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Training manual – A guide for collaborative learning sessions on farm recording, using the "CLAFRIP" podcasts

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Introduction

This training manual forms part of a set of learning materials developed under the USAID funded "Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study" project. The project uses podcasts as its central learning approach, supported by additional materials and activities.

The full set of learning materials are as follows (and are available to download, free of charge, from the AgriTechTalk website www.agritechtalk.org)

- Training manual
- Podcasts – a series of 4 podcasts (in English and Karamojong)
- Key Information Sheets (in English and Karamojong)
- Template for farm recording books (in English and Karamojong)

This training manual describes the content of the four listening sessions through which learning takes place. The listening sessions have the following themes:

Listening Session 1: Why do we need to record?

Listening Session 2: First steps to farm recording and farm recording books

Listening Session 3: Making sense of farm recording books

Listening Session 4: Comparing outputs and inputs to determine profits and losses

Session by session, this manual provides the content of the podcasts (allowing the trainer to follow them as they are played); as well as ideas for follow-up discussions; and examples that can be used to illustrate the content of the podcasts. These examples should be copied onto flipcharts as required.

Each podcast is divided into sections. At the end of each section, the podcasts should be paused for the follow-up activities, which will include elaboration and demonstration by the trainer; as well as group discussions – that is, conversation/sharing of ideas from within the group, in order to reinforce and strengthen learning. Note: The podcasts are introduced by a narrator, followed by a farmer who learns about farm recording from an extension officer. You may wish to vary the names of the farmer and extension officer depending on locality.

From Session 2 onwards, revision is encouraged, starting with a brief introduction and then revision of the previous sessions, as well as discussion and sharing of progress the trainees have made with their farm recording. The existing numeracy and literacy skills of the participants are likely to vary considerably; as well as their past experience of farm recording. In order to keep all participants engaged and progressing, the trainer will need to provide differing types and levels of support during the follow-up activities of each session.

Contents

Listening Session 1

Why do we need to record?

Learning session 1 is split into three sections:

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

Session 1 looks at what farm recording is and why it is important. The concept of Inputs and Outputs is introduced, with a discussion on the types of farming activities which should be recorded.

At the end of the session, trainees are encouraged to note down their activities (if they are not already doing so), ready for Session 2, which will look at farm recording books in more depth.

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.***
- ***Have the confidence to practise basic farm recording activities, if not already doing so.***
- ***If farmers are already keeping farm records, be evaluated and supported on their existing record keeping approaches.***

Listening Session 1

1. What is farm recording and why is it important?

PODCAST 1 - PART 1

Play the first part of podcast 1, which provides an introduction to farm recording and talks about its importance.

Play PODCAST 1 - PART 1

Narrator:

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. 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, as well as 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 will 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.

Farmers who are starting up with farm recording may just note down the activities for each of their farm's enterprises in small note books. As they develop their farm recording skills over time, they will be able calculate their profits using "**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**".

This series of podcasts has been prepared to guide any farmer who is new to farm recording to be able to do it.

Joseph, our friendly extension officer, will help you learn how to keep farm records. So let me hand it over to him to guide you through the process…..

Extension officer:

Hello, I am Joseph, an extension officer, and I have recently been working with farmers to help them develop their farm recording skills. I hope you will find this useful. Farmers who are already recording find it very helpful in keeping track of everything they do, so they can plan better for their future.

PODCAST 1 - PART 1 continued

Extension officer continued:

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. 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.

Farmer: (Betty/Lucia)

Well, I live in a Manyatta in Katikekile sub county. I am married and have two small children. We farm about one acre and grow maize and vegetables. Most of what we grow we eat, but we also sell some produce to get money for other things. We also have some goats and chickens.

Extension officer:

Why have you started farm recording?

Farmer: (Betty/Lucia)

Last year I heard about farm recording from a friend. She told me how it can help me understand our farm's progress over time, helping with decision making, which sounds 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!

FOLLOW UP ACTIVITIES

DISCUSSION THEMES: WHY IS FARM RECORDING IMPORTANT?

- Start with an open discussion where participants share any experiences/knowledge of farm recording.
- Discuss why some farmers record while others do not.
- Discuss the advantages of farm recording:
  - It provides farmers with a record of how an enterprise has been managed over a given season/year, providing a reference for the future.
  - It allows farmers to assess how well an enterprise is performing, both financially and in terms of production.

- Comparisons can be made between different enterprises, or (if records are kept over time) the same enterprise over different season/s years.

ACTIVITY RESOURCES:

EXAMPLE OF FARM RECORDS IN USE

Moses has kept records of his farming activities for 5 years.

Here is a summary of these records. Moses can see that, although his costs were a little higher in 2020, his production was considerably greater and he made more money overall.

He can match this information with the practices he carried out over those years, to investigate the reasons for these higher returns (eg did he buy in improved seed; apply more fertiliser or pesticides; grow his crop on new land; use a different sowing method etc?).

	Costs of production UGX	Sorghum grain production (kg)	Value of production UGX	Profit or Loss UGX
2016	150,000	125 kg	125,000	25,000 loss
2017	200,000	125 kg	125,000	75,000 loss
2018	175,000	100 kg	100,000	75,000 loss
2019	175,000	170 kg	170,000	5,000 loss
2020	220,000	300 kg	320,000	100,000 profit

2. Barriers to farm recording

PODCAST 1 - PART 2

Now play the second part of podcast 1, which talks about barriers to farm recording.

Play PODCAST 1 - PART 2

Extension officer:

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.

Farmer: (Betty/Lucia)

That's very true. My days are always very full as it is! 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 to sell, so that takes a lot of my time,as well as all the 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.

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.

Farmer: (Betty/Lucia)

That is a good idea. Working as a team will be very helpful.

FOLLOW UP ACTIVITIES

DISCUSSION: WHY DON'T SOME FARMERS RECORD?

An open discussion on the barriers to farm recording, asking the participants what challenges are likely to affect their farm recording practices,. These are likely to include:

- Time limitations
- Know-how/expertise
- Literacy or numeracy challenges
- Resources

Discuss with the group how these barriers can be overcome, drawing on the farmers' experiences as much as possible. These might include:

- Ways in which they could develop a regular routine of farm recording.
- Although they may not have confidence to start farm recording yet, the podcasts and listening sessions should help them develop the skills they need to start.
- This discussion slot can help the farmers to start thinking about systems of recording that will suit them. Podcast 2 talks about alternative systems of recording, such as using tallies and symbols – these will be especially helpful for those who are less numerate/literate. The officer should help reassure the farmers that using symbols, tallies etc. is a perfectly acceptable method of farm recording.

3. Getting started with farm recording

PODCAST 1 – PART 3

Play the third part of podcast 1, which talks about getting started, and introduces the concept of inputs and outputs. It describes how farmers can begin to use farm recording by thinking about inputs and outputs, which are the key components of farm recording. If they already use farm recording they should be encouraged to think about whether they are separating their inputs and outputs; and including them all (and if not, which others they should be recording).

Play PODCAST 1 - PART 3

Extension officer:

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.**

Outputs mean what is produced by that enterprise.

Play PODCAST 1 - PART 3

Farmer: (Betty/Lucia)

That would include maize cobs, grain, milk, eggs, calves and so on?

Extension officer:

That's right Betty.

Now, there are 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, and will be the same if the farmer keeps chickens, goats, grows maize or so on. 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 cots".

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

Farmer: (Betty/Lucia)

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

Extension officer:

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

Farmer: (Betty/Lucia)

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?

Farmer: (Betty/Lucia)

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 for your different enterprises.....

Play PODCAST 1 - PART 3 continued

Farmer: (Betty/Lucia)

And I have been writing some of it down. But as I said it is hard to keep organised!

Extension Officer:

You might want to try writing it down in a notebook so that all of your records are in one place and harder 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 also 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?

Farmer: (Betty/Lucia)

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.

Farmer: (Betty/Lucia)

This seems like a lot to do! Will it really be helpful?

Extension Officer:

It does sound like a lot of work but it really only takes ten or fifteen minutes a day and you will get faster at it. As we talked earlier it can be easier if you and your husband both record. And yes, it will be helpful! As your records develop, you'll be able to see which years had the best results, and if you think these results have been helped 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. Then you will have the best information for future decisions. Betty, I think you are doing very well so far. Please continue to write down any information on inputs and outputs. Let's talk again soon and I will show you how to record all of your activities effectively.

PODCAST 1 - PART 3 continued

Narrator:

Joseph and Betty will be back in our second podcast from Agri-TechTalk.
The role of Joseph was played by .....
The role of Betty was played by .....
And my name, the narrator, is .....
Thanks for listening. We hope you have enjoyed this podcast.

The podcast material was developed by AgriTechTalk International and AgriTechTalk Africa, with technical support from Farm Radio International. Ateker FM also provided technical support; and translated and recorded the podcasts.

All four podcasts on Farm Recording, as well as their scripts and supporting material for their delivery, are available to download free via the AgriTechTalk website, at www.agritechtalk.org .

You can also access them via USAID's Food Security and Nutrition Network. Just search for F-S-N Network and navigate to its resource library.
Or..... you can search online for Farm Radio International's Barza Wire service. Its resource section will link you to our podcasts and supporting materials.

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FOLLOW UP ACTIVITIES

DISCUSSION THEME: INPUTS AND OUTPUTS

Following the podcast, make sure that all of the group understand the terms **inputs** and **outputs**.

As a group, choose an enterprise and think of all the types of input and output that apply to it. The trainer should write these down on a flipchart, with inputs and outputs separated.

After this activity, the households should think about/list the different inputs/outputs that apply to other enterprises on their farm. The trainer can move around the group advising on as necessary. Once complete, a sample of the lists that the participants have developed can be read out, written down on a flipchart, and discussed as a group.

ACTIVITY RESOURCES:

EXAMPLE OF INPUTS AND OUTPUTS FOR A SORGHUM ENTERPRISE

INPUTS	OUTPUTS
Seed	**Sorghum Grain**
Labour	**Sorghum Stover**
Plough Hire	
Fertiliser	
Spray	
Empty Sacks	
Transport of produce to market	

INDIVIDUAL SUPPORT

You are likely to need to provide a lot of individual support to participants during this session, to help them identify/adjust the enterprises, inputs and outputs that they will keep farm records for.

