

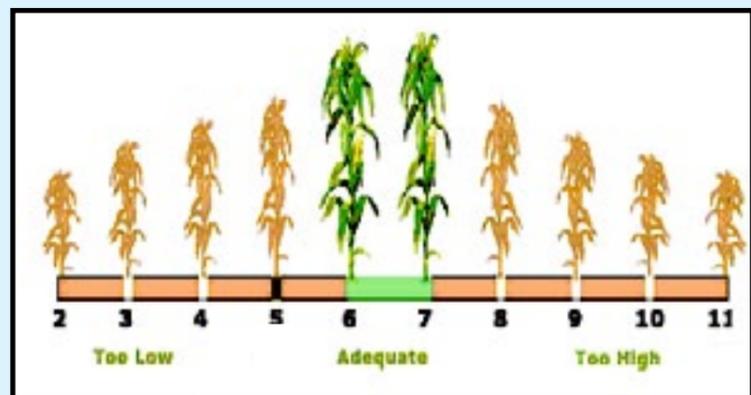
Soil Testing

For more information, SMS 'SOIL' to 30606

Carrying out a soil test helps you to know the kind of fertilizer to use and which crops to grow for a better production. Using the right fertilizer doubles your harvests.

Soil Cares is a mobile laboratory which can come to your field and do soil testing in your shamba.

Take a soil test every 3 years. These services can be provided by mobile soil testing units and laboratory tests.



It is very important to know your soil pH. This will tell you how healthy your soil is.

Soil Erosion

Soil erosion is when your top soil is taken away by water or wind. The soil is washed away when there is no cover material. The top soil is the best for plants to grow in so it is important to stop it from being washed away. If the soil is lost, it will have to be replaced by costly chemical fertilizers and manure instead. Also, when the soils are taken away by water, they make rivers, lakes, streams and dams dirty.

- Farmers need to get together.
- Leave crop residue or mulch on the soil to protect the topsoil.
- Plant buffers e.g. Napier grass on terraces to slow down and stop soil being washed away.
- Avoid farming along the river banks and plant trees or Napier as a buffer instead. These will catch the soil before it gets into the water.
- Dig in manure and compost to help the soil stick together.



Series 5, Episode 10

Grace's farm, Moivaro Ward, TANZANIA

This leaflet contains information on: controlling chicken pests & diseases, soil testing, climate change, youth in farming

Changing Weather

Weather patterns are changing. Rivers become dry more often, and sometimes there are floods. Getting water for crops and animals becomes hard. Soils also become poor and do not give good yields.

To protect yourself from changing weather:

1. Prepare your field very early before the rains – use a weather forecast to know when the rains will come.
2. Plant using the right seeds.
3. For your animals, plant **calliandra**, **mulberry**, **leucanea** and **napier grass**. It grows very well and your animals will get feeds even in drought.

Planting Fodder Crops

Calliandra is a good fodder shrub for farmers because it is drought tolerant and you can grow it on terraces or around the edge of your shamba. In the dry season it will give you food for the animals.

Fodder can be fed in the form of hay, silage or freshly cut. Always make sure the fodder is cut up well so it is easy for the animal to eat and is fed in a trough so you know how much the animal has eaten.

How To Plant Calliandra

1. Prepare your shamba by digging well using a jembe.
2. Dig holes 1 foot deep and 1 foot apart.
3. Place the calliandra seedling in the hole and firm it in the soil.
4. Water it every day for two weeks to make it grow strong.



Calliandra is a good fodder crop for cows

For more information, SMS 'FODDER' to 30606

Produced by Mediae



Watch us on Citizen TV on:
Saturday 1.30pm (English)
Sunday 1.30pm (Kiswahili)

For another leaflet
or more information,
SMS 30606

Logos and contact information for various organizations:

- USAID**: lachlan@griculture.com +254 020 2073912
- viazi POWER**: aak@aak.or.ke +254 20 222 4806
- MICHIGAN STATE UNIVERSITY**: aak@aak.or.ke +254 20 222 4806
- UNGA**: information@unga.com +254 020 393 3000
- Lachlan@griculture**: lachlan@griculture.com +254 020 2073912
- ULTRAVETIS**: info@ultravetis.com +254 20 235 8205
- MEA**: info@mea.co.ke +254 724 253 312
- d.light**: info@dlightdesign.com +254 20 210 6793
- CGIAR**: ciat@cgiar.org
- SecureNutrition**: info@coopers.co.ke +254 20 4206000
- GALVmed**: info@galvmed.org
- CCLP COOPER**: info@coopers.co.ke +254 20 4206000
- THE ROCKEFELLER FOUNDATION**: info@coopers.co.ke +254 20 4206000
- CLIMATE CHANGE AGRICULTURE AND FOOD SECURITY**: ccafs@cgiar.com +254 20 6978 000
- World Agroforestry Centre**: worldagroforestry@cgiar.org +254 20 7224000
- TRAC**: info@agrochem.co.ke +254 734 447 777
- CropLife**: info@agrochem.co.ke +254 734 447 777
- syngenta**: syngenta.east_africa@syngenta.com +254 20 322 8000
- the soil cares initiative**: info@soilcares.com +254 20 8632800

Controlling Chicken Pest and Diseases

Poultry is a good business for making money. Pests and diseases mean you lose money from your chickens. Controlling diseases is cheaper than treating or losing your chickens. Keep your chickens free from pests and diseases by following these steps:

