

## Ten ways to improve milk marketing

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<b>Sustainable Development Goals</b>	No poverty, gender equality, decent work and economic growth and life on land

### Summary

This practice describes ten strategies to increase earnings from a smallholder farmer's milk production. Strategies included within this practice are, among others, organizing a marketing group, setting up milk-collection points and starting a small-scale processing plant.

### Description

#### 1. Split your herd

Moving your herd from place to place in search of pasture and water makes it difficult to keep supplying milk to a collection point or dairy. One way to get around this problem is by splitting your herd as explained below.

1. Divide your herd into milking and non-milking animals.
2. Keep the milking animals close to the milk-collection point and feed them on stored forage or bought feed. Keep the milk herd in good health and disease-free.
3. Drive the rest of the herd off in search of pasture.

#### 2. Organize a marketing group

If you have only a few animals giving milk at any one time, you will have only a small surplus to sell. Dairies and retailers, on the other hand, require a reliable daily supply of milk, in a sufficient quantity and of a reliable quality. Thus, organizing a marketing group may be a good idea.

1. Organize a group of producers to produce and sell your milk. Together, you can produce enough milk to make it worthwhile for a trader to pick up, process and sell it. You will have a stronger bargaining position with the buyer, and you can share tasks, exchange information and get services such as credit and training.
2. Make sure that women are part of the group: they often do the milking, make butter and cheese, and sell dairy products on local markets. They need milk for cooking and to feed to children.

Figure 1. Organize a group of producers to sell milk together



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#### 3. Set up a milk-collection point

It is costly and time-consuming for a dairy to

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# Post-harvest and Marketing

pick up small amounts of milk from scattered locations. Setting up a collection centre will encourage traders or dairies to buy your milk and get you higher prices. It can be done as listed below.

1. Set up a collection centre with your milk-producers' group at a convenient location.
2. Arrange for all members of your group to deliver their milk to the collection centre each morning, and for the milk to be picked up quickly by a refrigerated truck.
3. Make sure the milk that members bring to the collection centre is fresh and uncontaminated.
4. Equipment you will need:
  - cans, pots, buckets, stirrers, funnel and a strainer, all made from aluminium or stainless steel;
  - a spring balance to weigh the milk that members deliver;
  - aluminium cans to transport the milk;
  - testing equipment and supplies such as test tubes, glassware, spoons, paraffin burner, pipettes, measuring cylinder, lactometer and chemicals;
  - nets to keep flies off;
  - clean, running water; and
  - cooling facilities (if possible).
5. Get advice on how to set up and manage a collection centre from the government or a development organization.

## 4. Start a small processing plant

A small-scale processing plant nearby can buy your milk and create jobs for the community. It can serve local consumers or supply a larger dairy in town.

It can be run only in the wet season when there is enough milk available for processing. It can pasteurise and package milk and turn it into yoghurt, ghee, and other products. A small processing plant may be started as indicated below.

1. Before investing any money, develop a business plan: you will need to research the potential market and products.
2. Set up a small-scale processing plant at a convenient place.
3. To keep milk fresh, you need to boil or pasteurise it, then cool it down. You can pasteurise milk by heating it to 63 °C for 30 minutes. Allow it to cool, then put it in a refrigerator.
4. Equipment you will need: same as for a collection centre, plus
  - gas cooker, refrigerator, thermometer and a watch or clock;
  - butter churn, containers to make yoghurt, cheese moulds and frame; and
  - packaging equipment and supplies (e.g., plastic sachets for milk, cups for yoghurt).

Figure 2. Set up a collection centre where producers can bring their milk for a dairy to pick it up



## 5. Improve feeding in the dry season

The amount of milk delivered to dairies varies hugely from season to season, as pastoralists move their animals around, and production rises and falls along with the growth of grass. That makes it difficult to keep dairies running at capacity, harming their profitability and viability – and their ability to keep buying milk. Improving feeding in the dry season may be accomplished following the steps indicated below.



1. Keep milking animals close to the milk-collection points, where you can feed them and care for them properly.
2. Make and store hay or silage, or feed the animals with sown forage or purchased feed in the dry season.
3. Provide supplements such as molasses feed blocks and mineral licks.

### 6. Improve animal health care

Healthy, well-fed animals produce more milk than those that are thin and ill. And certain diseases, such as tuberculosis, brucellosis and mastitis, can also affect the quality and safety of the milk. However, many drugs on sale in the drylands are expired or fake. Animal health care can be improved through compliance with the following three rules.

