



# Agribusiness: A path to prosperity

Transitioning from subsistence to commercial farming

## Module 1



## Acknowledgements

This training manual has been produced as part of the TOMAK program in Timor-Leste. TOMAK (*To'os ba Moris Di'ak* or Farming for Prosperity) is an agricultural livelihoods program supported by the Australian Government. The program is working with government, NGO and private sector partners to sustainably increase market engagement and household nutrition for farming families across the country.

A key aspect of the program is supporting the development of commercial agriculture through the enhancement of household capacity to confidently and ably engage in agriculture markets. This manual, designed to help farmers understand and embrace basic business practices, is an important educational tool supporting this work.

TOMAK would like to thank the many people who have contributed expertise, ideas and creativity to the creation of this manual. Special thanks to Joe Freach, who developed and wrote the manual.

Thank you for your contributions.

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## **Module 1**

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# 1 INTRODUCTION

The Timor-Leste Strategic Development plan outlines a vision in which “Subsistence agriculture will have been replaced by commercial, smallholder agriculture” by 2030. Despite this target, only 2.6% of private households reported being “involved in agriculture mainly for sale” in the 2015 Population and Housing Census.

At the time of writing in 2017, commercial agriculture remains a rudimentary but emerging sector of the Timorese economy. Few farmers are used to operating in a market system, large scale trade is rare for crops other than coffee, and the majority of transactions for agricultural produce take place at the local marketplace level. Exports of food crops are almost non-existent, and only minimal amounts of industrial crops are produced. Large scale government investment in irrigation systems and other infrastructure has provided resources for production in some areas, but efforts to increase productivity are hampered by the lack of market activity to consume the produce. Despite these limitations, recent growth in the market for products such as fresh vegetables and an increasingly urbanised population show potential for growth of commercial activity in the agriculture sector. There is a preference for local produce among the emerging middle class, and self-sufficiency in staple grain remains a government priority.

This training program was written to assist subsistence farmers both women and men, with little or no commercial experience who wish to begin the transition to commercial agriculture. It is targeted at farming families who do not yet have the capacity to access business support services. The program is designed to be non-technology dependent, deliverable in remote areas, and as accessible to illiterate and low literacy participants as possible. The information contained in each lesson is meant to be used to guide trainers to facilitate discussions, and participatory activities reinforce the concepts and provide opportunities for self-reflection among the participants. The lessons have been divided into two modules which could form the basis for a single training program, or each module can be delivered individually depending on the needs of the participants.

## 1.1 How to use this manual – a guide for trainers

The lessons in this training manual are meant to guide discussions on each topic with examples and activities to reinforce and provide context for the information. The trainer’s job is not to simply deliver the material, but instead to guide the participant’s understanding of how they feel about commercial farming and the issues that they must consider if they want to transition out of subsistence farming. Discussion should be encouraged throughout the lessons prompted by the questions that are included throughout the text. Trainers are welcome to use local languages if they are able in both the lessons and the discussions. The goal is to involve the participants in the learning process and to promote as much interaction as possible. Trainers should identify participants who quickly grasp the topics and utilise them to explain concepts, assist others, or even co-facilitate lessons.

Trainers must read and understand each lesson in advance in order to prepare the necessary materials and to ensure that they are able to explain the concepts and information. This includes writing out the tables of numbers so that they are ready to reveal to the participants during the training. If multiple trainers will be delivering the lessons, they should review the material together and discuss how they will divide the delivery. This is especially important for the examples and activities, which require some materials and planning for how the participants will be organised. Instructions and lists of resources are included at the beginning of each activity, as well as in the lesson plans.

Some symbols appear throughout the text with special instructions for trainers, ★ denotes key points, and definitions are in **bold text**.

It is up to the trainers to assess the level of each training group, and to adjust the lessons as necessary for the capacity of the participants. Trainers should be cautious that both the complexity of the material and the speed at which it is covered is appropriate for the group. Trainers should be conscious of possible gender differences in the participants and ensure both women and men have equal opportunities to speak and be listened to. The trainers must also be conscious of participants who cannot read or are not used to working with numbers. For most examples and activities, the tables and calculations should be written on a piece of flipchart paper before the training begins. The tables should be kept covered until they are needed in the lesson, and revealed row-by-row or column-by-column to avoid overwhelming participants who are not used to working with tables of numbers. Using a second piece of paper as a cover sheet is useful in revealing the tables in this way. Using simple symbols next to words (such as \$+ for 'money in' no \$- for 'money out') can help participants who cannot read to keep track of the information being presented. Many of the concepts are related, and some concepts (such as supply/demand and economy of scale) apply to many different sections. Drawing attention to past concepts when they apply to a lesson is a good way to reinforce the information. The 'concept wrap-up' found at the end of most activities is particularly important to bring the activity back to the original concept and to emphasise how it is applied to the activity scenario.



## 2 TRANSITIONING FROM SUBSISTENCE TO COMMERCIAL FARMING

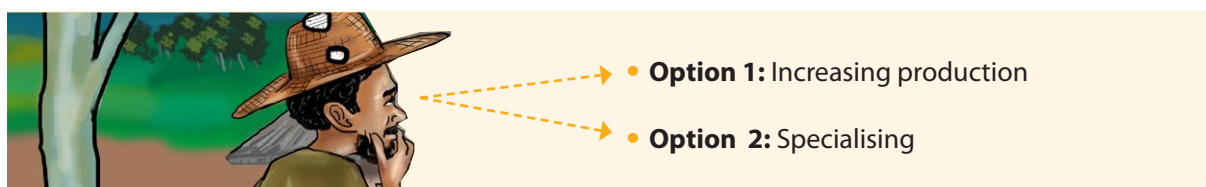


**Commercial agriculture is the production of crops or animals to sell for money.** The commercial farmer uses and often pays for resources such as land, water, labour, and seeds to produce goods for sale. This can be done either through:

1. Producing an **excess - extra crops that are sold after the family's food needs have been met**, or
2. Through producing a **cash crop - a separate crop produced specifically to sell**.

Neither type of commercial production requires that the farmer stop producing food crops for his/her family's consumption and relying only on cash to buy food. Commercial agriculture activities should fit together with the family's food production, and both should contribute to their food and income security. Although a family might start producing a cash crop, their production of staples such as cassava, corn, or rice are still very important for their food security. Becoming a commercial farmer could mean diversifying the crops that are planted, or specialising in a particular crop depending on what the farmer thinks that they can sell.

**Figure 1: Options for becoming a commercial farmer**



The first step in becoming a commercial farmer is beginning to view your farm as a business. It is a mistake to think that farming is not a 'real job', or that a farm is somehow different from other businesses that produce things. Just like a factory that produces goods, a farm uses input materials, labour, and resources to produce something that people can use. Just like the owner of a factory, store, or company, a farmer is a business person.

To successfully transition to commercial agriculture, farmers and farming couples need to start thinking like business owners. This includes planning ahead, managing resources, thinking about the market, looking for customers, using strategies to increase sales, promoting their product, thinking carefully about price, understanding costs, competing with other producers, and recording information that might be useful later. The lessons in this training will explore all of these topics.

★ **Discussion:**

What do the participants know about commercial agriculture? Do they consider their farms to be businesses now? Do they have certain farm activities that they consider to be business activities? Do they have any experience selling their produce? If not, do they barter their produce for other goods? Do they know any commercial farmers in their communities?

## 2.1 Who makes a good commercial farmer?

Before starting a business, a person, woman or man, must think about whether they have the right attributes to succeed in commercial farming. This does not mean that the farmer has to know everything in the beginning. Skills can be learned along the way, and responsibilities delegated to a family member. A business mentality is critical however, if the commercial farm is to succeed. Some attributes that make up this business mentality include:

**Note to trainers**

Some participants won't understand the words in the following list. The trainer can use other words and explanations to make the concepts clearer to the participants. For each point in the list, give an example that is relevant to the participants' experience.

- **Curiosity** – Someone who likes learning new information and how other people do things.
- **Adaptability** – Someone who is willing to change the way they do things to make them more successful.
- **Innovation** – Someone who is willing to try new things.
- **Motivation** – Someone who is willing to keep working, even if things become difficult.
- **Independence** – Someone who does not wait for other people to fix their problems.
- **Management** – Someone who is good at carrying out activities and delegating work.
- **Risk taking** – Someone who is willing to take risks if the potential reward is great enough.

People thinking about transitioning to commercial agriculture need to think about all of these attributes and decide: Do I have what it takes to succeed in commercial agriculture? Do I **want** to run my own business? A person who starts a business and then stops when things get difficult have wasted their time and effort. Many farmers know how to produce crops, but simply producing a crop and waiting for someone to buy it will not make many sales. A commercial farmer must be proactive, just like any other business owner.



### ★ Discussion:

Split into 3 groups for 10 minutes of discussion. Ask the participants why they want to become a commercial farmer. What do they think it takes to succeed in commercial farming? Do they think they have the attributes for a business mentality? Do they have any friends or neighbours who are successful business people? (these can be agricultural or other businesses) What attributes made those people succeed in business? After the discussion, ask each of the 3 groups to present back to

## 2.2 Risk

When deciding whether to open a business, it is important to think about the risks. **A risk is taking a chance even when the outcome is uncertain.** Life is full of risks, but a business owner sees risks as opportunities because many risks are paired with rewards. For example, a market seller buys some lettuce from a farmer and tries to sell it for \$1.50 per bundle. A restaurant owner approaches the trader and offers \$1.00 for all of the seller's lettuce. The seller now has a choice. They can sell today and make only a small profit, or keep trying to sell the lettuce in the hopes that they will get a better price. The seller knows that lettuce only lasts two days before it is too wilted to sell, so they have to decide whether to take the restaurant owner's offer or take the risk of trying to sell it at a higher price before it wilts. If the seller does find another buyer at a higher price, the higher profit that they earn is their reward for taking the risk.



