focus group); to read podcast script material out to the focus group; and to review their feedback. The draft farm record book and key information sheets will also be presented to the target audience for review and feedback.

2. Testing Design

The pre-testing session will take place after preparation of the draft scripts and supporting materials is complete.

The process will include:

1. Introduction to pre-testing session by facilitator
2. Outline of the theme, scenario, story and characters to the participants
3. Reading of podcast script
4. Follow-up questions (see 3 below), with answers documented
5. General discussion
6. Analysis of answers
7. Adjustments to scripts (and materials) as appropriate

During the session, the main facilitator will recap the project's theme of piloting collaborative learning about farm recording using podcasts and explain that, in order to test this approach affectively, the project needs to ensure that the podcasts are effective, appropriate, understandable, attractive, and culturally relevant to the participants. He will explain that the project is seeking the focus group's support in pre-testing the podcast content – which will also be used to support other farmers elsewhere in future.

The podcast script materials will then be read out from the Trainer's Manual to the group (ideally using two officers, who each play the roles of the two main characters who feature in the podcasts). It is anticipated that only the first script will be read out (Annex 2), as to read all four podcasts out would be both time consuming and likely lose the attention of the focus group. The first podcast sets the scene, introduces the characters, and includes some technical content, so it will be an adequate sample of all podcast material.

When the podcasts are played during listening sessions, they will be paused occasionally for demonstration and group discussion purposes. These "breaks" are indicated in the Trainer's Manual. During the pre-test session, the trainer should also pause at these breaks, explaining to the focus group what activities would be included during these interludes.

3. Develop Questions

The questions should be presented to the audience after reading out the podcast script. These are open in format, in order not to lead them into providing specific answers. Similar questions should also be asked about the supporting materials, but the key focus is on the podcasts. The questions that should be asked are included below:

1. What do you think the main theme of the podcasts is?
2. Do you feel that these podcasts are for people like you, or does it feel as if they have

been produced for other people?

3. Is there anything about the podcasts that might confuse, offend, or embarrass some people? What, in particular?
4. Is there anything in the podcasts that you really like? Which part? Why?
5. Is there anything in the podcasts that you do not like? Which part? Why?
6. Is the story included in the podcasts believable? Why or why not?
7. Do you think the podcasts are interesting or boring? Have you enjoyed what you have heard?
8. Would you like to hear more podcasts about farm recording that continue with the same story (of Lucia's progress with farm recording). Why or why not?
9. What do you think can be done to make the podcasts better?
10. Do you think these podcasts will help people? How?

Where there is a lack of consensus amongst the focus group, the facilitator should try to identify the opinions of the majority while being mindful of the opinions of others. Opinions may be split by gender, age, numeracy ability, etc. Feedback may be gathered that can extend the podcasts' relevance and appeal to all genders/ages, etc. – for example, by adding in specific references/examples through the podcasts that will appeal to the different groups.

4. Arrange the pre-testing session

The session should be arranged well in advance to ensure good attendance.

5. Recruit participants

It would be feasible to work with a single farm group for this exercise. The group selected should not be the most "advanced" in terms of existing skills. A group that includes individuals mainly with mid-level skills (in literacy, numeracy) and experience should be selected if possible.

A representative focus group shall be convened which should include at least 10 participants, comprising at least 50-75% women and 25% > 35 year olds (most participants are under 35, but the opinions of older people should also be included, so that the podcasts are appropriate to all audiences).

6. Summarise and interpret the results

Answers should be recorded in the Answer Template (Annex 1). This provides helpful notes for the facilitator. It also provides boxes where the responses of different genders/ages can be recorded where necessary.

The responses will be utilised to improve the podcasts as required, and will therefore need careful interpretation, as outlined below:

1. What do you think the main theme of the podcasts is?

Has the theme and purpose of the podcasts been understood? If not, the content clearly needs adjusting.

2. Do you feel that these podcasts are for people like you, or does it feel as if they have been produced for other people?

