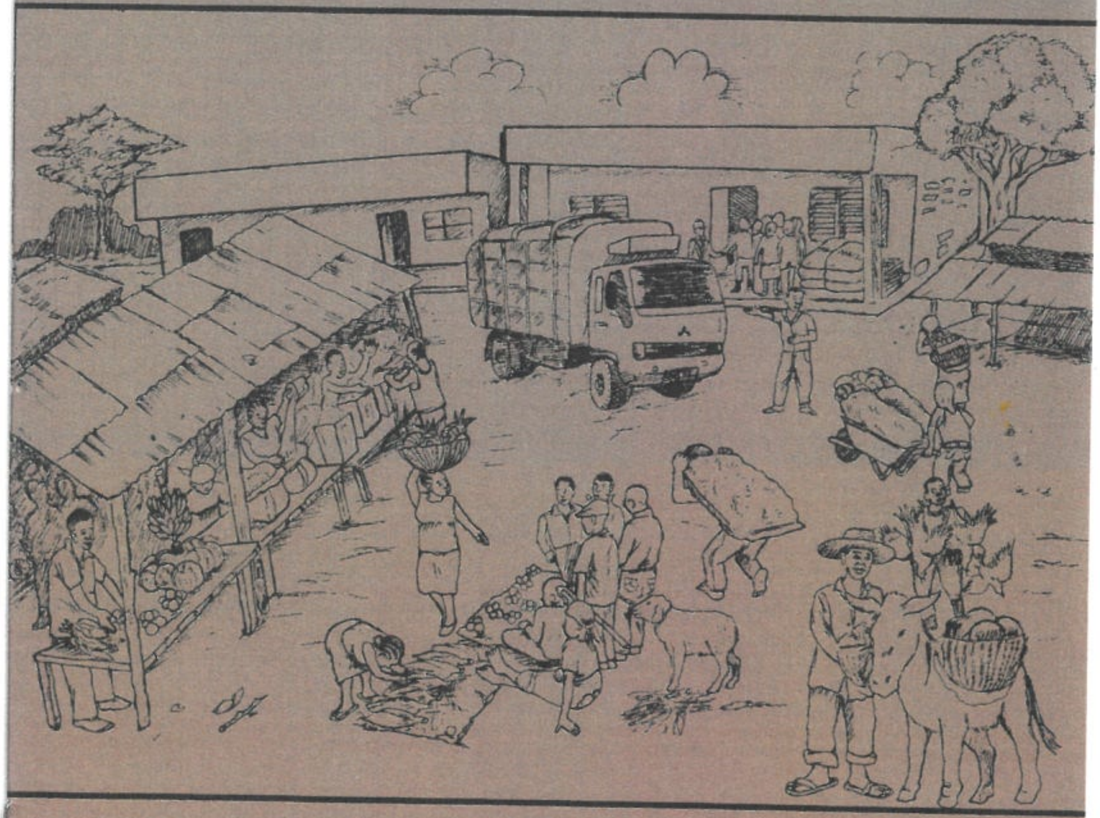
CTA Practical Guide Series, No. 16

Linking Smallholder Farmers to Markets



CTA

Linking Smallholder Farmers to Markets

This guide is about linking smallholder farmers to markets, which involves facilitating their access to **actors** in commodity **value chains** and assisting them to obtain the best possible prices for produce and inputs. A **glossary** of useful terms is included at the end.

Who is a smallholder farmer?

The definition may vary, but generally a smallholder farmer can be someone who:

- farms more for subsistence than for commercial reasons
- has limited resources e.g. owns a relatively small-sized farm, and invests small amounts of capital for production
- uses household labour
- often has only basic or no formal education.

What is a market?