Some people are very afraid of risk and avoid it whenever possible. These people may not lose very often, but they usually do not gain much either. To be a successful business owner, a person must learn to weigh up and manage their risk. They must decide: 'Is the possible return great enough to justify this amount of risk?' smart business owners also plan ahead and takes steps to reduce their risk as much as possible. A mung bean farmer who plans to sell to a trader at harvest time might put in some extra work looking for another buyer before the crop is even planted. Of course, he/she cannot promise to sell to both buyers, but by identifying another place to sell the crop, the risk of not making a sale is reduced if the first trader does not buy. Risks can also be shared among different people as long as the rewards are shared as well.

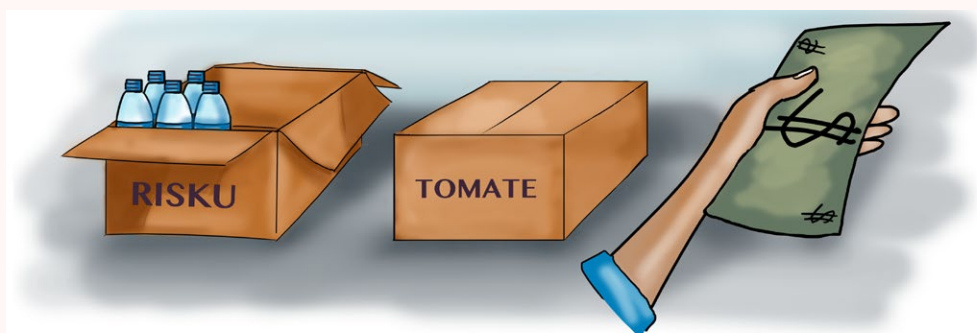
A farmer who grows, transports, markets, and sells their produce to a consumer gets all of the profit (reward) but also takes on all of the risk.

## ACTIVITY 1 – Risk role play

**Duration** Min 40

**Materials** Some fake money (blank paper is fine) / a box with four containers inside (water bottles, paper bags, etc) / a large box, sack, or other container / copies of the role play script

**Objective** The purpose of this activity is to help the participants to understand that risk can be reduced for each stakeholder when it is shared along the value chain. The stakeholders share the profit from the product, but they also share the risk.



You will need five people to act out the role play. The trainers can perform the role-play for the group, or participants can be included as well. If participants are to play a part, you will need to provide them with a script and ensure that you select participants that are able to read it. The five characters are: a farmer, a second farmer, a small trader, a supermarket owner, and a consumer. Act out the role play according to the following script below. Explain clearly to the group that the box with the four containers represents **risk**, and the other container represents a bag of tomatoes. Instruct the 5 characters to stand a few meters apart from each other in the front of the room. Give some of the fake money to the Small Trader, Supermarket Owner, and Consumer.

**Farmer:** "I am going to sell my tomatoes in the market. I hope to make a good profit, but there are many things that I am worried about. First, my tomatoes might get damaged in transport somewhere. Second, my vegetables might spoil in the sun. Third, I might not find a consumer to buy them if there are too many people selling tomatoes. All of this risk weighs heavily on me."

The farmer picks up the box with the four containers, and reminds the group that this represents his/her risk. The farmer carries the risk and the tomatoes to where the small trader is standing. When he/she carries the boxes, he/she pretends that the risk box is very heavy.

**Small trader:** "Hello Tia/Tiu. How much do your tomatoes cost?"

**Farmer:** "\$3 per pile."

**Small trader:** "That price is too high for me, but I need some tomatoes to take to a bigger market. I will pay \$1.75/pile if you sell me all of your tomatoes."

**Farmer:** "That price is less than I hoped to get, but all of this risk

is very heavy. If I sell them now I still have the risk of transporting my tomatoes to the market, but I no longer risk them being damaged in the sun, and there is no longer a risk of not finding a consumer to buy them. Ok, I will sell them to you for \$1.75/pile.”

The farmer removes one of the containers from the box of risk and explains to the group that this was the risk of the tomatoes being damaged in transport. He/she then trades the tomatoes for some fake money, but also gives the risk box to the small trader.

**Small trader:** “Now I have enough tomatoes to sell at the bigger market but there is a risk that they will be damaged in transport, a risk that they may spoil while I have them, and a risk that I will not find a buyer. I will go to the big market now and try to sell them.”

The small trader walks to where the supermarket owner is standing, carrying the tomatoes and the box of risk. He/she pretends that the box of risk is heavy.

**Supermarket owner:** “How much for these tomatoes?”

**Small trader:** “\$2.50 per pile.”

**Supermarket owner:** “I have many costs to run my big store and I have to make a profit. I can give you \$2.25 per pile, but I will buy all of your tomatoes.”

**Small trader:** “I would like to get a higher price, but this risk is heavy. If I try to sell them somewhere else, they may be damaged or spoil before I can find a buyer. Ok, I will sell them to you for \$2.25/pile.”

The Small Trader removes one of the containers from the box of risk and explains to the group that this was the risk of the tomatoes being damaged in transport. He/she then trades the tomatoes for some fake money, but also gives the risk box to the Supermarket Owner. The Supermarket Owner now holds up the box of risk.

**Supermarket owner:** “Now I will sell the tomatoes in my supermarket. I do not have any transport risk, but I do have the risk that they will spoil, and that no one will buy them.”

The Consumer walks to where the Supermarket Owner is standing.

**Consumer:** “How much for your tomatoes?”

**Supermarket owner:** “\$3.00/pile.”

**Consumer:** Ok, I would like to buy one pile. Now I can eat some tomatoes with only the small risk that they are rotten inside.”

The Consumer gives the Supermarket Owner some fake money, and the Supermarket Owner pretends to give the Consumer some tomatoes from the container. He/she also gives the Consumer one of the small containers of risk. The four characters now show the group the money and small containers of risk that they are holding.

**The Farmer, the Small Trader, and the Supermarket Owner all say together:**

“Now we have all made some money, and none of us are holding the whole box of risk!”

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Now the second farmer takes the box of tomatoes and the box of risk (with all of the small containers put back inside). The Small Trader, the Supermarket Owner, and the Consumer all stand a few metres apart.

**Second farmer:** "I am going to sell my tomatoes in the market. I hope to make a good profit, but there are many things that I am worried about. First, my tomatoes might get damaged in transport somewhere. Second, my vegetables might spoil in the sun. Third, I might not find a consumer to buy them if there are too many people selling tomatoes. All of this risk weighs heavily on me."

The Second Farmer picks up the box with the four containers, and reminds the group that this represents his/her risk. The farmer carries the risk and the tomatoes to where the small trader is standing. When he/she carries the boxes, he/she pretends that the risk box is very heavy.

**Small trader:** "Hello Tia/Tiu. How much do your tomatoes cost?"

**Second farmer:** "\$3 per pile."

**Small trader:** "That price is too high for me, but I need some tomatoes to take to a bigger market. I will pay \$1.75/pile if you sell me all of your tomatoes."

**Second farmer:** "That price is too low. If you can't pay more I will sell them myself."

**Small trader:** "OK, but the risk is yours."

The Second Farmer walks towards the Supermarket owner acting like the box of risk is very heavy.

**Second Farmer:** "Oh no, some of my tomatoes have been damaged in transport, now I have less to sell!"

The second farmer pretends to throw away some tomatoes, and walks to the Supermarket Owner.

**Supermarket owner:** "How much for these tomatoes?"

**Second farmer:** "\$2.50 per pile."

**Supermarket owner:** "I have many costs to run my big store and I have to make a profit. I can give you \$2.25 per pile, but I will buy all of your tomatoes."

**Second farmer:** "That price is too low. If you can't pay more I will sell them myself."

**Supermarket owner:** "Ok, but the risk is yours."

The Second Farmer walks towards the Consumer but the Consumer begins walking the other way. The Second Farmer and the consumer pretend to be looking for each other as they walk around the room. The Second Farmer acts like the box of risk is very heavy.

**Second farmer:** "Oh no, some of my tomatoes have been damaged in transport, now I have less to sell!"

Finally the Second Farmer finds the Consumer.

**Konsumidór:** "How much for your tomatoes?"

**Agrikultór segundu:** "\$3 per pile."

**Konsumidór:** "These tomatoes look a bit old, and you only have a few to sell. I think I'll go buy some at the supermarket!"

**Agrikultór segundu:** "I've carried too much risk and now I have nothing to sell."

### Concept wrap-up

A trainer now discusses what happened in the role play with the group. What happened to the risk along the value chain? **What would have happened to the risk if the farmer had tried to sell directly to the consumer?** (This is an important point to discuss because many farmers are used to 'being' the whole value chain.) Did they have the capacity to access that consumer who buys food in the supermarket? Would the extra money the farmer would have received been worth taking all of the risk? If the risk was very high, would they have gotten the higher price for the whole crop of tomatoes? The money each character received partly goes to pay for their costs, but does the profit they made compensate (pay) them for taking their portion of the risk?

★ By involving more people, the risk is divided among many different stakeholders. The producer already has risk during the production process, and if they are trying to operate the whole value chain themselves they assume a very high risk of not making a profit for their work. Trying to operate the whole value chain themselves also takes a lot of time, and takes their attention away from their primary activity – producing a crop. By selling larger quantities at a lower price they may make less money per unit, but they also greatly reduce their risk and have more time to focus on producing their crops. If the risk is divided among several people, it is also easier for each person to mitigate their risk because they can focus only on what directly affects them. A value chain is also a more efficient way of getting products to the consumer, because each stakeholder **specialises** in their part of the process. The producer specialises in production, the traders in moving goods, and the supermarket owner in selling to consumers. It would be very difficult for one stakeholder to do all of these things unless they only sold a very small quantity of product.



