



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”

Collaborative Learning Plan

July 2021

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INTRODUCTION

This collaborative learning plan describes the approach and content of the listening sessions that will be conducted as part of the “Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja” project.

The learning plan has been informed by activities conducted during the first milestone of the project. It comprises 5 sections:

Section 1. Summary of findings of the activities carried out during first milestone – applying these findings for optimal learning content (podcast etc) development

Section 2. Draft outline content and structure for the listening sessions

Section 3. Theme and structure of the podcasts

Section 4: Other materials to support learning

Section 5. Delivery programme

The plan has been shared with the AgriTechTalk Africa team for feedback and adjustment. The overall content of the listening sessions described in this plan has been presented to, and approved by, the farmer groups. Although the learning plan has also been shared with Farm Radio International, due to time/budget limitations, emphasis has been placed on their feedback on the podcast scripts.

SECTION 1. SUMMARY OF THE FINDINGS OF THE ACTIVITIES CARRIED OUT DURING THE FIRST MILESTONE – APPLYING THESE FINDINGS FOR OPTIMAL PODCAST DEVELOPMENT

The information used to prepare the learning plan was gathered via three sets of activities:

1. Surveys and follow-up visits to baseline the attitudes, knowledge and practice on farm recording and radio/podcast listening amongst the participating farming hh's.
2. Formative research document, comprising a desk based literature review on the use of podcasts for collaborative learning; as well as findings of a survey of agricultural officers, on their experience and opinions about farm recording and learning from radio/podcasts amongst the small-scale farming communities that they work with.
3. The podcast guidance document prepared by Farm Radio International (FRI).

1.1 Baseline survey findings

The baseline studies indicated differences between the five farming household groups in their understanding and abilities in record keeping:

Farmers from the two groups included in Mercy Corps Apolou programme (Apole and Etop) reported that they keep farm records, but further investigation revealed that these records were generally disorganised and only included totals spent/earned. These groups operate as VSLA's which keep records on a whole group (not hh) basis, though these were not available for review.

Four of the farmers from two other groups (the former DFMS groups) were found to keep quite extensive records. These were quite detailed. However, they only included data relating to costs of production, with no inclusion of values of output or, as a result, overall profit/loss. Thus there was no inherent practical value in these records.

The remaining farmers kept no records at all and were not familiar with the concept of record keeping.

It was observed that any hh record keeping amongst the groups was being done by men and that no women kept records. Similarly, record keeping was generally carried out by younger men.

In terms of learning from radio/podcasts, most of the farmers reported that they enjoy listening to and learning from the radio, and a high proportion have adopted new agricultural practices as a result of information acquired over the radio. Several were familiar with educational videos viewed on mobile devices, but not with audio podcasts specifically. They enjoyed the videos' features of being repeatable, pausable and sharable, which are all attributes common to podcasts.

1.2 Formative research findings

That African farming hh's are already learning extensively from radio is well known, as supported by our baseline studies. Our literature review indicated that podcasts are also being increasingly regarded as a highly effective tool for delivering technical advice and support to farming communities. However, as pointed out in the FRI guidance document, podcasts are not necessarily directly transferable into radio programmes and may need adaptation for specific audiences or formats. To be effective in messaging advice or support, podcasts must be made for "active listening" and, to achieve this, must be "unique, authentic, specific and consistent".

The formative research we conducted also revealed that behavioural change is best achieved by podcasts when they are integrated into a multi-tool approach, alongside aids and demonstrations. In line with this recommended approach, this project has proposed,

from the outset, to optimise its impact by integrating podcast learning with demonstration/ conversation (via its collaborative approach), recording practice and visual aids.

1.3 Podcast guidance document

The document produced by FRI for this project provides specific guidance on the development of podcasts, focusing on how they can best be developed to bring about a change in the behaviour of the target audience, more specifically African farming communities such as the participants in this project.

The following sections work through the key steps outlined in FRI's podcast guidance that relate to podcast content, bringing in ATTI's knowledge of the subject area of farm recording, as well as the findings of the baseline and officer surveys. This integrated approach will optimise the quality and applicability of the podcasts themselves, with their potential outreach augmented by the supporting materials that will be developed (trainer manual, key information sheets and farmer record books).

1.3.1 Questions to ask yourself (section 2 of FRI podcast guidance document)

DEFINING THE AUDIENCE (Section 2.1)	
Key points to consider	Response
Who do we need to hear from to determine the content?	<ul style="list-style-type: none"> • In order to develop podcasts that are suitably pitched, interesting and relevant, the existing capabilities and attitudes of the target audience in the subject that the podcast is covering (namely farm recording) must be gauged. This information is best provided by the target audience itself, via baseline surveys and visits to participating farming hh's. This information can be augmented by local agricultural officers, who have worked in the region with communities who are similar to the target audience. • The baseline information gathered above should be integrated with technical advice from farm recording system experts (AAI), to ensure that the podcasts cover effective recording systems that are suited to the abilities of the target audience. • Optimising the format of the podcasts for maximum learning amongst the listeners can be ensured by following the podcast guidance, prepared by our radio expert partners, FRI; and following the advice of local radio station partner/s.
Who do we need to hear from during the podcasts?	<ul style="list-style-type: none"> • As the FRI guidance points out, information and storytelling interviews are an effective format for podcasts that are aiming to achieve behaviour change amongst small scale farmers. The most effective

	<p>storytelling interviews feature “heroes” that the listeners relate to, and want to emulate. The guidance warns against focusing on “lead farmers” who, by definition, the listeners may not relate to. A more appropriate hero is a farmer who is going through the journey of discovering, learning and adopting the same behaviour that the podcasts are aiming to achieve bring about amongst the audience.</p>
What does the audience have in common?	<ul style="list-style-type: none"> Here we need to consider the project’s direct audience (the farmer groups), as well as future listeners to podcasts/radio programmes that are developed as project outputs. Over the course of this project, nearly all will be small scale farmers living in Northern Uganda. However, the content would be relevant to small farmers elsewhere in the world, who share the challenges of small scale farming – that is, the pressures of producing crops/livestock to support their hh’s, either by direct consumption or sales, and balancing the costs of these activities with the value of what is eaten or sold.
What differences are there between different members of the audience?	<ul style="list-style-type: none"> Despite the fact that the audience has a lot in common, there are also extensive differences. As well as gender and age differences, there are notable differences in existing skills and knowledge around the subject area. Particularly relevant are differences in literacy/numeracy abilities, which have to be considered in the development of the most appropriate recording systems for the target audience. These differences are often associated with gender and age.
What might influence the audience’s decision making? (i.e. culture, religion, gender, education, experience, position or status within a community, access to tools and inputs, ability to purchase what is needed, etc.)	<ul style="list-style-type: none"> Decision making relating to the desired behaviour change of farm recording has the potential to be negatively affected by the education levels of the audience, unless the recording materials are designed to suit their numeracy/literacy abilities. Education levels are often associated with gender and age, with men/youth ending to have achieved higher education levels than women/older generations. Regardless of education levels, as financial decision making within hh’s in Karamoja is often dominated by men, it can also be anticipated that women may be less encouraged or inclined or engage in record keeping, so will need extra support.
Are there any circumstances that the audience might face that would prevent them from accessing this podcast and how	<ul style="list-style-type: none"> The podcasts will be played during training sessions as part of project activities. These are planned in advance in consultation with the audience, in order to optimise their ability to attend these sessions.

