

# Series 4, Episode 7

Leah and Wilson's Farm, KAPSARET

*This leaflet contains information on: Feeding dairy cows, housing local chickens, vaccinating local chickens, vaccinating cattle against East Coast Fever, soil fertility and planting Sukuma*



## Feeding dairy cows

Dairy cows cannot make much milk if you do not feed them correctly. Making milk uses a lot of energy and protein from a cow's body.

A cow needs:

- 1 - proteins from fodder and concentrates
- 2 - minerals from mineral supplements
- 3 - energy from fodder
- 4 - vitamins from fodder and supplements
- 5 - plenty of clean water

To give your cow the best food for better milk, give it fresh fodder each day, and supplement with minerals and with **dairy meal**. Dairy meal will provide the cow with vitamins, energy and protein in a balanced way, so that the cow produces good milk and keeps a healthy body weight.

## Feeding calves and heifers

Every cow needs to be fed correctly from the time it is born, so that it grows into a good dairy cow.

When the calf is **1 week old**, feed it **Early Weaner Pellets** which will help it grow and wean it early, so you can get more milk from the cow for the family or to sell. Feed Early Weaner Pellets until the calf is **3 months old**.

After **3 months until 8 months**, feed the heifer **Young Stock Pencils** which will increase the body weight of the heifer, help it to grow and to come on heat on time when it reaches 350kg.

After **8 months until it is served**, feed the heifer **Unga Afya Meal** which will maintain it as a good bulling heifer.

When the heifer has been served and starts producing milk after birth, give the cow **Fugo Dairy Meal**.

Unga recommends feeding your cow **1 kg of Fugo dairy meal for every 2 litres of milk** the cow gives you above 5 litres.

So, if your cow gives you 7 litres a day:  $7 - 5 = 2 \text{ litres} = 1 \text{ kg of dairy meal}$



*Cows need concentrates and fodder to produce milk*

*For more information, SMS 'UNGA' to 30606*

## Chicken houses for local chickens

Chicken houses should be clean and dry, and big enough for you to get in to collect eggs, feed the birds and clean the house.

The house should have

- 1 - wood shavings on the floor,
- 2 - laying nests 1 foot wide by 1 foot deep by 1 foot high lined with hay or straw. 5 chickens can share one laying nest.
- 3 - perches made of round sticks for the birds to roost on at night.
- 4 - ventilation (open sides) on the North and South sides
- 5 - curtains to close the open sides at night for warmth

Disinfect the house every month to keep your chickens healthy and happy.

## Chicken houses for local chickens

Chickens get a lot of diseases. You can avoid diseases by keeping your chicken house very clean, and dry.

Some diseases are viral and cannot be cured. If your chickens get viral diseases, like **Newcastle Disease, Gumboro, and Fowl Pox** they can all die. It is important to **vaccinate** your chickens for these diseases.

If your chickens are **not eating, sleeping all the time, hunched over** and have **greenish diahorrea** and die quickly, they have Newcastle Disease. **Isolate sick chickens immediately.**

There is a new Newcastle Disease vaccine from **KARI** which is easy to use and does not need to be kept cold. Each bottle of vaccine is for 100 chickens.

To vaccinate against Newcastle, you can either (1) mix the vaccine with clean water and put one drop in each nostril of each chick or (2) remove the chickens’ water for 4 hours. Mix the vaccine with clean water and put in the drinker. Let the chickens drink the vaccine. All of it should be drunk within 2 hours.



*(1) For nose drops, after mixing the vaccine with clean water and put one drop in each nostril of each chicken*



*(2) For drinking, mix the vaccine with clean water, put in the drinker and give to the chickens. It should be drunk within 2 hours.*

The Ministry of Livestock recommend you vaccinate against Newcastle when the chicks are **7 days old**, again at **3 weeks**, and then every **6 months** after that.

*For more information, SMS ‘CHICKEN VACCINE’ to 30606*

## Feeding local chickens

Local chickens should be fed Chick and Duck Mash for the first 3 weeks, and kept inside.

After that, you can feed them **Kienyeji Mash** or two handfuls of **Grower’s Mash** and some maize every day. Let them out in the day to eat around the compound.

*For more information, SMS ‘LOCAL CHICKEN’ to 30606*

## East Coast Fever

East Coast Fever (ECF) is carried by the **Brown Ear Tick** and can kill your cattle.

Symptoms of ECF are:

- 1 - Swollen lymph nodes at the top of the neck and the front of the front leg
- 2 - Cow stops eating
- 3 - Milk production drops suddenly
- 4 - Coughing
- 5 - Foam at the mouth

It can cost KSH6,000 to cure a cow infected with ECF, and it will never produce as much milk as it did before it was sick. A pregnant cow infected with ECF will abort.

To control ECF you must spray or dip your cattle with correct **acaricides** at the right dose, every week. You should take **15 minutes to spray each cow**. Start with the legs first and work up, along and around the animal, doing the head last. Be sure to cover the whole animal with spray.

You can also **vaccinate** your cattle against ECF. This vaccine must be done by a vet who will come to your farm to vaccinate. They must vaccinate **40 cattle** at one time, so you can bring your neighbours together for this. The vaccine costs **KSH1,000 and lasts for life**. You can vaccinate calves from 1 month old. You cannot vaccinate pregnant cows.

The vet will check each cow’s **temperature, lymph nodes, weight, heart and lungs**. They will then deworm the cattle, inject them with an **antibiotic**, inject them with the **vaccine** and then **tag the ear**.

The cows might appear to be sick for a few hours, but they will recover as the vaccine starts to work.

Cattle with an ECF vaccine ear tag can get more money at the market.



*(1) deworming,*



*(2) antibiotic*



*(3) vaccine*



*(4) tagging*

*The vet will deworm, inject antibiotics, inject the vaccine and then tag your cows.*

*For more information about ECF vaccines, SMS ‘ECF’ to 30606 or contact Sidai vets info@sidai.com 0202038192*



## Soil fertility

Soil fertility is very important. If your soil is poor, you will not get a good crop.

In Kenya we have acidic soils which are not always good for crops. So, it is important to do a **soil test** to know what the **correct fertiliser** is for your soil.

**Do not use DAP for planting every year if you do not know the pH of your soil.** DAP can make your soil acidic, which means the plant will not be able to use the nutrients in the soil. DAP can be any colour, not only black.

A good planting fertiliser which does not add acid to your soil is **Mea Mazao 23.23.0** which contains **calcium**.

The correct steps to take to grow really good vegetables for the market are:

1. identify your market - where will you sell your vegetables, what vegetables does that market want?
2. Choose the vegetable type, the variety and the seed
3. Do a soil test to check
  - (i) if your soil is suitable for growing that vegetable
  - (ii) which fertiliser you should use

Fertiliser helps the plant to grow roots, and leaves.

**For more information, SMS 'SOIL' to 30606**

## Planting Sukuma

Use the correct spacing when planting your vegetables to make sure each plant gets enough fertiliser and has enough space to grow.

To plant Sukuma:

1. clear and dig the plot
2. make rows 1 ½ feet apart
3. make planting holes 1 foot apart on the rows
4. mix manure with the soil in the hole
5. add one capful of **Mea Mazao 23** to each hole and mix with the soil
6. Plant **one seedling in each hole** with the roots straight down. Do not plant the green stem in the soil.
7. water your seedlings to give them a good start.



**Plant the seedlings in each hole with the roots straight down**

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