



Series 6, Episode 5

Bernard's Farm, Makueni, KENYA

This leaflet contains information on: conservation agriculture, fruit fly in mangoes, drying Cassava for storage, chickens, saving money

If undelivered, please return to The Mediae Company, PO Box 215-00502, Karen.

Conservation Agriculture

For more information, SMS "SOIL CARE" to 30606

Conservation Agriculture is a way of farming that looks after soil to help you get a good harvest. There is less work and less cost for the farmer. For Conservation Agriculture, there are 3 ways to run your farm:

1. Do not disturb or plough the soil

If you dig the soil a lot, you will have a lot of weeds and lose water. This is very bad if you live in a dry area.

Prepare your land before the rains so you can plant after the first rain. Use a **sub soiler**.



A sub soiler helps to break up hard soil better than a plough. The roots will get more water.

Dig only the rows you will plant in. The soil will be better. It will not get taken away by wind or rain.

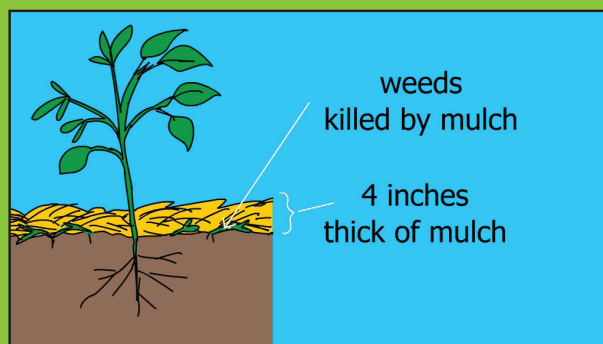
Weeding

Stop weeds before they grow. Spray a **pre-emergence herbicide** 48 hours after planting. Spray early morning or late evening.

2. Keep soil covered

Do not leave soil uncovered, even if you do not have a crop. Cover soil with dry grass (mulch) or put crop residue back on the soil to stop:

- water loss
- weeds
- pests and diseases
- soil being taken away by wind and rain
- soil being too hot or too cold



*Use dry grass for a **mulch***

After harvest, do not take away the leftover crop. Use it to cover the soil and protect it, or return the crop waste (e.g. bean plants) to the field.

3. Rotate crops

Do not plant the same type of crop in your field every year. Rotate crops for better soil and less weeds, pests and diseases.

e.g. After a maize crop, plant beans. Beans are good for the soil as they put in **Nitrogen**.

Mango Pests and Diseases

For more information, SMS "ORGANIC" to 30606

Control Fruit Flies

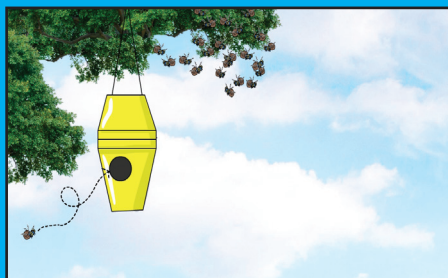
Fruit flies are bad for mango trees and make farmers lose a lot of money. You cannot sell fruits that have damage from fruit flies.

Control fruit flies with an **AD Device or ADD trap**, soil drench and foliar spray.



How an AD Device or ADD trap works

An ADD trap hangs from a tree. It has bait to attract fruit flies, and a killing agent to kill the fruit flies.



1. Fly goes into ADD trap and picks up killing agent.



2. Fly flies out and passes on killing agent to other flies.



3. Flies die

ADD traps can also be used with melons, courgettes and butternuts.

Recharge ADD traps every 6 weeks.

Buy ADD traps from agrovets, www.realipm.com or call 0725-806086 to order from Real IPM.

Use a soil drench to kill Fruit Fly eggs and Mango Seed Weevils

Mix 20ml **Campaign** with 20 litres of water in a knapsack to treat 12 trees.

Drench 1: when you see flowers

Drench 2: when you see fruits

You can also use this drench as a foliar spray to help kill adult fruit flies.

Treat Powdery Mildew

Mix 40ml **Regain** with 20 litres of water in a knapsack to treat 12 trees.



Spray every week when flowering starts until when you see the fruits.

Spray leaves: Month 1: every 7 days
Month 2: every 14 days

TIP

Form a group with your neighbours and kill the fruit flies in your area at the same time.

Treat Anthracnose

Mix 20ml **Sustain** with 20 litres of water in a knapsack to treat 12 trees.

Spray every week when flowering starts until when you see the fruits start to expand.

Spray:

Month 1: every 7 days
Month 2: every 14 days
Month 3: once



Storing & Drying Cassava

For more information, SMS "POST HARVEST" to 30606

Grow Cassava in dry areas. It does not need a lot of water.

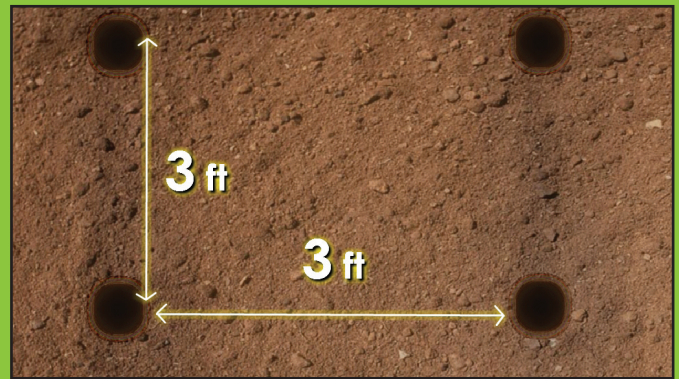
Plant Cassava seeds when the rains start, in holes 3 feet apart, on rows 3 feet apart. Only dig the holes you will plant in. Buy disease-free seeds.