can we mitigate them?	
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DEFINING GOALS AND OBJECTIVES (Section 2.2)	
Key points to consider	Response
What do you hope will change as a result of the podcast?	<ul style="list-style-type: none"> The series of podcasts will aim to increase the awareness of farming hh's about the value of record keeping; and facilitate their knowledge of how to keep simple farm records – ultimately bringing about the desired behaviour change of effective farm recording amongst the listeners.
What difference do you hope the podcast will make?	<ul style="list-style-type: none"> To bring about farm recording as a regular and sustained practice amongst the listeners; ultimately improving their knowledge of the performance of their different farming enterprises over time.
What is a doable realistic change?	<ul style="list-style-type: none"> The adoption of a simple farm recording system amongst the listeners,
How do you want your audience to feel after hearing your podcast?	<ul style="list-style-type: none"> The audience should feel engaged, motivated and enabled, as well as supported via the project's collaborative approach.

LENGTH AND FREQUENCY OF THE PODCAST (Section 2.4)	
Key points to consider	Response
How long should your podcast be?	<ul style="list-style-type: none"> The podcasts will be approx. 10 minutes each: Long enough to cover the topics in hand, but not so long as to cause the listeners to lose interest.
How much time does your audience have to listen to your podcast?	<ul style="list-style-type: none"> The podcasts will be part of the listening sessions and will be played during the sessions, supported by visual materials, demonstrations and discussions. During the baseline many of the participants indicated that they listen to radio and so it is anticipated that they would revisit the podcasts outside of the listening sessions, if these could be played on their mobile phones.
Are the themes better explored in short form or long?	<ul style="list-style-type: none"> The themes will be sequential and form a story, following the progression of a woman farmer as she embarks on farm recording. Due to the nature of the material, shorter podcasts were thought to be more beneficial, giving the farmers time to apply the knowledge they have learnt before the next podcast, which builds on the first and so on...
What will be the balance between very technical information and storytelling?	<ul style="list-style-type: none"> The podcasts will be story based, but technical information will be introduced, at varying levels, to cater for those more familiar with farm recording
Will you roll out the content all at once or follow a schedule?	<ul style="list-style-type: none"> The podcasts will be a 4-part series, each podcast building on and reinforcing the information and story of

	the last. As they will be part of a structured series of listening sessions they will follow a schedule during the project, but will be available post project to bulk download. The podcasts will also be developed into radio programmes. It is anticipated that these will follow the same structure of 4 separate, sequential programmes.
If on a schedule, will you be able to roll them out consistently?	<ul style="list-style-type: none"> The listening sessions are part of the overall project delivery and so will be delivered to the groups within the project.

1.3.2 How to make decisions about content (section 3 of FRI podcast guidance document)

In making decisions around the content of the podcasts, the guidance document describes that the balance between motivation and ability are key determinants in the adoption of a proposed practice. The good level of awareness and enthusiasm demonstrated by the farming hh's during the baseline surveys indicates that their motivation is high; whereas the review of any existing records revealed a lack of ability. The podcasts need to help equip the listeners with the necessary skills required to keep farm records.

In order to ensure that motivation to keep farm records is sustained, the podcasts will need to be produced in an enjoyable format; while the recording systems themselves will have to be compatible with the abilities of the listeners; and able to be adopted without compromising other tasks that the householders (most especially the women) must carry out.

As the guidance document points out, listeners are normally at different stages in relation to a specific change. This is certainly the case for the participants in this project. The mixed abilities of the individuals, ages and genders within the project will have to be considered when developing the content. Follow-up conversations with FRI indicate that, for a mixed audience, targeting the content at the middle-ground is often the best approach.

As the guidance document points out, people cannot always control the issues that determine their behaviour; and community and environmental factors can impede change, even when there is motivation. With this in mind, the relationship that the field officer will build up with the groups over the course of the project will be especially important. This will help inform which aspects of farm recording are the most successful, and for what reasons, improving the quality of learning that can be shared with the development community post-project.

1.3.3 Writing for the ear (section 4 of FRI podcast guidance document)

The guidance document highlights the importance of developing podcasts that are sharing facts in a story form, where the text is crucial in painting a picture for the listener. It provides a list of practical advice and considerations that will be followed in order to produce a podcast story that is engaging and effective. These will be consulted and adhered to in the development of the podcast content and text for the script.

1.3.4 Information and storytelling interviews (section 5 of FRI podcast guidance document)

The guidance document outlines two key approaches for sharing facts with small farmers via podcasts: Information and storytelling interviews. Even the former includes an element of storytelling, in that the interview progresses through the stages of a process that has been experienced by the interviewee. However, the more direct approach of a storytelling interview is considered appropriate for this project's podcasts: By taking the form of conversations between a lady farmer (who has never carried out farm recording before), and her supporting extension officer, and covering her journey in farm recording over time, the series of podcasts can gradually progress through the learning topics, in a format that is engaging and relatable to, most especially for female listeners. Thus, the format would include the four main ingredients FRI recommends for a successful storytelling interview: a main character (the lady farmer), the problem, agency (the officer), and the resolution

In this section, FRI points out the importance of understanding the different challenges that men and women face with regards to the subject being covered, such as different time commitments and access to resources. The podcasts and the farm recording systems will need to be relevant for both men and women. Thus, the lower literacy skills of most women, and their greater time commitments, will need to be reflected in the materials' content and formats.

1.3.5 Other things to consider (section 7 of FRI podcast guidance document)

The guidance document describes how small-scale farmers like to hear from experts but that they need to be able to relate to such experts - so tapping into the expertise of small-scale farmers is advised. As described in section 1.3.1, the guidance specifically warns against the trap of using "lead farmers" that listeners may feel set apart from. The choice of the small-scale female farmer as the main character of the podcasts will increase the ability of the female listeners to empathise and connect with the story that is being told, thus raising their confidence in carrying out farm recording themselves. It seems possible this approach will make the male listeners less engaged, though the podcasts will aim to prevent this, by including examples and references to other farmers who are benefitting from farm recording, which shall include men.

SECTION 2. CONTENT AND STRUCTURE FOR THE LISTENING SESSIONS

There will be four key training/listening sessions, which will incorporate the four podcasts, together with follow-up demonstrations by the field officer, as well as group discussions. The more able groups will be able to follow and engage in more in-depth discussions and demonstrations, keeping them engaged and furthering their knowledge and understanding of farm recording. A training manual will be produced, to accompany the podcasts, for the trainers to use when facilitating the listening sessions.

An outline of the content and structure of the listening sessions is provided below.

LISTENING SESSION 1 – Why do we need to record?