The participants are likely to have different numeracy/literacy skills. Some may already have experience of farm recording and others none at all, so the level and types of support required of the trainer will vary greatly.

Conclusion to Session 1

The session should conclude with a brief summary of what has been covered and what the farmers should 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:

- Request farmers to start listing their inputs and outputs in blank notebooks at home, as well as quantities/financial information relating to these inputs/outputs, and to bring these to next session. If records are already kept, request that these are brought along to the next session.

Listening Session 2

First steps to farm recording and farm recording books

This learning session is split into three 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.

This session looks at the layout of farm recording books and how to record inputs and outputs.

Trainees are given their new farm recording books, with a demonstration of how to enter inputs and outputs using symbols, tallies, writing and numbers.

Between listening sessions they will record their farming activities in these books and bring them to each session.

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.***

Listening Session 2

1. Revision of session 1

PODCAST 1 – REVISION

Begin session 2 with a quick revision of session 1 by playing ***Podcast 1 – Why do we need to record?***

Play PODCAST 1 – all the way through for revision *(for script see Annex 1 – PAGE 53)*

FOLLOW UP ACTIVITIES

DISCUSSION THEME: PROGRESS SINCE LISTENING SESSION 1

An open discussion where any farm recording practices that have been carried out since Listening Session 1 are discussed:

- Did the participants record any farming activities?
- If so, for which enterprises?
- What types of information did they record?
- How did they record the information (eg writing and numbers; or tallies and/or symbols)?
- What went well for them?
- What were the challenges they experienced?

2. Different approaches to recording

PODCAST 2 - PART 1

Now move on to the second podcast. Play ***Podcast 2 – First steps to Farm Recording***. This looks at different ways to record information and organise record books, so that all of the information can easily be referred to a later date, which is important when comparing records or looking at records in the future.

Play PODCAST 2 – PART 1

Narrator:

Welcome to the AgriTech Talk podcast on farm recording. This is the second 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.

In the first podcast we met Joseph, an extension officer, and Betty, a small-holder farmer. Joseph explained to Betty about why farm recording is important. They talked about how farms often have different enterprises and that these use inputs – activities which cost time or money – and produce outputs. In this podcast we'll look at how these inputs and outputs can best be recorded.

Joseph and Betty are back to continue their conversation. Let's listen in.....

Extension Officer:

Hello Betty. Good to see you! I see you have kindly brought along your papers, where you have written about this year's activities on your farm.

Farmer: (Betty/Lucia)

Hello Joseph. Yes I brought them along but I am afraid they are all mixed up in a long list. I plan on doing what you told me last time, to separate records into four new recording books.

Extension Officer:

Good for you Betty. That's excellent!

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

Farmer: (Betty/Lucia)

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

Extension Officer:

Great! Let's get you started. 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. Tallies are where you record numbers by drawing lines in groups of five – four vertical lines with one drawn across.

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.

Play PODCAST 2 – PART 1 continued

Extension Officer continued:

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

Farmer: (Betty/Lucia)

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?

Farmer: (Betty/Lucia)

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.

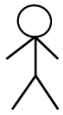
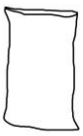
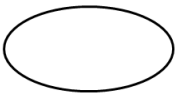
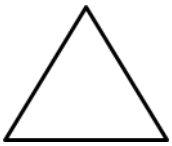
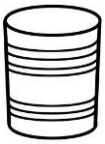
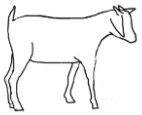
FOLLOW UP ACTIVITIES

DISCUSSION THEME: RECORDING INPUTS AND OUTPUTS

This should include a discussion within the group on the methods they will use to keep their records. If this includes those using symbols, the following resource may facilitate idea sharing:

ACTIVITY RESOURCES: **IDEAS FOR SYMBOLS THAT COULD BE USED.**

The trainer should encourage the group to think of symbols for each activity

Activity	*Symbol ideas*	*Activity*	*Symbol ideas*
labour		***empty sacks***	
seed		***chicken***	
eggs		***feed***	
fertiliser		***tools***	
empty boxes for produce		***tin of seed or grain***	
cup of milk		***goat***	

Listening Session 2

3. Organising farm recording books

PODCAST 2 – PART 2

Play part 2 of Podcast 2. In this part of the session the layout of farm recording books is discussed and demonstrated, with particular emphasis on separating outputs and inputs.

Demonstrate on the flip chart (shown in the RESOURCES box) what the extension officer is saying in the podcast. PAUSE the podcast as necessary during the demonstration.

Play PODCAST 2 – PART 2 PAUSE DURING DEMONSTRATION

Extension Officer:

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.

Farmer: (Betty/Lucia)

Would it help if I divided up the page into sections or columns?

Extension Officer:

Absolutely! Draw 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.

Farmer: (Betty/Lucia)

Oh I see. The lines create the columns.

Extension Officer:

Right, 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.

Farmer: (Betty/Lucia)

OK. Let me do that.

Extension Officer:

Well done Betty.

Now, underneath this, in the first column, you need to record your inputs. 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.

PODCAST 2 – PART 2 continued

Farmer: (Betty/Lucia)

Yes – a 5kg bag.

Extension Officer:

OK, so draw the bag 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 feed– 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....

Farmer: (Betty/Lucia)

So column one will have the chicken feed symbol. Column two is the price I paid for each bag. The third column is the number of bags I bought; and the last column has the total price I paid.

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?!

Farmer: (Betty/Lucia)

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 first column. Now, in the second column record the price you paid for each hen, that's 5,000 shillings.

Farmer: (Betty/Lucia)

And in the third, the quantity of hens I bought, which is 4. And finally, in the fourth column I'll write down the total amount I paid for the hens, that's 20,000 shillings.

That already looks much more organised than my old records.

PODCAST 2 – PART 2 continued

Extension Officer:

Any more inputs to add Betty?

Farmer: (Betty/Lucia)

No, but my hens have produced a lot of eggs –especially since I bought the extra hens!

Extension Officer:

So those are outputs.

Before moving onto OUTPUTS (part 3), there is a practical/discussion task for trainees.

RESOURCES TO ACCOMPANY PODCAST:

DIAGRAM OF BETTY/LUCIA'S FARM RECORD BOOK FOR CHICKENS – STARTING WITH INPUTS (draw in the symbol you are using for each item)

JANUARY							
INPUTS				*OUTPUTS*			
ITEM	*COST*	*QUANTITY*	*TOTAL COST*	ITEM	*VALUE*	*QUANTITY*	*TOTAL VALUE*
 *feed 5kg*	*5,000*	*2*	*10,000*				
 *hen*	*5,000*	*4*	*20,000*				

FOLLOW UP ACTIVITIES

PRACTICAL: STARTING UP WITH THE FARM RECORDING BOOKS – ADDING IN INPUTS

- Confirm with the trainees how many enterprises they have and how many books they need.
- Hand out the appropriate number of farm recording books and the participants label the front of the books on the front with their name, and the enterprise.
- Starting with the INPUTS, go through the columns, recapping the types of information that should be included in each one (a flipchart can be used for this demonstration).

- Support the trainees as they begin to fill up the Inputs pages for their enterprises. They may need to recall some of this information by memory.

INDIVIDUAL SUPPORT: BEGINNERS

Participants who have not recorded before may need help finalising their choice of suitable symbols, as well as setting up and completing their inputs pages.

INDIVIDUAL SUPPORT: MORE ADVANCED

For those farmers who are already record keeping, see if their systems could be improved:

- They may choose to use the new farm recording books; or continue using their old ones.
- Have they separated their enterprises?
- 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?
- 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

Now play part 3 of the podcast, where the extension officer is looking at Betty/Lucia's old notebook. Demonstrate her OUTPUTS page on a flipchart, in line with the podcast, pausing the podcast where needed.

Play PODCAST 2 – PART 3 PAUSE DURING DEMONSTRATION

Extension Officer:

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.

Farmer: (Betty/Lucia)

I'll divide this page into four columns as well.

Extension Officer:

Right. The first column for the activity, or type of produce; the second for the value that each item was worth; the third for the number that were produced; and the fourth, final column for the total value of the output produced.

So let's add in the eggs you produced…

Play PODCAST 2 – PART 3 continued PAUSE DURING DEMONSTRATION

Farmer: (Betty/Lucia)

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 of the outputs page (on the page opposite where you wrote down your chicken inputs), at the top, write in your symbol for an egg. Now, in the second 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.

Farmer: (Betty/Lucia)

Shall I enter the information for the other weeks of January beneath this at home?

Extension Officer:

Yes, that would be excellent.

RESOURCES TO ACCOMPANY PODCAST:

DIAGRAM OF BETTY/LUCIA'S FARM RECORD BOOK FOR CHICKENS – ADDING THE OUTPUTS

JANUARY							
INPUTS				*OUTPUTS*			
ITEM	*COST*	*QUANTITY*	*TOTAL COST*	ITEM	*VALUE*	*QUANTITY*	*TOTAL VALUE*
 *feed 5kg*	*5,000*	*2*	*10,000*	 *eggs*	*500*	*7*	*3,500*
 *hen*	*5,000*	*4*	*20,000*	 *eggs*	*500*	*9*	*4,500*
				 *eggs*	*500*	*13*	*6,500*
				 *eggs*	*500*	*15*	*7,500*

PODCAST 2 – PART 3 continued PAUSE DURING DEMONSTRATION

Extension Officer:

Next time we meet 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?

Farmer: (Betty/Lucia)

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

Extension Officer:

Great.

Farmer: (Betty/Lucia)

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 second and third columns blank if you need to.

Farmer: (Betty/Lucia)

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

Extension Officer:

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

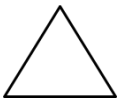
Are you happy to write the entries for your goats and vegetables in the other notebooks on your own?

Farmer: (Betty/Lucia)

Yes I am!