For more information, SMS 'CHICKENS' to 30606

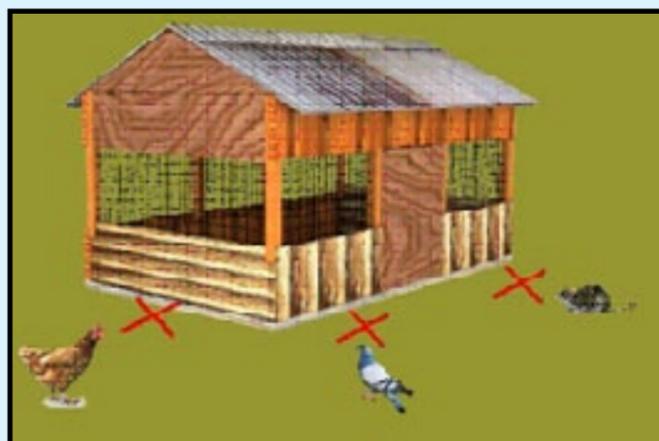
Vaccination

To make sure your chickens survive, vaccinate them. Stop viral diseases which have no cure like Newcastle and Gumboro. Follow the vaccination program in giving vaccines.

Vaccines	Age	Then Every...	Method
Marek's	Day 1	Never	Injection
Newcastle Disease	Day 1	10 - 14 days, 42 days then every 3 months	Eye/nose drops
Gumboro	Day 8	Day 15	Drinkers
Fowl Typhoid	6 - 8 weeks	12 - 14 weeks	Injection
Fowl Pox	8 -10 weeks	Never	Wing stab
Fowl Cholera	10 weeks	Every 8 weeks	Injection

Biosecurity

- Keep your chickens healthy by stopping rats, wild birds and other animals from coming close to your chickens.
- Keep the floor clean and dry with wood shavings. Spray the wood shaving with Ultraxide to disinfect them wood shavings and replace after a week.
- Make sure you clean and spray the chicken house using Ultraxide.
- Have a foot bath with disinfectant and step on the chemicals every time you go in to stop diseases.
- Spray the chicken house using Ultraxide.



Keep other birds and rats away from your chickens

How to Kill Rats Instantly Using Lanirat

It is important to make sure your chickens are not harmed by pests such as rats and mice. Rats carry diseases that can kill your chickens. They also like to eat the eggs, which will mean you lose money.

Use Lanirat by following these instructions:

1. Cut two holes in a cardboard to open the packet
2. Sprinkle Lanirat in a box and close it.
3. Put the box with the poison near where the rats run so they will eat the poison.
4. Keep the chicken house clean to stop parasites and worms.

Lanirat can also harm humans and other animals, such as household pets.



Lanirat kills rats instantly

Planting Local Vegetables Correctly

Vegetables are good for the family. They are rich in proteins, vitamins, minerals and can be grown easily. Your family needs good nutrition to grow well and be healthy. Children without good nutrition can be stunted or have diseases like kwashiorkor.

Put dry leaves like dry banana leaves to mulch your shamba.

After digging your shamba using a jembe, it is ready to plant local vegetables, make sure you:

1. Plant seedlings using a spacing of 15-20 cm between rows and 10-15 cm from one hole to another to get a good harvest and more money.
2. Spray to control pests and diseases.
3. Water at least 3-4 times in a week.



African Nightshade



Pumpkin leaves

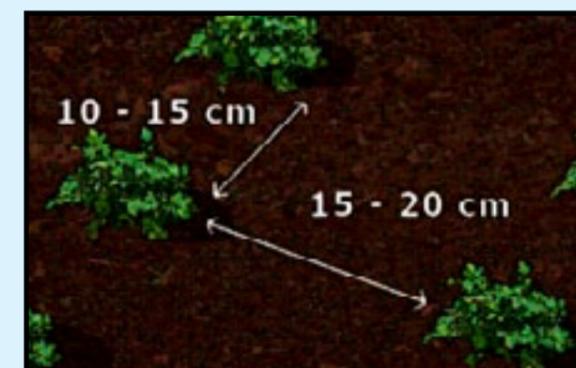


Amaranth (terere)

For more information, SMS 'AFRICAN INDIGENOUS VEGETABLES' to 30606

Importance of Using Mulch

1. Always keep the soil wet.
2. Stop water disappearing through evaporation.
3. Using mulch will mean you won't need to water as much.
4. When the mulch rots, it will make your field more fertile.
5. Mulch stops weeds from growing up towards the sunlight. This means they will not grow big and steal nutrients in the soil from your crops.



Spacing is important when planting

Youth in Farming

Many young people go to town to look for work, because they think that being a farmer means you will be poor. Farming can make a lot of money, and is a healthy lifestyle.

To be a successful youth farmer, make sure you:

1. Join youth training programs on good farming methods.
2. Form youth groups to get financial support like loans very easily from banks and SACCO.
3. Plan your farming activities well. Grow crops you know they are needed in the market to get more money.
4. Diversification of farming activities. This is doing more than one activity in the farm at a time like growing tomatoes at the same time as marketing maize that has been harvested. If one fails, you will still get money from the other activity.

For more information, SMS 'YOUTH' to 30606 or visit the Ministry of Agriculture.