Learning session 1 is split into 3 sections:

1. What is farm recording and why is it important?
2. Barriers to farm recording.
3. Getting started with farm recording.

Each section contains notes for the trainer, the podcast script and visual material which can be copied and used within the session for demonstration and discussions.

Objectives

At the end of this session participants should:

- ***Have an increased awareness and general understanding of farm recording.***
- ***Understand the importance and applications of farm recording.***
- ***Understand, for a simple record keeping system, the types of information that can be recorded, and what is meant by an input and an output.***
- ***Be confident to practise basic farm recording activities, if not already doing so.***
- ***If farmers are already keeping farm records, evaluation and support on existing record keeping approach.***

Content

1. **What is farm recording and why is it important?**
 - **PODCAST 1, PART 1:** What is farm recording?
 - **DISCUSSION: WHY IS FARM RECORDING SO IMPORTANT?**

Participants share experiences of farm recording.

Discuss why some farmers record while others do not.

Discuss advantages of farm recording

- It may help them to plan for the future.
- Assess see how well their enterprise is performing.

2. Barriers to farm recording

- **PODCAST 1, part 2:** Why don't more farmers carry out farm recording?

- **DISCUSSION: WHY DON'T SOME FARMERS RECORD?**

Discuss barriers to farm recording.

- How could barriers be overcome? Draw on farmers' experiences.

3. Getting started with farm recording

- **PODCAST 1, part 3:** How can farmers get started with farm recording? Key things to think about when farm recording.

- **DISCUSSION: DISCUSS THE TERMS INPUTS AND OUTPUTS**

Following the podcast make sure that all of the group understand the terms inputs and outputs. Within the group, households think about all the activities/transactions on their farm which could be recorded. For example livestock they sell, crops they sell, inputs they buy (e.g feed, seed, empty bags for storing grain etc.). These are made into a group list, with inputs and outputs separated.

- **INDIVIDUAL HH SUPPORT**

Towards the end of the session, the facilitator moves between hh's and reviews any existing records that are kept, advising on improved layout and approaches. For hh's who have not recorded before, these are asked to think about the inputs and outputs they incur and how these could be recorded in the future.

Conclusion to Session 1

Very brief summary of what they have learnt and what they need to do in preparation for the next session, which will look at farm recording book layouts and inputs and outputs in more depth.

What they have learnt:

- What farm recording is and why it is important.
- Understand what is needed for a simple farm recording system.
- Know what is meant by the terms input and outputs.
- Evaluate existing farm recording systems.

What to do next:

- Begin practising farm recording on blank notebook and bring these to next session.

LISTENING SESSION 2 – First steps to farm recording and farm recording books

This learning session is split into 3 sections:

1. Revision of Session 1.
2. Different approaches to recording.
3. Organising record books.

As with session 1, each section contains notes for the trainer, the podcast script and visual material which can be copied and used within the session for demonstration and discussions.

Objectives

At the end of this session participants should:

- *Continue to show an increased awareness and understanding of farm recording. Understand how activities can be recorded using: symbols; tallies; writing; numbers.*
- *Have received blank farm recording books – one for each enterprise.*
- *Be confident to record inputs and outputs in their farm recording books.*
- *Plan farm recording into their daily routines.*
- *If familiar with farm recording, continue to evaluate the way they currently record and assess alternative ways to record.*

Content

1. Revision of Session 1.

- **PODCAST 1** is replayed.
- **DISCUSSION: DISCUSS THE TERMS INPUTS AND OUTPUTS**
Any questions/concerns about farm recording so far?
- **DEMONSTRATION/DISCUSSION:**
Ask the group to share any activities carried out since Session 1.
Did they record them? If so, how?

2. Different approaches to recording

- **PODCAST 2, part 1:** How activities should be recorded – looking at symbols, tallies and numbers.
DEMONSTRATION/DISCUSSION: RECORDING THESE INPUTS AND OUTPUTS
Discussion within the group to share what methods they currently use.

Demonstration/Discussion - ideas for any symbols that could be used.

3. Organising farm recording books

- **PODCAST 2, part 2:** How record books can be organised.

- **PRACTICAL/DISCUSSION:**

The trainer discusses with the trainees how many enterprises they have and how many books they need.

Hands out the trainees farm recording books and they label the book on the front with the enterprise and their name. Look at the INPUTS page. Go through the columns recapping on what would be included in each column.

Ask which months the trainees can remember their records to. They will need to start their books on the earliest month they can remember and have one double page per month going onwards.

Support the trainees as they begin to fill up the Inputs for their enterprises, based on what they remember and any notes of activities they have brought to the session.

- **INDIVIDUAL HH SUPPORT 1:**

If the trainees need help for symbols for inputs these can be brainstormed by the whole group.

- **INDIVIDUAL HH SUPPORT 2:**

For those farmers who are already record keeping, see if their systems could be improved. Are they recording everything? Are they separating inputs and outputs? Do they want to record more detail for their inputs, ie. Add more columns. Does their layout enable totals to be calculated easily? Do they usually calculate their monthly totals or yearly totals of inputs and outputs? Do they have other businesses that they keep records for? Could they share the skills from recording across the different businesses?

- **PODCAST 2, part 3:** How record books can be organised – looking at Outputs.

- **PRACTICAL/DISCUSSION:**

Discuss with the trainees what OUTPUTS they should include in their books and which outputs they can remember from their enterprise. If the trainees need help for symbols for outputs these can be brainstormed by the whole group. They should start to fill in the outputs page of their new books after drawing and labelling the columns.

- **INDIVIDUAL HH SUPPORT 1:**

For those who are new to record keeping, support on symbols/tallies or numbers/text.

- **INDIVIDUAL HH SUPPORT 2:**

For those farmers who are already record keeping, see if their systems could be improved. Are they recording everything? Do they want to record more detail for their outputs, ie. add more columns.

- **PODCAST 2, part 3:** Conclusion.

Conclusion to Session 2

The trainer reviews the key elements of the session:

- Use one record book per crop or livestock enterprise.
- How the record books are organised: In brief, demonstrate how items bought (inputs) are kept separate to produce sold (output), so that it is easier to compare the records at a later date.
- How the records are entered – symbols/tallies or numbers/text.
- Trainees are given farm recording books – one of each enterprise.
- For those who are already familiar with farm recording are they recording all of their inputs and outputs in sufficient detail for their needs. Could their system of recording be improved?

What to do next:

- Use the farm recording books they have been given to record their activities for their enterprises.

LISTENING SESSION 3 – Making sense of farm recording books

This learning session is split into 3 sections:

1. Revision of Sessions 1 and 2.
2. Recording other inputs and outputs and allocation of activities
3. Comparing and adding inputs and outputs

As with all session, each section contains notes for the trainer, the podcast script and visual material which can be copied and used within the session for demonstration and discussions.

