

Series 3, Episode 12

Lucy & Charles farm, TIMAU

This leaflet contains information on: Potato Farming (planting, storing, markets), Chickens, Rainwater Harvesting and Energy Saving Jikos.

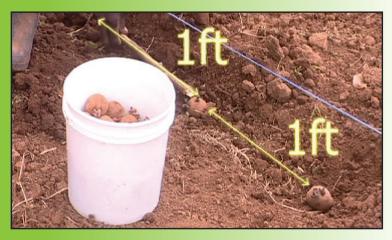
POTATO FARMING

Farmers all over East Africa have lots of problems with their potato crop. These problems include low yields, bad markets, low prices, uncertified seeds and poor storage.

Planting Your Potatoes

It is important to plant your potatoes correctly to get a full harvest. Preparing the soil is key – do this by digging the field well and getting rid of any big lumps of soil.

Make rows in the field going from east to west. This makes sure that the seeds get the most sunlight possible. Make sure the rows are dug at least 3 feet apart, with each potato 1 foot apart. Each furrow needs to be 6 inches deep. This gives the potato seeds enough room to grow strong and big.



Planting your potatoes correctly is the best way to get a bumper harvest.



Storing your potatoes in a store like the ones provided by the Kisima Farm can be a good way to get better prices.

Make sure you add farmyard manure and fertiliser to the furrows. This gives the potatoes more of the nutrients they need to grow. Add 20 kg of DAP fertiliser to 1 acre and mix with the soil and manure. Carefully add the seeds to this mix and cover with the soil mix. Water well for best results.

Storing Your Potatoes

Storage of potatoes is also key to getting a bumper harvest. Storing your potatoes has a lot of good benefits. Not only can you stop losing an amount of your harvest every year to disease, you can also hold them until a time when the markets are better.

To store your potatoes correctly, build storage units (3 for different sized potatoes) out of wood in a cool, dry and protected shed. Make sure the units are off the floor (to stop insects or rats from eating them) and out of the wind and rain.

Good Potato Seeds

Most farmers use seeds that they have kept from last year and that they have used for several year before this. This means the seeds are weak and often diseased, which makes them unlikely to give you a good harvest. New seeds have more vigour and will produce a high yield. Kisima Farm is a certified potato multiplication farm and we went there to learn about certified potato seeds. Using certified seeds from Kisima Farm means that your yield can go from 27 bags to 90 bags per acre in one year. Kisima Farm also provides services such as storage units to help farmers get a better price for your crops.

Grading Your Potatoes

To get a better price for your potatoes, start to grade them by size. Put them into small, medium and large piles (instead of piling them all together with small at the bottom and big at the top) and market them to different buyers.

Small potatoes can be used for seeds on the farm, medium for small buyers at a cheaper prices and large potatoes to big buyers at a premium price.



Certified seeds come with a label full of information to help you plant.

Finding A Market

Finding a market for your crops is always difficult. Often when crops are ready to harvest, the market becomes flooded by other farmers who also have crops that are ready. This influx of produce puts the price down.

To avoid this, Kisima Farm gives good advice to the farmers on how to get the best prices.

- **Grading** grading your potatoes into different sizes means you can get different but still good prices for them by targeting them to different buyers.
- **Packaging** most farmers use bags or sacks to package their potatoes. These bags are large and only suit big buyers rather than smaller families.
- **Pricing** If you price all your potatoes (big and small) at the same price you are less likely to sell your whole crop to a buyer.



Grading your potatoes by size means you can sell them at a better price.

Certified Seeds

The certified seeds provided by Kisima Farm are of a better quality than the potatoes used by Lucy on her farm. They are healthy (rather than diseased), have lots of eyes on it, and are well sprouted. All bags of certified seeds comes labelled by KEPHIS and includes information telling the farmer about how and where to plant the seeds.



Changing the packaging of your potatoes is also a good way to make more money.

- Using certified seeds using these types of seeds means you have a higher likelihood of getting a strong crop which you can sell at a better price.
- **Storage** Storing your potatoes means that that you can sell them at a time when the prices are better. By doing this you can control the market yourself.
- **Cluster Groups** getting together with other farmers means that you can go to buyers as a group and have a stronger negotiation power to get a better price for your product.