RESOURCES TO ACCOMPANY PODCAST:

DIAGRAM OF BETTY/LUCIA'S FARM RECORD BOOK FOR MAIZE – ADDING THE INPUTS

FEBRUARY							
INPUTS				*OUTPUTS*			
ITEM	*COST*	*QUANTITY*	*TOTAL COST*	ITEM	*VALUE*	*QUANTITY*	*TOTAL VALUE*
 *1kg seed*	*4,000*	*2*	*8,000*				
MARCH							
 *fertiliser*			*30,000*				

FOLLOW UP ACTIVITIES

PRACTICAL: CONTINUING WITH THE FARM RECORDING BOOKS – ADDING IN OUTPUTS

- Moving to the OUTPUTS, the trainer should go through the columns, recapping on the types of information that should be included in each one (a flipchart can be used for this demonstration).
- The trainer should support the trainees as they begin to fill up the OUTPUTS pages for their enterprises. They may need to recall some of this information by memory.

INDIVIDUAL SUPPORT: BEGINNERS

As before, participants who have not recorded before may need help selecting suitable symbols, as well as completing their inputs pages.

INDIVIDUAL SUPPORT: MORE ADVANCED

For those farmers who are already record keeping, see if their systems could be improved:

- Do they want to record more detail for their outputs, ie. add more columns?
- Does their layout enable totals to be calculated easily?
- Do they usually calculate their monthly totals or yearly totals of outputs?

PODCAST 2 - PART 4

Now play part 4 of the podcast, there the Extension Officer is recapping on what has been covered.

Play PODCAST 2 – PART 4

Extension Officer:

Great. You now have the skills you need to start recording and can organise your records in different books. Remember, 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.

Farmer: (Betty/Lucia)

So is that all I need to write down?

Extension Officer:

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

Farmer: (Betty/Lucia)

Joseph, this has been so helpful. I can't wait to show my husband. And I think I will show my sister as well. It would really help her and her husband on their farm.

Extension Officer:

Please do pass this on. It is a great skill for every farmer to have. See you next time Betty.

Narrator:

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

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

The role of Joseph was played by …….
The role of Betty was played by …….
And my name, the narrator, is ……..

Thanks for listening.

The podcast material was developed by AgriTechTalk International and AgriTechTalk Africa, with technical support from Farm Radio International. Ateker FM also provided technical support; and translated and recorded the podcasts.

Play PODCAST 2 – PART 4 continued

All four podcasts on Farm Recording, as well as their scripts and supporting material for their delivery, are available to download free via the AgriTechTalk website, at www.agritechtalk.org .

You can also access them via USAID's Food Security and Nutrition Network. Just search for F-S-N Network and navigate to its resource library.

Or….. you can search online for Farm Radio International's Barza Wire service. Its resource section will link you to our podcasts and supporting materials.

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Conclusion to Session 2

Review 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 for each enterprise.
- Are beginners confident in continuing with their recording activities?
- 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 up inputs and outputs

As with all sessions, 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 <u>all</u> 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.***

Listening Session 3

1. Revision

PODCAST 2 - REVISION

Begin the session by playing podcast 2 again, for revision.

Play PODCAST 2 – all the way through for revision *(for script see Annex 1 – PAGE 67)*

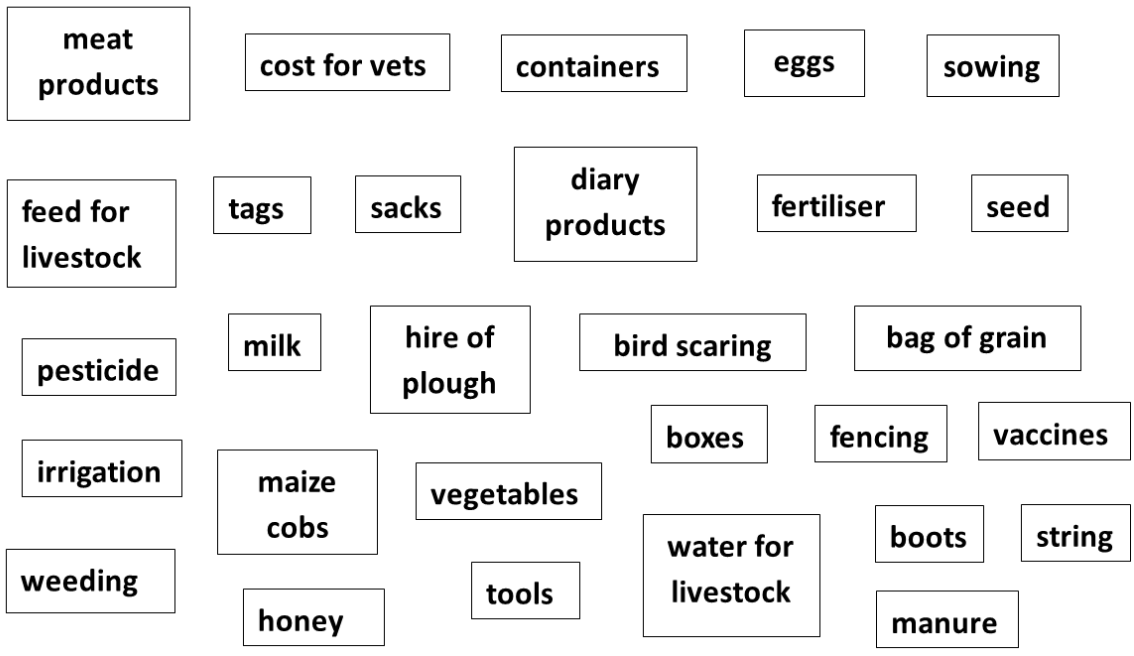
DISCUSSION THEME:

After listening to podcast 2 discuss what has been learnt so far, including what to record (inputs and outputs). Interactive activity – grouping activities into inputs and outputs.

ACTIVITY RESOURCES

GROUPING OUTPUTS AND INPUTS

Prepare some cards with different inputs and outputs written on them. The trainees allocate them into inputs and outputs. Example inputs and outputs are given below.



PODCAST 3 – PART 1

Now play the first part of ***Podcast 3 – Making sense of farm recording books,*** which looks at how Betty/Lucia has got on with her farm recording since their last meeting.

Play PODCAST 3 – PART 1

Narrator:

Welcome back to the AgriTechTalk farm recording podcasts. This is the third podcast in a series of four. 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.

To do this we once again join Joseph, an extension officer, and Betty, who is a small-holder farmer.

Extension Officer:

Hello Betty. Very nice to see you again.

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.

Farmer: (Betty/Lucia)

Hello Joseph. 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.

Extension Officer:

I know what you mean. Life can be quite hectic.

Farmer: (Betty/Lucia)

I am still using a book for each of my enterprises, just like you suggested last time. In each I have one page for inputs and one page for outputs; using the left hand page for inputs and the right hand page for outputs; and I separate these by month.

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.

My sister and several of my friends have also started recording so we compare records and can learn from each other. I have been helping them to get started.

Play PODCAST 3 – PART 1 continued

Extension Officer:

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

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

Before continuing with the podcast. the group look at how they are progressing with their farm recording in a follow up session.

FOLLOW UP SESSION:

DISCUSSION THEME: GETTING ROUND THE CHALLENGES OF RECORD KEEPING

- Facilitated by the trainer, participants can share their farm recording books and look at progress so far.
- They can compare their books and discuss any problems they have had.
- Discuss how Betty/Lucia has done, as well as the types of problem she faced.
- Is there anything she has done to get round the challenges of record keeping that the participants think they could do (eg. establishing a regular routine; seeking help etc.)?

2. Recording other inputs and outputs and allocation of activities

PODCAST 3 - PART 2

Move on to the part 2 of the podcast. This looks more in depth at the inputs and outputs that farmers may not think to include - for example, outputs that are in storage; outputs they have eaten; and labour costs.

Play PODCAST 3 – PART 2

Farmer: (Betty/Lucia)

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.

Play PODCAST 3 – PART 2 continued

Extension Officer continued:

This means that you need to include the value of all your produce, not just what is actually sold.

Farmer: (Betty/Lucia)

Putting a value on some of our produce may be difficult I think.

Extension Officer:

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 eggs, 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.

Farmer: (Betty/Lucia)

I find it hard making some of those calculations Joseph.

Extension Officer:

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.

Farmer: (Betty/Lucia)

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

Extension Officer:

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

Farmer: (Betty/Lucia)

I will try to remember!

RESOURCES TO ACCOMPANY PODCAST:

DIAGRAM OF BETTY/LUCIA'S FARM RECORD BOOK FOR CHICKENS – ADDING IN ALL OUTPUTS

FEBRUARY							
INPUTS				*OUTPUTS*			
ITEM	*COST*	*QUANTITY*	*TOTAL COST*	ITEM	*VALUE*	*QUANTITY*	*TOTAL VALUE*
 *feed 5kg*	*5,000*	*3*	*15,000*	 *eggs eaten*	*500*	*4*	*2,000*
				 *eggs sold*	*500*	*26*	*13,000*
				 *eggs eaten*	*500*	*12*	*6,000*
				 *eggs sold*	*500*	*28*	*14,000*

FOLLOW UP ACTIVITIES:

DISCUSSION THEME: RECORDING ALL OUTPUTS

- Are the participants (both beginners and those who are more advanced) recording the value of all their outputs? Are they separating these as what they sell, eat, store, or give away?
- How do/would they allocate a value to these outputs?
- Discuss how they can, if they choose, enter the **total** amount of all produce produced rather than separating it by sold/eaten/given away – but that this means these figures cannot be explored in future.
- Discuss how, in more sophisticated recording systems, the value of produce eaten/sold etc may be separated into different records, so that they can be added up and explored more easily.

PODCAST 3 - PART 3

Now play part 3, which looks at how to enter labour as input costs.

Play PODCAST 3 – PART 3

Extension Officer:

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

Farmer: (Betty/Lucia)

Well, I paid a friend 5,000 shillings for helping me prepare my maize field for planting for a day. 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 told me you also make skirts. So the time you spend on the farm could be spent making skirts.

Farmer: (Betty/Lucia)

Yes that's true! My time is valuable isn't it?

Extension Officer:

It certainly is. But 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.

Here is something important Betty. 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 – wait until the next season. Likewise if you do want to record a value for your labour, make sure you include it for all of the relevant activities.

