

The Organic Farmer

The newspaper for sustainable agriculture in Kenya



Nr. 19 December 2006



Good pasture, more milk

Poor pasture is to blame for low milk production and reduced income for many farmers.

The Organic Farmer

The type and quantity of feed dairy cows eat determines the amount of milk they produce. Even a high-yielding dairy cow will not produce the optimum milk yield if it is not well fed. A good mixture of forage that contains energy, protein, fibre, miner-

als and vitamins helps the animals to maintain their normal body functions and stay healthy. Also important is the supply of water. If a cow does not get enough water, it will produce less milk. A milking cow drinks about 5 litres of water for every litre of milk it produces.

Many small-scale farmers feed their dairy cows with inadequate and low quality fodder, resulting in low milk production (and, of course, low income for the farmer). Before buying dairy cows, a farmer should know their pasture requirements according to the size of the shamba. Even for those who have planted pasture, it is very often of poor quality that cannot sustain the animals. Pasture is like any other crop on the farm: it should be well managed. Farmyard manure should be applied to maintain soil fertility and ensure faster regeneration.

Dairy cows are more comfortable if they are given enough space for free movement. All animals should have access to pasture and an open-air exercise area or run. In organic farming, landless zero grazing is not allowed.

Hay is important

We are now approaching the dry season. Scarcity of pasture forces farmers to work extra hard to feed their animals. Farmers should make provisions for the dry season. How can they store feed so that the cows do not suffer and reduce milk production during the dry season? See pages 4 and 5 for some answers. ■

Dear farmers,

First off, we would like to thank you for all the letters, telephone calls and SMS messages we have received this year. It is a good feeling to be in direct contact with farmers. Every week, at least four new farmers' groups join our mailing list. This is a very good indicator that farmers value the information we give and are ready to put new ideas into practice. We may not be able to meet all the demand for the newspaper, but we have addressed the problem partly by increasing the number of copies from 12,000 to 14,000 copies. We will try and distribute these fairly to ensure as many farmers as possible are able to access the information.

Going through your letters and reactions, one is really impressed by the direction agriculture is taking in the country. Farmers are becoming more and more self-confident. They are willing to learn new farming methods. To them, farming is no longer an occupation for those who have nothing else to do. It is an honourable and profitable occupation like any other. Many farmers now realise that farming is not just about producing food for consumption, but is like any business enterprise.

A farmer needs to be a planner and a manager. A well organised farmer knows that the dry season is a time of great hardship, as pasture and water resources reduce. He/she has to ensure there is enough fodder to feed their animals during this period (see page 4 and 5). A farmer has also to be an accountant: He/she has to keep a record of all the farming activities during the year to determine how much money the farm has made and how it has been used, and whether they have made any profit or loss during the year. One has to be a marketing specialist too. You should know when to grow and sell to get a maximum return on your investment (see pages 2 and 3).

Farmers have to be self-reliant, but they should not underestimate the advantages of working as a group. Farming has a great future if it is done in the right way. Finally, in this last issue of 2006, we would like to wish you all the best for the holiday season and the coming year. May you enjoy the fruits of your hard labour, a good harvest and good health, as we all work together for the prosperity and peace of our country.

The Editors

in this issue

Recordkeeping is the way to success

Farmers, can you answer the following questions: How many bags of maize did you sell after the last harvest? How many litres of milk does your cow produce per month? Do you actually know the exact size of your land?

You are not sure? Then you don't keep your records properly! Keeping farm records is neither a waste of time nor a boring job done only by people in offices. On the contrary,



it gives you an exact picture of the expenses and earnings of your farm. It is the only way to find out whether you are making a profit with your farm and its produce or whether you are losing money. Read page 2 on how to keep farm records.