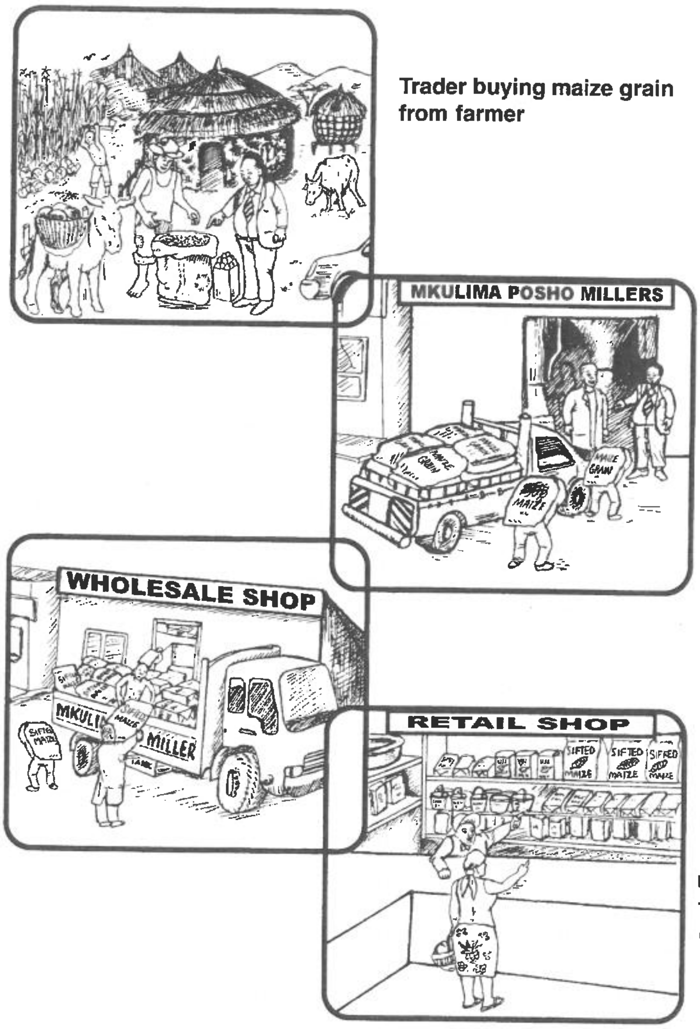
A market is:

- characterised by many sellers and buyers interacting in trade
- a place where **traders** buy and sell products
- a place where farmers go to offer their produce for sale, and where buyers go to purchase this produce
- a place where sellers can bargain to get the highest possible price for their produce, and where buyers bargain to pay the lowest possible price.

A market can also mean:

- a physical place e.g. marketplace or a commodity exchange trading floor
- a virtual market, such as on Internet or radio
- a domestic, regional, or international market
- the total supply (quantity of a product offered for sale) and demand (quantity of a product that buyers bid to buy) for a particular product, such as maize or livestock.

MAIZE VALUE CHAIN



Trader buying maize grain from farmer

Trader selling maize grain to miller

Miller selling maize flour to wholesaler

Retailer selling maize flour to customer

Why link smallholder farmers to markets?

Agricultural input and output markets do not often work well for smallholder farmers because of a number of reasons, including the following:

- Smallholder farmers produce and offer for sale small quantities of produce that vary in terms of quality.
- They have little or no bargaining power for a better price in the market place, and thus receive low prices for their produce, resulting in low farm incomes.
- They often cannot afford to invest in improved inputs necessary for increasing their production.
- Poor access to reliable and timely marketing information
- Poor access to value-adding services
- Reliance on middlemen to access markets.

Smallholder farmers also face common problems normally associated with agricultural production, such as:

- Increasing competition from other farmers in the community, nationwide, and in regional and international markets
- Fluctuating prices
- Unfavourable government policies
- Crop and livestock pests and diseases
- Impact of climate change such as droughts and floods.

Smallholder farmers therefore need help to improve their competitive position and cope with the risks in the market place.

How to link smallholder farmers to markets

Smallholder farmers can obtain information from extension and other advisory services to help them overcome the difficulty of linking with markets. The following steps serve as a guide for farmers and all the individuals and services that work with them.