Farmer: (Betty/Lucia)

Do other farmers forget to include the value of their labour?

Extension Officer:

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 their decision and it is fine as long as they are consistent.

RESOURCES TO ACCOMPANY PODCAST:

DIAGRAM OF A FARM RECORD BOOK– VALUE OF LABOUR

FEBRUARY			
INPUTS			
ITEM	*COST*	*QUANTITY*	*TOTAL COST*
Symbol for land cultivation	*5,000*	*1*	*5,000 (hired)*
Symbol for land cultivation	*3,500*	*5*	*17,500 (own)*
Symbol for weeding	*3,500*	*4*	*14,000 (own)*
Symbol for harvesting	*3,500*	*3*	*10,500 (own)*

FOLLOW UP ACTIVITIES:

DISCUSSION THEME: RECORDING LABOUR

- Are the participants (both new and those who are more advanced) recording the value of labour?
- Do they want to record the value of their own/family labour?
- If so, how would they allocate a value to their own/family labour?
- If a friend helps you with a task in exchange for something, if and how would you include this? (if the value of own labour is recorded, this value should also be included, even though money did not exchange hands).
- Discuss how, in more sophisticated recording systems, the value of hired and family labour may be separated into different records, so that they can be added up and explored more easily.

PODCAST 3 - PART 4

Some inputs are spread across more than one enterprise. Play part 4 of podcast 3, which explores allocating costs to different enterprises.

Play PODCAST 3 – PART 4

Extension Officer:

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.

Farmer: (Betty/Lucia)

That sounds like a difficult calculation to record.

Play PODCAST 3 – PART 4

Extension Officer:

Here's how to do it. To record this activity as accurately as possible you need to divide the cost of the activity between the two enterprises. In this case, this is done by estimating how much time was spent on each of the enterprises.

It may be 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?

Farmer: (Betty/Lucia)

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

Farmer: (Betty/Lucia)

I understand.

FOLLOW UP ACTIVITIES:

DISCUSSION THEME: SHARED COSTS

- If the farmers have more than one enterprise, are there any costs that should be shared by enterprises?
- If so, discuss these examples as a group.
- The trainer should then help the farmers enter these costs into their respective enterprise records.

ACTIVITY RESOURCES:

EXAMPLE OF SHARING COSTS BETWEEN ENTERPRISES *(for more numerically confident farmers)*

Cost of hired labour to help prepare a 1 acre field: 50,000 UGX

Area planted to Sorghum is 0.6 acres	Area planted to Maize is 0.4 acres

Cost allocated to sorghum = 0.6 x 50,000 = 30,000 UGX

Cost allocated to maize = 0.4 x 50,000 = 20,000 UGX

3. Comparing and adding up inputs and outputs

PODCAST 3 - PART 5

Play Part 5 of podcast 3, which discusses adding up monthly totals so that inputs and outputs can be compared on a monthly basis.

Play PODCAST 3 – PART 5

Extension Officer:

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.

Farmer: (Betty/Lucia)

My neighbour is very good at that. She can help me. I can help her with other parts of recording.

Extension Officer:

Very smart, Betty. You know 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 your neighbour is busy and you cannot do these calculations, your farm records are still going to be useful.

Farmer: (Betty/Lucia)

I also have a friend from a VSLA group who has helped me – my family has helped me too. This is even better Joseph - 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:

Great. You are in good shape then! At the end of the year you should add these monthly totals up to find the total for the whole year. You can compare the monthly totals before the year is finished though.

Play PODCAST 3 – PART 5

Extension Officer continued:

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. This also includes 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.

Farmer: (Betty/Lucia)

That sounds very interesting. Can you teach me about that?

Extension Officer:

We will look at gross margins in more detail next time. See you then Betty

Farmer: (Betty/Lucia)

Goodbye Joseph. Thanks!

Narrator:

As Joseph said, in the next podcast he and Betty will look at, gross margins.

The role of Joseph was played by …..
The role of Betty was played by …..
And my name, the narrator, is …..

Thanks for listening. We hope you have enjoyed this podcast.
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Or….. you can search online for Farm Radio International's Barza Wire service. Its resource section will link you to our podcasts and supporting materials.

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FOLLOW UP ACTIVITIES:

DISCUSSION THEME: 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:

RESOURCES:

DIAGRAM OF A FARM RECORD BOOK – CALCULATING A MONTHLY TOTAL

FEBRUARY							
INPUTS				*OUTPUTS*			
ITEM	*COST*	*QUANTITY*	*TOTAL COST*	ITEM	*VALUE*	*QUANTITY*	*TOTAL VALUE*
 *feed 5kg*	*5,000*	*3*	*15,000*	 *eggs eaten*	*500*	*4*	*2,000*
				 *eggs sold*	*500*	*26*	*13,000*
				 *eggs eaten*	*500*	*12*	*6,000*
				 *eggs sold*	*500*	*28*	*14,000*
TOTAL			*15,000*	*TOTAL*			*35,000*

INDIVIDUAL SUPPORT: BEGINNERS

- Discuss ways of calculating totals, for example, using pen and paper; a calculator; or estimating totals (rounding up/down).
- Practice preferred methods of adding up together.
- If individuals cannot add up, discuss how records can still be of use.

INDIVIDUAL SUPPORT: MORE ADVANCED

- Introduce the concept of comparing total values of inputs and outputs over time.
- Discuss why this is useful.

- The following example (in the RESOURCES box) shows how records can be compared between two enterprises.

RESOURCES:

DIAGRAM OF FARM RECORD BOOKS – COMPARING MONTHLY TOTALS

SORGHUM

MONTH	INPUTS (total for month)	OUTPUTS (total for month)
March	15,000	
April	18,000	
May	5,000	
June	5,000	
July	5,000	
August	20,000	50,000

MAIZE

MONTH	INPUTS (total for month)	OUTPUTS (total for month)
March	20,000	
April	25,000	
May	15,000	
June	20,000	
July	30,000	
August	25,000	75,000

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 sessions, 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.

This session introduces gross margins and how these can be used to assess the profitability of the enterprise.

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.***

Listening Session 4

1. Revision

PODCAST 3 - REVISION

Begin the session with revision by listening to **Podcast 3 – Making sense of farm recording books.**

Play PODCAST 3 – all the way through for revision *(for script see Annex 1 – PAGE 67)*

FOLLOW UP ACTIVITIES:

DISCUSSION THEME: SHARING FARM RECORDING BOOKS

- Farmers share their farm recording books so far – these books should cover one enterprise and have outputs and inputs separated and itemised.
- Have they included labour? How did they value this?
- Do they have any inputs which are shared across enterprises?
- How have they entered the value of their outputs?
- Have any farmers calculated their monthly totals?
- Discuss the methods used for calculating the totals and give any additional support as required.
- Have the trainees compared any of the inputs or outputs their enterprises?

INDIVIDUAL SUPPORT: BEGINNERS

Give additional support for adding up monthly totals as required.

INDIVIDUAL SUPPORT: MORE ADVANCED

- Support this group in adding up any monthly and yearly totals.
- Compare and discuss and input and output totals.
- If they have old record books, help them compare their figures with previous years/months.
- What do the figures tell them about the different enterprises?

PODCAST 4 - PART 1

Now play the first part of **Podcast 4 – Comparing outputs and inputs to determine profits and losses**, which explores how Betty/Lucia is getting on with her recording.

Play PODCAST 4 – PART 1

Narrator:

Welcome back to the AgriTechTalk farm recording podcasts. This is the final podcast in a series of four. In a moment we will be joined by Joseph, an extension officer and 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 and experiences. In the previous podcasts Joseph and Betty have discussed the importance of farm recording; which inputs and outputs should be included; and how best to organise farm record books. In this podcast, Joseph will help Betty learn how to compare inputs and outputs to calculate a gross margin.

The two of them are standing by so let's join them for this final instalment.

Extension Officer:

Betty, it is good to see you again. How is the recording going?

Farmer: (Betty/Lucia)

Thank you, Joseph. 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 now working out monthly 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:

I want to show you how to figure out your Gross Margins. That will help you. **Gross margins** can show the profitability of an enterprise.

In the next part of the session, gross margins are introduced.

2. Estimating profits and losses through gross margins

PODCAST 4 - PART 2

Play part 2 of podcast 4, where gross margins are introduced.

Play PODCAST 4 – PART 2

Extension Officer:

A gross margin is calculated by taking away the ***variable costs*** of producing an enterprise (that is, the **inputs**) from the value of what is produced…

Farmer: (Betty/Lucia)

That is the output right?

Extension Officer:

Exactly. The 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.

Farmer: (Betty/Lucia)

Does that mean I will have a lot of paper work and calculating to do at the end of each year?

Extension Officer:

Good question Betty. If you have been doing your recording regularly it should be quite easy. You will have all the information you need in your notebooks.

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 inputs from the total output value for the year. This will give you a figure for your annual gross margin.

Farmer: (Betty/Lucia)

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 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.

Farmer: (Betty/Lucia)

And for my chickens?

Extension Officer:

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

Play PODCAST 4 – PART 2 continued

Extension Officer continued:

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?

Farmer: (Betty/Lucia)

Yes, that sounds good.

FOLLOW UP ACTIVITIES:

DISCUSSION THEME: UNDERSTANDING HOW TO CALCULATE GROSS MARGINS

- Show how Gross Margins can be calculated for a given enterprise/time period, illustrating the formula clearly (using a flip chart).
- Explain that they are normally calculated over a year but can be done for shorter periods.

ACTIVITY RESOURCES: **GROSS MARGIN CALCULATION**

Gross Margin = Total Outputs minus **Total Variable Costs (Inputs)**

For example, a farmer's sorghum enterprise:

Total Outputs = 220,000 UGX
Total Inputs = 150,000 UGX

Gross Margin = 220,000 – 150,000 = 70,000 UGX

PODCAST 4 - PART 3

In part 3 of the fourth podcast, Betty/Lucia's gross margin is calculated.

Play PODCAST 4 – PART 3

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.....

Play PODCAST 4 – PART 3

Extension Officer continued:

Or, we could mark them as we add them up, so we know we have counted them.....

So starting with your chicken inputs, that's 30,000; 15,000; 20,000.....

