

Series 4, Episode 22

Wilfred and Rose's Farm, NARO MORU

This leaflet contains information on: soil testing, top dressing maize, feeding cows, minerals for cows, stopping gully erosion and harvesting rainwater



Fixing gullies in your farm

Gullies carry soil and water away from your farm. If you lose the soil from your farm, you can not grow good crops. Gullies get wider and deeper with every rain, and should be stopped to save your farm.

To fix a gully, plant Napier grass or fodder across the gully to catch soil and water as it flows down the gully. This will give you good fodder for your animals and save your soil.

If you cannot plant Napier you can use dead wood from the farm. Put stakes of dead wood into the soil across the gully and weave smaller wood across the stakes to make a check dam. This will catch soil and water running off the farm.



Harvest rainwater for the house

Rainwater is free and clean. Trapping rain from your roof will give you a good water supply for your house and the farm.

Make sure your roof is clean, your gutters are clean and do not leak, and your tank is secure.

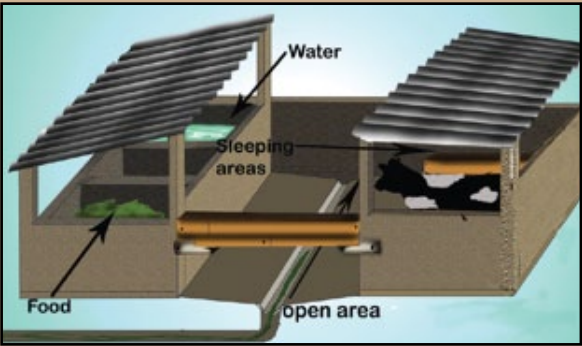


Using harvested water for irrigation

Use drip irrigation to get the best profits.

If you do not have a pump, put your tank on the highest part of your farm so your drip system can work using gravity, or build a tank stand.





Cow sheds

A good cow shed should have

- a hard floor which is easy to clean and slopes away so the slurry can drain out.
- good sleeping places for the cows with a roof,
- a feeding area with three troughs, one for minerals and dry feed, one for fodder and one for water.
- The shed should be cleaned every week
- gutters and tank to catch water for the cows

Feeding cows for more milk

You need good cattle feed so your cow

- 1-stays healthy,
- 2-comes on heat,
- 3-makes good calves and
- 4- gives a lot of milk.

Feed your cows fodder, such as grass, lucerne and Napier, chopped into small pieces 2 inches long, and mix with concentrates and supplements:

Heifers from 9 months, and pregnant heifers, feed
Unga Afya Meal 1 kg per day.

Lactating cows

Fugo Dairy Meal



Give each cow **1 kg** of Dairy Meal for every **2 litres** above **5 litres** it produces.
So, if your cow produces 7 litres of milk, you calculate:

7 litres - 5 litres = 2 litres

1 kg for every 2 litres over 5 litres = 1 kg

For more information, SMS 'DAIRY FEED' to 30606

Supplements for healthy cows

Producing milk takes a lot of minerals and protein from the cow's body. If you do not give cows supplements, they will produce less and can get sick.



These are the signs if your cow does not have enough minerals:

- 1 - fur comes out
- 2 - black cows have brown patches of fur



Pregnant cows need extra supplements. Cows which do not have enough minerals when pregnant can get milk fever which can kill the cow.

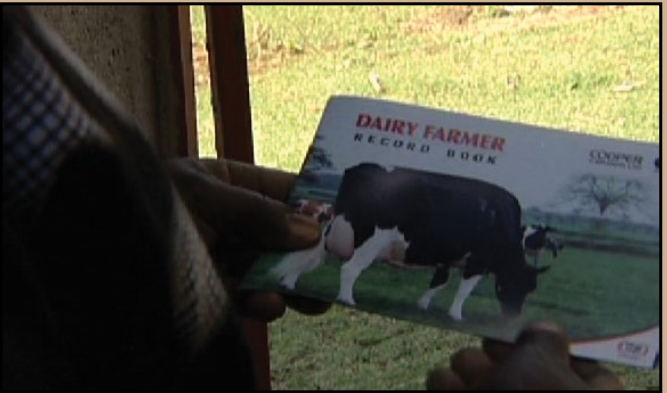
For the last 2 months of pregnancy, feed your cow a high protein ration of supplements:

Supplement	Amount per day per cow
	150gr (2 Handfuls)
	1 glass per day

For more information, SMS 'MINERALS' to 30606

Dairy Record Books

A record book will help you to manage your cows.
You can get a record book from Coopers.



To make your own record book, start with an ID page like this:

Cow Name:	Sire (father):	Dam (mother):
Cow Breed:	Tag Number:	
Date of Birth:		
AI/Cover date 1:	Repeat date 1:	Calf 1:
AI/Cover date 2:	Repeat date 2:	Calf 2:
...		

Then have another page for health and vaccination:

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4
Vaccination types and dates	Deworming dawa and dates	Spraying record	Health record (all sicknesses, vet visits and treatments)
<i>(For example, ECF, 30/7/2014)</i>	<i>(For example, Nilverm, 5.6.2014)</i>	<i>(For example, Grenade spray, 4/7/2014)</i>	<i>(For example, lumpy skin disease, vet visited, injected 3/3/2014)</i>
<i>(For example, Foot and Mouth, 01.08.2014)</i>	<i>(Remember to deworm every 3 months)</i>	<i>(Remember to spray every week)</i>	
...

Then, have a record of the amount of milk the cow gives you:

Date:	1/7/2014	2/7/2014	3/7/2014	4/7/2014	5/7/2014	Etc...
Milk (am)	2 kg					
Milk (pm)	3 kg					
Total milk	5 kg					
Milk sold	2 kg					
Price	60 Ksh					

Using this, you can work out how much your cow gave you every month or year, and how much money you made from it.

If you deduct the costs from the income, you get the profit. Costs are feed, supplements, fodder, housing, dewormer, spray, vaccines, vet costs, AI, etc.:

Total milk income - costs = profit

For more information, SMS 'DAIRY FARMING' to 30606

Soil tests

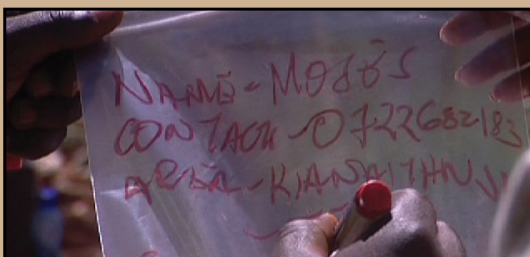
A soil test will tell you

- how healthy your soil is and
- which fertiliser to use and
- how much fertiliser to use
- if you need to use more manure,

Take a soil test every 3 years.

1. dig up subsoil from 5 places around your shamba.
2. mix the soil samples with each other.
3. Put 4 handfuls in a soil sample bag or plastic bag
4. Label the bag with your name, address, location, phone number and the crops you want to grow.
5. Send the sample to:

Mea Ltd Laboratory
PO Box 1018 Nakuru
Stanley Mathenge Road
054 2212220



The lab will send you test results which will look like this:

Parameter	Unit	Result	Too Low	Optimum	Too High
pH		6.5			
Phosphorous (P)	ppm	30			
Potassium (K)	ppm	1000			
Calcium (Ca)	ppm	8000			
Magnesium (Mg)	ppm	893			

And will tell you which type of fertiliser to use. Remember to change your fertiliser every 4 years.

For more information, SMS 'SOIL TEST' to 30606

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Saturday 1.30 - 2.00pm (English)
Sunday 1.30 - 2.00pm (Kiswahili)

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