Objectives

At the end of this session participants should:

- ***Continue to show increased awareness of farm recording and be actively engaged in recording their farm activities.***
Begin to record all outputs including those in store, those eaten and those given away.
- ***Understand how to record labour costs.***
- ***Have an increased awareness of activities which may be shared over different enterprises and how to allocate these to the correct enterprises.***

- *Begin to understand that farm recording allows farmers to compare the outcomes of different farming enterprises/practices, or the same enterprises/practices over time.*
- *For those already recording deepen their understanding of the uses of farm recording and be confident to add and compare monthly totals across different activities/enterprises, months and years and what this means for future planning.*

Content

1. Revision.

- **PODCAST 1** is replayed.
- **DISCUSSION:**
Quick revision session on what has been learnt so far, including what to record (inputs and outputs). Interactive activity - grouping activities into inputs and outputs.
- **PODCAST 2** is replayed
- **PODCAST 3, part 1:** Betty's progress so far.
- **DISCUSSION:**
Participants share their farm recording books and look at progress so far. Compare books and discuss any problems they have had.
How do they think Betty has done? Is there anything she has done that they could do?
- **DISCUSSION:**
Betty talks in the podcast about how often she records. When do the farmers think they will record?
Are there any barriers to their recording, for example, time and any other commitments?

2. Recording other inputs and outputs and allocation of activities

- **PODCAST 3, part 2:** Other types of outputs that should be recorded.
- **DISCUSSION:**
Do the farmers record all of their outputs?
How do/would they allocate a value to these outputs?
- **PODCAST 3, part 3:** Recording labour costs.
- **DISCUSSION:**
Do the farmers record labour? Do they feel they need to record their labour?
How would they allocate a value?
Some inputs are spread across more than one enterprise. The next part of the podcasts explores allocating costs to different enterprises.
- **PODCAST 3, part 4:** Allocation of inputs across different enterprises.
- **DISCUSSION:**

If the farmers have more than one enterprise are there any costs that should be allocated across different enterprises.

Emphasise the importance of allocating inputs and outputs to the correct enterprises.

3. Comparing and adding inputs and outputs

- **PODCAST 3, part 5:** Comparing and calculating totals

DEMONSTRATION/DISCUSSION:

Demonstrate and discuss how input/output values can be calculated to find totals: Inputs and Outputs. Show how the value of inputs and outputs should be calculated for each month. Demonstrate with an example of this.

Discuss/show how they can be calculated for the year. Demonstrate with an example of this.

- **DISCUSSION HH 1:**

Discuss ways of calculating totals, for example, using pen and paper; a calculator or estimating totals (rounding up/down). What methods of calculating do the group use?

- **DISCUSSION HH2:**

Introduce the concept of comparing total values of inputs and outputs over time. Why is this useful? Use some examples to show how records can be compared.

Conclusion to Session 3

Review of the key elements of the session:

- Important to include all outputs – those stored, eaten and given away
- How to allocate a value to those outputs that are stored, eaten or given away.
- Recording labour and how to value your own labour.
- BE CONSISTENT when including/not including labour.
- Some inputs may be spread across enterprises so it is important to allocate the costs accordingly to the correct enterprise.
- It is good practice to add up monthly totals at the end of each month as these can be used when comparing farm records and calculating profits and losses. These will be discussed further in the next session.

What to do next:

- Continue to use the farm recording books they have been given to record their activities for their enterprises.

LISTENING SESSION 4 – Comparing outputs and inputs to determine profits or losses.

This learning session is split into 3 sections:

1. Revision
2. Estimating profits and losses through gross margins
3. Planning for the future

As with all session, each section contains notes for the trainer, the podcast script and visual material which can be copied and used within the session for demonstration and discussions.

Objectives

At the end of this session participants should:

- ***Continue to show increased awareness of farm recording and be actively engaged in recording their farm activities.***
- ***Understand how inputs and outputs can be used to compare the efficiency of an enterprise.***
- ***Understand the importance of profits and losses and gross margins.***
- ***How profits and losses and gross margins can be used in planning for the future of the enterprise.***

Content

1. Revision.

- **PODCAST 3** is replayed
- **DISCUSSION:**
Farmers share their farm recording books so far – these books should have outputs and inputs separated and one book per enterprise.
Have they included labour? How did they value this?
Do they have any inputs which are shared across enterprises?
Have any farmers calculated their monthly totals?
Discuss the methods used for calculating these and give any additional support as required.
Have the trainees compared any of the inputs or outputs of their enterprises?
- **INDIVIDUAL HH SUPPORT 1:**
Give additional support for adding up monthly totals as required.
- **INDIVIDUAL HH SUPPORT 2:**
Give examples of inputs and outputs and this group add up monthly and yearly totals and then compare and discuss and input and output totals. If they have old record books they can compare their figures for the last years of months.

What do the figures tell them about the different enterprises?

PODCAST 4, part 1: See how Betty is getting on with her recording.

2. Estimating profits and losses through gross margins.

- **PODCAST 4, part 2:** Introducing profit and loss using Gross Margins
- **PRACTICAL/DISCUSSION:**
Trainer demonstrates gross margins.
- **PODCAST 4, part 3:** Calculating Betty's Gross Margins.

3. Understanding Gross Margins.

- **PODCAST 4, part 4:** Understanding what Gross Margins mean.
- **PRACTICAL/DEMONSTRATION/DISCUSSION:**
Examples of gross margins for the farmers to work on:
 - **Positive gross margin**
What does a positive gross margin tell us.
Why do they think the example enterprise had a positive gross margin.
Could things be changed in the enterprise to make a bigger gross margin?
 - **Negative gross margin**
 - What does a negative gross margin tell us.
 - Why do they think the example enterprise had a negative gross margin.
 - Could things be changed in the enterprise to make the gross margin positive (i.e. turn an unprofitable enterprise into a profitable one)?

4. Planning for the future.

- **PODCAST 4, part 5:** Understanding what Gross Margins mean and how to use the knowledge they have learnt and apply it to their future plans.
- **DISCUSSION:**
Profits and losses - why they are important?
Planning for the future – do the farmers have any plans for the future?
Discuss other ways to gauge if your enterprise is successful.

Conclusion to Session 4

Review of the key elements of the session:

- Gross margins are a good indicator of the performance of an enterprise
- A positive gross margin indicates the enterprise has made a profit.
- A negative gross margin indicates the enterprise has made a loss.
- Records can be analysed to see if enterprises can be made more profitable.
- Gross margins and record keeping are important for future planning.

What to do next:

- Outline what is expected in terms of record keeping from the trainees once the training has finished.
- Outline the plan for the follow up activities which will follow this training.

SECTION 3. THEME AND STRUCTURE OF THE PODCASTS

The four podcasts will be approximately 10 minutes in length. Each one will be divided into 2-3 sections, allowing periodic demonstration/discussion between the sections. Previous podcasts would be replayed during subsequent sessions, allowing reinforcement of learning.

The section below presents the draft podcast contents:

Podcast 1 - Why do we need to record?

EXTENSION OFFICER:

Welcome to the AgriTechTalk podcast on farm recording. This is the first in a series of four podcasts about farm recording and how it can be used effectively, by even small-scale farmers, to help manage their farms better. I'm Joseph, an extension officer, and I have recently been working with farmers to help them develop their farm recording skills.

