

Series 3, Episode 10

CCAFS sponsored Climate Change Episode

This leaflet contains information on: Planting Trees, Water Distribution, Drought Resistant Crops, Napier Grass, Solar Lights, Rainwater Harvesting and Energy Saving Jikos.



SOIL EROSION

Striga Weed

Soil erosion is a big problem on the farm. Rich topsoil gets washed away by floods during the rains. The topsoil is the best for plants to grow in. If this soil disappears, it will have to be replaced by costly chemical fertilisers. So, it is very important to stop erosion.

Planting Trees

Planting trees is the best way to stop soil erosion from destroying your farm. Tree roots grow deep into the soil and hold it there, stopping it from being washed away.

The best types of tree to plant are ones that are drought resistant and do not need a lot of water. Avocado and fruit trees are good, they do not use a lot of water and hold the soil together. They also give you fruit for your family or to sell.

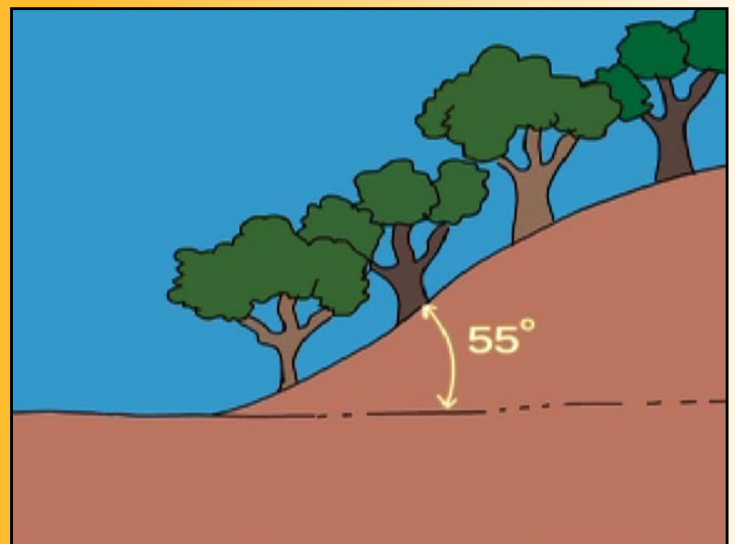
To plant trees, dig a hole 2 feet wide by 2 feet deep. Then mix top soil with 20g, or 2 caps, of DAP fertiliser to give the tree the help it needs to grow. Return the soil and fertiliser mix to the hole. Plant the tree and don't forget to water it well!

Terraces are often used to stop erosion, but in fact they make the soil more unstable - planting trees is better on slopes that are steeper than 55 degrees.

FOR MORE INFORMATION SMS 'TREES' TO 30606



Water the plant well once it has been planted.



Using terraces on land that is steeper than 55 degrees is dangerous.

PREDICTING THE RAINS

Predicting the rains can be a challenge. This is because of changing weather patterns. If rains fail or come at the wrong time, it can mean you lose your crops. Try to find a place near you, like a KARI research station, that can give you a weather forecast. This will help you to plan your planting.

If you have a well or dam, or live near a river, you can use a pump to draw water for your farm.

Manual Pumps

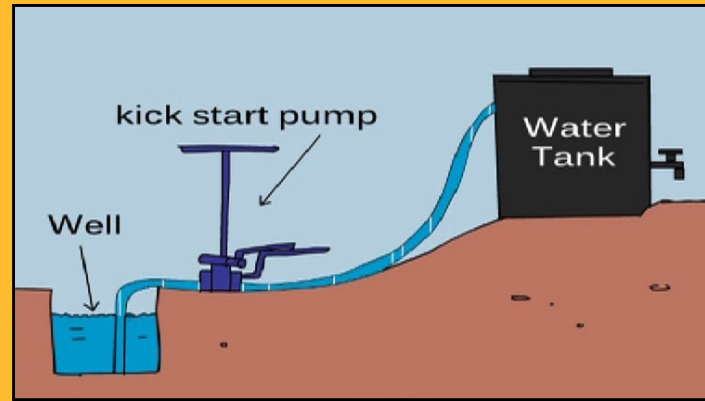
Carrying water from wells or rivers takes time and needs a lot of energy. A manual pump makes it easier.

The KickStart Money Maker Hand Pump is a good solution. The pump is manually operated so doesn't break down, and you can pump up to a tank or dam.

