

Rainwater Harvesting

The school where Lucy works has no running water, which means the children have to collect the water themselves, so they miss lessons.

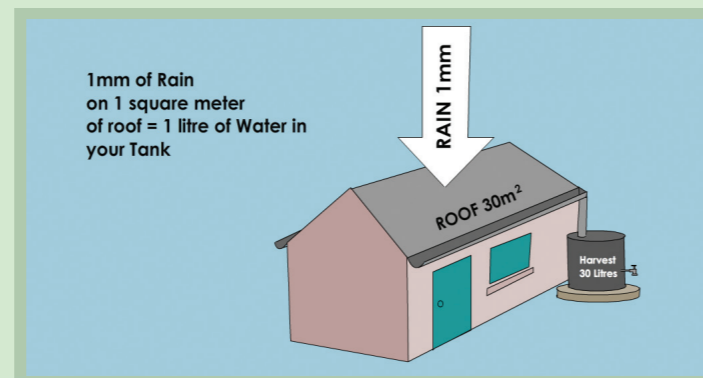
Water harvesting is a good way to catch clean water for the whole school, so children do not get sick or miss lessons. Collect the water from the roof using gutters attached to a plastic or rust-proof tank. Make sure the tank has a good tap which does not leak.

The water is useful for:

- Drinking
- Cleaning the classroom
- Cooking
- Giving to animals

Because the water is now running into a tank it does not ruin the playground, or erode the shamba.

For more information, SMS 'WATER' to 30606



Water harvesting is a good way to have a supply of clean water

Planting Trees

The children also want more trees in their school.

Trees are good for:

- Protecting the soil from erosion
- Providing shade
- Providing food and fruit
- Firewood
- Protecting against climate change



Plant tree when it is 30cm high

To plant the tree, dig a hole 2 feet deep and 2 feet wide. Plant each tree 2 metres apart. A good tree to plant is a Kenya Cypress Tree and make sure it is 30cm tall when you plant it. Add manure to the soil and mix. Add the tree to the hole and cover with the manure and soil. Add some dried grass mulch around the seedling and then water well.

It is important for children to learn about planting trees – they are the future of Kenya! Why not explain to your young relatives the importance of planting trees and get them to help you plant some at home.

Produced by Mediae



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Watch us on citizen television on

Saturday 1.30 - 2.00pm (English)

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Series 3: Episode 3

Joseph & Lucy's farm and local school – KINANGOP

This leaflet contains information on: planting trees, growing cabbages, dairy cows, and rainwater harvesting.



Growing Cabbages

James needs help with his cabbage crop, which is having problems with disease. Disease is causing James to produce weak and small cabbages, which in turn is making him lose money. An expert from Syngenta is called in to help with the problem.

Cabbage Disease

A common disease in cabbages is called **Ringspot**. Ringspot can be detected when a cabbage has black spots on it. The black spots grow as the disease spreads onto more of the leaves, deeper inside the cabbage.

Ringspot is a type of fungus, and appears in cabbages after a time of wet or cold weather. If you do not treat it, Ringspot can wipe out a whole crop.



An affected cabbage with Ringspot

How to Prevent Ringspot

ORTIVA is a fungicide spray which protects your cabbages from Ringspot and other fungal disease. It is preventative against these diseases, so you must spray BEFORE you see any disease.

To use **ORTIVA**, mix 20 ml (2 capfuls) into 20 litres of water and spray the mix across ¼ acre (50 feet by 50 feet) of land. This mixture will stop any Ringspot and fungal disease.



Spraying Ortiva protects cabbages against diseases such as Ringspot

Always read the instructions carefully when handling chemicals.

How To Stop The Spread of Ringspot

If your cabbage crop already has the disease Ringspot, or other fungal diseases, you can spray **SCORE**.

SCORE won't help cure the disease that has already taken over, but it will stop the disease from spreading to other plants and ruining the whole crop.

Always wear protective clothing when spraying chemicals!

Disease Resistant Seeds

You can buy disease resistant seeds for cabbages which do not get the usual diseases, such as Ringspot, that old varieties get. This makes them a good investment as they will save you time and money, and give you a bigger better crop.

F1 seeds of any variety mean they are resistant to common diseases as they are new seeds. You spend more than older varieties but your crop is bigger so you get your money back.

A good variety to use is **Quisor F1**. This is disease resistant and can be bought from your local agro-dealer. These seeds give healthy, uniformed, well coloured cabbages with a long shelf life. These types of vegetable can be sold at market for a good profit.

How To Plant Your Quisor F1 Seeds

Planting your new disease resistant seeds correctly is important:

1. Make a nursery: Mix farmyard manure and soil together and make small trenches.
2. In each trench, add around 60 seeds. One pack of seeds should be enough for ¼ acre of cabbages.
3. Cover the seeds with soil, and put either old sacks or dried mulch (grass) over the top to protect the seeds.
4. Once the roots have grown, water with **ACTARA**. Add 1 packet of **ACTARA** to 20 litres of water.
5. After 21 days, move seedlings from the nursery to the field, spacing them 2 feet apart: Add 5g/1cap of **DAP fertiliser** and a handful of manure to the planting hole, mix with soil, plant the seedling, cover with soil and manure. Water well.
6. After around **75 – 80 days**, your crop will be mature. You should harvest around **40 – 60 tonnes** of cabbage.