Step 1: Understand what products the market wants

Farming should be practised as a business (with the aim of making a profit). Therefore, a farmer must find out what products the market wants first before producing. This can be done by conducting a market research, which involves collecting information about supply and demand, to find out:

- *What commodities, crops or livestock, are in demand*, to decide on which one(s) to produce, given the environmental conditions (rainfall, temperature, soil type)
- *What quantities or volumes are in demand*, to decide on how much (scale) to produce
- *What quality is required*, to decide on the technologies to use for production, post-harvest handling and value addition

- *When commodities are in demand*, to decide on the timings for production and marketing for optimum prices
- *Where the commodities are in demand*, to decide on how to transport and market the commodities
- *What total volumes will other farmers produce and offer for sale in the same market*, to understand the level of supply and hence competition involved
- *What prices buyers will be willing to pay*, to decide on whether it will be profitable to produce and market the commodities.

Sources of market research information include:

- Farm records of previous seasons
- Information from other farmers and observations about what commodities they produce
- Government and/or private agricultural research, extension, education and training institutions
- Agricultural radio or television programmes
- Internet
- Published information e.g. newsletters, newspapers, magazines and books.
- Talking to actors in value chains - middlemen, traders, processors, exporters, wholesalers, retailers and consumers.

Step 2: Prepare a farm budget for the commodities you want to produce

To prepare a farm budget:

- Decide what commodities to produce (see Step 1)
- Decide on how many hectares of land to cultivate or number of livestock to keep
- Determine the amount and quality of inputs needed
- Estimate yields i.e. how many units of produce you expect to harvest per hectare or per livestock unit
- Prepare a farm budget, i.e.:
    - Calculate the total **variable costs/expenses** (amounts of variable inputs multiplied by the prices of the inputs)
    - Calculate the expected total **revenue** (yields/harvests multiplied by their market price)
    - Calculate your **gross profit/margin** (total revenue minus total variable costs). Avoid proceeding with a venture if doing so will result in a **loss** i.e. if the total variable costs exceed the total revenue, yielding a negative gross margin.

Variable costs are costs that vary according to the level or scale of production e.g. fertilizer costs vary with the number of hectares you cultivate; livestock feed costs vary with the number of animals you keep.

Fixed costs remain the same irrespective of your scale of production, e.g. the cost of permanent hired labour, depreciation cost of machinery, equipment and buildings.

Step 3: Procure the inputs you require

To procure the necessary inputs:

- Collect information about input suppliers and the prices they charge
- Check if you have enough money to buy the inputs, or if you will need to borrow money, i.e. get credit or a loan to buy the inputs
- If you need to borrow money, decide on the best source, i.e. which institution will give you the best credit terms. Your prepared farm budget will assist the credit manager to evaluate your case and to decide how much money s/he should lend you and the period of the loan.
- Buy the inputs in time to enable you to start producing when required. Starting late may result in reduced yields or poor-quality products.
- Buy the right varieties of seed, planting materials, or breeds of livestock, suitable for your environment and to achieve the best yields. If necessary, seek help from agricultural research or extension services.

Step 4: Start production/farming

> **Tip!** Plant early in the season to harvest before other farmers! This will enable you to sell at high early-season market prices before the market gets flooded by supplies from other farmers, causing prices to drop.

Start production and adopt good farming practices. This will help you to:

- keep your crops or livestock in good health and good productive condition.
- produce the right quantity and quality of products that the market wants.
- offer the products for sale at the right time when the market wants them.
- attract buyers more easily, and sell your products at good prices.
- conserve your farm environment e.g. to avoid soil erosion and maintain soil fertility, enabling you to farm your land sustainably.
- maximize your net farm profit.

To find out more about good farming practices, seek help from your local agricultural research or extension services.

Keep up-to-date farm records of input expenses and produce harvests and record regularly:

- how much inputs you purchase and their costs
- how much produce you harvest
- how much harvested produce you use in the household, feed to animals, give to friends or relatives, sell, and for how much money.