Farm recording means keeping a record of daily **activities** on your farm. These may include buying seed, preparing land for planting sowing seeds or selling produce and many other activities.

When these activities are recorded in an organised way, normally in note books, at the end of the season these records can help you understand how well your farming year has gone, and plan for the next season.

On your farm you may grow different types of crops and keep different types of livestock. Each of these is called an enterprise. You may have several different enterprises on your farm, for example, goats, sheep, sorghum, maize and so on.

The farmers I have worked with who are just starting up with farm recording are noting down the activities for each of their farm's enterprises in small note books.

Other farmers have used farm recording before and I am helping them to build on their farm recording skills, and to calculate their profits through “gross margins”. Gross margins show how much money an enterprise has made or lost. An enterprise that earns more money than it cost to produce has made a “profit”; but an enterprise that has earned less money than it cost to produce has made a “loss”.

Some of the farmers I have worked with are confident in writing and carrying out calculations. Other farmers I have worked with are not able to write or do calculations - but they are using a simple recording system with symbols instead of writing; and tallies instead of numbers.

So, as you can see, farm recording can be used by all farmers. This series of podcasts has been prepared to guide any farmer who is new to farm recording to be able to do it.

I have with me one of the farmers I am working with. Betty is starting up on farm recording. She is going to share her story of how she is progressing during the podcasts.

Betty – please tell us a bit about yourself and why you wanted to start farm recording?

BETTY:

Well, I live in Katikékile sub county with my husband and two small children. We have a small farm, about one acre and grow maize and vegetables. Most of what we grow we eat and also sell some to our neighbours for other things. We also have some goats and chickens. Last year I heard about farm recording from a friend and started to think it could be useful. So this year I started noting down whatever we do on our farm, such as how much time and money we spent on preparing and sowing our land. But, my records are not very organised!

EXTENSION OFFICER:

I will help you organise your records better during the coming podcasts. But it is great that you have made a start!

I know that a lot of farmers are always very busy and it is easy to ignore farm recording. Ideally farm recording is something which would be done every day, or several times a week, and could become part of your daily or weekly routine - but I know how lots of things can get in the way.

I have met some farmers who started to record and then felt they didn't have any support or training when they wanted to ask questions or had doubts about things. Hopefully I can give you the support you need to keep good farm records.

Also, in many households where farm recording is used, the husband does most of the farm recording but does not have time to record everything, or does not have information on activities that his wife has been carrying out. But many of the women I have worked with would like to share the role of farm recording with their husbands. Working as a team in this way leads to much better quality records which are therefore of more use in farm planning.

Do any of these things affect you Betty?

BETTY:

Well I am very busy - tending the crops, while looking after my children. And then I take some of the produce, like eggs and milk to market. I also make skirts so that takes a lot of my time, but also cooking and cleaning. But I try to make room for the farm recording as I know it will be good to understand how my enterprises have done financially, without having to remember the figures I have got better at remembering to record now too – it is now part of my weekly routine.

EXTENSION OFFICER:

That's very good. Going back to something you said earlier – that your records are not organised. Let's talk more about how you can organise your records better:

We talked before about enterprises having activities. These activities can be separated into **inputs** and **outputs**:

Inputs, or expenses are anything which has cost money or time from the enterprise, such as buying seed, paying somebody to plough your land, the cost of fertiliser, livestock medicines and so on.....Because these costs change according to the scale of the enterprise (such as how many hens are kept; or how much land used to grow a maize crop) they are called **variable costs**.

On the other hand **Outputs** are what is produced by that enterprise, such as fresh maize, maize grain, milk, eggs, calves or so on.

There are also other sorts of activities which may cover the whole farm, like rent, machinery, buildings, or equipment for storage, like granaries. Unlike variable costs, these are **fixed costs** and need to be paid no matter what enterprises the farm is involved with. For, example, rent for land may need to be paid whether or not the farmer uses part or all of it, keeps chickens and goats or just grows maize. Because these fixed costs are not connected to a single enterprise, they should be recorded in a separate book which is used just for these "fixed costs".

Let's start with your maize crop enterprise Betty. What sort of activities do you have going on with this at the moment?

BETTY:

Well, because we are getting ready for harvest, we are buying sacks for our maize. We recently paid for some fertiliser for that maize.

EXTENSION OFFICER:

How about earlier in the year? Did you buy maize seed for example?

BETTY:

Oh yes! I wrote this information down. We bought seed with the money we got from selling our produce last year. We also had to pay someone to plough the field, so that cost quite a lot. I have also done lots of weeding myself.

EXTENSION OFFICER:

So these are all inputs -activities which have cost you time or money to grow your maize. As you have not harvested your grain yet, you won't know about your maize outputs for this year yet.

But what about your livestock? How are these going? Have they been earning you any money this year?

BETTY:

Oh yes - I have sold lots of eggs and some milk. I go to the market most days to sell them, along with the vegetables we have been growing.

EXTENSION OFFICER:

Well it sounds as if you have lots of activities to record on your different enterprises.....

You said you have been writing down information at home. If you are starting farm recording then a notebook is a good idea, so that all of your records are in one place and more difficult to lose. Writing your information in a notebook also means that they will be in sequence. This means that you can study your records month by month, and see how your farm is performing over time.

When recording your activities it is good practice to keep the records for each of these enterprises separate, making it easier to organise them and compare records later on. So, ideally, you need a notebook for each enterprise. Or if this seems expensive you can have different sections of a thick notebook for each enterprise.

For example, you keep chickens and goats, as well as vegetables and maize. These are different enterprises, so you will need four notebooks or one thick notebook. Will you be able to get those?

BETTY:

Yes I think so.

EXTENSION OFFICER:

You will also divide your notebooks by time, so that you can compare them over different growing seasons in the future. Because you start clearing land for sowing maize in February/March, this is the time to start your records for your maize crop. Then you can start another set of records for your maize the following February/March.

As your records develop, you'll be able to see which years had the best results, and if you think these results have been affected by certain decisions you made – such as if using more fertiliser helped produce a higher yield.

By the way, lots of farmers I speak to do record some activities, but not all of them. It is best to record all activities for each enterprise, that is your goats, your chickens, your maize and your vegetable garden.

Next week we'll start to look at how to fill these in together. But for now, carry on writing down any information on inputs and outputs and please bring this information along to the next podcast.

Podcast 2 -First steps to farm recording and farm recording books.

EXTENSION OFFICER:

Welcome back to the AgriTechTalk farm recording podcasts. This is the second in a series of four. I am Joseph, an extension officer and I am here with Betty, who is a small-holder farmer in Katikakile sub county. Betty will be updating us on how she is getting on with her farm recording and sharing her thoughts about it. In the first podcast we looked at why farm recording is important. We talked about how farms often have different enterprises and spend time and money on the different inputs. We also talked about outputs. In this podcast we'll look at how these inputs and outputs can best be recorded.

Betty has kindly brought along her old notes where she has been writing down this year's activities for her farm. I see they are all mixed up here in a long list. If you remember, Betty needs to separate these records into her four new recording notebooks, one for each enterprise.