OK, so we have finished adding up your inputs and outputs now. You have a total of 130,000 shillings of inputs and 215,000 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 215,000 minus 130,000.....

Which equals 85,000 shillings.

Farmer: (Betty/Lucia)

That is such good news and such valuable information!

Extension Officer:

Even if is not good news, if you had made a loss, that is also valuable information to know.

FOLLOW UP ACTIVITIES:

DISCUSSION THEME: PRACTISING CALCULATING GROSS MARGINS

Using Betty/Lucia as an example, recap how to calculate totals for a single month, before demonstrating how total values over a whole time period are calculated:

You should reinforce the need to add up monthly totals as farmers progress with their recording, to make the final additions easier.

Steps to calculating gross margin:

1. Add up each months total inputs and outputs
2. Add up all of the monthly totals for the inputs and outputs
3. Calculate the Gross Margin.

RESOURCES TO ACCOMPANY PODCAST:

STEP 1: CALCULATING BETTY/LUCIA'S TOTAL COSTS/OUTPUTS FOR CHICKENS - MARCH

MARCH							
INPUTS				***OUTPUTS***			
ITEM	***COST***	***QUANTITY***	***TOTAL COST***	**ITEM**	***VALUE***	***QUANTITY***	***TOTAL VALUE***
 ***feed 5kg***	*5,000*	*3*	*15,000*	 ***eggs eaten***	*500*	*4*	*2,000*
 ***new boots***	*5,000*	*1*	*5,000*	 ***eggs sold***	*500*	*26*	*13,000*
				 ***eggs eaten***	*500*	*12*	*6,000*
				 ***eggs sold***	*500*	*28*	*14,000*
				 ***eggs sold***	*500*	*10*	*5,000*
TOTAL			***20,000***	***TOTAL***			***40,000***

STEP 2: CALCULATING THE MONTHLY TOTALS

MONTH	TOTAL INPUTS	TOTAL OUTPUTS
JANUARY	30,000	22,000
FEBRUARY	15,000	35,000
MARCH	20,000	40,000
APRIL	15,000	38,000
MAY	20,000	35,000
JUNE	30,000	45,000
TOTAL	**130,000**	**215,000**

STEP 3: CALCULATING THE GROSS MARGIN

Gross margin of Betty/Lucia's chicken enterprise over 6 months

= value of outputs – value of variable inputs

= 215,000 – 130,000 = 85,000 UGX

3. Understanding Gross Margins

PODCAST 4 - PART 4

Now play part 4, where gross margins are analysed and interpreted, to help farmers understand how their gross margin can help them and what it tells them about their enterprise.

Play PODCAST 4 – PART 4

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 rainy season.

Some of these variations are unavoidable, but there may be certain costs that the farmer could reduce by thinking carefully about his or her 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.

Farmer: (Betty/Lucia)

This is interesting Joseph. I have already been sharing these new skills with my neighbours and family and found that, by sharing our records, we can learn from each other.

Extension Officer:

Good.

FOLLOW UP ACTIVITIES:

DISCUSSION THEME: POSITIVE AND NEGATIVE GROSS MARGINS

Discuss that when inputs have a greater value than outputs, a loss has been made. This is called a negative gross margin.

ACTIVITY RESOURCES:

DEMONSTRATING A NEGATIVE GROSS MARGIN

Gross Margin = Total Outputs minus Total Variable Costs (Inputs)

For example, a farmer's maize enterprise:

Total Outputs = 100,000 UGX

Total Inputs = 150,000 UGX

Note that the costs are greater than the value of what has been produced.

Gross Margin = 100,000 – 150,000 = - 50,000 UGX = A LOSS OF 50,000 UGX

The following points can be discussed with the group:

Negative Gross Margin

- What does a negative gross margin mean?
- Why do they think the example enterprise had a negative gross margin? What might have happened to make the output value lower than the costs (e.g low yields due to poor rainfall, poor husbandry etc)?
- What changes could make this farmer's maize gross margin positive in future (e.g. better rainfall, improved seed, lowering costs etc)?

4. Planning for the future

PODCAST 4 - PART 5

Part 4 of the podcast looks at how the farmers can use the knowledge they have learnt and apply it to their future plans.

PODCAST 4 – PART 5

Extension Officer:

And here is something else. 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 very large price changes.

PODCAST 4 – PART 5 continued

Farmer: (Betty/Lucia)

Can you give me an example?

Extension Officer:

Of course. One year your labour costs 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. But the amount you paid for the seed might be less, because planting in rows is less wasteful than broadcasting seed. If in that same year your outputs increased, due to greater 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, were similar.

There are many factors involved in farming, as you know Betty, such as the weather, so when interpreting your farming records think carefully about all of the things 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.

But let me ask you Betty, how do you think your farm records will help you in the future?

Farmer: (Betty/Lucia)

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, not just in terms of what is sold but also the value of the eggs and the milk we consume at home. I would like to start making cheese in the future, 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 said you also make skirts. You can use the skills you have learnt from the farm recording to record your skirt enterprise.

Farmer: (Betty/Lucia)

Really? How?

PODCAST 4 – PART 4 continued

Extension Officer:

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 their farm, and their recording skills can be used for these other enterprises too.

Farmer: (Betty/Lucia)

I will definitely try that Joseph!

Thank you so much for these lessons.

Extension Officer:

It was my pleasure Lucia. And remember, if you have any questions any extension officer can always help you out.

Farmer: (Betty/Lucia)

You have been listening to the last of our four part series on farm recording from AgriTechTalk.

We hope that they have been helpful. Good luck with your farm recording!

The role of Joseph was played by …..

The role of Lucia was played by …..

And my name, the narrator, is …..

Thanks for listening.

The podcast material was developed by AgriTechTalk International and AgriTechTalk Africa, with technical support from Farm Radio International. Ateker FM also provided technical support; and translated and recorded the podcasts.

All four podcasts on Farm Recording, as well as their scripts and supporting material for their delivery, are available to download free via the AgriTechTalk website, at www.agritechtalk.org .

You can also access them via USAID's Food Security and Nutrition Network. Just search for F-S-N Network and navigate to its resource library.

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FOLLOW UP ACTIVITIES:

DISCUSSION THEME: WHAT WE CAN LEARN FROM GROSS MARGINS

Discuss the following with the group:

- Profits and losses – what can these tell a farmer about his/her enterprise?
- Discuss how different types of records can help farmers learn more about how well their enterprises are doing, and so improve their future decision making.
- Discuss with the participants how their record keeping activities are going; whether they will continue post-project and what new types of records they think they might keep.

ACTIVITY RESOURCES:

HOW OTHER RECORDS CAN HELP FARMERS LEARN MORE ABOUT THEIR ENTERPRISES

Moses (introduced in Session 1) has also kept records of where he bought his maize seed; what fertiliser he used; as well as a general description of the rainfall over the season.

	Variety	Purchased from	Fertiliser used	Rainfall	Output from 0.25 ha
2016	Unknown	Own seed	None	Good	125 kg
2017	Akiriri	A&E seeds	None	Poor	125 kg
2018	Unknown	Neighbour	Urea	Poor	100 kg
2019	Unknown	Own seed	Urea	Good	170 kg
2020	Akiriri	A&E seeds	Urea	Good	400 kg

He can see that, as expected, production was low when rainfall was poor. However, he can also see that when rainfall was good, he got the highest yields when he purchased seed of a local landrace from a well-respected trader; and applied some fertiliser.

Even when rainfall was good, planting seed of an unknown variety did not produce a good yield. This information can help Moses with his future decision making.

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.

Annex 1

Scripts for the podcasts

Notes: Each podcast is based on the story of a farmer, Betty/Lucia, who is beginning to use farm recording on her farm. The podcasts follow her as she discusses her progress and the impact the recording has had on her enterprise, with an extension officer, who also gives out specific key information to assist farmers in record keeping.

As the podcasts are scripted, it is anticipated that actors will provide the voices of Betty /Lucia and the extension officer.

There are 4 podcasts in total, approx. 10 minutes each in length.

The podcasts will be played during **listening sessions**. These sessions should be facilitated by an experienced field officer, or "trainer".

Each session shall be divided into sections. At the end of each section, the podcast will be paused for demonstration/discussion, led by the trainer. Sections can be replayed if required.

The trainer will be provided with a trainer manual, which describes the structure of the listening sessions; the content of the podcasts; and provides advice and ideas for the demonstration/discussion slots. Farmers will be provided with simple farm recording books for their records; and illustrated key information sheets to aid revision.

Podcast 1 - Why do we need to record?

Narrator:

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. 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, as well as 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 will 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.

Farmers who are starting up with farm recording may just note down the activities for each of their farm's enterprises in small note books. As they develop their farm recording skills over time, they will be able calculate their profits using "**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**".

This series of podcasts has been prepared to guide any farmer who is new to farm recording to be able to do it.

Joseph, our friendly extension officer, will help you learn how to keep farm records. So let me hand it over to him to guide you through the process…..

Extension Officer:

Hello, I am Joseph, an extension officer, and I have recently been working with farmers to help them develop their farm recording skills. I hope you will find this useful. Farmers who are already recording find it very helpful in keeping track of everything they do, so they can plan better for their future.

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. 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.

Farmer: (Betty/Lucia)

Well, I live in a Manyatta in Katikekile sub county. I am married and have two small children. We farm about one acre and grow maize and vegetables. Most of what we grow we eat, but we also sell some produce to get money for other things. We also have some goats and chickens.

Extension Officer:

Why have you started farm recording?

Farmer: (Betty/Lucia)

Last year I heard about farm recording from a friend. She told me how it can help me understand our farm's progress over time, helping with decision making, which sounds 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.

Farmer: (Betty/Lucia)

That's very true. My days are always very full as it is! 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 to sell, so that takes a lot of my time,as well as all the 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.

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.

Farmer: (Betty/Lucia)

That is a good idea. Working as a team will be very helpful.

Extension Officer:

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.**

Outputs mean what is produced by that enterprise.

Farmer: (Betty/Lucia)

That would include maize cobs, grain, milk, eggs, calves and so on?

Extension Officer:

That's right Betty.

Now, there are 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, and will be the same if the farmer keeps chickens, goats, grows maize or so on. 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 cots".