Weed 2 weeks and 4 weeks after the Cassava starts to grow.

Harvest Cassava after 8-10 months. Save the seeds to plant next season.

Sell Cassava to factories where it is made in to chips or flour. You can get a better price than selling fresh Cassava locally.

Dry Cassava yourself: peel and wash the roots the same day you harvest. Cut into small chips, or use a **chipper** to cut the cassava. Lay the chips out in the sun to dry for 4 days on a plastic sheet. Store the dried cassava in sacks or **PICS bags** in a good store.



Plant Cassava seeds in small holes 3 feet apart, in rows 3 feet apart.

To harvest Cassava:

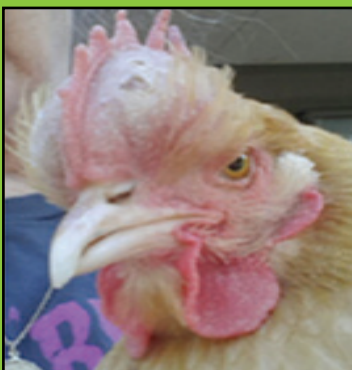
1. Cut the stems 2 inches above the ground with a panga. Do not cut the root.
2. Loosen the soil around the root.
3. Pull the stem to lift out the root.

Newcastle Disease (NCD) in Chickens

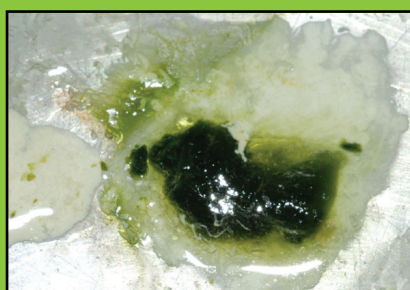
Newcastle Disease (NCD) is a virus with no cure. If NCD comes to your farm your chickens will die and you will lose a lot of money.

Vaccinate your chickens every 3 months to stop NCD.

Signs of Newcastle Disease (NCD):



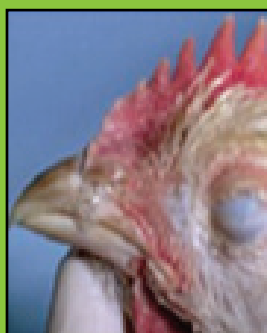
1. Swollen head and neck



2. Greenish diarrhoea



3. Discharge from eyes & nose and



Keep sick birds away from healthy birds.

Vaccinate against NCD:

1. Mix the vaccine with clean water. Follow the instructions on the packet.
2. Put 1 drop of mixed vaccine into the eye of the chicken.



3. Wait for the chicken to blink it in.





Only vaccinate chickens that are healthy.

For more information, SMS "CHICKEN" to 30606

Saving money

For more information, SMS "BANK" to 30606

You can use savings to buy fertiliser for your shamba, or even to pay school fees. Compare the ways you can save. Find out which works best for you and helps you save the most money.

In a bank	As a group	At home	On your mobile phone
 <p>Your money is safe. You make money from interest if your money stays in the bank a long time.</p> <p>Remember: you may have to pay the bank to have an account. Try to find an account that is free.</p>	 <p>Useful when you live far from a bank. Make money with enterprises.</p> <p>Remember: you may not be able to take out money when you want.</p>	 <p>Easier than taking it to a bank or group. You have control of your money.</p> <p>Remember: money can be stolen from your home. It is also easy to spend it on other things.</p>	 <p>No-one can steal your money. You have control of your money.</p> <p>Remember: if you live near an agent, it is easy to take out your money and spend it on other things.</p>

Plan well to save money

1. Decide how much money you need to save and how much time you have to save it.
2. Work out how much money you have to save each month.
3. Keep to your plan. If you make extra money, add it to your savings. You will have less to save next month.

January	February	March	April
Save 5,000/=	Save 10,000/=	Save 2,500/=	Save 2,500/=
Total 5,000/=	Total 15,000/=	Total 17,500/=	Total 20,000/=

You need 20,000/= in April. Plan to save 5,000/= each month.

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

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SMS 30606



www.plantraisers.com
+254 700 723 220
+254 735 752 687



info@galvmed.org
+254 715 831 853



africa@soilcares.com
+254 782 970 136



info@realipm.com
+254 717 741 717
+254 725 806 086



Alama ya Ubora
information@unga.com
+254 20 697 8000



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caroline.munyao@khs.co.ke
+254 730 000 704



kassim.owino@agriseed.co.ke
+254 702 934 938



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Food and Agriculture
Organization of the
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info@dlightdesign.com
+254 20 210 6793



SMS: 70555



info@mea.co.ke
+254 724 253 312



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



marketing@oshochem.com
+254 711 045 000
+254 732 167 000,
SMS: 20560



info@kenchic.com
+254 722 202 163
+254 734 600 204