How are you feeling about getting started with your new record books Betty?

BETTY:

I am looking forward to starting up an organised recording system!

EXTENSION OFFICER:

Great! Now, there are different things to think about when setting up your farm recording book.

Firstly, you need to decide the way you want to record your information. You must choose a method that suits you. Some farmers may use symbols to represent their different activities. For example they may draw a can for a can of maize they sold, or a square for a sack of grain. Other farmers may write down what they have sold.

Also, if you are not confident in writing and adding numbers, you can use tallies instead of numbers. If you are selling lots of produce at a market you could even put tokens or stones in a pot for each item sold, then count and record this number in your record book later.

Some farmers use a combination of numbers, tallies, words and symbols. Any system is fine, as long as it allows you to record all your inputs and outputs for each of your enterprises. What's important is that the method works for **you**.

Of course, you may change your way of recording as time progresses and you learn new skills. Adapting and improving the way you record is fine.

Now, I see that in your old notes Betty, you have drawn symbols as well as numbers

BETTY:

Yes. I am not good at writing – so I have been making up simple symbols when recording my different activities. For example, I draw a bag to represent chicken feed; an egg to record sales of eggs; cups to record sales of goat milk; some dots to represent seed and so on. The symbols suit the activities so I don't forget them!

I can write numbers though.

EXTENSION OFFICER:

That sounds good. You can carry on using your symbols and writing numbers in your new notebooks.

Let's now decide how detailed your records should be.

What have you been writing down in your old book?

BETTY:

I have been writing down the items I have bought or sold, as well as how many and the total amount they cost me, or the amount I sold them for.

EXTENSION OFFICER:

That is excellent. We can use all this information in setting up your new record books.

Before we start doing this, it is also important to separate the inputs from the outputs for each enterprise. A simple way to do this is to record the inputs on one page; and the outputs on the opposite page.

Let's set up your notebook for your chickens.

Open it so that you have two clean pages to write on in front of you. You are going to write information about your inputs on the left; and about your outputs on the right.

To make your job of recording easier, you can divide the page into sections, or columns, by drawing lines from the top to the bottom of each page. The number of columns depends on how detailed your records are.

You will need four columns on each page Betty.... like this.

So, let's start by entering your inputs into your new notebook. I shall take you through what you write in each column one by one.

Firstly, at the top of your page, write down the time period that the figures are for. We normally work in months. You started your chicken records in January, so write this month, and the year, at the top. Leave a gap at the bottom of each month - you will need this later.

Now, underneath this, in the first column, you need to record your input. Remember that the input costs (which are called variable costs) don't include fixed costs which would occur whether or not the enterprise existed.

I can see your symbol for chicken feed which is a bag.

BETTY:

Yes – a 5kg bag.

EXTENSION OFFICER:

OK, so draw a symbol in your first column; and let's write a 5kg on it too, so that you have this information in future.

In the second column, let's write down the price of one bag of grain – that is 5,000 shillings

Now, in the third column, write down the number of bags you bought (that's 2);

Last of all, in the fourth, column write down the total amount you spent on the grain (that's 10,000 shillings).

I see you have more records on chicken feed lower down your list. Let's enter these too..... That's right.

BETTY:

I can see how recording items in columns will help to keep the data organised and easier to read.

EXTENSION OFFICER:

Yes it is helpful - also if you want to show your records to your family or friends it will be easier to follow and understand.

Ok, so I also see that you bought 4 young hens at the market last week for 5,000 shillings each. Write these down underneath the last entry for chicken feed. What symbol are you going to use for a hen?!

BETTY:

I will use a simple chicken shape

EXTENSION OFFICER:

That works well and you will remember what it means. When you are choosing symbols it is important to choose symbols that you will remember!

So, draw the hen in the 1st column. Now, in the 2nd column record the price you paid for each hen, that's 5,000 shillings. Next, in the 3rd, the quantity of hens you bought, which is 4. And finally, in the fourth column write down the total amount you paid for the hens, that's 20,000 shillings.

BETTY:

That already looks much more organised than my old records.

EXTENSION OFFICER:

Any more inputs to add Betty?

BETTY:

No, but my hens have produced a lot of eggs!

EXTENSION OFFICER:

So those are **outputs**. Looking at your old notebook, I can see that you have been keeping a record of the number of eggs your hens produced, as well as how many you sold at the market and how much you sold them for. That is really good.

So this has to be written on the opposite page, under outputs.

You will need to divide this page into four columns as well: The first for the activity, or type of produce; the 2nd for the value that each item was worth; the 3rd for the number that were produced; and the 4th final column for the total value of the produce.

So let's add in the eggs you produced...

BETTY:

OK. In the first week of January my hens produced 7 eggs and I sold these at the market for 500 shillings each and earned 3,500 shillings from them.

EXTENSION OFFICER:

So, in the first column, at the top, opposite where you made entries for your chicken inputs, write in your symbol for an egg. Now, in the 2nd column, record the value of each egg. You said you sold these for 500 shillings each. Now, in the third column, record the number of eggs, which is 7. Finally, in the fourth column, write down the total you earned from selling these eggs, that's 3,500 shillings.

Next week we are going to learn about how it is important to record everything you produce, not just what you sell. But for now, let's look at your other enterprises, before we run out of time....

Let's look at your maize. Do you feel ready to talk me through the steps?

BETTY:

Yes! Here is my new maize notebook. So.... I'll write the month that activities started, February, at the top. I'll use the left side for inputs and the right side page for outputs. I will draw 4 columns each side.

EXTENSION OFFICER:

Great

BETTY:

I purchased 2 packets of maize seed in February, each weighing 1 kg. These cost 4,000 shillings each. So I'll draw my symbol for seed in column 1. That is a bag with some dots. I shall write 1 kg onto it too.

In the next column I shall record the price I paid for each bag, that's 4,000 shillings. Then I record the number I bought, that's 2. Finally, in the last column, I shall write the total cost of the seed, 8,000 shillings.

Underneath this I'll write in the fertiliser I bought in March. I can't remember how many containers of DAP and Urea I bought, just that I spent a total of 30,000 shillings.

EXTENSION OFFICER:

That's OK. Just draw your symbols, then the total you spent in the last column. You can leave the 2nd and 3rd columns blank if you need to.

BETTY: OK, so here is my symbol for fertiliser- a triangle - and then I write in the total I paid, that's 30,000shillings.

EXTENSION OFFICER:

That's really good. You will not have anything to write in your maize outputs yet, as you have not yet harvested.

Are you happy to write the entries for your goats and vegetables in the other notebooks on your own?

BETTY:

Yes I am!

EXTENSION OFFICER:

Great. You now have the skills you need to start recording and can organise your records in different books, one for each of your enterprises, with the inputs and the outputs separated.

This will allow you to compare your inputs and outputs for your chickens, goats, maize and vegetable garden.

Over time, you may want to add more detail into your records, such as where you bought your inputs; or what the price of a single bag of seed was. But for now it's best if we keep things simple. But do remember to record **all** of your activities.