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

Farmer: (Betty/Lucia)

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

Extension Officer:

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

Farmer: (Betty/Lucia)

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?

Farmer: (Betty/Lucia)

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 for your different enterprises.....

Farmer: (Betty/Lucia)

And I have been writing some of it down. But as I said it is hard to keep organised!

Extension Officer:

You might want to try writing it down in a notebook so that all of your records are in one place and harder 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 also 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?

Farmer: (Betty/Lucia)

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.

Farmer: (Betty/Lucia)

This seems like a lot to do! Will it really be helpful?

Extension Officer:

It does sound like a lot of work but it really only takes ten or fifteen minutes a day and you will get faster at it. As we talked earlier it can be easier if you and your husband both record. And yes it will be helpful! As your records develop, you'll be able to see which years had the best results, and if you think these results have been helped 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. Then you will have the best information for future decisions. Betty, I think you are doing very well so far. Please continue to write down any information on inputs and outputs. Let's talk again soon and I will show you how to record all of your activities effectively.

Narrator:

Joseph and Betty will be back in our second podcast from Agri-TechTalk.

The role of Joseph was played by …..

The role of Betty was played by …..

And my name, the narrator, is …..

Thanks for listening. We hope you have enjoyed this podcast.

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

Narrator:

Welcome to the AgriTech Talk podcast on farm recording. This is the second 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.

In the first podcast we met Joseph, an extension officer, and Betty, a small-holder farmer. Joseph explained to Betty about why farm recording is important. They talked about how farms often have different enterprises and that these use inputs – activities which cost time or money – and produce outputs. In this podcast we'll look at how these inputs and outputs can best be recorded.

Joseph and Betty are back to continue their conversation. Let's listen in…..

Extension Officer:

Hello Betty. Good to see you! I see you have kindly brought along your papers, where you have written about this year's activities on your farm.

Farmer: (Betty/Lucia)

Hello Joseph. Yes I brought them along but I am afraid they are all mixed up in a long list. I plan on doing what you told me last time, to separate records into four new recording books.

Extension Officer:

Good for you Betty. That's excellent!

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

Farmer: (Betty/Lucia)

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

Extension Officer:

Great! Let's get you started. 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. Tallies are where you record numbers by drawing lines in groups of five – four vertical lines with one drawn across.

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

Farmer: (Betty/Lucia)

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?

Farmer: (Betty/Lucia)

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.

Farmer: (Betty/Lucia)

Would it help if I divided up the page into sections or columns?

Extension Officer:

Absolutely! Draw 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.

Farmer: (Betty/Lucia)

Oh I see. The lines create the columns.

Extension Officer:

Right, 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.

Farmer: (Betty/Lucia)

OK. Let me do that.

Extension Officer:

Well done Betty

Now, underneath this, in the first column, you need to record your inputs. 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.

Farmer: (Betty/Lucia)

Yes – a 5kg bag.

Extension Officer:

OK, so draw the bag 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 feed– 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.....

Farmer: (Betty/Lucia)

So column one will have the chicken feed symbol. Column two is the price I paid for each bag. The third column is the number of bags I bought; and the last column has the total price I paid.

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?!

Farmer: (Betty/Lucia)

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 first column. Now, in the second column record the price you paid for each hen, that's 5,000 shillings.

Farmer: (Betty/Lucia)

And in the third, the quantity of hens I bought, which is 4. And finally, in the fourth column I'll write down the total amount I paid for the hens, that's 20,000 shillings.

That already looks much more organised than my old records.

Extension Officer:

Any more inputs to add Betty?

Farmer: (Betty/Lucia)

No, but my hens have produced a lot of eggs –especially since I bought the extra hens!

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.

Farmer: (Betty/Lucia)

I'll divide this page into four columns as well.

Extension Officer:

Right. The first column for the activity, or type of produce; the second for the value that each item was worth; the third for the number that were produced; and the fourth, final column for the total value of the output produced.

So let's add in the eggs you produced…

Farmer: (Betty/Lucia)

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 of the outputs page (on the page opposite where you wrote down your chicken inputs), at the top, write in your symbol for an egg. Now, in the second 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.

Farmer: (Betty/Lucia)

Shall I enter the information for the other weeks of January beneath this at home?

Extension Officer:

Yes, that would be excellent.

Next time we meet 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?

Farmer: (Betty/Lucia)

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

Extension Officer:

Great

Farmer: (Betty/Lucia)

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 second and third columns blank if you need to.

Farmer: (Betty/Lucia)

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

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?

Farmer: (Betty/Lucia)

Yes I am!

Extension Officer:

Great. You now have the skills you need to start recording and can organise your records in different books. Remember, 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.

Farmer: (Betty/Lucia)

So is that all I need to write down?

Extension Officer:

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

Farmer: (Betty/Lucia)

Joseph, this has been so helpful. I can't wait to show my husband. And I think I will show my sister as well. It would really help her and her husband on their farm.

Extension Officer:

Please do pass this on. It is a great skill for every farmer to have. See you next time Betty.

Narrator:

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

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

The role of Joseph was played by …..

The role of Betty was played by …..

And my name, the narrator, is …..

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Podcast 3 - Making sense of farm recording books

Narrator:

Welcome back to the AgriTechTalk farm recording podcasts. This is the third podcast in a series of four. 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.

To do this we once again join Joseph, an extension officer, and Betty, who is a small-holder farmer.

Extension Officer:

Hello Betty. Very nice to see you again.

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.

Farmer: (Betty/Lucia)

Hello Joseph. 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.

Extension Officer:

I know what you mean. Life can be quite hectic.

Farmer: (Betty/Lucia)

I am still using a book for each of my enterprises, just like you suggested last time. In each I have one page for inputs and one page for outputs; using the left hand page for inputs and the right hand page for outputs; and I separate these by month.

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.

My sister and several of my friends have also started recording so we compare records and can learn from each other. I have been helping them to get started.

Extension Officer:

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

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

Farmer: (Betty/Lucia)

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.

Farmer: (Betty/Lucia)

Putting a value on some of our produce may be difficult I think.

Extension Officer:

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 eggs, 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.

Farmer: (Betty/Lucia)

I find it hard making some of those calculations Joseph.

Extension Officer:

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.

Farmer: (Betty/Lucia)

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

Extension Officer:

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

Farmer: (Betty/Lucia)

I will try to remember!

Extension Officer:

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

Farmer: (Betty/Lucia)

Well, I paid a friend 5,000 shillings for helping me prepare my maize field for planting for a day. 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 told me you also make skirts. So the time you spend on the farm could be spent making skirts.

Farmer: (Betty/Lucia)

Yes that's true! My time is valuable isn't it?

Extension Officer:

It certainly is. But 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.

Here is something important Betty. 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 – wait until the next season. Likewise if you do want to record a value for your labour, make sure you include it for all of the relevant activities.

Farmer: (Betty/Lucia)

Do other farmers forget to include the value of their labour?

Extension Officer:

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 their decision and it 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.

Farmer: (Betty/Lucia)

That sounds like a difficult calculation to record.

Extension Officer:

Here's how to do it. To record this activity as accurately as possible you need to divide the cost of the activity between the two enterprises. In this case, this is done by estimating how much time was spent on each of the enterprises.

It may be 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?

Farmer: (Betty/Lucia)

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

Farmer: (Betty/Lucia)

I understand.

Extension Officer:

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.

Farmer: (Betty/Lucia)

My neighbour is very good at that. She can help me. I can help her with other parts of recording.

Extension Officer:

Very smart, Betty. You know 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 your neighbour is busy and you cannot do these calculations, your farm records are still going to be useful.

Farmer: (Betty/Lucia)

I also have a friend from a VSLA group who has helped me – my family has helped me too. This is even better Joseph - 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:

Great. You are in good shape then! At the end of the year you should add these monthly totals up to find the total for the whole year.

You can compare the monthly totals before the year is finished 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. This also includes 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.

Farmer: (Betty/Lucia)

That sounds very interesting. Can you teach me about that?

Extension Officer:

We will look at gross margins in more detail next time. See you then Betty

Farmer: (Betty/Lucia)

Goodbye Joseph. Thanks!

Narrator:

You have been listening to the third of 4 podcasts on farm recording from AgriTechTalk.

As Joseph said, in the next podcast he and Betty will look at, gross margins.

The role of Joseph was played by …..

The role of Betty was played by …..

And my name, the narrator, is …..

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

Narrator:

Welcome back to the AgriTechTalk farm recording podcasts. This is the final podcast in a series of four. In a moment we will be joined by Joseph, an extension officer and 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 and experiences. In the previous podcasts Joseph and Betty have discussed the importance of farm recording; which inputs and outputs should be included; and how best to organise farm record books. In this podcast, Joseph will help Betty learn how to compare inputs and outputs to calculate a gross margin.

The two of them are standing by so let's join them for this final instalment.

Extension Officer:

Betty, it is good to see you again. How is the recording going?

Farmer: (Betty/Lucia)

Thank you Joseph. 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 now working out monthly 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:

I want to show you how to figure out your Gross Margins. That will help you. ***Gross margins*** can show the profitability of an enterprise. A gross margin is calculated by taking away the ***variable costs*** of producing an enterprise (that is, the **inputs**) from the value of what is produced…

Farmer: (Betty/Lucia)

That is the output right?

Extension Officer:

Exactly. The 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.

Farmer: (Betty/Lucia)

Does that mean I will have a lot of paper work and calculating to do at the end of each year?

Extension Officer:

Good question Betty. If you have been doing your recording regularly it should be quite easy. You will have all the information you need in your notebooks.

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 inputs from the total output value for the year. This will give you a figure for your annual gross margin.

Farmer: (Betty/Lucia)

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

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.

Farmer: (Betty/Lucia)

And for my chickens?

Extension Officer:

With animal or 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?

Farmer: (Betty/Lucia)

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.....

So starting with your chicken inputs, that's 30,000; 15,000; 20,000.....

OK, so we have finished adding up your inputs and outputs now. You have a total of 130,000 shillings of inputs and 215,000 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 215,000 minus 130,000.....

Which equals 85,000 shillings.