This should be a much better crop than using older seeds.

For more information, SMS 'SEED' to 30606



SCORE Stops Ringspot getting worse, but cannot cure already affected plants



Quisor F1 seeds are a disease resistant variety



Plant Quisor F1 seeds in a nursery to start



Quisor F1 seedlings must be planted correctly for them to grow strong

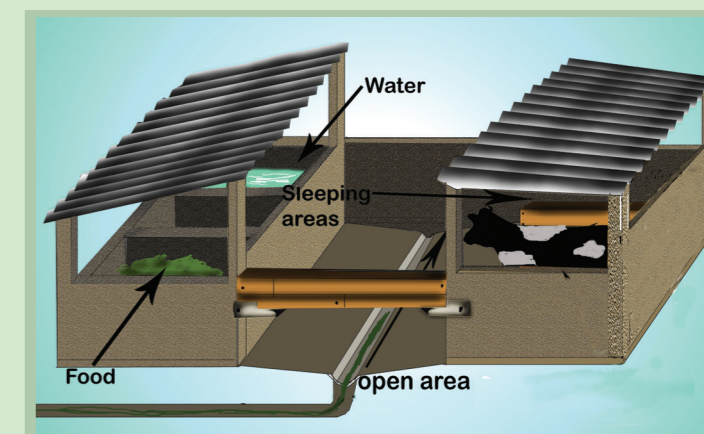
Dairy Cow Farming

James' cows are healthy and fat, but their milk production is too low. James feeds them lots of grass, and desmodium or silage. To help the cows to produce more milk, build a cattle shed for the cows and feed them there.

Building A Cattle Shed

Cattle sheds are important because they protect the cows from wind and rain so they don't get sick. The shed must be built with a strong hard floor to stop diseases like foot rot or even deadly foot and mouth.

The shed also must have three troughs to help you give your cows the correct feeds so they make more milk. One trough should have lots of clean water which is very important to make milk.



Cow sheds are important for keeping cows healthy

Feeding Your Cows

Cows which are fed well will make more milk. Cows should give 10 litres of milk a day.

Feeding Supplements

Making milk uses a lot of energy and minerals from the cow. You need to feed them supplements, like **COOPERS Improved Milk Production Feeds**. Never mix feeds with milk or water, this can make the cow sick.

A cow has 4 stomachs, only 1 of them can digest milk or water! Anything else that is mixed with the milk or water will not be digested, causing diarrhoea and even death.

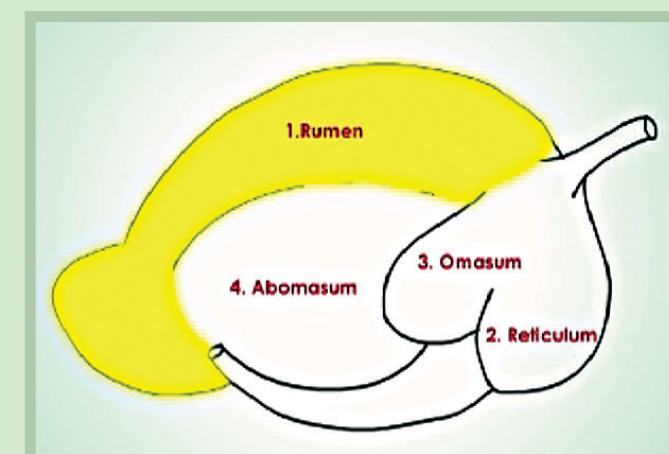
COOPERS Low Milk Supplement can be used to increase milk production. If your cow produces 5 litres, for every 2 litres over this, give them 1 kg of the meal in their fodder or grass trough. So, if your cow gives you 7 litres, give 1kg, if it gives 9 litres, give 2 kg.

Always check the cow's health – worm them every 3 months, always make sure they have lots of clean water, and are free of ticks and lice.

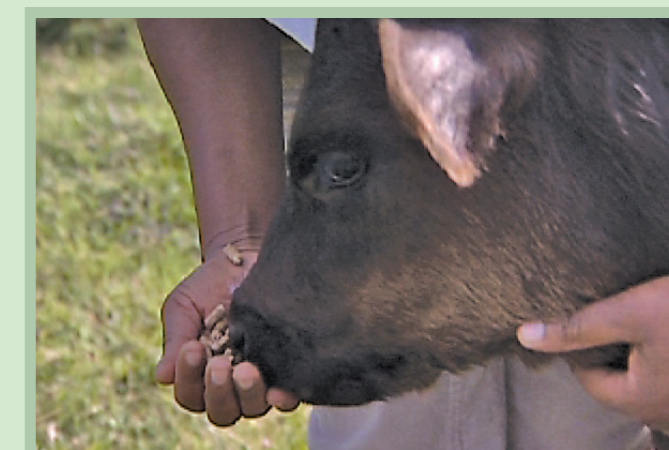
To help young calves become good milk cows, give them **UNGA Early Calf Weaner Pellets** for the first 3 months of their lives, starting as early as week 1. They will help stimulate and develop their stomach and help them grow bigger, stronger and fatter. NEVER mix pellets with water.

Help your calves to eat the pellets by feeding them it by hand – patience is always important here!

For more information, SMS 'COW' to 30606



Cows have 4 stomachs to process their food



Hand feeding the calf needs patience