### 3 THE MODERN MARKET ECONOMY

In the past, and even today for some special products, the government has announced set prices to be paid for agricultural goods. In the modern market economy, this is usually not the way prices are set. Actually, prices are not 'set' at all. ★ Price is just what is agreed on between the buyers and the sellers. Sellers must try to balance the amount of money they want to make with what their customers are willing to pay. If the price is too high, they will have no customers. If the price is too low they will probably have lots of customers, but they won't make any money. Think about people that the farmers are familiar with who have made lots of money from their businesses (i.e. big shop owners, import/export, petrol station companies, etc.) Does the government set the price of those goods? No, those people have made their money by competing in the market.

There are four important factors that make up market prices: cost, demand, supply, and competition.

- **Costs** – What the producer or trader has to pay to obtain the product
- **Demand** – Whether or not a lot of people want to buy the product
- **Supply** – The amount of the product which is available to be sold
- **Kompetisaun** – How many other people are selling a similar product

#### Costs

Since the participants are producers, we'll look at how costs affect price from their perspective. Costs affect the market price because a seller must set their price higher than what it cost them to buy or make it. Otherwise, they would not make money and their business would fail. For producers, it is mostly the cost of production that influences their sales price. Explain how the cost of production sets the minimum price a producer can take for his/her product. At the end of the example, ask the group what would happen to the sale price if the family's cost of production increased next year. Discuss how changes in cost affect the sale price at different points along the value chain. Also, inform the group that we will practice documenting and calculating their own costs in the section on business skills.



Use the following example:

A family decides to grow mung beans to sell to a local trader. They buy 10 kg of seed for \$3.00/kg, rent 0.5ha of land for \$100, and plant their crop. At harvest time they spend \$25 on hired labour, and buy 25 clean sacks for \$10.00. After drying and bagging their harvest, they have 400 kg of mung beans to sell to the trader. The family's costs are summarised:

|                    |                  |
|--------------------|------------------|
| Seed               | \$ 30.00         |
| Land               | \$ 100.00        |
| Labour             | \$ 25.00         |
| Sacks              | \$ 10.00         |
| <b>Total costs</b> | <b>\$ 165.00</b> |

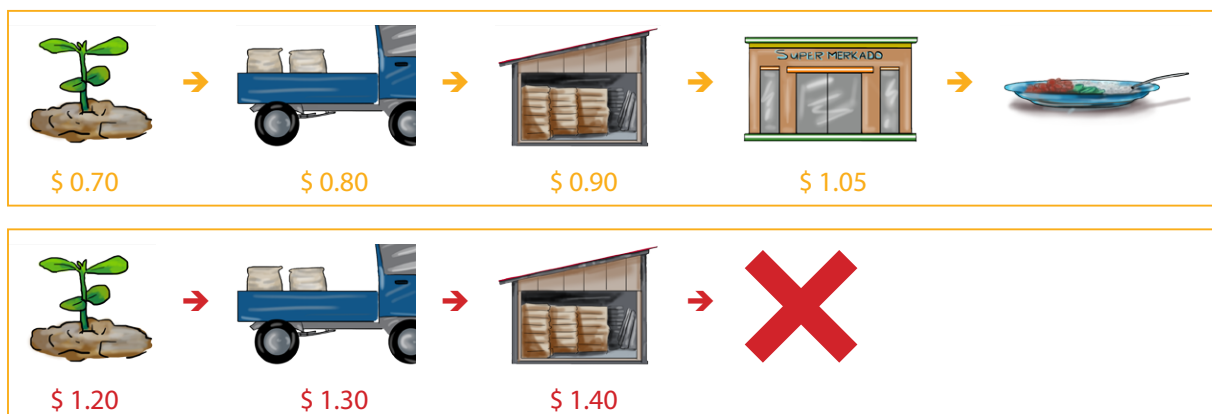
If the total costs are divided by the total production, the *break-even price* be lehet. can be found. For this example, the break-even price is \$0.41/kg. This represents the minimum price the family can accept to avoid losing money. Of course, this price is still too low – the family wants to **make** money – but knowing the break-even price helps them to negotiate with a trader with an understanding of what it cost them to produce the crop.

| Total costs | ÷ | Total production | = | Costs/kg  |
|-------------|---|------------------|---|-----------|
| \$165.00    | ÷ | 400 kg           | = | \$0.41/kg |

If the family sells their mung beans to the trader for \$0.70/kg, the sale price is made up of their costs plus profit. At \$0.70/kg, the family's profit is \$0.29/kg. **The profit is the part of the sale price that the family gets to keep after subtracting their costs.**

| Costs   | + | Profit  | = | Price   |
|---------|---|---------|---|---------|
| \$ 0.41 | + | \$ 0.29 | = | \$ 0.70 |

The trader will then add his/her costs to the buying price of \$0.70, add a margin for profit, and sell the mung beans on to the next stakeholder in the value chain. This continues until the mung beans reach the final consumer. ★ Remember, though, that if the price is too high when the mung beans reach the consumer because the costs or profit were too high at any point in the value chain, EVERYONE LOSES. If the consumer doesn't buy... the wholesaler doesn't buy... the trader doesn't buy... and the farmer cannot sell his/her produce.

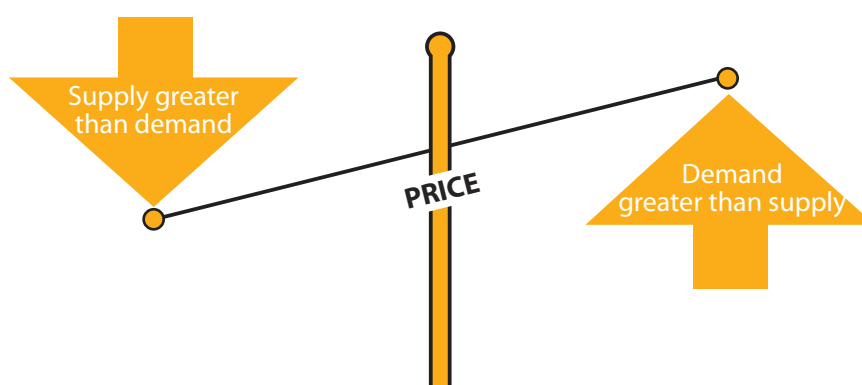




## Supply and demand

Supply and demand are two important factors that determine price. Whether you're looking at a small local market or at global trade, supply and demand has big influence on the price of a product. Supply and demand is also usually the reason that prices fluctuate. Farmers know that the price of their produce is lowest around harvest time when there is lots of the product around, and that the price rises when the product is out of season and it becomes scarcer. What they might not realise is that prices are often higher in cities because there are more people there to buy it, fewer people can produce the product themselves, and expensive or difficult transport can limit the quantity of the product that makes it into the city. As the supply of a product drops, or the demand rises, the price rises as well.

**Figure 2: Effect of supply and demand on price**



For some products, such as peanuts, local supply and demand affects the price. Prices are low at harvest and higher in the off-season. For other products, global prices around the world affect the price that traders buy and sell a good for. Rice, coffee, and vanilla are traded on the global market, which can greatly affect the prices they are bought and sold for at a local level. A poor rice harvest in Vietnam or Thailand could greatly increase the price of a bag of rice in Viqueque or Manatuto. A poor vanilla harvest in Madagascar could mean a high price paid for vanilla in Suai.

It is worth noting that while a decrease in supply usually raises the price, there is a minimum level of supply that must be achieved to stimulate demand for a product. A scarce but desirable product will likely have a high price, but a product that is so scarce that it is difficult to find or accumulate might not be very attractive to traders. If all of the members of a farmer's group agree to produce mung beans, they are more likely to attract a trader than if a few farmers grew the crop themselves. If everyone in the municipality grows mung beans, the price is likely to be low at harvest time because supply will be higher than demand.

### ACTIVITY 2 – Supply and demand

**Duration** Min 60

**Materials** Flipchart or whiteboard / 8 small prizes such as lollies / a small object (beads, bottle caps, etc.) for each participant / a stack of blank cards

**Objective** The purpose of this activity is to 1) show how market prices come about and 2) show how changes in supply and changes in demand affect the market price.



### Introduction

Call two participants to the front of the room and explain the following to the group. Tell one that they are a 'seller' and give them a small object to represent a television. Tell them that they are going to sell the television and secretly (so no one else can hear) tell them that they **cannot accept a price below \$20**, but that they should try to get the highest price possible. Tell the other person that they are a buyer and that they have to buy the television. Secretly tell them that they **cannot pay more than \$300**, but that they should try to get the lowest price possible. Ask the students to negotiate in front of the class until they reach an agreed price.

When they agree on a price, write it on the board and reveal the maximum (\$300) and minimum (\$20) prices to the class. The agreed price should be somewhere in the middle. Explain to the class that **both people won because the buyer got MORE than their minimum, and the seller paid LESS than their maximum**. Both have agreed to the price, but one might have gotten a better deal: Was the buyer further above his/her minimum than the seller was below his/her maximum, or was it the other way around? Did the buyer win more than the seller, or the opposite? Discuss this with the group.

### Round 1

Now divide the group into two equal parts and ask them to stand on opposite sides of the room. One of the groups is the buyers, and one is the sellers. Give all of the sellers a small token that represents a gold ring that they must sell to a buyer. Inform both groups that their **minimum price is \$50** and their **maximum price is \$200**. Tell the buyers that they have 10 minutes to negotiate to buy a ring. The seller that gets the highest price, and the buyer who pays the lowest price, will be the winners for the round and will receive a prize. If the participants don't like the price from one buyer or seller, they should move around and look for a better price from someone else.