Farmer: (Betty/Lucia)

That is such good news and such valuable information!

Extension Officer:

Even if is not good news, if you had made a loss, that is also valuable information to know. 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 rainy season.

Some of these variations are unavoidable, but there may be certain costs that the farmer could reduce by thinking carefully about his or her 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.

Farmer: (Betty/Lucia)

This is interesting Joseph. I have already been sharing these new skills with my neighbours and family and found that, by sharing our records, we can learn from each other.

Extension Officer:

Good. And here is something else. 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 very large price changes.

Farmer: (Betty/Lucia)

Can you give me an example?

Extension Officer:

Of course. One year your labour costs 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. But the amount you paid for the seed might be less, because planting in rows is less wasteful than broadcasting seed. If in that same year your outputs increased, due to greater 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, were similar.

There are many factors involved in farming, as you know Betty, such as the weather, so when interpreting your farming records think carefully about all of the things 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.

But let me ask you Betty, how do you think your farm records will help you in the future?

Farmer: (Betty/Lucia)

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, not just in terms of what is sold but also the value of the eggs and the milk we consume at home. I would like to start making cheese in the future, 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 said you also make skirts. You can use the skills you have learnt from the farm recording to record your skirt enterprise.

Farmer: (Betty/Lucia)

Really? How?

Extension Officer:

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 their farm, and their recording skills can be used for these other enterprises too.

Farmer: (Betty/Lucia)

I will definitely try that Joseph! Thank you so much for these lessons.

Extension Officer:

It was my pleasure Betty. And remember, if you have any questions any extension officer can always help you out.

Narrator:

You have been listening to the last of our four part series on farm recording from AgriTechTalk.

We hope that they have been helpful. Good luck with you farm recording!

The role of Joseph was played by …..

The role of Betty was played by …..

And my name, the narrator, is …..

Thanks for listening.

The podcast material was developed by AgriTechTalk International and AgriTechTalk Africa, with technical support from Farm Radio International. Ateker FM also provided technical support; and translated and recorded the podcasts.

All four podcasts on Farm Recording, as well as their scripts and supporting material for their delivery, are available to download free via the AgriTechTalk website, at www.agritechtalk.org .

You can also access them via USAID's Food Security and Nutrition Network. Just search for F-S-N Network and navigate to its resource library.

Or….. you can search online for Farm Radio International's Barza Wire service. Its resource section will link you to our podcasts and supporting materials.

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Annex 2

Printable handouts

Annex 2 contains the following handouts:

Session 2 - Podcast 2

IDEAS FOR SYMBOLS

EXAMPLE PAGE FROM A FARM RECORDING BOOK

BETTY/LUCIA'S FARM RECORD BOOK FOR CHICKENS - INPUTS AND OUTPUTS

BETTY/LUCIA'S FARM RECORD BOOK FOR MAIZE – INPUTS

Session 3 - Podcast 3

INPUTS AND OUTPUTS FOR GROUPING

BETTY/LUCIA'S FARM RECORD BOOK FOR CHICKENS – ALL OUTPUTS

DIAGRAM OF A FARM RECORD BOOK– VALUE OF LABOUR

DIAGRAM OF A FARM RECORD BOOK – CALCULATING A MONTHLY TOTAL

Session 4 - Podcast 4

GROSS MARGINS - CALCULATING BETTY/LUCIA'S GROSS MARGIN

HOW OTHER RECORDS CAN HELP FARMERS LEARN MORE ABOUT THEIR ENTERPRISES – MOSES' RECORDS

IDEAS FOR SYMBOLS (Podcast 2)

Activity	*Symbol ideas*	*Activity*	*Symbol ideas*

EXAMPLE BLANK PAGE FROM A FARM RECORDING BOOK (Podcast 2)

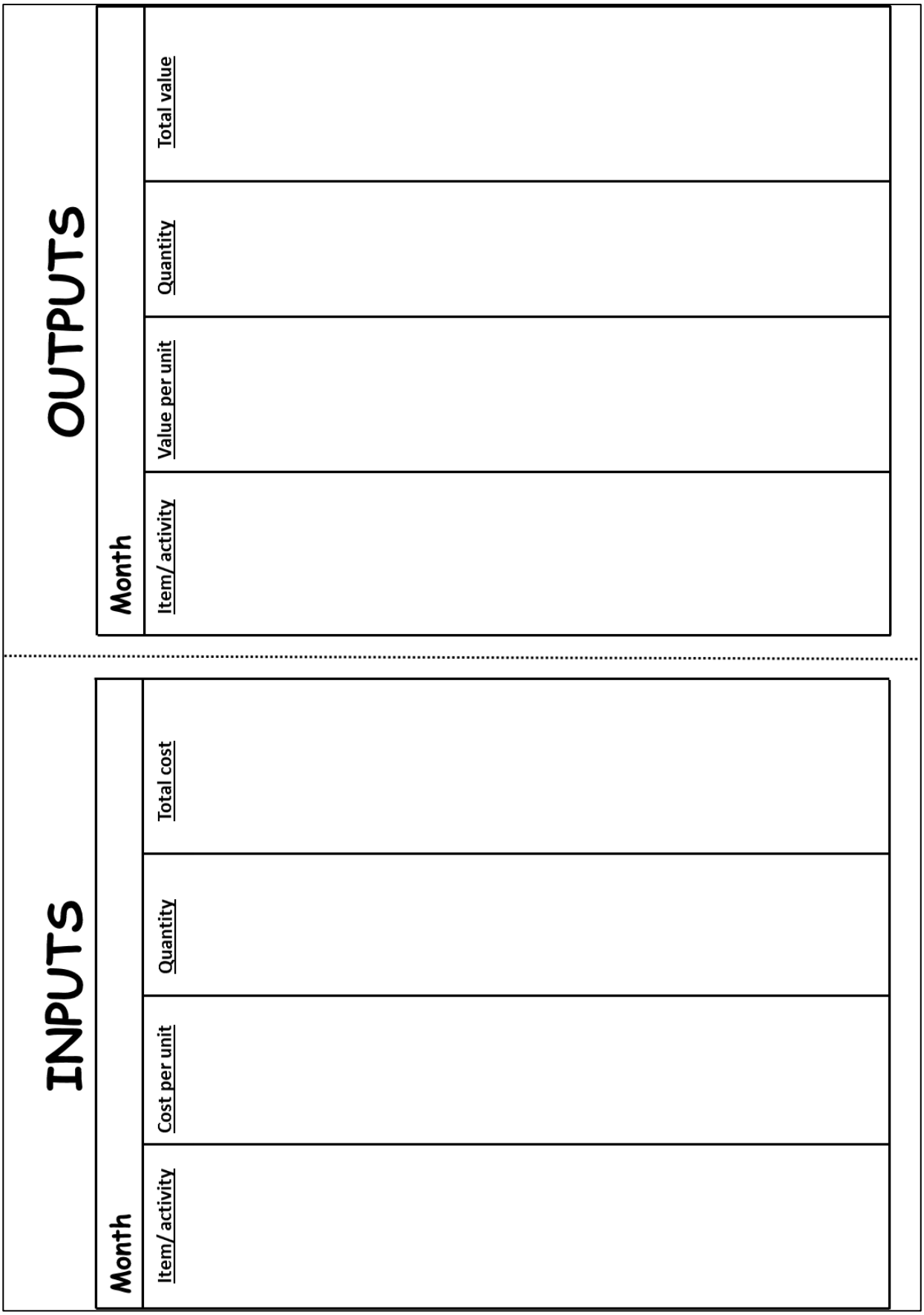


DIAGRAM OF BETTY/LUCIA'S FARM RECORD BOOK FOR CHICKENS – INPUTS AND OUTPUTS (Podcast 2)

JANUARY	INPUTS				OUTPUTS			
	ITEM	COST	QUANTITY	TOTAL COST	ITEM	VALUE	QUANTITY	TOTAL VALUE
	 feed 5kg	5,000	2	10,000	eggs	500	7	3,500
	 hen	5,000	4	20,000	eggs	500	9	4,500
					eggs	500	13	6,500
					eggs	500	15	7,500

DIAGRAM OF BETTY/LUCIA'S FARM RECORD BOOK FOR MAIZE – INPUTS (Podcast 2)

FEBRUARY									
	INPUTS				OUTPUTS				
	ITEM	COST	QUANTITY	TOTAL COST	ITEM	VALUE	QUANTITY	TOTAL VALUE	
	1kg seed	4,000	2	8,000					
MARCH									
	fertiliser			30,000					

INPUTS AND OUTPUTS FOR GROUPING (Podcast 3)