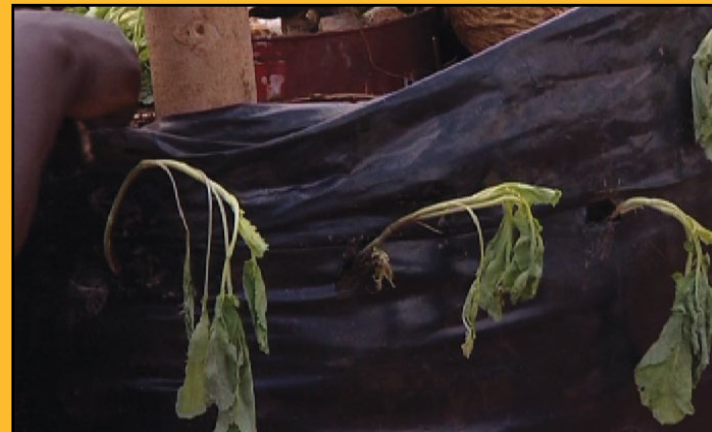
If you pump water up to a storage tank you can water your crops and animals by gravity, which saves time.

The pump is strong, durable and has a 1 year guarantee

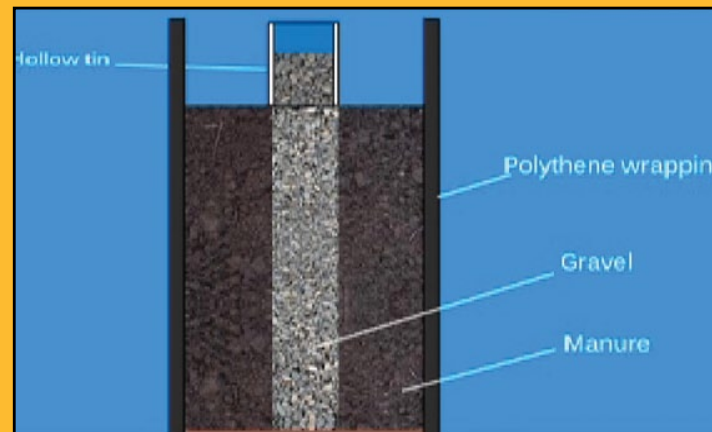
FOR MORE INFORMATION, SMS 'PUMP' TO 30606



The water will be stored in a storage tank for use during the dry season.



You can plant a variety of plants, however green vegetables work best.



A flying garden is a good way of growing vegetables in a arid area.

Flying Gardens

A flying garden is a good way for growing plants with little water. It can also be grown in very little space. Flying gardens are simple and cheap to build and do not need very many materials. Plants like green vegetables work best, such as spinach and sukuma.

1. Drive 4 wooden stakes into the ground in a 2 foot square shape. Wrap a polythene bag around the 4 stakes to make a skin, or put a big sack or plastic bag between the stakes. Put a hollow tin in the middle of the bag on the ground.
2. Mix manure and top soil and put it between the in and polythene. Leave the inside of tin completely empty. Once you reach the top of the outside of the tin, remove it and fill the hole with ballast or kokota. Repeat this process until the whole polythene bag is filled with a ballast tunnel in the middle. Make small holes in the side of the bag wall, leaving 15cm between each hole.
3. Inside the holes made, put seedling plants. Once seeds planted, pour water down the ballast tunnel. This preserves the water and takes it directly to the. All the flying garden needs is 20 litres of waste (1 jerry can) every 2 days.

AMARANTH FARMING

Amaranth is a fast growing and early maturing crop so you do not need to wait a long time to harvest. It is also very resilient, and will still grow in hot temperatures and with little water. This makes it perfect for areas where droughts are common. It is important that high yielding seeds are used for growing a strong and healthy crop.

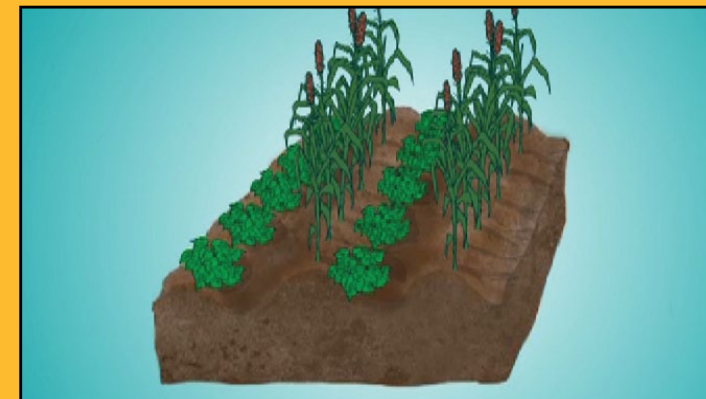
Amaranth is a good cash crop and is also good for feeding the family. It is high in protein, which keeps you strong and helps children grow.