Can the audience relate to the content of the podcasts, and do they feel engaged in its story and relevant to its key messages?

3. Is there anything about the podcasts that might confuse, offend, or embarrass some people? What, in particular?

Specific content/types of content should be identified and removed/adjusted as appropriate.

4. Is there anything in the podcasts that you really like? Which part? Why?

Try and build on this by adjusting the content of other podcasts as appropriate.

5. Is there anything in the podcasts that you do not like? Which part? Why?

Remove/ adjust this content; as well as similar content in other podcasts.

6. Is the story included in the podcasts believable? Why or why not?

Make adjustments as appropriate.

7. Do you think the podcasts are interesting or boring? Have you enjoyed what you have heard? Why or why not?

Will the audience be entertained by the podcasts? Are they likely to be able to concentrate and be engaged by them?

8. Would you like to hear more podcasts about farm recording that continue with the same story (of Lucia's progress with farm recording). Why or why not?

Will the audience progress through all four podcasts, remaining engaged throughout?

9. What do you think can be done to make the podcasts better?

Make adjustments as appropriate.

10. Do you think these podcasts will help people? How?

Has the key purpose of the podcasts been realised?

Guide for Pre-testing of Podcast Scripts

Podcast pre-test answer template

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
1. What do you think the main theme of the podcasts is? *NOTE: Here we are trying to find out if the theme and purpose of the podcasts have been understood: That the podcasts are there to teach the participants the benefits of farm recording and how they can practice it on their own farms.*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
2. Do you feel that these podcasts are for people like you, or does it feel as if they have been produced for other people? *NOTE: Here, we are trying to ensure that the audience can relate to the content of the podcasts; and that feel engaged in its story; and feel relevant to its key messages.*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
3. Is there anything about the podcasts that might confuse, offend, or embarrass some people? What, in particular? *NOTE: Try to identify specific traits/themes that are problematic*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
4. Is there anything in the podcasts that you really like? **Which part? Why?** *NOTE: Try to identify what really works within these podcasts – we can ensure that this is repeated elsewhere where relevant.*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
5. Is there anything in the podcasts that you do not like? **Which part? Why?** *NOTE: Try to identify specific traits/themes that are problematic*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
6. Is the story included in the podcasts believable? Why or why not? *NOTE: If they do not feel the story is real, they are unlikely to be able to relate to it, so less likely to feel engaged by it.*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
7. Do you think the podcasts are interesting or boring? Have you enjoyed what you have heard? Why or why not? *NOTE: Is the audience entertained by the podcasts? Are they likely to be able to concentrate and be engaged by them in future?*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
8. Would you like to hear more podcasts about farm recording that continue with the same story (of Lucia's progress with farm recording). Why or why not? *NOTE: We are trying to ensure that the audience is likely to progress through all four podcasts, remaining engaged throughout.*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
9. What do you think can be done to make the podcasts better? *NOTE: Note down any specific ideas the focus group has.*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

Question	Majority Answer	Response from (√)		Other Answer 1	Response from (√)		Other Answer 2	Response from (√)	
10. Do you think these podcasts will help people? How? *NOTE: This trying to find out if the key purpose of the podcasts has been realised by the audience?*		Both genders			Both genders			Both genders	
		Mainly men			Mainly men			Mainly men	
		Mainly women			Mainly women			Mainly women	
		All age groups			All age groups			All age groups	
		Mainly youth			Mainly youth			Mainly youth	
		Mainly older			Mainly older			Mainly older	

ANNEX 6 – MID-TERM PODCAST SESSION EVALUTION TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

Data collection from for mid-term evaluation of listening sessions

Technical Podcast Questions	Women	Men	Older participants (>35 yrs)
Are you enjoying the podcasts? If so, why? If not, why?			
Are you finding the information understandable, or too complicated?			
Is the pace of the podcasts too fast, too slow or about right?			
Is the language easy to follow or is it too complicated?			
Is the duration of each podcast about right, or should they be longer/shorter?			