Your farm records will allow you to calculate whether you are making a profit or a loss (**net farm profit/loss**) at the end of each season or year.

Step 5: Harvest and handle produce with care

Harvest and handle your produce with care by:

- using proper methods, clean tools, equipment and materials for harvesting and handling
- adding value to the produce e.g. by washing, sorting, grading, processing etc.
- packaging produce attractively in appropriate volumes and weights that the market wants
- storing produce properly.

Careful harvesting and handling will help:

- avoid or reduce post-harvest losses
- keep produce in good quality condition
- increase the shelf life of produce
- improve presentation of produce to buyers
- boost demand for the produce
- improve selling price, profitability and income.

Farmer getting help from daughter to keep farm records

Step 6: Sell/market your produce

You can sell your produce directly to buyers at farm-gate or at a market according to various terms of sale.

Terms of sale

a) You can sell your produce to a buyer for **cash**, where you agree on the price and then the buyer pays you and takes away the commodity. In this transaction, there is no risk of default by the buyer.
b) You can sell your produce to a buyer on **credit**, i.e. for payment at a later date.
c) You can also sell your produce on **contract**, i.e. for delivery at a later date, such as in contract farming.
d) You can also sell your produce using a **futures contract**. This is a standardized and transferable contract, traded on a futures exchange or market, to buy or sell a certain commodity at a certain date in future, at a specified price. It is used to fix the price of a product in advance and thereby hedge against the risk of an adverse or reduced future market price.

If you sell on credit or simple contract, there is a risk that the buyer might default on payment or in taking delivery when your produce is ready. It is therefore necessary for you to enter into a formal, preferably written, **sales agreement** or **contract** to protect yourself against any risk. This contract can also be used as evidence in case of dispute or litigation.

Sales agreement or contract

The sales agreement should include the following important transaction terms:

- Price to be paid
- Quantity, quality, packaging (material and weight or volume), delivery date and mode (truck, rail), time and place

- Payment terms (e.g. cash on delivery, banker's cheque or letter of credit, and when payment is to be made)
- Penalty or sanctions in case of default by either party
- An arbitration clause to avoid potential delayed court action
- Signatures of the seller, buyer and a witness
- Place and date of the agreement.

If necessary, and when a relatively large sum of money is involved, you should hire a lawyer to draw up the contract and to administer its signing. This may cost you a fee.

As a farmer, you should always fulfill your obligation by delivering the product as per agreed contract terms. This will build your social capital, goodwill and trust in the marketplace and ensure repeat transactions with buyers.

Collective marketing

It is difficult for an individual smallholder farmer to link to a profitable market, especially if the market is far away or requires large volumes of produce when you can only supply relatively small quantities. Grouping together with other farmers in an association or cooperative will help you market collectively and enable you to:

- bulk individual small quantities into reasonable volumes for marketing
- share and lower the costs of value addition, storage, transportation, and market information.
- enhance your opportunities to access large-volume buyers such as processors or supermarkets
- enhance your bargaining power for higher prices when selling products, or lower prices (discounts) when purchasing inputs, and thus earn higher profits and incomes.

Farmers' associations are usually formed in accordance with a legal framework which provides guidelines for the efficient management and operation of the activities of these groups. You should find out from the relevant authorities how to organize yourselves in accordance with your country's legal framework.

Marketing and market information

In order to market your products effectively, you need reliable and timely information to assist you in making the right marketing decisions. The following can help you.

Marketing information is a broad concept that comprises information about the supply of, and demand for, commodities. It includes information about the availability and costs of farm inputs such as seeds, fertilizers, breeding stock, and value-adding services such as storage, processing and suitable packaging.

Accessing and using reliable and timely marketing information will benefit you in several ways. It will enable you to:

- know what products the market wants so that you can plan well to meet the market requirements
- bypass middlemen and reach the market directly

- improve your bargaining power with buyers in the market place
- obtain better input and product prices
- be efficient in your production and competitive in your marketing activities
- reduce costs and improve revenue and profit.