After the 10 minutes is finished, separate the groups again and ask each person who has a ring to write the price they paid for it on a card provided by the trainer. Use these cards to make a list of prices in the front of the room (as in the example below). The trainer or a co-trainer should calculate the average of the prices paid and add it to the list. Award the best buyer and best seller with a prize.

| Round 1 |       |      |       |       |      |       |       |       |       | Average |
|---------|-------|------|-------|-------|------|-------|-------|-------|-------|---------|
| \$150   | \$110 | \$75 | \$180 | \$165 | \$60 | \$100 | \$110 | \$195 | \$125 | \$127   |

## Round 2

Repeat the activity the same way as round 1, but this time the buyers from round 1 are the sellers, and the sellers are the buyers. Participants must not sell the gold rings back to the person who they just bought from (they must sell to someone else). Remind the group that the **maximum (\$200) and minimum prices (\$50)** still apply. When the 10 minutes is finished, collect the cards and record the prices as before (as in the example below) and award the two winners.

Leave the two groups separated, but ask the group what has happened to the prices? If the activity has worked, the prices from round 2 should be much closer together than those in round 1. The average price might be nearly the same, but all of the prices will be closer to that average price than they were in round 1. Explain to the groups that this is how market prices happen and that if we were to run the activity several more times, the prices would all be nearly the same in later rounds. As more and more transactions happen in a market, the price settles at a level that sellers are willing to take, and buyers are willing to pay. This price will usually stay nearly the same until something happens in the market to change it.

| Round 1 |       |       |       |       |       |       |       |       |       | Average |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| \$150   | \$110 | \$75  | \$180 | \$165 | \$60  | \$100 | \$110 | \$195 | \$125 | \$127   |
| Round 2 |       |       |       |       |       |       |       |       |       | Average |
| \$120   | \$135 | \$115 | \$100 | \$125 | \$130 | \$145 | \$125 | \$120 | \$140 | \$126   |

### Note to trainers

After rounds 1 and 2, a trainer should explain that "If we repeat this activity 10 times, the buyers will know the price sellers can sell at, and the sellers will know the price that buyers are willing to pay. Now in rounds 3 and 4, we will change some things and see what happens to the price."

## Round 3

Tell the group that there is a big problem with shipping and that now fewer gold rings are being imported into Timor-Leste. Go to the group that now has the rings, and take a ring from 1 out of every 3 participants. Tell these people that they have become buyers and that they should join the other group. Remind the group that the **maximum (\$200) and minimum prices (\$50)** still apply.

Run the activity again, this time with more buyers than sellers. Collect the cards and record the prices as before (as in the example below), and reward the two winners. Leave the two groups separated, but discuss what has happened to the price. (Note: the average price should have gone up because there were more buyers than sellers. More people wanted a ring than there were rings available.)

| Round 1 |       |       |       |       |       |       |       |       |       | Average |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| \$150   | \$110 | \$75  | \$180 | \$165 | \$60  | \$100 | \$110 | \$195 | \$125 | \$127   |
| Round 2 |       |       |       |       |       |       |       |       |       | Average |
| \$120   | \$135 | \$115 | \$100 | \$125 | \$130 | \$145 | \$125 | \$120 | \$140 | \$126   |
| Round 3 |       |       |       |       |       |       |       |       |       | Average |
| \$150   | \$170 | \$145 | \$125 | \$155 | \$165 | \$180 |       |       |       | \$156   |

#### Round 4

Tell the group that the shipping problem is fixed, and that the jewellery stores have ordered too many gold rings. Collect the tokens (and add some additional ones) and give them to all of the people in the bigger group. Run the activity again, this time with more sellers than buyers. Remind the group that the **maximum (\$200) and minimum prices (\$50)** still apply.

Collect the cards and record the prices as before (as in the example below), and reward the two winners. The participants can now return to their seats. Discuss what happened to the price in rounds two and three. What were the effects of changes in supply and demand? (note: the average price should have gone down because there were more sellers than buyers. There were more rings for sale than people who wanted them.)

| Round 1 |       |       |       |       |       |       |       |       |       | Average |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| \$150   | \$110 | \$75  | \$180 | \$165 | \$60  | \$100 | \$110 | \$195 | \$125 | \$127   |
| Round 2 |       |       |       |       |       |       |       |       |       | Average |
| \$120   | \$135 | \$115 | \$100 | \$125 | \$130 | \$145 | \$125 | \$120 | \$140 | \$126   |
| Round 3 |       |       |       |       |       |       |       |       |       | Average |
| \$150   | \$170 | \$145 | \$125 | \$155 | \$165 | \$180 |       |       |       | \$156   |
| Round 4 |       |       |       |       |       |       |       |       |       | Average |
| \$90    | \$100 | \$85  | \$75  | \$95  | \$100 | \$110 |       |       |       | \$94    |

#### Concept wrap-up

Discuss with the group how supply and demand affects the price of crops that they grow in Timor-Leste. Think of some scenarios that could happen, and ask the group how it would affect the price of their crops. Don't choose big external examples. Instead think of small, local factors that farmers have probably encountered already but might not have fully understood the consequences. Examples such as: 'everyone in the village harvests mung beans at one time', 'a big ceremony is planned and each family has to supply a pig or goat', or 'a family invests in a plastic tunnel that allows them to grow and sell vegetables out of season' will work best. Talk about how the event will affect both the buyer and seller. How can understanding this concept help them to plan their own commercial farm?

Next, discuss with the participants that this is also what happens with international prices. Most of the participants are new commercial farmers and will not be exporting goods in the near future, but discuss the ways that international price fluctuations do affect them. Examples are: the price traders, companies, and cooperatives pay farmers

for coffee and spices, and the price of imported white rice that they buy in their local markets. Even if they will not be exporting goods for some time, it is still important that they understand why prices fluctuate in the local, national, and international markets

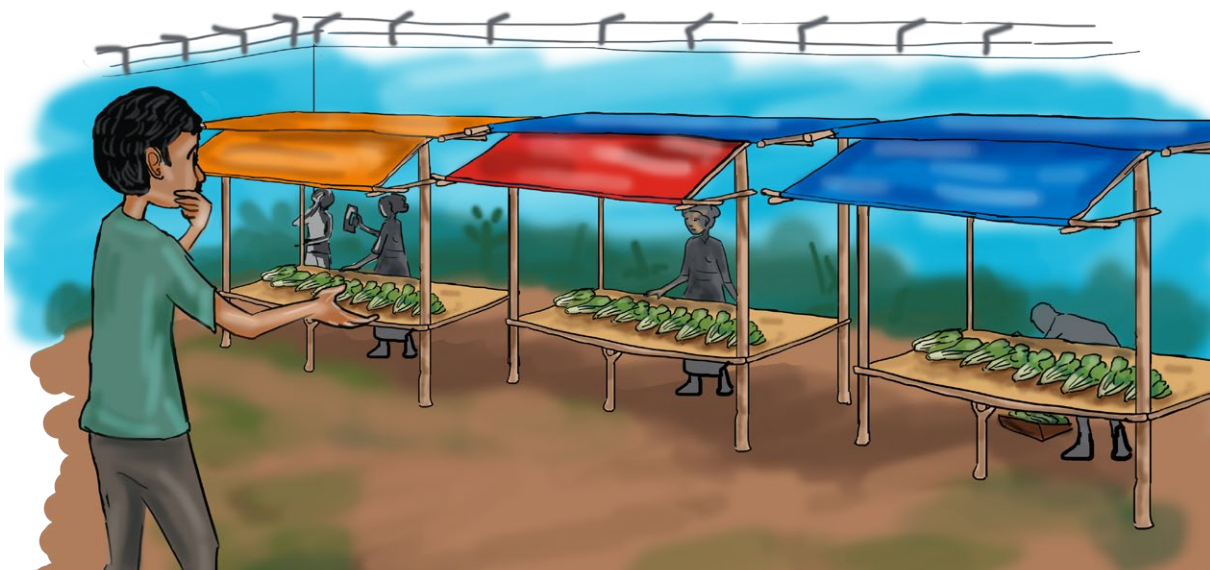
Remind the group that no one sets the price of most goods. The market automatically arrives at a price based on agreements between buyers and sellers. What are some strategies that producers can use to attract more buyers?

## Competition

In the modern market economy, sellers compete with each other so that buyers will purchase their products instead of someone else's. Read the example about selling pineapples and use the following table on a flipchart and discuss it with the group. A farmer goes to their local market to sell pineapples, which other sellers are pricing at \$2.00/pineapple. The market is large and busy, and many people want to buy pineapples. Explain that as the price is lowered, more people will want to buy the goods. The seller can decide to make less profit per item, in order to sell more items. This is competition. Note that this **increases** the seller's total profit, **until the price drops more than the sales increase**. Ask the group where they would set their price if they had 40 pineapples to sell. (If they set the price too high, remind them that they will not all sell and they will have to take them home again.) What if they had 100? What if they were selling vegetables in their local market, and someone came along and offered to buy all of their vegetables, but at a lower price per piece? What would this do to both their profit and their risk?

| Price per item | x | Quantity sold | = | Sales value |
|----------------|---|---------------|---|-------------|
| \$ 2.00        |   | 20            |   | \$ 40.00    |
| \$ 1.90        |   | 25            |   | \$ 47.50    |
| \$ 1.80        |   | 30            |   | \$ 54.00    |
| \$ 1.70        |   | 35            |   | \$ 59.50    |
| \$ 1.60        |   | 40            |   | \$ 64.00    |
| \$ 1.50        |   | 45            |   | \$ 67.50    |
| \$ 1.40        |   | 50            |   | \$ 70.00    |
| \$ 1.30        |   | 55            |   | \$ 71.50    |
| \$ 1.20        |   | 60            |   | \$ 72.00    |
| \$ 1.10        |   | 65            |   | \$ 71.50    |
| \$ 1.00        |   | 70            |   | \$ 70.00    |

Competition can sometimes be controversial, especially when a farmer is competing with other sellers who are his/her neighbours, friends, or extended family. Sometimes in local market places there is little competition because all of the sellers ask the same price for their goods. This is different from a market price because without competition, the price is set higher than the product is worth.