Technical Podcast Questions	Women	Men	Older participants (>35 yrs)
Are the actors doing a good job of playing the roles of extension officer and farmer?			

Format of listening sessions	Women	Men	Older participants (>35 yrs)
How are you finding the format of the listening sessions? Should the podcasts be broken up into more sections?			
Are the examples provided by the trainers during the sessions easy to follow? Are they useful?			
Are the discussion sessions that take place during the training helpful?			
Do you feel you are getting enough record keeping practice and support during the sessions? Would you like more?			
Any suggestions on how the listening sessions can be improved?			

ANNEX 7 – POST LISTENING-SESSION EVALUATION SURVEY TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

POST-LISTENING SESSION EVALUATION

Introduction

This report outlines activities relating to evaluation of the CLAFRIP listening sessions.

<u>Previous evaluation activities</u>

A podcast pre-testing session was formerly delivered to a focus group on August 4th, 2021. The specific feedback acquired from the participants was that the podcasts should include musical intervals to add enjoyment. This was implemented by the podcast developer, Ateker FM.

Following delivery of the first podcast, it was observed by the field team that the speed of the podcast dialogue/narration was very fast and, as their purpose is to teach the process of farm recording step-by-step, should be slower. This feedback was gathered in time to adjust the speed of the remaining three podcasts.

Subsequently, a detailed mid-term evaluation of the listening sessions was conducted with the groups after delivery of two of the sessions (during the week of October 4th), so that adjustments could be made to further improve the remaining sessions. This gathered feedback on the:

- Quality of the podcasts
- Quality of demonstrations
- Quality of support provided by the officer during the listening sessions
- Format and value of the discussion sessions

This survey found that all participants appeared to be happy with all aspects of the sessions. No suggestions for improvement were provided.

<u>Post-listening session evaluation outline</u>

The purpose of this evaluation activity is to gather further feedback from participants on the quality of the listening sessions and podcasts; if and how the podcasts will be used/listened to in future; to gauge the uptake of farm recording as a regular behaviour at home so far; and to assess (at a broad level) how learning is being applied.

There are many different types of farm record. Questions relating to farm recording refer to the simple system of enterprise related farm recording covered during the podcast sessions.

The survey should be delivered as a group activity, in order to optimise opportunity for discussion and exchange, and is provided below:

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

POST-LISTENING SESSION EVALUATION SURVEY

GROUP NAME	
TOTAL NUMBER OF ATTENDANTS	
TOTAL NUMBER OF MEN:WOMEN	
TOTAL NUMBER OF OLDER AGES:YOUTH	
NUMBER OF PARTICIPANTS ATTENDING POST-LISTENING SESSION EVALUATION	
DATE OF MID-TERM EVALUATION	

A. LISTENING SESSIONS

A1. Have you enjoyed the listening sessions, and found them interesting?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				
Which parts have you found the most interesting (podcasts; demonstrations; discussions; practice sessions), if any?				

A2. Have you learned enough new skills from the listening sessions to start keeping enterprise-based farm records yourself; or improving them if you kept them already?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

If not, why do you think this is? _____

A3. If you said YES to above, which aspects of the listening sessions **contributed most** to what you have learned?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
I learned most from the podcasts				
I learned most from the demonstrations of examples by facilitator				
I learned most from the discussions with my fellow learners				
I learned most by practicing farm recording supported by the facilitator				
OR All activities together – I found them all equally helpful				

A4. Have you enjoyed learning as a couple?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

If not, why do you think this is? _____

A5. Do you think learning as a couple has helped your learning?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

If yes, why do you think this is? _____

If not, why do you think this is? _____

B. PODCAST CONTENT

B1. Did you find the podcasts enjoyable?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

If yes, why? _____

If no, why? _____

B2. Have the podcasts increased your interest in farm recording?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

B3. Have the podcasts increased your knowledge of farm recording?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

B4. Please tell us how the podcasts have contributed to your understanding and knowledge of farm recording

B5. Could the podcasts have been improved? If so, how? **Your ideas are welcome!**

B6. Will you listen to these podcasts again?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				
Probably				
Not sure				

B7. Will you invite friends/other family members to listen to the podcasts with you?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				
Probably				
Not sure				
If so, where and how?				