MY OPINION

When I was young, we could accurately predict the seasons, grow crops at the right time and get good harvests. But climate change now threatens food production. The current rains for example, have intensified in November which is supposed to be the beginning of the dry season. Africans does not have many cars or big factories that produce dangerous gases. The US, Europe China and other industrialized countries are to blame for global warming and the changing weather patterns. But I do believe that if all farmers adopted sustainable agriculture, planted trees and stopped use of dangerous chemicals that pollute our environment, we will play our part in saving this planet.

Simon Githinji, a farmer in Thika

The Organic Farmer

The Organic Farmer is an independent newspaper for the Kenyan farming community. It promotes organic farming and supports discussions on all aspects of sustainable development. The Organic Farmer is published monthly by ICIPE and distributed free to farmers. The reports of The Organic Farmer do not necessarily reflect the views of ICIPE.



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Layout

In-A-Vision Systems(k)

Do you keep farm records?

Farmers should keep proper records about the activities on their farm. To be certified as an organic farmer, recordkeeping is a must.

Anja Bengelstorff

Recordkeeping tells you how the various activities on your farm perform. For example, how much profit did you make from milk production, or how much from maize farming? Which of the enterprises is most profitable, which causes you losses? You might need this information in case you want to change the crop you are planting or if you have to decide whether or not to purchase another cow. Also, if you want to apply for a loan from a bank or another lending institution, you will need to present farm records to show how your farm performs. It is almost impossible to get a loan without evidence of records.

Start an inventory

At the beginning, an accurate inventory of the farm should be done so as to know what you, the farmer can work with: buildings and their size, use, and capacity; livestock, tools and machinery; and other available assets. All need to be



listed. What is the cash value of all this? To plan future steps, draw a map of the homestead which shows the important features and field arrangements. How many acres/hectares is the farm? Determine how much is under crops and pasture, or used for housing, and what is wasteland.

It is also important to look into the following factors:

Water supply: How do you access water for irrigation? Do you have a stream next to your homestead, or do you have to carry water from far? Supplying the farm with water from a distant place involves additional labour and time and determines whether you can develop an irrigation system.

Climatic conditions: Record the rainfall patterns in your area. How many days of rainfall do you experience per year? Does it change over the years, and if yes, how? The amount of rain will determine which crops a farmer can plant since there should

be enough water for irrigation. Do you enjoy two or only one growing period per year? Describe the soil type(s) and the general vegetation in your area; changes over a longer period might force you to change farming activities.

Proceed with activities

Every single activity must be recorded. As a rule, note the price, date and place of each purchase and expenditure.

Crop production records: Note exactly how much of seed or seedlings you plant and on how many beds and what size and on which day? Put a sign on each bed, naming the plant grown there. Record the time in days you needed to cultivate your crop. Record how much manure or fertilizer you used. If you prepared it yourself, which components you mixed and at what cost. Note how

many bags/ kilos of each of your crops you harvest. Write down exactly how much you consume yourself and how much you sell, and at what time and place.

Livestock production records:

Count your cattle/ goats/ poultry, etc. Document new births and their birth weights and their parents. Record how much money you spend on fodder, water, shelter, veterinary services, etc. during an animal's lifetime. Record how much milk/ eggs/ meat, etc. you consume yourself and how much you sell and at what price and place.

Storage records: How much space do you have? What were the costs of setting up the storage facilities?

Labour records: Record how many people worked on which farming activity and for how many hours or days? Note if and how much you paid them. This should also include family members.

At the end of each month, calculate the output (yields and their cash value, sale of livestock, etc.) of each farming activity. Deduct the money spent on input (costs of seeds, labour, medicines, fertilizers, etc.) from the output – this is your profit. ■

The best way to market your maize

Most of our Kenyan farmers grow maize. However poor marketing continues to reduce their profits.

Anja Bengelstorff

Considering farming as a business is necessary to improve livelihoods, as we pointed out in the July issue. Part of the farming business is marketing of crops in order to get the highest profit possible. Maize is the most important food crop in Kenya. The majority of farmers plant it for home consumption and hope to sell a surplus to earn some cash. Every Kenyan eats on average 98 kg of maize every year.