1. Keep your milking animals healthy. Get them vaccinated and treat them promptly if they fall ill. Keep a few healthy, productive, well-fed animals, rather than a lot of thin, hungry ones.
2. Buy medicines only from a reputable dealer. Make sure you use the right medicine at the right dosage.
3. Milk only disease-free animals.

Figure 3. A few healthy, well-fed cows produce more milk than a lot of thin, ill animals



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### 7. Improve hygiene

Milk can be contaminated in various ways: through dirty hands and teats, unhygienic milking containers, plastic jerry cans, and deliberate dilution. Bacteria can multiply

rapidly in warm milk and in hot weather. Hygiene can be improved by following the indications below.

1. Wash your hands and the udder with clean water before milking.
2. Wash the milking bucket and all equipment well. Keep the milking area clean and free of dust and flies.
3. Use stainless-steel or aluminium buckets and cans to carry and store milk. Do not use plastic jerry cans: they are impossible to clean properly.

Figure 4. Plastic jerry cans may look clean, but they are impossible to keep clean! Aluminium cans are much better



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### 8. Deliver it quickly

Milk is highly perishable, especially in a hot climate. So speed is everything: the milk has to get from udder to dairy (and to the retailer) as fast as possible before it goes off. Make sure to following the steps listed below to maintain the cold chain.

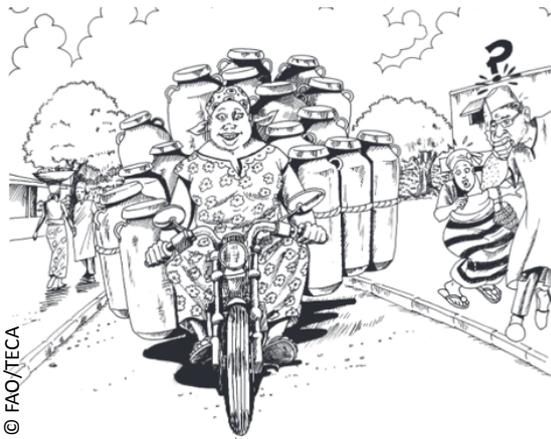
1. Keep the milk cool by burying the containers deep in the sand, wrapping the containers in wet towels, or (better) by refrigerating the milk.
2. Heat the milk to kill bacteria, then allow it to cool.



# Post-harvest and Marketing

3. Get it there quickly. Take the fresh milk to the collection point or customer as quickly as possible. Transport it in the morning when the air is still cool. Replace feet with bicycles, bicycles with motorbikes, motorbikes with pick-ups, and pick-ups with refrigerated lorries.

Figure 5. Deliver your milk quickly



## 9. Think camel

Camel milk is popular among certain consumers, and has a huge potential market – one that pastoralists are in a unique position to serve.

Figure 6. There is a big demand for camel milk in some cities



Steps you may follow to set up a sustainable camel milk production.

1. If your area is suitable for keeping camels, do some market research. Is there demand for camel milk and other products?
2. Set up a group to produce and sell camel milk.
3. Arrange for collection, processing and delivery to the town.
4. Make other products, such as ice-cream or sweets.

## 10. Give women a bigger role

Producing, handling and selling milk is often a woman's job. But women often have little say in pastoralist societies. In some societies they are excluded from big decisions, are not allowed to travel alone, and find it hard to get information. If women play a bigger role in marketing, it can benefit the whole family and the economy as a whole. To ensure a more important role for women in the marketing process, the following points should be taken into consideration.

1. Women should attend training and become members of groups.
2. Women should take leadership positions in groups.
3. Women should form women-only groups to produce and market milk.
4. Older women should join groups: they are important role models for younger women.
5. Encourage men to support the women and help them to see the benefits of women taking a more active role in milk marketing.

## 11. Further reading

- Lambert, J.C. 1988. Village milk processing. FAO Animal Production and Health Paper 69.



- <http://www.fao.org/docrep/004/t0045e/T0045E00.htm>.
- Kurwijila, L.R. 2006. Hygeinic milk handling, processing and marketing: Reference guide for training and certification of small-scale milk traders in Eastern Africa. International Livestock Research Institute, Nairobi.

Figure 7. Women are often responsible for milking and handling dairy products



## 12. Related/Associated Technologies

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## 13. Objectives fulfilled by the project

- Women-friendly;
- resource use efficiency; and
- pro-poor technology.