### ★ Discussion:

Split participants into 3 groups and ask them to have a 15 minute discussion about what problems might arise if all of the sellers agree on a single high price. Will the total amount sold in the marketplace that day be higher or lower than if there was a true market price? Will buyers purchase products from the seller who is offering the best deal, or buy from sellers at random? How will this affect each seller's profit? Is competition controversial in the participant's communities? Are people willing to lower their prices below that of other sellers in their local marketplaces? What are some strategies people use when dealing with competition? After 15 minutes, ask each group to present back to the wider group.

Sellers need to think about what price they will ask for their goods, and how to maximise their total profit based on what buyers are willing to pay. A seller might decide to have a fixed price that is always the same, or a flexible price that depends on the situation. If a buyer seems hesitant, the seller might lower the price knowing that it is better to make a little profit on the sale than no profit at all. If a buyer seems willing to buy a larger quantity, the seller might offer a lower price per unit if the buyer buys a certain amount. Making a profit on each sale is important, but so too is managing risk. When a sale is made, there is no longer a risk that the product won't sell or that weevils or wilting will destroy it. All of these are considerations that each seller must think about. Choosing to ask a price just because that is what all of the other sellers are asking is not a good way to succeed in business.

## 3.1 Economy of scale

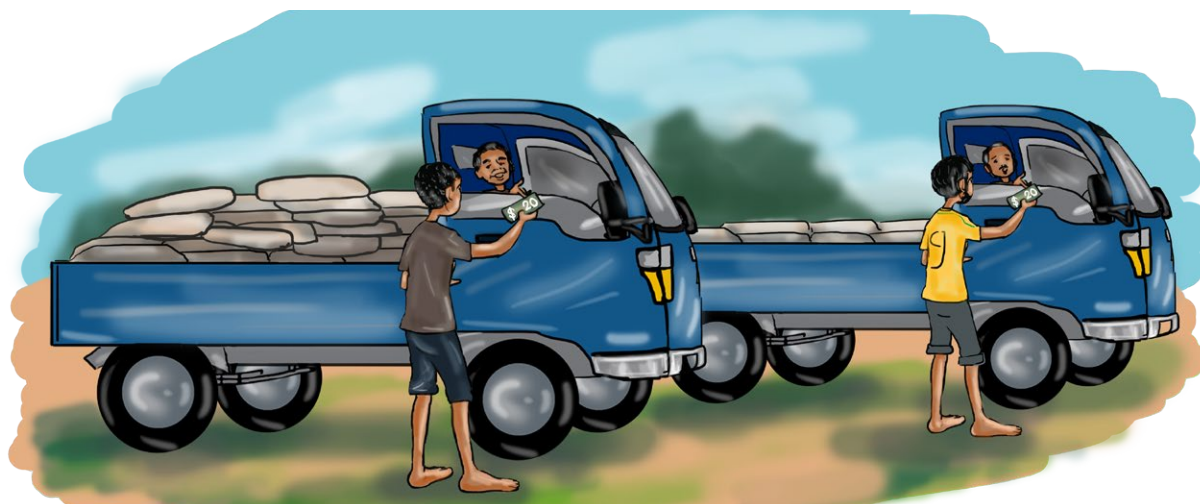
Many of the concepts in these lessons include the effect of economy of scale. The profit of every stakeholder along the value chain is improved when they can take advantage of this effect. **An economy of scale is a proportionate savings in costs gained by an increased level of production.** Put more simply, the more product you produce, the less it costs you to produce each product.

### Example

A farmer rents 1 hectare of land for \$100. If he/she grows a mung bean crop that produces 1000 kg, each kilogram had a land rental cost of \$0.10 ( $\$100 \div 1000 \text{ kg} = \$0.10$ ) that must be subtracted from the sales price to calculate the farmer's profit. If the farmer had produced 1500 kg, only \$0.07 per kilogram ( $\$100 \div 1500 \text{ kg} = \$0.07$ ) would need to be subtracted. If they had produced only 500 kg, \$0.20 per kilogram ( $\$100 \div 500 \text{ kg} = \$0.20$ ) would be subtracted. A farmer who reduces his/her costs puts themselves in a



much better position to make a profit when they sell their crop. If they have trouble finding buyers, lower costs mean that they can lower their price to attract customers and still make the same amount of profit. If the market is good and buyers are plentiful, their profit will increase because less of the sales price is taken away by costs. Because each stakeholder specialises in their part of the value chain, they create their own economy of scale. This makes the whole system more efficient. A transporter fills his/her truck and a trader fills his/her warehouse with many farmer's produce. This reduces the cost of transport and storage in the final price for the consumer.



#### ★ Discussion:

Ask the participants to think of some examples of economy of scale on their own farms. If they find this difficult, suggest that they think about equipment purchases (hand tractors, threshing machines, etc.), hand tools, or transportation costs. What about other stakeholder's businesses? Why would a trader want to buy a bigger volume of a product? (Transport costs, storage costs, processing machinery, permanent labour).

★ Some costs cannot be reduced through economies of scale. A farmer who produces more shallots will need to buy more sacks and hire more labour at harvest time. These costs stay the same per unit of production regardless of how much is produced. Remember, though, that spending more money on sacks means that you have more shallots to sell!

## 3.2 Smaller margin, higher volume

Tell the participants the following joke to start the lesson:

*Anibal wants to buy a mobile phone. He goes to Colmera, looks at the phones that the street-sellers have, and asks about one that he likes.*

*- "How much for this mobile phone?" he asks a small street-seller.*

*- "\$20,000" replies the seller.*

*Anibal is shocked.*

*- "\$20,000?" he asks "That is a crazy price for a phone!"*

*- "That might be true" says the seller "But I only have to sell one to be rich!"*





All businesses must make a profit on their goods or services, and the family farm is no different. Operating a business is not like winning the lottery though; you don't grow rich off of each sale. Producing higher quality goods or goods that are more scarce can increase the amount of profit per sale, but the best strategy is to make a little profit on each sale and then gradually try to increase how much you sell.

★ A good way to look at this is: **"Make small gains, but often."**

Big businesses such as supermarkets often only make a few cents profit on each dollar's worth of goods that they sell. These businesses still make a lot of money, because of the huge numbers of sales they make each day. While this margin might be too small for the commercial family farm, the concept still applies. It is almost always better to sell more goods at a slightly lower price, than less goods at a slightly higher price. This is especially true if accepting a lower price allows the farmer to sell all of their goods at once.

★ Getting a high price is not the only way of increasing profit.

### ACTIVITY 3 – Lower price but higher profit

**Duration** Min 40

**Materials** Flipchart

**Objective** The purpose of this activity is to show that getting a high price is not the only factor in increasing profit. If selling at a lower price means you make more sales, the lower price can result in a higher profit.

#### Note to trainers

This lesson is about price and sales volume, but also reinforces the concept of risk. The trader pays a lower price for the cabbages, partly because he/she takes on a portion of the risk – the risk of the cabbages spoiling in the sun and the risk that they won't sell. Maria and Apoli give up some of the sale price in exchange for reducing their risk. This is also a simple example of contract farming which is discussed in the Business Skills section. Remember to reveal the tables of numbers to the participants one row at a time. Explain the meaning of the numbers in each row thoroughly before moving on to the next one.

### Note to trainers

This activity uses two symbols to show when the trainer should read participants the story directly from the manual:



Read the following story to the participants:

“ Maria and Apoli grow cabbages on their farm. Every Saturday they travel to the market to sell their cabbages. The price of cabbages at the Saturday market goes up and down depending on how many people bring cabbages, but is usually around \$2.00 each. They take 10 cabbages per week to the market, but the number that they sell is never the same. Sometimes they sell all of their cabbages quickly, sometimes it takes all day to sell just a few, and sometimes they don't sell any at all. Sometimes they cannot sell some of their cabbages because they are damaged in transport, or wilt because the sun is too hot.



This means that the amount of money Maria and Apoli make each week can be very different. From what they earn from selling their cabbages, they have to subtract their costs. They spend \$2.00 per week on seed and fertilizer. Transport to and from the market costs \$5, and the price rises to \$6 if they have to bring a sack of cabbages back home with them because they didn't sell that day. This means that they must sell at least 4 cabbages per week just to cover their costs.

One day a small market trader tells Maria that he will buy 10 cabbages from her every week for a price of \$1.25. This seems like a very low price, but Maria has been writing down how many cabbages she has sold for the last ten weeks, so she can calculate how much money they will make if they take the trader's offer. ”

Now explain the first table. Remember to explain **why the cost of transport increases** when they only sell a few cabbages and must bring the rest back home with them.



*Maria and Apoli's cabbage sales for the last 10 weeks look like this:*

| Week                         | 1      | 2       | 3      | 4      | 5      | 6       | 7       | 8       | 9      | 10     | Total   |
|------------------------------|--------|---------|--------|--------|--------|---------|---------|---------|--------|--------|---------|
| <b>Cabbages sold for \$2</b> | 8      | 10      | 4      | 6      | 7      | 2       | 0       | 9       | 8      | 5      |         |
| <b>Input costs</b>           | \$2.00 | \$2.00  | \$2.00 | \$2.00 | \$2.00 | \$2.00  | \$2.00  | \$2.00  | \$2.00 | \$2.00 |         |
| <b>Transport costs</b>       | \$5.00 | \$5.00  | \$6.00 | \$5.00 | \$5.00 | \$6.00  | \$6.00  | \$5.00  | \$5.00 | \$5.00 |         |
| <b>Profit</b>                | \$9.00 | \$13.00 | \$0.00 | \$5.00 | \$7.00 | -\$4.00 | -\$8.00 | \$11.00 | \$9.00 | \$3.00 | \$45.00 |

*Maria then does the calculations based on the trader's price:*

| Week                            | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | Total   |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| <b>Cabbages sold for \$1.25</b> | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 10     |         |
| <b>Input costs</b>              | \$2.00 | \$2.00 | \$2.00 | \$2.00 | \$2.00 | \$2.00 | \$2.00 | \$2.00 | \$2.00 | \$2.00 |         |
| <b>Transport costs</b>          | \$5.00 | \$5.00 | \$5.00 | \$5.00 | \$5.00 | \$5.00 | \$5.00 | \$5.00 | \$5.00 | \$5.00 |         |
| <b>Profit</b>                   | \$5.50 | \$5.50 | \$5.50 | \$5.50 | \$5.50 | \$5.50 | \$5.50 | \$5.50 | \$5.50 | \$5.50 | \$55.00 |



*Maria and Apoli are surprised to see that even though the trader pays a much lower price, they still make more money in the end. They also like that they will know how much money they will make each week, that there won't be weeks where they lose money on their trip to the market, and that they won't have to sit all day at the market every Saturday. Even though there is still the risk of some cabbages being damaged in transport, now they won't have to worry about their cabbages spoiling in the sun, or not selling them, or about paying the extra \$1 to transport unsold cabbages home.*

#### Additional activity if time allows:

**Repeat the exercise** with a product the participants know well. Show what happens to their profit each week if the price buyers are willing to pay goes up or down slightly. How does their profit change compared to the amount of risk they are carrying?