A farmer who wants to produce maize for sale needs to consider several important factors when entering into maize production, and also when deciding when and how to sell the maize – the marketing.

First, a farmer defines how much land will be available to put into maize. The farmer then needs to calculate how much maize the family will need between the planting seasons. Will the output only feed the family, or can you get more to sell at the market? Once you have come up with a figure, you should plan how much maize you want to sell and where. The maize can be sold directly from the farm to individual buyers or to middlemen, or it can be taken to the (nearest) market by the farmers themselves or by farmers organized in a group. It can also be taken to a buying agency such as the National Cereals and Produce Board (NCPB).

A farmer can also consider other possibilities such as contract farming: The farmer signs a contract with a buyer or an agency and agrees on the price per bag and how many bags are to be delivered before the production even starts. This way of marketing is not very common in Kenya as yet, but has the advantage that the price is fixed, regardless of how good or bad the harvest will be.

The price per bag needs to be calculated, too. Here the farmer should know the prices of previous seasons as a starting point. Currently, a bag of maize in Kenya goes for around KShs 1,300.

Production and other costs

Another important, if not the *most* important consideration is how much do you have to invest to get one bag of maize? These costs include labour,



the money needed to buy seeds and to prepare manure, the cost of pest control, among others. How fertile is your soil, and how much care does it need to get a high yield? Once the production costs are established, they are used as a basis to determine the selling price. Farmers should recover their production costs, getting at least the same amount of money for their maize as was put into its production. A good profit would start with anything above 10% of the production costs, suggests Dr. Festus Murithi from the Kenya Agricultural Research Institute (KARI).

Storage also requires some investment. Other costs which must be taken into account include transporting the maize to the market or the buyer. Also, if the farmer needs someone to sell the produce at the market, this person might need to be paid.

To establish the true production costs, it is necessary for every business-oriented farmer to keep the records properly.

The maize is harvested – what's next?

If all the maize is not to be sold immediately after harvesting, a farmer needs to store the excess properly. The storage facility is supposed to contain all the maize and keep away pests

and rodents such as insect pests and rats.

Prices are usually low at harvest because everyone is selling, and improve once the harvest time is over. Every farmer needs to know the highest prices of previous seasons and the current price to decide how long to store the maize and when to sell. If not sold at the right time, prices could fall, pests could destroy the produce, or there could be no buyers at all.

If the maize is to be sold green for roasting or boiling, higher prices are likely to be gained near towns where many people might buy maize cobs while passing by.

As a rule, the price will depend on how much maize is in the market and how much maize is needed by buyers, as well as the costs of storage if one wants to wait for better prices. The general performance of the maize

crop within the neighbouring farms, areas and the whole country must not be forgotten either: If the season is good for all farmers, a farmer may want to wait before selling or sell immediately if the prices are good.

Marketing as a group

However, there are times when cash is needed immediately: to pay school fees three times a year, to buy seeds to start the new season, or to meet other urgent needs which cannot be postponed. At such times, if saving money from previous harvests was not possible, the farmer is forced to sell at whatever price is available.

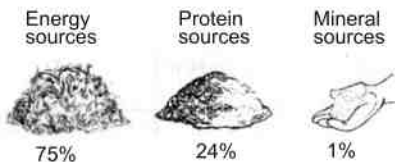
As Dr. Murithi from KARI points out, farmers in a given area could benefit from better prices if they form marketing groups to sell their maize as a group. This will improve their bargaining power with traders. In such a group, all members put in some money for the benefit of all, and since acting as a group reduces costs, the farmers could construct or hire storage facilities and transport their maize together at lower prices. Also, they could assign someone to get information on prices and demand in other parts of the country. This would enable the group to transport their crop to places where there are favourable higher prices. ■

Dairy cows need a balanced diet

How can farmers improve the quality of the pasture to meet the feed requirements of their cows?