B8. Would you like to listen to other teaching related podcasts in the future? That is, podcasts which aim to teach you specific new skills?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

B9. If so, how would you actually access these podcasts?

B10. Compared to radio programmes that you listen to "live", do you think there are advantages in learning from podcasts? If so, what are these advantages?

C. ENGAGEMENT/ATTITUDE TO FARM RECORDING

C1. Prior to the project, were enterprise-based farm records (**of the type covered in the podcasts**) kept for your farm?

Household	1	2	3	4	5	6	7
Yes							
No							
If yes, to what extent?							
If no, why?							

C2. If YES to above, were these records kept by YOU?

Household	1	2	3	4	5	6	7
Husband							
Wife							
Both							

C3. Are enterprise based farm records (of the type covered in the podcasts) kept for your farm now?

Household	1	2	3	4	5	6	7
Yes							
No							
If yes, to what extent?							
If no, why?							

C4. IF YES to above, are you keeping your records for the farm together, or are you (husbands and wives) keeping separate sets of records?

Household	1	2	3	4	5	6	7
Keeping single set of farm records together							
Keep separate records							

C5. IF YES to C3, who does this farm recording?

Household	1	2	3	4	5	6	7
Husband only							
Wife only							

Household	1	2	3	4	5	6	7
All aspects equally shared							
Husband mainly, with wife providing information to be written down							
Wife mainly, with husband providing information to be written down							
Another family member							
A friend							
A farmer group member							
A farm officer							

C6. Have you been telling others about the benefits of farm recording, and has it made them interested in starting this practice themselves?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				

If yes, who? _____

D. APPLIED PRACTICE OF FARM RECORDING- FOR THOSE WHO NOW PRACTICE ENTERPRISE BASED FARM RECORDING

D1. Do you use the recording books given to you by the project?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No, I prefer to use my own format				

Option	No. individuals	No. hhs	No. women	No. youth (<35)
I am not using any record books at all				

Can you suggest how you think the record books may be improved? _____

_____

D2. What systems do you use to record?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Symbols				
Written text				
Numbers				
Tallies				
I use a combination of the above				

D3. What sorts of activities do you record?

D4. Are you able to calculate and enter total costs/values in your record books?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes - and I was calculating total costs for my farm before the project.				
Yes - I have learned how to do this during the listening sessions				
Not yet, but I have learned about this during the listening sessions and am confident I will be				

Option	No. individuals	No. hhs	No. women	No. youth (<35)
able to do it by the end of the project				
No. Although I understand what this means, I do not think I will be able to do it myself in future				
No. I do not understand this subject at all.				

D5. Are you able to calculate profits and losses?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes - I was calculating profits and losses for my farm before the project.				
Yes, I have learned how to do this during the listening sessions				
Not yet, but I am confident I will be able to do it by the end of the project				
No. Although I understand what this means, I do not think I will be able to do it myself in future				
No. I do not understand this subject at all.				

D6. Will you encourage friends to start farm recording based on your experience?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Yes				
No				
Probably				
Not sure				

ANNEX 8 – OFFICER SURVEY TEMPLATE (POST-LISTENING SESSIONS)

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

AGRICULTURAL OFFICER LISTENING SESSION SURVEY

Name of Officer	
Position	
Employer	
Name of group attended	
Number of Listening Sessions attended	
Date/s and listening session number/s (1,2,3,4) you attended if known	

Please circle the item that you think applies. If you wish to provide an explanation for your answer, please do so in the area provided.