CHICKENS

It is very important to keep your chickens healthy to get a good yield from them, whether it is from eggs or meat. Good hygiene is the best way to make sure that your chickens stay healthy and happy – it is also the cheapest.

Good Hygiene

The best way to keep your chickens healthy is to keep up good hygiene practises. These can include keeping different clothes for each different animal so that you don't bring in disease or bacteria from other animals on your clothes.

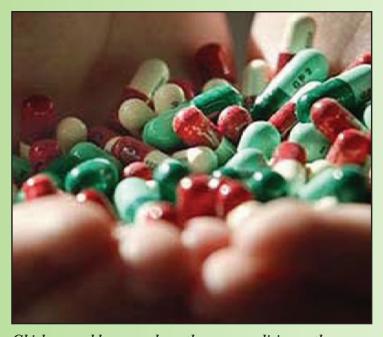
Another good way to stop the spread of disease is to put a foot bath outside the chicken house. Use this every time you go in or out of the house to stop disease being spread there.

As well as this, keep the house clean and well ventilated. This also means keeping the food and water holders clean and stocked full of clean food and water.

Vaccinating Your Chicks

It is important that you always vaccinate your chicks when they are young. The chicks from KenChic are vaccinated when they leave their hatcheries at are one day old, however Kienyeji chickens do not come already vaccinated so you must do it yourself.

Giving your chicks vaccines is important as it stops lifethreatening diseases such as Newcastle Disease. The vaccine for diseases such as this can be bought from your local agro-dealer and must be kept cold.



Chickens and humans share the same medicine so they building up a resistance to them. This very bad for human health.



Keep the chickens feeding areas clean to avoid disease.



Having a foot bath can stop the spread of diseases to your chickens.

Antibiotics For Your Chickens

It is very important that you only give your chickens antibiotics given to you by your vet. Vets will only give your chickens the right medicine when they are actually sick. If you give your animals medicine they do not need they will build up a resistance to them and then when they really get sick, the medicine will not work anymore.

If a resistance is built up to the antibiotics by the chickens, they will slowly stop working. This can mean the disease in your chicken cannot be cured and they could die. This would lead to a decrease in produce and therefore a decrease in income.

Chickens who are treated with antibiotics transfer these medicines into the meat and eggs they produce which in turn are eaten by humans. Since humans use the same types of antibiotics as the chickens, we too slowly build up a resistance to them. This can lead to problems if we get ill and cannot be cured.

FOR MORE INFORMATION, SMS 'CHICKENS' OR 'ANTIBIOTICS' TO 30606

Ezy Life Jikos came to replace the fire which made Lucy's kitchen so smoky with an energy efficient jiko.

It uses less firewood than a normal fire which saves time and effort from collecting wood. The jiko also produces much less smoke. This means that Lucy and her family do not get sore eyes or cough as much as they used to. This means the jiko is even good for their health, as well as their pocket!

The jiko is small, therefore can be put on a table instead of the floor, and is made of high quality metal, which means it will last as long as 5 years, and has a 1 year guarantee. The jiko costs around 1,200 ksh but can pay for itself in under a couple of months with the money you save from buying lots of firewood.

FOR MORE INFORMATION, SMS 'JIKO' TO 30606



Jikos come in 3 shapes and sizes and even different colours depending on your needs.

To help Lucy and Charles get the best from their potato crop Shamba Shape Up builds them a water pan. This means they can store water in it as well as in a water tank above.

Having both a water tank and a water pan is very helpful as it makes watering the field much easier.

However, without any way to distribute the water the farmers are stuck. Using the Money Maker Max pump is a low cost and low maintenance way of spreading the water across the fields. It is easy to put together and safe to use by anyone without the use of petrol or electricity. The water is pumped up from the water pan into the water tank where it is then stored. Gravity is used to pump the water as a sprinkler over the crops.

This new way of pumping water saves Lucy and Charles money, time and effort, and helps to irrigate their farm well.

FOR MORE INFORMATION, SMS 'PUMP' TO 30606



Digging a water pan can be a good way to store water on your shamba.