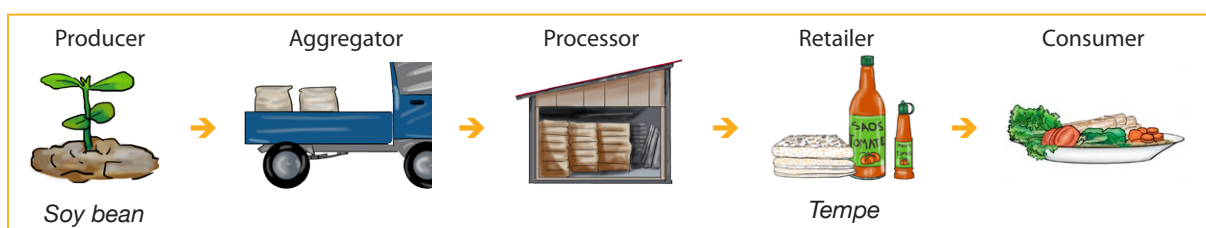
#### Concept wrap-up

★ Being a successful commercial farmer is not about getting rich on every sale, and the highest price is not always the best price, even for the seller. The farmer must weigh-up the quantity they will be able to sell, their risk, and their costs when deciding on what price to ask for their products.

## 4 VALUE CHAIN PRINCIPLES

Commercial farmers produce goods for sale, but many different things can happen to those goods before they are bought by the person who eats or uses them (the consumer). Understanding how these goods get to the consumer, who is involved in the process, how and why the price of the goods changes, and ways a farmer can try to sell more goods are important if the farmer wants to make more money. In Timor-Leste, many farmers try to do the whole process themselves. They grow, transport, and sell their produce directly to the consumer. This might sometimes be a good system for selling small quantities of produce, but for a commercial farmer to be successful, they will have to understand how to attract larger buyers.

The process of goods moving through a market is called a 'value chain.' The value chain is made up of the different stakeholders that buy and sell the goods. Value chains can be short, with only a few stakeholders, or long with many stakeholders. The stakeholders in a value chain can include:



- **Producers** – Who grow or make the produce.
- **Aggregators (small traders)** – Who buy small quantities of local produce and sell them in larger quantities.
- **Wholesalers (big traders)** – Who buy and sell big quantities of produce.
- **Processors** – Who buy the produce and use it to make something else.
- **Retailers** – Who buy large quantities of produce, divide or package them, and then sell them.
- **Consumers** – Who eat or use the final product.

Also involved in the value chain are companies that provide services such as selling inputs, milling, or transporting goods. Each of the stakeholders has their own business, and each of these businesses depend on each other to help move the produce to the consumer. If any stakeholder's business fails, they cannot continue in their role and the goods stop moving to the consumer. When this happens, the other stakeholders must find another way to move the goods or their businesses will fail too.

### 4.1 Pricing along the value chain

#### ACTIVITY 4 – Thinking about price

**Duration** Min 45

**Materials** Flipchart

**Objetivu** The purpose of this activity is to encourage the participants to think about what makes up the price of a product. The final price of a product is made up of the costs and profit of every stakeholder that has helped to move the product from the producer to the consumer.

The trainer draws a picture of a product manufactured overseas (i.e. can of soda, bottle of shampoo, etc.) and asks the group:

"How much does this product cost at the kiosk near your home?"

The group decides what the product costs, and the trainer writes the price next to the picture of the product.

"Who gets this price?" asks the trainer.

The participants might say the kiosk owner, but the trainer points out that the kiosk owner had to buy the product and so didn't keep the whole price. The participants might say the company that made the product, but the trainer points out that the company isn't in their village and they sold the product long ago to the people who brought it there.



The trainer then draws a simple value chain with 4 or 5 stakeholders, starting with the factory and ending with the consumer (i.e. factory → international distributor → domestic wholesaler → retailer → consumer).

Above the consumer, the trainer writes the price chosen by the group, and then writes a lower price above each stakeholder along the value chain. The amounts do not have to be perfectly accurate, just an estimation to show that the value of the good increases along the chain. After explaining this to the group, the trainer then points out that each value chain stakeholder also has costs to cover such as: raw materials, transport, taxes, packaging, storage, marketing, etc. These costs must be paid, and the stakeholder has to make a profit too. The trainer then explains to the group that even though each stakeholder only keeps a small part of the retail price, each company still operates and makes money. If they didn't, they would go out of business!

Next the trainer **repeats the activity** with a local agricultural product. Select a product that has at least three stakeholders in the value chain. Repeat the discussion about how each stakeholder only receives a share of the final price, and what costs they must cover to operate their business.

**Local example:** Snake bean

Producer → Bus driver trader → Dili market trader → Consumer

### ★ Discussion

Split participants into 2 groups for a 15 minute discussion. Ask participants: What are some ways that goods produced in the participants' community move from producers to consumers? Are there ways that this could be improved? Do all of the goods produced stay in the local area, or do some move to other places? How do goods produced in other places move into the community?



### Concept wrap-up:

★ The price of goods cannot stay the same along the value chain because most stakeholders would not make money this way. If stakeholders don't make money, they fail and there is no one to help get the goods from the producer to the consumer. Many factors affect the price of goods along the value chain.

This activity ends here. Continue with the next lesson.

Buyers at each point in the value chain will:

- Only buy what they know they can sell
- Pay higher prices if the seller helps them to reduce their costs
- Pay less for common goods that they can get from many sellers
- Pay more for rare goods, as long as they are something people want to buy
- Be more likely to buy from sellers that have been trustworthy in the past

All buyers along the value chain have costs, just like the producer has. These costs affect the price that the buyer can pay to the producer, and the price that he/she can sell it on to the next trader. Sometimes farmers see the price of their goods in a supermarket or even the local market, and think that the trader has cheated them. This may be true sometimes, but it is important to remember that the supermarket or market trader has costs associated with selling the product. For most products, the consumer will not come to the farm looking to buy them. The traders along the value chain are therefore providing a service to the farmer by making it possible for consumers to access the goods. Remember that if the supermarket does not cover their costs and also make some money, there will be no supermarket to sell the goods!

Farmers are very busy with the production of their crops, and often don't have access to enough consumers to buy their whole harvest piece-by-piece. One way to look at this, is that the trader is providing a service to the farmer for a price. If a farmer were trying to sell pumpkins for \$2.00 each, and I said that for a price of \$0.25 per pumpkin, I would go out and find people to buy them, would it be worth it? This is what the trader does for the farmer.

## 4.2 How other stakeholders' business models affect your own



## ACTIVITY 5 – How a trader's business model affects the farmer<sup>1</sup>

**Duration** Min 30

**Materials** Flipchart

**Objective** Participants have a better understanding about how traders set their prices and what farmers can do to improve their price negotiating position. If the farmers can help the trader to reduce costs, the trader can offer the farmers a higher price.

### Note to trainers

This lesson also includes the concept of Economy of Scale which is discussed on page 21. This activity uses two symbols to show when the trainer should read participants the story directly from the manual:



Tell the participants the following story, and write the table on a flipchart when you explain the numbers. Help the participants to understand that Mr. Jose pays a higher price to the farmers, and also makes more money himself. Both Mr. Jose and the farmers benefit from the increase in production. If production is lower, both of them make less money.

### Story

#### Marobo shallots

“ In the village of Marobo, there was a group of men and women farmers who produced shallots. They sold their shallots to Mr. Jose, a vegetable trader from Dili, for \$0.90/kg. Mr. Jose took them to the supermarket in Dili, where he sold them for \$2/kg.

One day, one of the farmers, Rosa, went to the supermarket in Dili. She found that farmers there were selling their shallots to the supermarket for \$1.50/kg and sometimes \$1.75/kg. She went back to the village and told the other farmers about this.



When Mr. Jose next came to the village, Rosa asked him why he paid them so little for their shallots. They wanted a better price. The trader smiled. “You are right,” he said. “The problem is that every time I come to Marobo you sell me only 25 or 30 kg. At that amount I cannot pay you more. If you want a better price you need to sell me a lot more shallots.”

The farmers thought about this. Rosa then asked, “What would you give us if we produce 50 kg every week?”

Mr. Jose said “I would give you \$1.25/kg”. ”

1 Adapted from: Seven Steps of Marketing Course on Agroenterprise and Market Development for Field Agents, CRS.



“Rosa was surprised. “I want to earn more. I want \$1.75 for my shallots. The quality is very good!”

Mr Jose smiled again. “It’s true that the quality is very good, Rosa. I can pay you \$1.50/kg for your shallots, but only if you supply me with 100 kg on every visit. If you can do that I will come every month.”



“Let me tell you a little about my business,” Mr. Jose continued. “I come to Maliana to buy vegetables, but I have to make an extra trip to Marobo to get shallots. If we count the cost of fuel, and my truck driver’s salary, the extra trip here costs me \$20, the same if I buy 30 kg from you or 100 kg.”