The Organic Farmer

A good cow will bear one calf a year and produce milk for more than 284 days during the same year. To sustain this production level, proper feeding is required to meet the nutrient needs of the cow. Just like human beings, livestock require a balanced diet. Cows have a large stomach which should always be full (maize stalks and banana stems are good fillers). Mature cattle need 80 kg per day of fodder including fresh foods with a high vitamin content. A variety of food makes the cows healthier and more productive (see two diets for dairy animals in the table on the right). Good and balanced feed for cows must have at least equal parts from each of the following three sources: protein, energy and minerals; they should be distributed as explained below:



Energy

Cows obtain most of their energy from roughage (plant feed materials). They require energy for body maintenance, milk production, growth, weight gain and reproduction. Most of the milk is produced during the first 3 to 4 months of the lactation period. Therefore the cow needs more energy at the beginning of lactation. Also, the young animals need extra energy for growth and weight gain.

Ordinary energy sources: All grasses and maize stalks are very good sources of energy for ruminants (cud-chewing animals). The most popular fodder grasses include Napier (elephant) grass, Guatemala grass, Giant setaria, Guinea grass, Makarikari grass, Rhodes grass, Kikuyu grass, Nandi setaria. If farmers use the *tumbukiza* method for Napier grass (see page 5), they should remember that each dairy cow needs grass from three holes to meet its daily forage requirements. Napier grass can only be fed to animals at 6 or 8 weeks after planting as young Napier grass contains a lot of water and very little dry matter and so will not sustain the animals.

Ration 1

Ingredients	Quantity
Chopped maize stalks	2 debes, tight
Chopped sweet potato vine	2 debes
Chopped Napier	2 debes
Maize germ or Maozo (reject maize)	3 gorogoros
Cotton seed cake	1½ gorogoros water
Dairy lick	2 tablespoons

Expected production: 13 bottles of milk per day.

Be careful with reject maize (maozo); rotten maize may contain aflatoxin.

Ration 2

Ingredients	Quantity
Chopped maize stalks	2 debes, tight
Chopped sweet potato vine	2 debes
Chopped Napier	2 debes
Dairy lick	2 tablespoons
Dairy meal	5 gorogoros

Expected production: 13 bottles of milk per day

Poultry waste ... Not allowed!

In conventional agriculture, farmers are advised to give the cows poultry waste, also referred to as poultry litter or poultry manure. Poultry litter consists of bedding, spilled feed, feathers and chicken droppings collected from where chickens live.

No doubt, chemical analysis shows that the protein content in poultry waste is very high, and the nitrogen in this manure can be utilised up to 10 times more efficiently when recycled through animals as a feed. Microorganisms in the stomach have the unique ability of utilising protein and nitrogen in the waste to make their own cell protein, which is subsequently digested in the lower gut for use by the host animal.

But there are a lot of problems associated with the use of poultry waste as feed. The material, if it is not properly treated, is a potential source of harmful agents including patho-

genic bacteria, for instance *Salmonella*, moulds and yeasts. In addition, some forms of poultry waste (e.g. caged-layer waste) have a particularly offensive odour and are rather messy to handle.

Bird flu is another potential worry, although it is not present in Kenya at this time. Another reason why the US, Canada and many other western countries have banned chicken waste from livestock feed is that they fear the transmission of BSE (mad cow disease).

In organic farming, the use of poultry waste is not allowed. According to the International Standards for Organic Farming, the following substances are prohibited in the diet for livestock:

- Farm animals by-products (e.g. abattoir waste).
- All types of excrement, including droppings, dung or other manure.

Extra energy sources: Molasses, maize germ, wheat germ.

