

# Series 4, Episode 16

Elizabeth and John's Farm, Ndori, BONDO



*This leaflet contains information on: Striga or Kayongo, IR Maize, Tree planting, Sasso chickens, feeding Sasso chickens, Biogas and solar lights*

## Planting trees for fodder and healthy soil

All farms should have trees to provide shade, hold the soil together and, depending on the type of tree, to fix Nitrogen in the soil and provide fodder for animals. Plant trees in lines along the terraces or contours of your farm to control erosion, or across the wind to reduce wind damage to your crops.

Trees are a good retirement policy and can give you enough firewood through coppicing, so you don't have to cut down whole trees.

Good fodder and soil improvement trees are **Calliandra**, **Grevillea**, **Cordia** and **Leucanea**.

To plant a woodlot, mark a grid with lines 6 feet by 6 feet apart.

On each grid square, dig a hole 1 foot wide by 1 foot long by 1 foot deep.

Mix **manure** with the **topsoil** you have removed. Water the hole, then plant the tree with the topsoil-manure mix. Water again.

You do not need to use DAP or inorganic fertiliser for the trees.

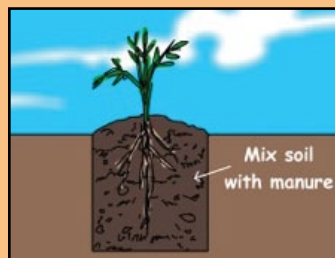
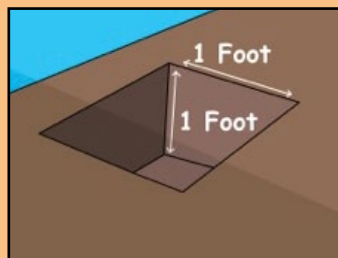
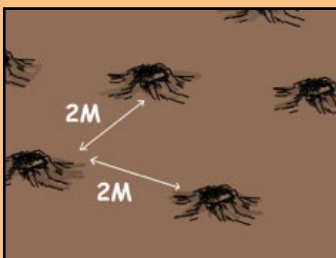


*Grevillea is a big tree which you can use for fodder. It is also good for the soil as it fixes Nitrogen*



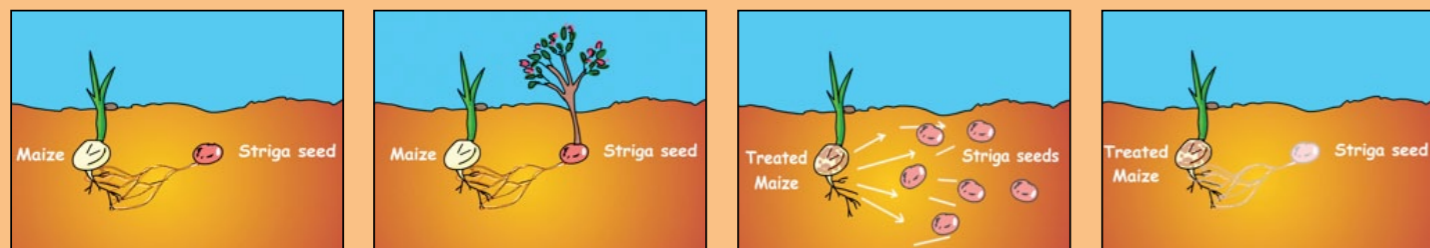
*Calliandra is a smaller tree or shrub, which you can use for fodder.*

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



## Striga or Kayongo

Striga, or Kayongo, is a parasite plant, which attaches to maize plants and takes all the water and nutrients from the maize plant.



Striga seeds stay in the soil for 20 years, waiting for a maize plant to attach to. When the maize is planted and starts to grow, the Striga seed will start to grow into the new maize plant. It attaches just above the roots, below the ground. When you can see the Striga flowers above the soil, it is too late. The Striga has already taken the nutrients from your maize.

Maize attacked by Striga will be stunted and produce no cobs. Maize should produce 4 tons per acre - with Striga you can get only 4 bags.

Striga is a community problem. The seeds are very light and are carried by water and wind from one shamba to the next. So, when you attack Striga, do so with your neighbours.

## Getting rid of Striga

To remove Striga, you can weed the crop, but this will not stop some Striga attaching to your maize. You can also spray Kayongo-tox, but this is expensive.

**Desmodium** can work to stop the Striga growing if you **intercrop** it with your maize.

Applying **fertiliser and manure** to the soil will make your maize stronger and more able to resist the Striga.