Amaranth is easy to grow, but needs some careful attention. A well managed farm will produce between 1400-2000 kilograms of amaranth per acre.

Amaranth grain sells for around 50 – 60 Ksh per kg. This price can even go up to 80 Ksh when markets are good! This means you get a good profit from your crop, allowing you to make money for your family and for your farm. You can also eat the vegetable type



The threshed seeds reach a good price at market.



Inter-cropping beans and sorghum gives you twice the amount of crops to sell.

PLANTING SORGHUM AND BEANS

Sorghum is a good crop to grow in dry areas. You can sell it at the market for a good price, you can also use it as animal fodder during the dry season and you can feed it to your family as part of a healthy diet.

It is good to plant sorghum with beans. Beans improve the soil, and protect it from the sun. Plant the sorghum in rows 75cm apart, and plant beans between each row of sorghum. This means that you will have two crops to eat and sell at different harvest times.

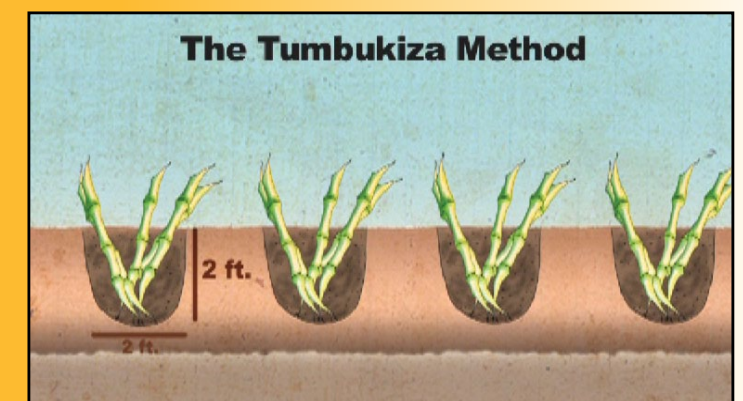
PLANTING NAPIER GRASS

Napier grass is also a drought resistant crop, and is good for animals. You can cut Napier in the dry season to feed to your animals, or make silage in the rains to store for the dry season.

New methods have been created to help farmers get more from their field. Start by digging a hole 2 feet square and mix the top soil with fertiliser. Add 5 – 10 Napier cuttings to the hole, with at least 2 nodules below the soil and 1 above. Water well.

This method should bring in at least 2 – 3 times more grass.

FOR MORE INFORMATION ON HOW TO MAKE SILAGE, SMS 'SILAGE' TO 30606



This method of planting gives better yields.

RAINWATER HARVESTING

Trapping rainwater using strong, clean gutters and tanks can give you water for cooking, cleaning and drinking.

Guttering around your roof can be made from anything - old pipes, 5 litre mtungis cut in half, or plastic or metal guttering. Make sure it is well attached and does not leak.



Guttering is a good way to store rainwater that falls on your roof.

SOLAR LAMPS

Solar lamps from d.Light are strong, durable and use the sun's light to power them, so they are free to run.

They can be used to provide light for reading, writing, working, looking after your animals and even charging your mobile phone.

There are no dangerous fumes or chance of fire and are much safer than kerosene lamps. They can give out light for 4 hours on the brightest setting.

FOR MORE INFORMATION SMS 'SOLAR' TO 30606

ENERGY SAVING JIKOS

Good jikos save you time and money, your health and your eyes.

Jikos from EzyLife come in 3 designs, and all are made from high quality, strong metals and are long lasting.

A jiko can pay for itself in a few months as it uses half the amount of wood that an open fire uses.

Jikos are also better for the environment because less trees are cut.



The EzyLife jiko comes in 3 different designs.



Studying is just one of the ways you can use the solar light.

Produced by Mediae



Watch us on Citizen Television on

Saturday 1.30 - 2.00pm (English)

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