Market information usually refers to data on prices and quantities exchanged, duly processed and made available to market actors (e.g. agents, traders).

A **marketing information system** is a system that collects, processes, manages and disseminates marketing information using a variety of channels, which may include:

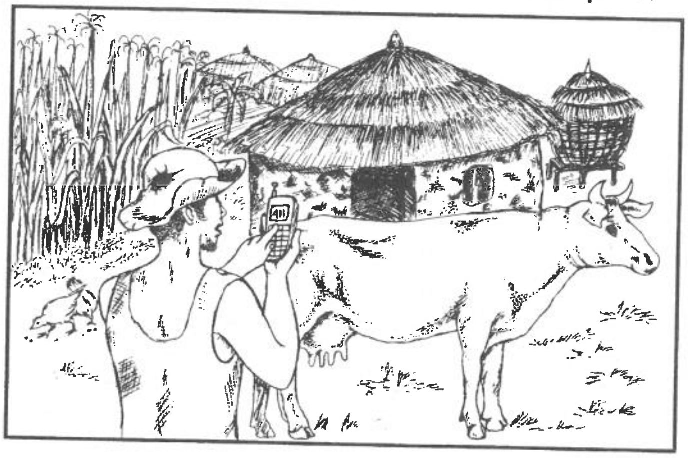
- An extension service, which may consist of public (government) and private-sector service providers.
- Institutions such as rural resource centers or commodity exchanges.
- The use of ICTs such as mobile phones, Internet and radio.

Step 7: Calculate farm profit or loss

Use your farm records to calculate your gross and net farm profit or loss at the end of the season or year (see Step 2).

Compare the results of your calculation at the end of the season or year with those in your farm budget plan for each commodity or enterprise.

Farmer using mobile phone to check market prices

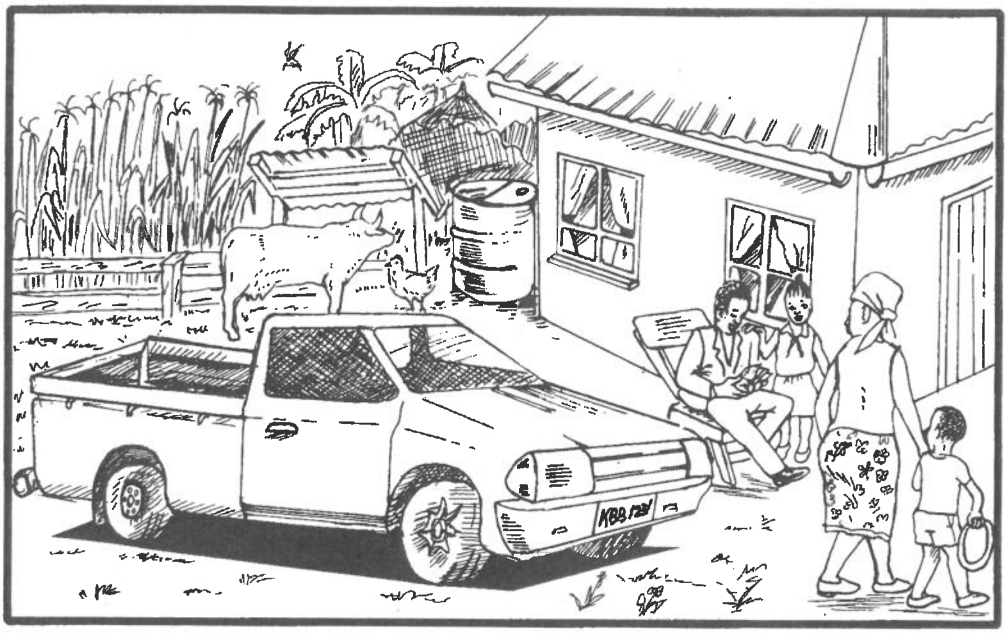


This will enable you to:

- find out whether you achieved your production and profit targets, and if not why
- correct or avoid mistakes from previous seasons and thereby improve your farm plan and profits for the next season or year
- determine how much profit to reinvest in the next season or year, and how much to save or provide for household use.