SECTION A. PODCASTS

1. The quality of information included in the podcasts was.

1 = very poor; 2 = weak; 3 = average; 4 = good; 5 = excellent

Please explain your answer

_____

2. Overall, do you think the quality of production (e.g., speed of delivery, language used, duration) of the podcasts was:

1 = very poor; 2 = weak; 3 = average; 4 = good; 5 = excellent

Please explain your answer

_____

3. Overall, how engaged/interested do you think the <u>men</u> were by the podcasts?

1 = not at all; 2 = a few were engaged; 3 = most were engaged; 4 = all were very engaged

Please explain your answer

_____

4. Overall, how engaged/interested do you think the <u>women</u> were by the podcasts?

1 = not at all; 2 = a little; 3 = engaged; 4 = very engaged

Please explain your answer

_____

5. Do you think the men enjoyed learning with their wives?

1 =They did not like it at all; 2 = They did not like it much; 3= They did not really care;
4 = They enjoyed it; 5 = They really enjoyed it

Please explain your answer

_____

6. Do you think the women enjoyed learning with their husbands?

1 =They did not like it at all; 2 = They did not like it much; 3= They did not really care;
4 = They enjoyed it; 5 = They really enjoyed it

Please explain your answer

_____

7. How would you rate podcasts as a training resource compared to live radio?

1 = far less good; 2 = not as good; 3 = about the same; 4 = better; 5 = much better

Please explain your answer

_____

8. Could you see podcasts as an effective tool for bringing about behavioural change amongst the communities you work with?

Yes   No

Please explain your answer

_____

9. Do the families in the communities you work with have the right equipment (radios/phones that can accommodate memory cards) to play podcasts?

1 = Very rarely; 2 = The minority do; 3 = About half of families do; 4 = Most families would;
5 = Nearly all families would

If so, would the women in these families have access to these too? Please explain.

_____

10. If they do have the right equipment, do you think they would share and listen to the podcasts?

Please explain your answer

_____

SECTION B: OTHER ASPECTS OF THE LISTENING SESSIONS

Setting the podcasts aside, how would you rate the <u>other aspects</u> of the listening sessions, for each of the following:

11. The quality of examples provided during demonstrations (e.g., were they clear, relevant, etc. to the audience?)

1 = very poor; 2 = weak; 3 = average; 4 = good; 5 = excellent

Please explain your answer

_____

12. The quality of discussion sessions (did the participants get involved and take part?)

1 = very poor; 2 = weak; 3 = average; 4 = good; 5 = excellent

Please explain your answer

_____

13. The quality of the record keeping practice sessions (did the audience seem engaged and able to carry out the record keeping practice tasks?)

1 = very poor; 2 = weak; 3 = average; 4 = good; 5 = excellent

Please explain your answer

_____

Please provide any other feedback that you wish to share about the listening sessions

ANNEX 9 – INDIVIDUAL HOUSEHOLD FOLLOW-ON SURVEY TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

FARM VISIT SURVEYS

These shall provide more detail on visits made to farmers, so that behaviour change can be recorded and quantified more closely. They shall include a simple system of reviewing the quality of farm records as well as the farmers' attitudes, experience, and uptake of farm recording.

INDIVIDUALS NAMES: _____

GROUP NAME: _____

DATE OF VISIT: _____

1. HOUSEHOLD STRUCTURE: Have there been any changes to the household structure since the last farm visit? For example, the arrival/departure of any family members. If yes please note these changes.

2. ENGAGEMENT WITH FARM RECORDING

Are you keeping enterprise-based farm records?	Yes No
If yes, were you already doing this before the project?	Yes No

If no, why not? _____

If yes to above, who is doing the recording?   Husband   Wife   Both Someone else
If both, how is the work balanced between you?
If someone else does the recording, who?

Husband - Have you found the farm recording?   Easy   Difficult   OK
If difficult/hard, what problems have you encountered?
Wife - Have you found the farm recording?   Easy   Difficult   OK

100

If difficult /hard, what problems have you encountered?

As a household, are you finding time/remembering to record all farming activities?

Yes   No

Do you record using:

Tallies   Numbers   Symbols   Written Text   or   Combination

Husbands - are you confident in calculating total amounts /values?   Yes   No

Wives - are you confident in calculating total amounts /values?   Yes   No

If none of you are able to record, is there anyone else who can do this?