Protein

Protein is required to help microorganisms in the rumen (stomach) to break down the roughage (plant feed materials) into nutrients that the animal can use. When protein is lacking in the diet, the results are poor growth, reduced milk production, loss of weight and late maturity. The available amount of protein depends on the plants: Legumes have a higher protein content than grass; younger and fresh plants have a higher protein

content than older plants. Young green pasture or fodder also has plenty of vitamins.

Protein sources: Leguminous fodder is a good protein source for all livestock. Examples are desmodium, lucerne, white clover and bean straw. Good protein sources are the fodder trees like calliandra, sesbania, leucaena, mulberry, trichandra (see on page 8 the protein content of plants). Note: Do not feed fresh calliandra as it causes the milk to smell. Farmers should let it dry before feeding the animals. Other protein sources are sweet potato vines, sunflower and *omena*.

continued on page 5

Farmers can overcome the dry season

In order to keep their animals productive during the dry season, farmers need to plan ahead through conservation of pasture.

The Organic Farmer

Agriculture has a lot to do with planning, as you can read on page 2. Farmers should know when the dry season is coming and plan their pasture requirements early on. The limited growth of pasture or fodder during this period leads to reduction in milk yield and loss of body condition – and income too! To avoid this, farmers should make provisions during the rainy season, during which a surplus of forage beyond what the animals can eat is often produced. To overcome dry season feed shortages, farmers should grow grasses and deep-rooted legumes that provide high quality feed for a longer period. It is important to conserve all surplus feed while it is still nutritious for use later as hay or silage in the dry season.

The most common methods used to provide quality feeds throughout the year include hay and silage making. In this issue of *The Organic Farmer* we introduce to you methods of making hay (see box on the right). In the January 2007 issue, we will feature silage production.

Tumbukiza and fodder shrubs

Well-prepared farmers plant Napier grass using the *tumbukiza* method, or trenches. Even during the dry season, they will have forage for their cows since the water remains longer in the holes and the trenches. One bucket of water per week for each hole will keep the Napier grass growing. ■

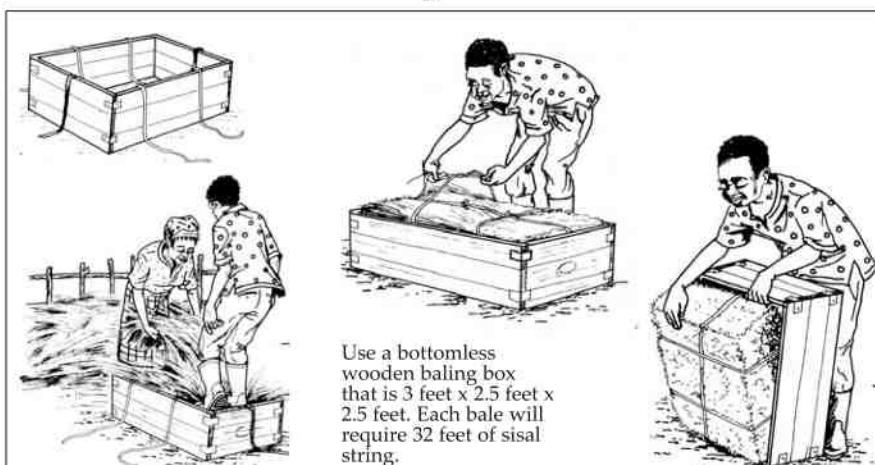
... balanced diet ...

continued from page 4

Minerals

Salts provide essential minerals such as calcium (Ca) and phosphorus (P) which are vital for livestock. During pregnancy, a cow requires extra minerals to help the bones and other tissues of the unborn calf develop. A balanced mineral supplement, either as powder or block licks, should be provided freely at all times. Attention! Ordinary table salt used in the kitchen is *not* appropriate for livestock as it does not have the types of minerals that are much needed by animals.

Dairy meal: Dairy meal or concen-



Use a bottomless wooden baling box that is 3 feet x 2.5 feet x 2.5 feet. Each bale will require 32 feet of sisal string.