## Using Striga resistant maize

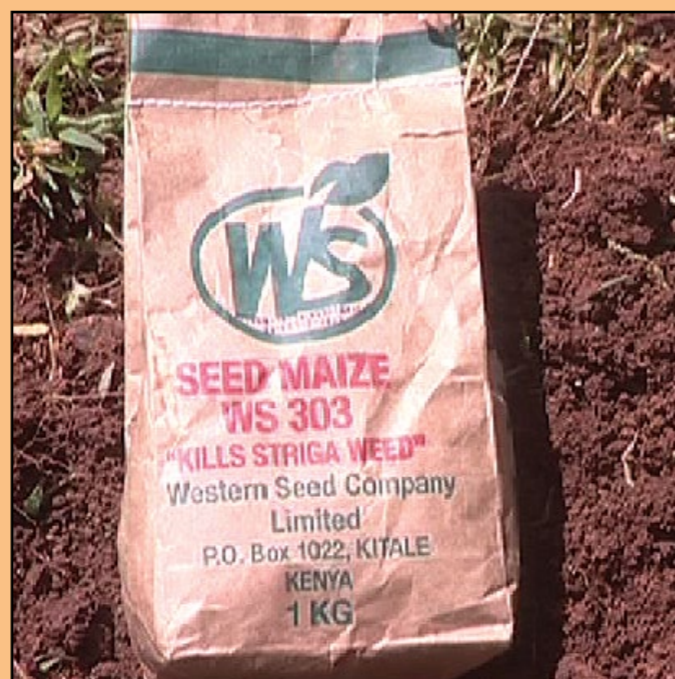
A good option to stop Striga is **IR Maize**. This maize is coated with a herbicide which kills Striga in the soil. The maize takes in the herbicide as it grows, so if the Striga is not killed in the soil, and tries to attach to the maize, it will die.

To plant IR Maize, make rows **75cm** apart and holes **60cm** apart on each row. **Mix DAP and manure** with the soil in each hole, and plant **two seeds** per hole.

**WASH YOUR HANDS AFTER HANDLING IR MAIZE AND DO NOT HANDLE OTHER SEEDS.** The herbicide can kill other seeds.

If you are intercropping, ask someone else to plant the beans between the rows, **at least 15cm from each maize hole.**

For more information, SMS 'IR MAIZE' to 30606



Ask for IR Maize or Striga Resistant Maize at your agrodealer. WS 303 from Western Seed is IR Maize.

## Sasso chickens

Kenchic has several breeds of chickens:

Layers - for commercial layer farmers

Broilers - for chicken meat business

Kenbro - a cross breed of local and broiler chickens, which can spend the day outside.

Sasso - a cross breed chicken which is good for laying, and can spend the day outside.

You can buy Sasso chicks from Kenchic distributors.

## Chicken house

Before you buy Sasso chicks, make sure your **chicken house** is suitable. The chicken house should have:

- Enough space for each chicken to have 1 square foot of space in the house.
- Good ventilation - 3 feet of chicken wire on the North and South sides, and close the West and East sides completely.
- Security - Solid walls 4 feet high all around the house.
- A clean, dry floor with woodshavings
- One feeder and one drinker for every 50 chickens.
- A footbath with disinfectant to stop diseases.
- One laying nest for every 5 birds.

## Chicken health for Layers, and Sasso/Kenbro for laying

When you buy chicks, check if they have been vaccinated and for which diseases.

The recommended vaccination schedule is:

DAY	VACCINE
1	Mareks
10 - 14	NCD + IB Live
15 - 18	Gumboro Intermediate Plus
24 - 28	NCD + IB Live
28 - 32	NCD killed or NCD + IB Live Fowl typhoid
WK 6 - 8	Fowl Pox Fowl Cholera
WK 8 - 10	Fowl Typhoid
WK 12 - 14	NCD + IB live
WK 16 - 18	Fowl Cholera

For more information, SMS 'KENCHIC' to 30606

## Feeding Sasso chickens

Sasso chickens can be kept as layers or broilers.

### Feeding Sasso chickens for laying

For laying, feed **Fugo Chick and Duck Mash** for the first 8 weeks, then slowly introduce **Fugo Grower's Mash** until 18 weeks.

At 18 weeks, slowly introduce **Fugo Layer's Compleat Meal** and feed two handfuls for each chicken each day.

Make sure the chickens have plenty of fresh, clean water, and the feeders and drinkers are cleaned every day.

### Feeding Sasso chickens for meat

If you want to sell the chickens for meat, feed them as much feed as they can eat.

Start with **Starter Mash** from day 1 until they are **3 weeks old**. Then feed **Finisher Mash** until they are **18 weeks old**. They will then be ready for slaughter.



## Flexi biogas

A biogas system is a good way to save money, time and health. Many biogas systems are built from stone and are dug into the ground. There is a new type of biogas system which does not need any building, and sits on top of the ground. This is a **Flexi Biogas system** from **Biogas International**.

The system uses a big bag to hold the gas, a greenhouse to make the bag warmer so more gas is produced, and pipes to take the gas to the kitchen. With this system, **one cow** can give enough gas for a house of **5 people**. You can also use pig or chicken manure, and vegetable waste. The system takes 3 hours to install and will start making enough gas for you to use after 4 days.



## Save money with solar

You can save your eyes, your health and a lot of money by using a solar lamp. To work out how much money you can save, fill in the calculator below:

(a) Cost of Kerosene for house per day = KSh .....

(b) Cost per week = (a) \* 7 = Ksh .....

(c) Cost per month = (b) \* 4 = Ksh .....

(d) Cost per year = (c) \* 12 = Ksh .....

SAVINGS USING SOLAR PER YEAR =

Cost of Kerosene per year minus Cost of Solar Light = Ksh .....

You can also save money on charging your phone if you buy an S300 solar light from dLight - the light can charge your phone and give you enough light to light your house all night.

For more information, SMS 'DLIGHT' to 30606

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For another leaflet or more information SMS 30606

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