“If I only buy 30 kg of shallots, I still have to pay for the transport and driver. So I can offer you only \$0.90/kg. But if can buy 100 kg of shallots from you, I can pay you more for them and still earn money. I have written some figures down for you to see the prices. Have a look at them, and call me if you decide to grow more shallots.” ”

Show the participants the following table, revealing each row in the **30 kg column only** and explaining it before moving on to the next. Make sure the participants understand the calculations in the 30 kg column, and then divide them into two groups. Tell the first group that they are to do the calculations based on 50kg of production, and the second group for 100 kg of production. Ask the groups to complete their columns in the table, and then the results are shared with the rest of the participants. When all of the calculations are correct, show the group the completed table below with the 30 kg, 50 kg, and 100 kg columns filled. The important point is to show the group how Mr. Jose’s profit changes depending on how many kg he buys on each trip. Why does Mr. Jose’s profit INCREASE, even though he pays a HIGHER price to the farmers?

| Kg of shallots Mr. José buys | A             | 30 kg    | 50 kg     | 100 kg    |
|------------------------------|---------------|----------|-----------|-----------|
| Price Mr. Jose pays per kg   | B             | \$ 0.90  | \$ 1.25   | \$ 1.50   |
| Cost of shallots             | C (=A*B)      | \$ 27.00 | \$ 62.50  | \$ 150.00 |
| Cost of driver and fuel      | D             | \$ 20.00 | \$ 20.00  | \$ 20.00  |
| Mr. Jose’s transaction costs | E (=C+D)      | \$ 47.00 | \$ 82.50  | \$ 170.00 |
| Mr. Jose’s income            | F (=A*\$2.00) | \$ 60.00 | \$ 100.00 | \$ 200.00 |
| Mr. Jose’s profit            | H (=F-E)      | \$ 13.00 | \$ 17.50  | \$ 30.00  |

“Rosa studied the figures and spoke with her neighbors. The farmers knew this was a big jump in their production, but they worked out a plan to increase the size of the group and to plant a larger area. Now they produce 100 kg every month for Mr. Jose.



Mr. Jose is very pleased with his shallots, and the farmers work hard together. Both the farmers and Mr. Jose are pleased they are earning more from their shallots.

Mr. Jose explained that prices of shallots in the market change during the year, so the farmers must monitor the market prices. They will have to accept lower prices at some times of the year, and can perhaps ask for a little more when prices are high. ”

### ★ Discussion:

Choose a product that farmers sell and work out the costs from the market back to the farm. These costs can be an estimation and don't have to be exact. Work out the costs if you have 10, 100 or 200 units of that product. Also work out the costs if the market price changes.

### Concept wrap-up

Remind the participants again that even though Mr. Jose pays a higher price, he also makes more money for himself. Point out to the group that if a trader is making more money, he/she is more likely to come to the area to buy produce. Mr. Jose makes more money because as his sales increase, his costs stay the same. This is an important point that can also apply to how the participants manage their farm businesses.

It is common in Timor-Leste to hear farmers say: "I could increase my production, but no one comes to buy my crops." This is often true, but it is important to remember that **money does not come looking for you. You must go out and look for money!** Farmgate sales, selling to a trader or consumer directly from the farm, is easy for farmers but is not a very good way of going out to look for money. Some government programs, especially in the past, have made purchases this way, but in the modern market economy the system does not usually work this way. Looking at this from the trader's perspective is a useful way to understand why buyers don't come looking for farmers to sell them goods.

## ACTIVITY 6 – Don't wait for farmgate sales<sup>2</sup>

**Duration** Min 20

**Materials** Empty paper bags with air in them / clock or watch

**Objective** This exercise helps farmers understand (1) why the trader is not willing to come looking for their crops; and (2) the value of bringing their produce to a central collection point



### Suggested procedure

1. Choose 6 volunteers from the group to stand.
2. Ask one participant to act as a “trader”. Ask this person to stand at one end of the room. Draw a starting line on the ground in front of the trader.
3. Give the other team members a bag each.
4. Ask the group to stand about 10 paces apart, facing their trader. Each person should put the bag on the ground next to him or her.
5. Tell the trader that they have to run, pick up the first bag, and bring it back to the starting line. They then run and pick up the next bag, bring it back, and so on. They may carry only one bag at a time.
6. Start the race, and keep time with the watch.
7. At the end of the race, all the bags will be behind the starting line for the trader.
8. Now **repeat the exercise**, but this time, tell the members of the team to stand closer together. This time the trader can pick up all of the bags at once. Now repeat the race and see which time was faster.
9. Bring the participants back together to discuss what happened. (It takes a lot more time and effort to collect the produce when it is spread out.)

### Concept wrap-up

Why did it take so long to collect the bags on the second round? Who do you think the traders will go to first, farmers who are organized and have all their produce in one place, or farmers who keep their produce at different places? Which farmers will get the best price for the “grain” in the bags? What was the effect on the trader’s business when the crops were spread out instead of grouped together? How did the spread out bags affect the trader’s time? Effort? Costs? Profit?

Many farmers do not consider that in addition to the cost of transport there is also a cost for the time that a trader puts into collecting produce. For traders time and distance to collect produce are their major costs. A trader will make a higher profit if he or she can collect produce quickly sell it and then go on to another deal. If the trader is delayed when collecting produce he or she will need to pass that additional cost on to the farmers or his or her customers. It is simpler to charge the farmers, meaning farmers get paid a lower price for their goods if they are not organised.

# SUMMARY

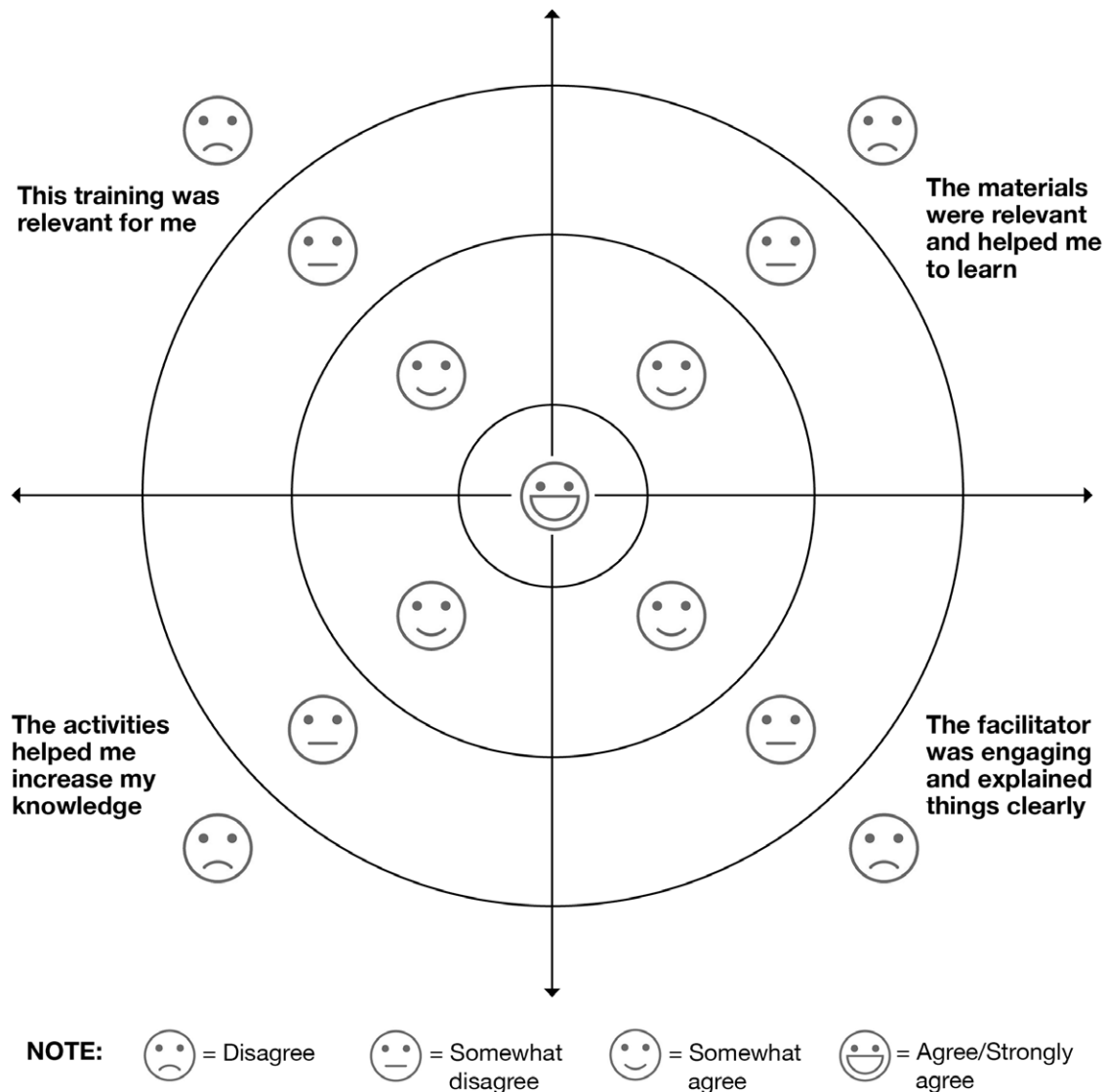
Distribute training booklets to the participants and use the information on each page to summarise the training. Ask participants to explain key concepts according to their understanding and reinforce the key points.



Allow time for participants to reflect on what they have learned and the things they are going to apply after the training. Thank the participants for their attention and ask the participants if they have any final questions before ending the training.

# TRAINING EVALUATION

To evaluate the training with participants, draw the following figure on a flipchart or whiteboard. Participants will mark or place a sticker on the diagram based on their feeling and opinions of the training, according to the four aspects described in each corner (total of 4 marks/stickers). Set up a private place where participants can mark the flipchart one at a time, away from other participants.



