

Series 4, Episode 10

Harriet's Farm, BULAMBULI, UGANDA

This leaflet contains information on: Growing Indigenous Vegetables, New Fodder for Cattle, Orange Flesh Sweet Potatoes, Kenbro Chickens and Rainwater Harvesting



Mulato grass for better cow health



Small pieces of fodder are easier to chew, and digest, than large pieces, so your cow will give you more milk

Remember to cut your fodder into small pieces so the animal can digest and use all the food you give it.

It is important to **weed** your fodder plot often, and plant the grass in such a way that it fills up the whole plot. Bare ground will be taken over by weeds.

When cutting back your fodder, cut to the ground level so the plant can grow back from the base. This will give you a better grass crop.

Remember, each cow will need **1 acre** of fodder to feed it throughout the year.



Mulato grass is a new type of grass fodder for feeding cattle. It is better for cattle than Napier or Boma Rhodes Grass as it has a high protein content. **Protein** is important to animals to keep them healthy. Mulato grass is **drought tolerant** and can go for 5 months without rain. The grass also grows very quickly.

Mulato grass is easy to grow from cuttings. The grass can be used for grazing or for cutting fresh or baling as hay, or for making silage.

Tall grasses like Napier or Mulato grass need to be cut when still green. Your cattle cannot digest woody, large stems.



Do not cut your grass too high or the plant cannot grow back

Planting Mulato grass

To plant Mulato grass you first need cuttings or suckers.

Plant the suckers in rows 50cm apart in holes 10cm deep. Only plant the base of the sucker in the soil. Water the suckers until they are established

How much grass should you feed your cow?

A cow should eat between 2% and 2.5% of its body weight in food per day.

So, if your cow weighs 350kg (the weight of a good heifer), then it should eat 9kg of feed every day. This should be a mixture of dry feed and fodder.

Kenbro Chickens for Business

Kenchic sells **Kenbro** chicks, which is a dual purpose chicken breed. It is resistant to diseases and grows faster than local chicken breeds.

Looking after Kenbro chickens

For the first three weeks, the chicks need to be kept inside. This keeps them safe from predators. Make a **brooding ring** using plywood.

You need to put a heat source, like a **jiko**, with the chicks to keep them warm. The chicks should be in a brooding pen kept at 33 Degrees Celcius. If your chicks are huddled together, this means they are too cold. Cold chicks will also get diarrhea.

After 3 weeks the chicks can be let out during the day to look for food in the compound, like local chickens.

The chickens need a house with enough space for **1 square foot** per bird, with 3 foot of solid wall on the bottom of the walls and 4 foot of mesh wire on the top of the North and South walls for ventilation. The West and East walls should be fully closed. Close the open sides at night with **curtains**.

The house should have a **foot bath** at the door, which you need to dip your feet into every time you go into and out of the chicken house. The chicken house should be away from paths or where people are, to keep the chickens healthy. You must also clean the feeders and drinkers **at least once a week**.

Remember to **vaccinate** your chickens against **Gumboro, Newcastle Disease, Fowl Pox and Fowl Typhoid**.

Feeding Kenbro chickens

Give the chicks **Chick and Duck Mash** or **Starter Mash** for the first **three weeks**. After that, supplement their free range feeding with **Grower's Mash** or **Kienyeji Mash**. This will save you money but keep the chickens growing quickly so you can sell them earlier. Give the chickens as much food as they can eat.

You can also make your own feeds - remember the feed should have **energy**, proteins, vitamins and minerals. **For energy** you can use **crushed maize**, for **protein** you can use **fish meal**, for minerals you can use **limestone** and for the vitamins you can buy a vitamin mix from the agrovet. You should also feed the chickens plenty of fresh greens and vegetables.

Make sure your chickens have plenty of fresh **clean water** every day.

How many chickens should you keep?

The more chickens you keep, the less it costs **per chicken** to keep them. This is because your house cost and heating cost will be spread over many chickens.

Make sure you always have enough space for your chickens. If your chickens do not have enough space, they will **fight, peck each other, cannibalise and eat their eggs**. If your chickens do this you need to remove some chickens or increase the space - each chicken needs one square foot of space.