Husbands - are you confident in calculating profit/loss?	Yes No
Wives - are you confident in calculating profit/loss?	Yes No

If neither of you is confident, is there anyone else who can do this? Who?

What impact do you think the project has had so far on your farming?

Positive   Negative   Too early to say   Don't know

Why do you think it has had this impact?

3. NOTES ON FARM RECORDING BOOK

Field Officers comments on the progress made, e.g., recording for different enterprises done in separate books, outputs and inputs separated, clear and organised book.

4. CONTINUED USE/SHARING OF PODCASTS

Have you listened to the podcasts since the end of the learning sessions?   Yes   No
If so, how many times?
If not, why not?

Have you listened to the podcasts with anyone else?   Yes   No
If so, with how many people?
How many times?
Have you been able to share the recordings with anyone else?   Yes   No
If so, with how many people?
What technology did you use to share your records?

5. ANY OTHER ISSUES
Please note any other issues regarding farm recording

ANNEX 10 – FINAL END-LINE MIXED GROUP SURVEY TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

END-LINE GROUP EVALUATION SURVEY:

Introduction

This final end-line survey aims to:

1. Investigate whether the practice of farm recording learned during the project is still being practiced 3 months after the end of the "training" period.
2. Broadly compare the patterns of farm recording practiced by male and female participants and youth vs older participants.
3. Investigate if and how the participant households feel they are benefitting from the information compiled in their farm records.
4. Explore the extent to which the podcasts have been listened to since the training period and shared with others.
5. Identify the appetite for learning from podcasts in the future.

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END-LINE GROUP EVALUATION SURVEY:

GROUP NAME	
TOTAL NUMBER OF ATTENDANTS	
TOTAL NUMBER OF MEN:WOMEN	
TOTAL NUMBER OF OLDER AGES: YOUTH	
NUMBER OF PARTICIPANTS ATTENDING END-LINE GROUP EVALUATION	
DATE OF END-LINE GROUP EVALUATION	

A. APPLIED PRACTICE OF FARM RECORDING

A1. During the last evaluation, just after the listening sessions, you all said that you had started keeping records for your farm enterprises? Are you **still** practicing farm recording for your farm enterprises?

Household	1	2	3	4	5	6	7
Yes							
No (go to A9)							

A2. If you said yes to A1, do you both carry out record keeping, or just one of you (if so, who is this?)?

Household	1	2	3	4	5	6	7
Husband only							
Wife only							
All aspects equally shared							
Husband mainly, with wife							

Household	1	2	3	4	5	6	7
providing information to be written down							
Wife mainly, with husband providing information to be written down							
Husbands and wives keep their own records for different enterprises							
Another family member							
A friend							
A farmer group member							
A farm officer							

A3. If yes, please list the enterprises you have kept records for

Household	Livestock enterprises	Crop enterprises	Does this represent all your farming enterprises? (yes/no)	Other business enterprises
1				
2				
3				
4				
5				
6				
7				

A4. What systems do you use to record?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Symbols				
Written text				
Numbers				
Tallies				
A combination of the above				

A5. Have you had challenges with record keeping since the end of the listening sessions which have made it difficult? If so, what are these?

A6. Are you benefitting from the information produced in your record books?

Household	1	2	3	4	5	6	7
Yes							
No							

A7. If you said yes to A6, please give specific examples of how you have benefitted. E.g., "My gross margin for sorghum was higher than for maize last year. Although the value of the maize I grew was higher than for sorghum, my maize costs were much higher, leading to a lower GM. So overall, I could see that my sorghum was more valuable".

A8. Do you think that your hh will continue farm recording into the future?

Household	1	2	3	4	5	6	7
Yes							
No							

A9. If your hh is NOT practicing farm recording any longer, why is this?