Explain to participants how to mark the diagram, and emphasise that no one will see or judge how they mark the diagram. Participants will evaluate the training according to 4 statements: 1) This training was relevant for me; 2) The materials were relevant and helped me to learn; 3) The activities helped me increase my knowledge; and 4) The facilitator was engaging and explained things clearly.

Participants should place a mark in each corner of the circle based on their opinion of the training. Marking the small inner circle indicates the participant **agrees** or **strongly agrees** with the statement, the middle circle indicates the participant **somewhat agrees** with the statement, the big circle indicates the participant **somewhat disagrees** with the statement, and the outer area of the circle indicates the participant **disagrees** with the statement. Each participant should place 4 marks in total.

Ask participants to head to the evaluation area one by one to mark the diagram. When all participants have completed the evaluation, thank them for their feedback and honesty.

# LESSON PLAN

## Module 1 (2 days)

### Topics covered

- Transitioning from subsistence to commercial farming
- The modern market economy
- Value chain principles

### Learning outcomes

By the end of the module, the participants should understand:

- 2.0** The definition and types of commercial farming and importance of viewing the farm as a business
- 2.1** The personal attributes necessary to become a commercial farmer.
- 2.2** The concept of risk, its necessity in business, how it is shared, and balancing risk/reward
- 3.0** How a market economy functions, what makes up price (costs, competition, and supply/demand)
- 3.1** How economy of scale reduces the cost per unit of a product and how this affects profit
- 3.2** How price, sales volume, and profit are related, and strategies to take advantage of this
- 4.0** A value chain moves goods from producer to consumer, stakeholders in the value chain
- 4.1** How and why the price changes along the value chain, costs of different stakeholders, and that sharing value with other stakeholders makes the system work
- 4.2** How other stakeholders make money and that this is important for the farmer, how other stakeholders' costs affect price, and why traders don't want to buy at farmgate

### Trainers should read and plan the delivery of sections

- **2.0, 2.1, 2.2, 3.0, 3.1, 3.2, 4.0, 4.1, & 4.2**

### Materials

- ☐ Flipchart
- ☐ Some fake money (blank paper is fine)
- ☐ A box with four containers inside (water bottles, paper bags, etc)
- ☐ A large box, sack, or other container
- ☐ Copies of the role play script
- ☐ 8 small prizes such as lollies
- ☐ A small object (beads, bottle caps, etc.) for each participant
- ☐ A stack of blank cards
- ☐ Paper bags with air in them
- ☐ Clock or watch

# Transitioning from subsistence to commercial farming

## 1 Introduction

**Duration** Min 20

**Lesson / activity** –

**Materials** Flipchart

**Instruction** Trainers should welcome the participants and make sure that everyone can see and hear the training. Fill out the attendance sheet if necessary and introduce each trainer. Ask each of the participants should introduce themselves to the group, and explain why they are interested in commercial farming.

Give a brief overview of the training procedure and list the topics that will be covered through the whole training. Inform the participants that this training is based on discussion and that the trainers will be presenting information in that context. Encourage the participants to ask question or share their experience throughout the lessons. Activities throughout the lessons will reinforce the information, give practical demonstrations, and allow everyone the chance to participate. Discuss the context of the training (based on the introduction at the front of this manual) and explain that it is for people interested in transitioning to commercial farming..

## 2 Transitioning from subsistence to commercial farming

**Duration** Min 30

**Lesson / activity** 2.0

**Materials** Flipchart

**Instruction** Trainers define and describe the different types of commercial farming. Introduce the concept of viewing a farm as a business, and a farmer as a business person. Participants share their experience based on the discussion questions.

## 3 Who makes a good commercial farmer?

**Duration** Min 30

**Lesson / activity** 2.1

**Materials** Flipchart

**Instruction** Trainers introduce the attributes that make a good commercial farmer and list them on the whiteboard. Participants must WANT to be business people if they are to succeed as commercial farmers. Not everyone will have all of the attributes, but a good business person should have many of these strengths. Participants share their experience based on the discussion questions.



## 4 Risk

**Duration** Min 20

**Lesson / activity** 2.2

**Materials** Flipchart/whiteboard

**Instruction** Define and introduce the concept of risk. A good business person is willing to take some risks in order to get a reward. Work through the simple example of the lettuce seller on the whiteboard.

## 5 Risk role play

**Duration** Min 40

**Lesson / activity** Activity 1

**Materials** Flipchart / some fake money (blank paper is fine) / a box with four containers inside (water bottles, paper bags, etc) / a large box, sack, or other container / copies of the role play script

**Instruction** Organise the participants to take part in the roleplay. Choose participants who are comfortable reading the script and acting in front of the group. When the role play is finished, discuss the concepts according to the concept wrap-up. Risk is an important concept that appears throughout many of the lessons so it is important to cover all of the discussion questions.

# The modern economic market

## 6 The modern economic market

**Duration** Min 90

**Lesson / activity** 3.0

**Materials** Flipchart/whiteboard

**Instruction** Introduce the concepts of a market economy and emphasise that this is how nearly all markets work. Explain what makes up the market price, paying special attention to supply & demand. Write and work out the examples together with the group on the whiteboard.

## 7 Supply and demand

**Duration** Min 60

**Lesson / activity** Activity 2

**Materials** Flipchart / 8 small prizes such as lollies / A small object (beads, bottle caps, etc.) for each participant / a stack of blank cards

**Instruction** This activity must be explained carefully but should be fun for the group. It demonstrates BOTH how market prices are arrived at, and how changes in supply and demand affect the price. After each round, and at the end of the activity, discuss what happened to the market price and how this relates to the concepts from the lesson. Work through some scenarios with the participants from the concept wrap-up. Be sure to discuss both local and international prices.

## 8 Economy of scale

**Duration** Min 30

**Lesson / activity** 3.1

**Materials** Flipchart

**Instruction** Introduce the concept of economy of scale and work through the example on the whiteboard together with the participants. Ask the participants to list some expenses that can or cannot be reduced through economy of scale. Participants share their experience based on the discussion questions.

## 9 Smaller margin, higher volume

**Duration** Min 15

**Lesson / activity** 3.2

**Materials** Flipchart

**Instruction** Explain how price, sales volume, and profit are related. Make sure the participants understand that selling more product at a lower price can produce a higher profit than selling less product at a higher price.

## 10 Lower price but higher profit

**Duration** Min 40

**Lesson / activity** Activity 3

**Materials** Flipchart

**Instruction** This activity is a story with a long example. Trainers can prepare blank tables on flipchart paper ahead of time, but it is best to enter the numbers and do the calculations in front of the group. Use the concept wrap to reinforce the concepts in a discussion with the participants.

# Value chain principles

## 11 Value chain principles

**Duration** Min 30

**Lesson / activity** 4.0

**Materials** Flipchart

**Instruction** Introduce the concept of a value chain, but do not focus on the chain itself. Instead, focus on the product as it moves through the chain. The value chain is a system that moves product from producers to consumers. Emphasise that all stakeholders along the chain must make money or the system will not work and there will be **no one to buy from the producer**. Explain the different stakeholders in the value chain and how they facilitate the movement of the product. Point out the different service providers along the value chain and how they help the other stakeholders (and are a cost).

## 12 Thinking about price

**Duration** Min 45

**Lesson / activity** Activity 4

**Materials** Flipchart

**Instruction** This lesson starts with an activity. Go through several examples of different products and show how the value increases as they move through the value chain. If participants suggest prices that are much too high or too low, show them how this would affect the price for the other stakeholders in the value chain (especially the price paid to the producer, and the price paid by the consumer). Use the discussion questions at the end of the activity to reinforce the concepts and to allow participants to share their experience.

## 13 Pricing along the value chain

**Duration** Min 30

**Lesson / activity** 4.1

**Materials** Flipchart

**Instruction** Explain how prices are set along the value chain, and that each stakeholder has costs and must make a profit for the system to work. Emphasise that it is very difficult for one stakeholder to do everything in a value chain. A producer who does everything in order to receive all of the value (a full retail price) of a product won't have much time to focus on his/her production. Carefully explain the example at the end as another way of looking at what the trader does for the farmer.

## 14 How other stakeholders' business model affects your own

**Duration** Min 15

**Lesson / activity** 4.2

**Materials** Flipchart

**Instruction** Briefly introduce this topic and explain that understanding other stakeholders' business models is important. Knowing how a buyer makes their money can help a farmer to do things to attract more buyers. Remind the participants that it is good if the trader makes money because this means that he/she will want to buy more product from the farmer.

## 15 How a trader's business model affects the farmer

**Duration** Min 30

**Lesson / activity** Activity 5

**Materials** Flipchart

**Instruction** This activity is a story with a long example. A trainer can read the whole story to the participants, or different trainers can read the parts of the different characters. Trainers can prepare blank tables on flipchart paper ahead of time, but it is best to enter the numbers and do the calculations in front of the group. Use the concept wrap to reinforce the concepts in a discussion with the participants.

## 16 Don't wait for farmgate sales

**Duration** Min 20

**Lesson / activity** Activity 6

**Materials** Flipchart / paper bags with air in them / clock or watch

**Instruction** This activity addresses farmer's common complaint that no one comes to buy their products. The activity should be fun for the participants, but be sure to thoroughly explain the concepts that it demonstrates. Use the concept wrap-up to discuss farmer's experience with attracting traders and some strategies they can use to increase their sales.

## 17 Wrap-up

**Duration** Min 15

**Lesson / activity** –

**Materials** –

**Instruction** Very briefly list the topics that were covered today and any important concepts that you think the participants should understand. Distribute handouts to the participants and use the content on each page to summarise the training - ask participants to help explain the key concepts and reinforce any important points. Thank the participants for their attention and ask them to complete a short evaluation (if required).