For more information, SMS 'KENBRO' to 30606



A footbath is very important



The North and South sides should have good ventilation with curtains to close at night'

Cooking Orange Fleshed Sweet Potato for a healthy family

Orange Flesh Sweet Potato is a good source of Vitamin A, B, C and E and minerals for the family. Vitamin A keeps you healthy and improves your eyesight and your immunity.

The potato is especially good for children and helps them to fight illnesses and night blindness.

You can make **dried chips, flour, fried chips, bread, mandazi, porridge, stew, cakes, bread, juice, jam, donuts and much more** with OFSP.

Orange fleshed sweet potato and groundnut porridge

(Especially good for children)

- 3 medium sized orange-fleshed sweet potatoes.
- ½ cup pounded roasted groundnuts.
- 2-4 teaspoons shredded/pounded green leafy vegetables.
- 1 light two-finger pinch of salt.
- 2 ¼ cups water.

Procedure

1. Boil 3 medium sized orange-fleshed sweet potatoes and remove the skin.
2. Mash the sweet potatoes into a smooth paste.
3. Add the pounded groundnuts.
4. Add the shredded vegetables.
5. If necessary add a little water to make the paste soft enough for the child.
6. Heat for 3-4 minutes while stirring constantly.



Orange fleshed sweet potato chapati

- 1000g (31/ cups) boiled and mashed orange fleshed sweetpotato.
- 1000g (62/ cups) wheat flour.
- 18.5g (41/ level teaspoons) salt.
- 30 ml (3 tablespoons) oil.
- Water.
- 0.5 litre (2 cups) oil for shallow frying.

Procedure

1. Mix the dry ingredients first and then add and mix in the boiled mashed sweet potato.
2. Add the oil and mix.
3. Add the water a little at a time, while kneading until a soft smooth and non-sticky dough is formed.
4. Cover the soft dough with a plastic sheet and leave to relax for about 30 minutes.
5. Form, roll and fry the chapatis as normal.



Indigenous Vegetables

Indigenous vegetables, like Nightshade, Amaranth and pumpkin are very good for the family. They have proteins, minerals and vitamins and are easy to grow.

You can get seeds for these vegetables from many seed companies in your area, and from KARI and some Universities. Buying fresh seed for these vegetables will give you a bigger harvest for your family and to sell.

Planting indigenous vegetables correctly

To get a good harvest, you must plant your seeds correctly, in lines and with the right spacing. Broadcasting the seed gives you an uneven crop which does not do so well.

To plant **Terere (Amaranth, Namtoto)** first make rows **1 foot apart** and 2 inches deep. Then mix **DAP and manure** with the soil along the rows.

Mix the seed with **clean sand** and sprinkle along the rows. Cover the seeds with soil, **mulch** and then water.



Mix the seeds with sand to help spread them evenly when planting



Buying certified seeds will give you a bigger harvest

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information
SMS 30606



+254 (0) 715831853
info@galvmed.org



RESEARCH PROGRAM ON
Climate Change,
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+254 020 6978000 +254 (20) 3675 000 +254 (703) 033 000
ccaafs@cgiar.org info@agra.org



+254 20 4223725
aatf@aatf-africa.org



+254 722 734 468
pmuthangya@eucord.org



+254 020 6978000
cip.nbo@cgiar.org



+256 41 4320556 / 4321885
asareca@asareca.org



+254 (20) 4223633
cip-nbo@cgiar.org



+254 (0) 722 734 468
pmuthangya@eucord.org



+254 20-3754333/4/5/7
ke-com@tns.com



+254 (0) 722365784
ifad@ifad.org



+254 20 420 6000
info@coopers.co.ke



+254 724 253 312 | +254 735 440 267
info@mea.co.ke



+254-020-6978000
information@unga.com



+254 20 322 8000
syngenta.east_africa@syngenta.com



+254 20 2301518/20
info@kenchic.com



+243 20 210 6793 / 0703 896996
dlightafrica@dlightdesign.com