Step 8: Repeat Steps 1 to 7 for the next production season

For each production season, repeat the above steps using the experience and lessons of previous years to improve on the performance of the next season.



What can go wrong, and what is the solution?

Problem	Solutions
Unreliable marketing information, due to late or inaccurate data	• Cross-check data periodically for accuracy • Ensure receipt of timely information
Lack of, or costly, marketing or value-adding services	• Develop own capacity to add value e.g. through training or hiring of skilled staff • Seek credit to access required services
Weak farmers' association/ cooperative due to poor management	• Improve management through staff capacity development, e.g. training courses
Buyer defaults on payment	• Ensure you have a formal, written and signed sales agreement or contract • Seek arbitration, and if this fails or is unavailable, seek court litigation

Existence of monopsony (single seller) in input markets and monopoly (single buyer) in output markets	• Use collective marketing to improve your bargaining power
Unpredictable or adverse conditions e.g. diseases or pests, floods or draughts, theft, family catastrophe, accidents, high input prices, low output prices, unfavourable government policies	• Use conservative estimates of input levels, yields, and market prices when planning your production • Consider a worst-case scenario and possible coping strategies • Buy insurance cover for insurable activities • Seek expert advice • Adopt market-price risk-management strategies such as warehouse receipts, contract farming and futures contracts

Glossary:

Actors: see **value chain**.

Adding value to a product when it passes through the value chain means making the product more saleable to a buyer at a higher price e.g. through activities such as washing, sorting, drying, grading, packaging, freezing, processing, storing, warehouse receipting, transporting.

Agents are those who trade on behalf of and with money from other buyers.

Assemblers are those who bulk in order to supply a larger volume buyer on better terms.

Brokers or **middlemen** are those who link buyers and sellers for a commission.

Millers process grain (e.g. maize) into flour. They range from local/village hammer millers who produce wholegrain flour, to large-scale millers who produce sifted maize meal.

Net farm profit/loss is the difference between the gross profit/margin and total fixed costs. A farmer must aim to maximize their net farm profit.

Price is determined by supply and demand. If demand for a product is high and supply is low, buyers will be willing to pay a higher price, and sellers are able to make more money from sales. If supply is high and demand is low, sellers will be willing to offer their product at a lower price, and will therefore make less money.

Traders are those who buy and sell as a business.

Value chain or **market channel** is the line of connected activities that a product goes through on its way from the input supplier, to the farmer and to the consumer. The value chain has several **actors** such as agents, assemblers, brokers or middlemen, traders and millers.

Warehouse receipt is a receipt or document of title, signed or certified by a warehouse keeper, guaranteeing existence and availability of a specified quantity and quality of a commodity, and used as an instrument of transfer for current or future transactions.

Warehouse receipting involves storing produce in a warehouse, and for which a farmer receives a warehouse receipt. The farmer can then choose to cash in the receipt for a certain value of the commodity while it is still in storage awaiting sale at a better future market price.

CTA Practical Guide Series, No. 16

For more information contact:

Kenya
Agricultural
Commodity
Exchange

Kenya Agricultural Commodity Exchange (KACE) Limited
Brick Court, 2nd Floor
Mpaka Road, Westlands
P.O. Box 59142-00200
Nairobi, Kenya
Tel: +254-20-4441829/30; Fax: +254-20-4448486
Email: amukhebi@kacekenya.com; Website: www.kacekenya.com

CTA
partageons les connaissances au profit des communautés rurales
sharing knowledge, improving rural livelihoods

The ACP-EU Technical Centre for Agricultural and Rural Cooperation (CTA)
P. O. Box 380, 6700 AJ Wageningen, The Netherlands
Tel: +31 317-467100, Fax: +31 317-460067
E-mail: cta@cta.int, Website: www.cta.int
CTA is financed by the European Union.

 – ISSN 1873-8192