In the next podcast we will look at some other inputs and outputs as well as shared activities on the farm.

We will also look at weekly and monthly totals and what these totals can tell us about our farm inputs and outputs.

Podcast 3 - Making sense of farm recording books

EXTENSION OFFICER:

Welcome back to the AgriTechTalk farm recording podcasts. This is the third podcast in a series of four. I am Joseph, an extension officer and I will be joined by Betty, who is a small-holder farmer in Katikavile sub county. She will be updating us on how she is progressing with her farm recording and sharing her thoughts. In the previous podcasts we have looked at why farm recording is important and at the different inputs and outputs that should be recorded in a simple recording system.

In this podcast we will look at:

Firstly, how to record the value of what your enterprise has produced in more detail.

Then we'll look at how to enter the cost of labour into your inputs.

And lastly, we'll look at dealing with inputs that are shared by different enterprises.

But first, Betty, do you want to tell us how you are getting on with your recording? Looking at your records, you seem to be managing to record your farm activities nicely.

BETTY:

Yes I think so. I try to record when I come home from the market or when I come in from the field. That way I remember it, otherwise it is easy to forget with everything else going on.

BETTY:

I am still using a book for each of my enterprises with one page for inputs and one page for outputs; and I separate these by month, using the left hand page for inputs and the right hand page for outputs.

As the season progresses I am recording new things and so I'm having to think up new symbols, so that when I look back I know what the activity was. My husband and children help me come up with ideas.

Several of my friends have also started recording so we compare records and can learn from each other.

EXTENSION OFFICER:

That sounds good. I am glad you are helping each other.

Have you had any problems or worries about your farm recording?

BETTY:

Well, I was wondering how to record the value of the eggs that I produce but do not sell, because we have eaten them.... For example, this week we produced 10 eggs. We ate four of them and sold six of them for 500 shillings each.

EXTENSION OFFICER:

That is what I wanted to talk about – that is, how to record the value of all your outputs.

If you had not eaten those four eggs at home, you would have needed to buy eggs from someone else. Similarly, if you grew some grain and put some of it into storage to eat later, this would save you buying grain later on. This means that you need to include the value of all your produce, not just what is actually sold.

When giving your products a value, try to ensure that it's of similar quality to what you're basing its value on, otherwise you may be under valuing or over valuing your produce, which will reduce the accuracy of your farm records. The value could be based on similar produce you have bought or sold that day, or the value of produce for sale at the market.

So, looking at your eggs again. You should record the value of each egg you ate at the same as the price you sold an egg for.

You can also add on a symbol for whether the produce was sold, eaten, stored or given away, so that you can make comparisons between these quantities and values in the future.

So, for your egg records, draw your symbol for the eggs you sold, enter the price you sold each egg for; then add the number of eggs; and finally the total value of the eggs. Do the same for the eggs you ate underneath.

Do not get concerned if you are faced with calculations you're not confident in carrying out. For example, if you are unsure about how to work out the total value of the four eggs you ate, see if you can find a family member, community officer, extension officer or VSLA group to help you. Do not let the worry of not being able to do these calculations put you off farm recording, as even without these totals, you will still be able compare your activities and what they produced.

BETTY:

How about if the produce is damaged and so cannot be sold? For example, a lot of the eggs we eat are those which are broken.

EXTENSION OFFICER:

You can record these also as you would need to buy them somewhere else if you did not have them.

Don't forget that you should also record any milk or any vegetables or maize that are eaten or given away. And also any produce you have in store.

BETTY:

I will try to remember!

EXTENSION OFFICER:

So let's talk about labour costs. Have you been recording the cost of labour Betty?

BETTY:

Well, I paid a friend 5,000 shillings for helping me prepare my maize field for planting. I entered this as an input. Otherwise it is all my own labour so I didn't record that.

EXTENSION OFFICER:

But, if you could earn money for that time doing something else, you should include a value for your time.

For example you also make skirts. So the time you spend on the farm could be spent making skirts.

If you don't know what value to put down for your own labour, you could still note down the hours you spend working on each enterprise. Over time, you might decide to include a value for your labour, as this can help you understand the efficiency of your different enterprises. Knowing which of the farm activities is taking most time is a useful indicator for some farmers.

The key consideration with labour is that you should be **consistent**. If unpaid labour has not been recorded for several months then do not suddenly start recording it for the rest of the season. Likewise if you do want to record a value for your labour, make sure you include it for all of the relevant activities.

Many farmers feel they do not need to include labour for themselves, or unpaid labour from their family. They only include labour that they have paid for. That is fine as long as they are consistent.

Another question some farmers ask is how to record outputs and inputs if they are shared between different enterprises.

For example if a farmer has a field of maize and a field of sorghum, they may pay someone for a day to plough their fields. This may include both fields.

To record this activity as accurately as possible they need to divide the cost of the activity between the two enterprises. In this case, this is done by estimating how much time was allocated to each of the enterprises.

It maybe that the fields are the same size and took the same time to plough, so the cost could be divided equally. However, if the sorghum field was much larger than the maize field an estimate maybe needed to divide the cost.

Do you have any shared costs Betty?

BETTY:

We do have to spend money repairing the fencing for our chicken run and vegetable garden – this cost about 100,000shillings last year.

EXTENSION OFFICER:

So you could split the fencing costs between your chicken and vegetable enterprises – that is, 50,000 shillings each. Your figures do not have to be exact, a good estimate will do.

BETTY:

I understand.

EXTENSION OFFICER/BETTY:

Now, we have talked about all the inputs and outputs that are included in your farm records. Remember that these are being kept so that total costs and outputs can be compared over time. To do this, you have to add up all your costs and inputs values for the period of time you're looking at, so this does of course involve some calculations.

By keeping your farm records on a monthly basis, you can compare monthly inputs and outputs through the year, as well as for the same month over different years. Or you might just want to compare your records on a yearly basis. But remember, it will be easier for you to do calculations regularly, rather than saving them all for the end of the year. You might even decide to break your records down by week – you need to decide what works best for you....

You may be unconfident in working out your totals. But remember not to give up if you cannot do these calculations, your farm records are still going to be useful. How are you with adding up Betty?

BETTY:

I am not good at adding up but my friend from a VSLA group helped me and also my family have helped me.

My husband has got a phone with a calculator on now. My daughter showed me how to use it to do calculations on bigger numbers.

I have written in the total inputs and outputs values for each month, in the space I left at the bottom.

EXTENSION OFFICER:

Good. At the end of the year you should add these monthly totals up to find the total for the year.

You can compare the monthly totals now though. You will be able to see which enterprises cost or earned the most over different months; what inputs were the most expensive; what enterprises produced the greatest value and so on.

There are many different ways to compare and use your monthly and annual records, including looking at profit and loss, using what are called **gross margins**, which are often used as an indicator of how well an enterprise is doing.

We will look at gross margins in more detail in the next podcast.