Option	1	2	3	4	5	6	7
Not enough time							
Find it too difficult							
Kept on forgetting							
Forgot what was learned in the listening sessions							
Do not think it is worth the time							
Do not have/cannot afford the recording materials							

Other reason _____

B. CONTINUED USE/ SHARING OF PODCASTS

B1. Have you listened to the podcasts since the end of the listening sessions?

For each group, count and enter the number who agreed with the option

Option	No. individuals	No. hhs	No. women	No. youth (<35)
Many times				

Option	No. individuals	No. hhs	No. women	No. youth (<35)
A few times				
Not at all				

B2. If you have listened to the podcasts again, have you listened with others friends/family outside your household?

Household	1	2	3	4	5	6	7
Yes							
No							

B3: Have you managed to share the podcasts by letting others download them onto their phone/radio memory cards?

Household	1	2	3	4	5	6	7
Yes							
If yes, how many times?							
No							

C. LOOKING AHEAD

C1. What other subjects would you like to learn about from podcasts in the future? (*Note that this question is repeated for women in the separate survey conducted with them*)

C2. Do you think podcasts would be useful learning aid for other members of your family? If so who and what kinds of subjects? (*Note that this question is repeated for women in the separate survey conducted with them*)

ANNEX 11 – FINAL END-LINE WOMEN ONLY SURVEY

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

END-LINE WOMEN'S SURVEY:

Introduction

This end-line women's survey aims to:

1. Understand the roles of the women participants in farm record keeping activities adopted during the project.
2. Understand and characterise the challenges faced specifically by the women in farm recording.
3. Understand the extent to which the women can carry out farm recording activities independently and whether any have gained enough experience to share their knowledge with others.
4. Understand the limitations women experience in accessing the podcast material at home.
5. Understand whether the women felt that learning with their partners was beneficial or detrimental to them, and explore the reasons for this in more detail.
6. Understand whether the women felt that learning in groups was beneficial or detrimental to them, and explore the reasons for this in more detail.
7. Explore whether, by playing a role in farm record keeping, the women perceive that they also have a greater role in financial decision making than previously.

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END-LINE WOMEN'S SURVEY

GROUP NAME	
TOTAL NUMBER OF WOMEN PRESENT	
TOTAL NUMBER OF OLDER AGES: YOUTH	
DATE OF END-LINE EVALUATION	

A. APPLIED PRACTICE OF FARM RECORDING

A1. What best describes how farm recording is practiced for your farm?

Household	1	2	3	4	5	6	7
Only my husband only does it							
Only I do it							
All aspects equally shared							
My husband mainly, but I provide him with information to be written down							
I do it mainly, but my husband provides me with information to be written down							

Household	1	2	3	4	5	6	7
My husband and I keep our own separate records for our different enterprises							
Another family member does it							
A friend does it							
A farmer group member does it							
A farm officer does it							

A2. If your husband tends to do the actual recording, why is this?

Household	1	2	3	4	5	6	7
He is better at it – I am happy that he does most of it							
He tends to dominate. I am capable of doing more but he takes over.							

A3. If you carry out some of the recording, do you get help to do this?

Household	1	2	3	4	5	6	7
I don't need help							
My husband helps me							
Family members help me							
Friends help me							
A farmer group							

Household	1	2	3	4	5	6	7
member helps me							
A farm officer helps me							

A4. If you are involved in the actual practice of recording, what system do you use? Are you able to carry out the calculations?

For each group, count and enter the number who agreed with the option

Option	No. women	No. women youth (<35)
Symbols		
Written text		
Numbers		
Tallies		
A combination of the above		
I can carry out the calculations		

Do you feel that your role in record keeping is beneficial and worth the time, or does it feel like an extra chore that does not bring you benefit?

Household	1	2	3	4	5	6	7
I takes me very little time							
It takes time but is worth the effort							
It takes time and is not worth the effort							

B. CONTINUED USE/ SHARING OF PODCASTS

B1. Have you listened to the podcasts since the end of the listening sessions?

Household	1	2	3	4	5	6	7
Many times							
A few times							
Not at all							

If not or very little, why is this? _____

B2. Have you listened to the podcasts since the end of the listening sessions <u>without</u> your husbands present?