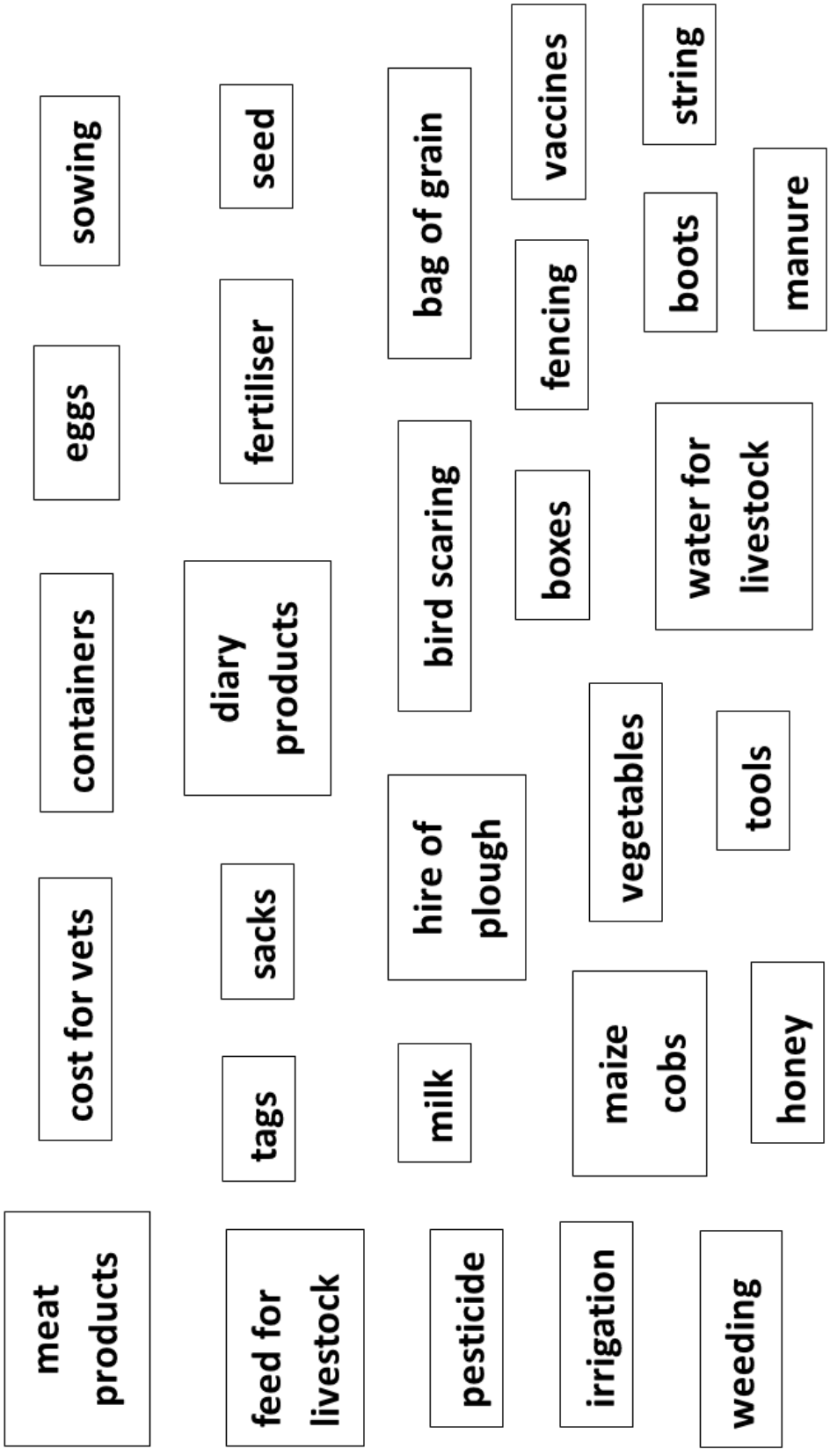


DIAGRAM OF BETTY/LUCIA'S FARM RECORD BOOK FOR CHICKENS – <u>ALL</u> OUTPUTS (Podcast 3)

FEBRUARY	INPUTS				OUTPUTS			
	ITEM	COST	QUANTITY	TOTAL COST	ITEM	VALUE	QUANTITY	TOTAL VALUE
	 feed 5kg	5,000	3	15,000	eggs eaten	500	4	2,000
					eggs sold	500	26	13,000
					eggs eaten	500	12	6,000
					eggs sold	500	28	14,000

EXAMPLE OF A FARM RECORD BOOK– VALUE OF LABOUR (Podcast 3)

FEBRUARY	*INPUTS*				
	ITEM	*COST*	*QUANTITY*	*TOTAL COST*
	Symbol for land cultivation	*5000*	*1*	*5,000 (hired)*
	Symbol for land cultivation	*3500*	*5*	*17,500 (own)*
	Symbol for weeding	*3500*	*4*	*14,000 (own)*
	Symbol for harvesting	*3500*	*3*	*10,500 (own)*

EXAMPLE OF A FARM RECORD BOOK – CALCULATING A MONTHLY TOTAL (Podcast 3)

FEBRUARY	INPUTS				OUTPUTS			
	ITEM	COST	QUANTITY	TOTAL COST	ITEM	VALUE	QUANTITY	TOTAL VALUE
	 *feed 5kg*	*5,000*	*3*	*15,000*	*eggs eaten*	*500*	*4*	*2,000*
					eggs sold	*500*	*26*	*13,000*
					eggs eaten	*500*	*12*	*6,000*
					eggs sold	*500*	*28*	*14,000*
	TOTAL			*15,000*	*TOTAL*			*35,000*

DIAGRAM OF FARM RECORD BOOKS – COMPARING MONTHLY TOTALS (Podcast 3)

SORGHUM

MONTH	INPUTS (total for month)	OUTPUTS (total for month)
March	15,000	
April	18,000	
May	5,000	
June	5,000	
July	5,000	
August	20,000	50,000

MAIZE

MONTH	INPUTS (total for month)	OUTPUTS (total for month)
March	20,000	
April	25,000	
May	15,000	
June	20,000	
July	30,000	
August	25,000	75,000

GROSS MARGINS (Podcast 4)

STEP 1: CALCULATING BETTY/LUCIA'S TOTAL COSTS/OUTPUTS FOR MARCH

MARCH	INPUTS				OUTPUTS			
	ITEM	COST	QUANTITY	TOTAL COST	ITEM	VALUE	QUANTITY	TOTAL VALUE
	 feed 5kg	5,000	3	15,000	eggs eaten	500	4	2,000
	 new boots	5,000	1	5,000	eggs sold	500	26	13,000
					eggs eaten	500	12	6,000
					eggs sold	500	28	14,000
					eggs sold	500	10	5,000
	TOTAL			20,000	TOTAL			40,000

GROSS MARGINS (Podcast 4)

STEP 2: CALCULATING BETTY/LUCIA'S MONTHLY TOTALS

MONTH	TOTAL INPUTS	TOTAL OUTPUTS
JANUARY	30,000	22,000
FEBRUARY	15,000	35,000
MARCH	20,000	40,000
APRIL	15,000	38,000
MAY	20,000	35,000
JUNE	30,000	45,000
TOTAL	**130,000**	**215,000**

GROSS MARGINS

STEP 3: CALCULATING BETTY/LUCIA'S GROSS MARGIN

Gross margin of Betty/Lucia's chicken enterprise over 6 months

= value of outputs – value of variable inputs

= 215,000 – 130,000 = 85,000 UGX

HOW OTHER RECORDS CAN HELP FARMERS LEARN MORE ABOUT THEIR ENTERPRISES – MOSES' RECORDS (Podcast 4)

	Variety	Purchased from	Fertiliser used	Rainfall	Output from 0.25 ha
2016	Unknown	Own seed	None	Good	125 kg
2017	Akiriri	A&E seeds	None	Poor	125 kg
2018	Unknown	Neighbour	Urea	Poor	100 kg
2019	Unknown	Own seed	Urea	Good	170 kg
2020	Akiriri	A&E seeds	Urea	Good	400 kg

Annex 3

Key Information sheets

Farm Recording *Key Information Sheets*

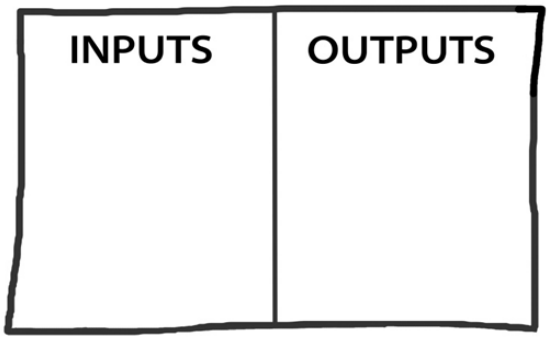
Hints and tips to help you with farm recording

Remember:

One farm recording book per enterprise

For example you may have: goats, sorghum and chickens.

Separate Inputs and Outputs in your books



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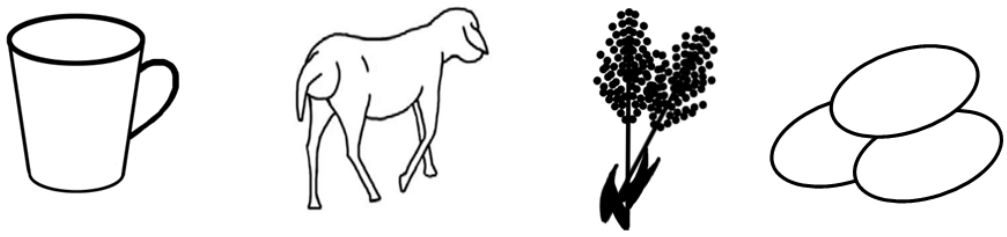
Farm Recording *Key Information Sheets*

Hints and tips to help you with farm recording

Inputs – record only the costs of producing your enterprise (variable costs).

For example, the costs of buying in new livestock, tins of seed, tools or bags of fertiliser.

Outputs – record the value of what is produced by your enterprise – this may be sold, eaten, stored or given away.



For example, the value of milk, livestock, produce from crops or eggs you are selling.

Farm Recording *Key Information Sheets*

Hints and tips to help you with farm recording

Layout of farm recording books

For each of the input and output pages include:

Name or symbol of each item/activity

Cost/value per unit of input/output (cost/value each)

Quantity/amount used/sold

Total cost/value of inputs/outputs

For example for Betty/Lucia's chicken enterprise

INPUTS

Month	April		
Item/ activity	Cost per unit	Quantity	Total cost
Feed 1kg bag	2,000	5	10,000
Empty boxes for eggs			500
Fencing			4,500
Total			15,000

OUTPUTS

Month	April		
Item/ activity	Value per unit	Quantity	Total value
Eggs eaten	500	4	2,000
Eggs sold	500	30	15,000
Eggs given away	500	10	5,000
Eggs sold	500	35	15,000
Eggs eaten	500	2	1,000
Total			38,000

Farm Recording *Key Information Sheets*

Hints and tips to help you with farm recording

Gross Margins – these show how well your enterprise is doing financially.

Gross margin = total value of outputs – total costs of inputs

If the gross margin is:

Below 0 or - **Above 0 or +**

Enterprise has made a ***Loss*** 0 *Enterprise has made a* ***Profit***

For example for Betty/Lucia's chicken enterprise

MONTH	TOTAL INPUTS	TOTAL OUTPUTS
JANUARY	30,000	22,000
FEBRUARY	15,000	35,000
MARCH	20,000	40,000
APRIL	15,000	38,000
MAY	20,000	35,000
JUNE	30,000	45,000
TOTAL	**130,000**	**215,000**

Gross margin = 215,000 - 130,000 = 85,000

This means Betty/Lucia has made a profit.