Hay making is easy and cheap

Material for hay

Harvest forage when the feeding value is high (pasture for conservation should be cut after 4 to 6 weeks of regrowth), then dry and store it. Cut the pasture when half of the plants have flowered. Morning is the best time to cut forages for hay because more nutrients are conserved. A mixture of grasses and legumes with a lot of leaves is ideal. The legumes increase digestibility and intake of the conserved forage. Grasses such as Rhodes grass, Congo signal grass, Guinea grass and Kikuyu grass are good for hay production.

Making hay

Dry the cut pasture as quickly as possible. Use a rake to turn the forage several times; this allows quicker

wilting. Drying for 2 to 3 days should be sufficient, depending on moisture content of the plant. Over-drying gives poor quality hay. Once dry, the hay can be stored loose or in bale-stacks in the field or in the barn. In the field, it should be stored on a raised mice-proof platform to avoid damage by rodents and termites. It should be covered to avoid damage by rain and sunlight. One old farmer saying is, "Make hay when the sun shines".

Feeding hay

Good quality grass hay is able to sustain milk production during the dry season. An average-sized cow will require one bale of hay per day if no other feed is available. Remember that when feeding dry matter, a constant supply of water is essential!

Reference books

Below are some very useful books, booklets and leaflets about forage from which we used the information and illustrations on these two pages:

- *More Forage, More Milk*. Technical Handbook No. 33, RELMA/World Agroforestry Centre (ICRAF), P.O.Box 30677, 00100 Nairobi

- *Field Notes on Organic Farming*, by John Njoroge, Kenya Institute of Organic Farming, P.O.Box 34972, 00100 Nairobi

- *Coping with Feed Shortages During the Dry Season*. Published by KARI Kitale, P.O.Box 450, Kitale

- *How to Get More Milk in the Dry Season*. Leaflet published by KARI Kitale, P.O.Box 450, Kitale

- *Plant Fodder Shrubs for More Milk and Cash*. Published by World Agroforestry Centre (ICRAF) and KARI, Nairobi.

Fodder trees and shrubs are very helpful. They contain not only protein, but are much more drought-tolerant and produce high quality fodder (see box on page 8).

trates (feeds high in nutrient concentration) are not only expensive, and must be used in the most beneficial way possible, but they are also dangerous if a farmer is feeding high levels of concentrate and cutting back on low-cost forage. Forages such as grass or hay must always remain the main feed for all animals. Experienced farmers plant fodder trees and shrubs for more milk and cash: 3 kg of tree fodder and other legumes such as desmodium, or even sweet potato vines, gives roughly the same milk yield as 1 kg dairy meal! Therefore farmers can save money by having to buy only small amounts of the expensive commercial protein supplements.

Can you set up a demo plot?

Justus Ikiungu P.P Box 134 of Maua, Meru North says that many farmers in his region consider miraa the only agricultural crop that can bring them income. "I am at present teaching and applying E.M. What advice can you offer so that I may increase my effectiveness in teaching these farmers other agricultural alternatives? Our soils are very rich and in the lower parts we have water. Can you please consider starting an organic farming demonstration plot in this area so that farmers can learn practically?"

Justus, well done with your teaching on the uses of E.M. We can assist you by sending you copies of *The Organic Farmer* monthly, that you may distribute to the farmers in your area. The detailed information in the magazine will help the farmers make a choice on what they are willing and able to do that may be different from their current practices. At this point we are unable to set up a demonstration plot in your area, however, we do try to

make the magazine as informative as possible and would be very happy to hear that you are able to start a demo site in the area yourself. We look forward to hearing from farmers who have taken the initiative to start such sites and encourage more to do so. We would be very happy to publish photographs, contributed by farmers and farmers groups so that we may share your experiences with the other organic farmers in the country.

Prepare plant extracts in the right way

Mburu (Tel: 0720 244 522) says, "I am wondering if there is any pre-harvest interval to be observed when you use FPE, especially marigold spray".