Podcast 4—Comparing outputs and inputs to determine profits and losses

EXTENSION OFFICER:

Welcome back to the AgriTechTalk farm recording podcasts. This is the final podcast in a series of four. I am Joseph, an extension officer and I will be joined by Betty, who is a small-holder farmer from Katikekile sub county. She will be updating us on how she is progressing with her farm recording and sharing her thoughts. In the previous podcasts we have looked at the importance of farm recording and which inputs and outputs should be included and how best to organise your farm record books. In this podcast we will be looking at comparing inputs and outputs to calculate a gross margin.

Betty has been following our podcasts and is making good progress with her farm recording.

BETTY:

Yes I am feeling much more confident about my farm recording now. My family are interested to see the different inputs and outputs and we are doing weekly totals for each of the enterprises.

I have a book for each of my enterprises so it is really easy to see what my inputs and outputs are for those different enterprises.

I think that all of the enterprises are making some money, but I am not sure....

EXTENSION OFFICER:

We can find out: **Gross margins** can show the profitability of an enterprise. A gross margin is calculated by taking away the variable costs of producing an enterprise (the inputs) from the value of what is produced (the outputs).

So gross margin equals total outputs minus total variable costs

If the value of what is produced is greater than the input costs, you will have made a **profit**. But if your input costs are higher than the value of what is produced, you will have made a **loss**.

Gross Margins are normally calculated each year. This enables you to compare your enterprise from year to year.

To find your total outputs for the year you will need to add up all of the totals for each month.

Likewise for your inputs, you need to add up the monthly costs to find the total for the whole year.

Now, we take away the total variable costs from the total output value. This will give you a figure for your gross margin.

BETTY:

What happens if I do not have a complete year of data?

EXTENSION OFFICER:

You can still calculate your gross margins even if you don't have a full year, as you will be able to see how each enterprise is performing over these months, but if you are comparing enterprises it is better to have a full year, especially for crops as these are seasonal. You will be able to do this in the future as your records develop.

If you have livestock enterprises, you may wish to calculate the gross margin every 3 months, or every 6 months as these are not seasonal enterprises.

And remember that, though there are a lot of calculations, you should try and get help from your friends and family – or an extension officer like me. Shall I help you calculate your gross margins with the data you have collected so far Betty?

BETTY:

Yes, that sounds good

EXTENSION OFFICER:

OK. Starting at the top, we are going to add up the value of all inputs and outputs for each month, for each enterprise. Let's list them on a separate piece of paper, so we do not accidentally count them twice. Or, we could mark them as we add them up, so we know we have counted them.....

<<Starts to read out numbers for a bit....>>.....

OK, so you have a total of 100,000 shillings of inputs and 250,000 shillings of outputs for your chicken enterprise. The output total is bigger than the input value so you have made a profit, as you thought. This is good as some enterprises do not make a profit.

The gross margin is 250,000 minus 100,000.

which equals 150,000 shillings.

So you have made a profit.

EXTENSION OFFICER:

If you calculate your gross margins and find that your enterprise has not made a profit you can look back at your records and see what may have caused the business to make a loss.

For example a farmer may have made a profit on one enterprise but made a big loss on another. He will be able to see from his records what has caused this loss.

It may be that in some months he had a lot of inputs which were unexpected, for example, needing to buy more seed from having to replant. This may lead to an overall loss for the year.

It may also be that the outputs were very low due to a poor season.

Some of these variations are unavoidable, but there may be certain costs that the farmer could reduce by thinking carefully about his farming management and practices. This is when it is particularly helpful to share ideas and records with other farmers, so that you can learn and share knowledge between farmer groups.

Keeping records of your farm, year by year, will also enable you to compare the inputs and outputs between different years. This can be beneficial if you introduce a new farming practice as it will help you to see the impact of that

practice on your enterprise, providing of course there have been no extreme events like flooding or drought, or anything else which will affect the inputs and outputs, except the change in your farming practice, and changes in prices!

For example, one year your inputs may increase due to introducing a practice of planting your seeds in rows, because you have had to pay some people to help you plant them. If in that same year your outputs also increased, due to increased harvests, then it is likely that the row planting has had a positive impact on the business, providing other conditions, like weather, levels of fertiliser and so on, are similar.

There are many factors involved in farming, such as the weather, so when interpreting your farming records think carefully about all of the factors which may have had an impact on your enterprise.

If you do have an extreme event you can note that down as well. Or if you change farming practice, or buy a different variety of seed. Any information like this will be helpful when you are looking at planning in the future.

EXTENSION OFFICER:

How do you think your farm records will help you in the future Betty?

BETTY:

I will be able to see the amount of time I spend on each enterprise if I record the time for my labour, although I will not put a cost for it. This will help me to see which one is performing better in terms of my time inputs.

I will also know how well the chickens or the goats are performing.

They are important as we can use the eggs and the milk, and also have enough to sell and I would like to start making cheese so I will be able to see if that is profitable.

EXTENSION OFFICER:

Betty, I can see you are planning for the future which is important and shows you are confident with your farm recording.

You also make skirts. You can use the skills you have learnt from the farm recording to record your skirt enterprise. You will need to think carefully about your inputs and outputs but you can use the same layout for the recording book as you use for your farm recording to make it easier.

Farmers often have other enterprises separate to the farm and their skills they have learnt through this series of podcasts can be used for these other enterprises.

We hope you have found this series of podcasts useful. They are available to anyone to download for future reference.

SECTION 4: OTHER MATERIALS TO SUPPORT LEARNING

Key information sheets will be produced, which the farmers can take home with them and use to remind them of the key elements when recording. There will be two versions, to cater for those farmers who are more familiar with farm recording, and those who are not.

A trainer manual will be developed. This will guide trainers through the process of delivering the listening sessions, which will incorporate the playing of podcasts, follow-up demonstrations, and facilitating follow-up farm recording practice and discussion.

A farm notebook template shall be developed, for the farmers to use themselves. This will be able to accommodate both written number/text entries; or symbols/tallies for those less literate/numerate.

SECTION 5. DELIVERY PROGRAMME

To be delivered to 5 groups over 8 weeks with 1 session every 2 weeks. Follow up sessions to reinforce knowledge Nov 2021 to Feb 2022.

It is envisaged each session would last approximately half a day, with a scheduled refreshment break mid-session.

Start of training - Months 6 (Sept 2021) and 7 (Oct 2021)

Group	Session 1	Session 2	Session 3	Session 4	Follow up
<u>Apule</u>	1 st week Sept.	3 rd week Sept.	1 st week Oct.	3 rd week Oct.	One visit each month Nov to Feb
<u>Etope</u>	1 st week Sept.	3 rd week Sept.	1 st week Oct.	3 rd week Oct.	One visit each month Nov to Feb
Betelemu	2nd week Sept.	4th week Sept.	2nd week Oct.	4 th week Oct.	One visit each month Nov to Feb
Etiyata Kaapei	2nd week Sept.	4th week Sept.	2nd week Oct.	4 th week Oct.	One visit each month Nov to Feb
Omora Kaapei	2nd week Sept.	4th week Sept.	2nd week Oct.	4 th week Oct.	One visit each month Nov to Feb