Household	1	2	3	4	5	6	7
Many times							
A few times							
Not at all							

If not or very little, why is this? _____

B3. If you have listened to the podcasts <u>without</u> your husbands present, who have you listened with (<u>tick all that apply</u>)?

Household	1	2	3	4	5	6	7
Listened alone							
Listened with other hh members							
Listened with friends from our farm recording group							
Listened with friends from outside our farm recording group							

B4. If you listened with friends who were new to farm recording, did you help them get started with farm recording at all?

Household	1	2	3	4	5	6	7
No							
Yes, I helped my friends start up with farm recording							

C. LEARNING AS A COUPLE

C1. Did you enjoy learning as a couple with your husband?

Household	1	2	3	4	5	6	7
Yes							
No							

If not, why not? _____

C2. Do you feel that learning about farm recording as a couple has benefitted your role in hh financial decision making?

Household	1	2	3	4	5	6	7
Yes							
It has not changed							
No, it is worse than before							

What are the reasons for your answer, if any? _____

C3. Would you like to learn as a couple again in the future?

Household	1	2	3	4	5	6	7
Yes							
No							

What are the reasons for your answer, if any? _____

D. LEARNING IN GROUPS

D1. Did you enjoy learning in mixed groups?

Household	1	2	3	4	5	6	7
Yes							
No							

If not, why not? _____

D2. Do you feel that learning about farm recording in mixed groups has helped your learning?

Household	1	2	3	4	5	6	7
Yes							
It has not changed							
No, it is worse than before							

What are the reasons for your answer, if any? _____

E. LOOKING AHEAD

E1. What other subjects would you like to learn about from podcasts in the future?

E2. Do you think podcasts would be useful learning aid for other members of your family? If so who and what kinds of subjects?

ANNEX 12 – RECORD BOOK SCORE SYSTEM TEMPLATE

SC-IDEAL-MG-RFA-2019-01: "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study"

RECORD BOOK ASSESSMENT

GROUP _____   DATE_____

Tick in box under hh if statement applies

	Hh1	Hh2	Hh3	Hh4	Hh5	Hh6	Hh7
RECORD BOOK SCORING							
1. Keeps at least one record book							

Then for the most complete record book:

2. Tidy, well laid out and understandable							
3. Has costs on one side, outputs on other (or if no outputs, just costs on one side)							
4. Appears to have comprehensive list of all activities (and outputs if there are any)							
5. Appear to have been kept regularly and does not have long gaps							
6. Has included the month							

7. Includes breakdown of units and costs per unit, not just totals							
8. Calculations of cost (or output) completed for each activity/output type							
9. Total costs of value of outputs over time have been calculated							
10. GM has been calculated (where applicable)							
TOTAL							
ADDITIONAL INFORMATION							
Has record books for multiple enterprises							
Husband does majority of the recording							
Wife does majority of the recording							
Someone else does majority of the recording							

ANNEX 13 – EXAMPLE RECORD BOOK

Chicken Enterprise.   OUTPUTS.   3

Ngulu iitana

Ibore/Nguna itiyiasi / Item	Ebei angina tutubet / Cost	Etiaye / Quantity	Ekimar angulu isitiyiar / Total Cost
Feeds 5Kg	5,000=	2	10,000=
Hen	5,000=	4	20,000=
F E B 2021			
Feeds 5Kg	5,000=	1	5,000=
	1000=	2	2,000
	1000	2	2,000
			39,000=

Ngulu eriamunio

Ibore/Nguna itiyiasi / item	Ebei angina bore / Value	Etiaye / Quantity	Ekimar ke ebei / Total Cost
Eggs	500	7	3500=
Eggs	500	9	4500
Eggs	500	13	6500
Eggs	500	15	7500
Hen	10,000	4	40,000=
	20,000=	1	20,000
	20,000=	1	20,000
			102,000=
Profit			63,000=

Elap: January 2021 / Feb / March. April May June July

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