This question is asked time and again and is very important. Plant extracts can be very toxic, although we may feel they are safe because they are 'natural'. Keeping in mind that even deadly cyanide can be found in a natural state, we must be cautious with the ingestion of anything we use as a pesticide, fungicide, foliar feed et cetera. It is advisable to give at least a week's interval before consumption of products that have been exposed to bio-solutions, less time if it is during the rainy weather.

Wash the vegetables

Added to this, most of the plant extracts have strong smells and sometimes contain natural oils. These can adhere to our crops once harvested and may affect the taste of the crop. It is advisable always to wash your vegetables and fruit in clean drinkable water before preparation and consumption.

Su Kahumbu answers your questions

Write to

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I want to start organic poultry keeping

I am a small scale-farmer engaged in horticulture and rearing of exotic poultry. I am interested in rearing exotic poultry the organic way. How can I do it?

When we use the word exotic poultry, we could be referring to rearing of any of the following: guinea fowl, quail, ostrich, wild ducks, wild geese, etc. Please elaborate on the particular exotic breed you have in mind, then we can better investigate and answer the question to your satisfaction. I



would like to mention a few words on guinea fowl. This bird is a delicacy in Europe and has been domesticated and reared for many year, especially in France. I do not know of any local guinea fowl breeders and understand one may require a license from KWS in order to commercially rear them. I do believe there is an opportunity and would be willing to research the means and ways of commercially rearing them for the Nairobi market if anyone is interested in doing so. One thing I do know is they are useless brooders and abandon their eggs where they lay. A good *kienyeji* mother hen is the simple brooding solution!



Properly made compost...



... is very good fertilizer

(Photo TOF)

How do we get organic fertilizers?

We, the Akombori Self Help Group (Tel 0720 708 574), have a shamba and we would like to grow crops with organic fertilizers. We want your advice on how to go about it.

Organic fertilizers are simply products that will increase the soil fertility that are not of synthetic (chemical) origin. We have animal manures, green manures (e.g mustards, rape, alfalfa, legumes etc.) rock residues, ashes, bonemeal. For best results these products should be composted. This encourages pasteurisation, thus elimination of pathogens, disease and weed seed. It also helps to improve the structure of the soil and acts as a nutritious feed for the soil organisms and plants. Look around you: the leaves, weeds, animal bedding, animal manure.....these are all natural fertilizers waiting to be used! When planting your crops, instead of using chemical fertilizers, use these natural composted fertilizers by digging them into your planting beds at the time of planting. As plants mature, you can take the same compost and make a compost tea by soaking 5 kg of compost in a 20 litre drum of water. This tea can then be used as a foliar feed for plants in need of regular feeding. Good luck, we would like to hear how your group get along.



I have changed to organic farming

I am happy and thankful for your research in organic farming. Thank you also for the information you are passing on to young organic farmers across the country. I am now practicing organic farming since I read the information on how to make and prepare organic manure from your newspaper. On my farm, I use the organic manures to plant and top dress crops. Please consider me and send me one magazine on how to prepare and continue using this organic manures. More so, I want to get the experience of other organic farmers who have successfully used natural methods to control pests and diseases on their crops. I would like to assure you that, I will go ahead to form a Bingwa organic farmers association for the young generation.

David Kamotho Rotich, P.O Box Maki-
meny, Via Sotik

I need information

Recently I came across a copy of March 2006, from a friend who attended a seminar organized by ICIPE on malaria control in the community of Nyamondo. I am not an organic farmer but I am very much interested to become one. Therefore if you have past magazines send me copies to help increase my knowledge on the following subjects:

1. A step by step guide on how to prepare compost.
2. How to control mole rats in the farm.
3. Conserving Napier grass for future use. Thank you

William Makori Omaiyo, P.O Box
4115, Kisii

Our group wants organic poultry production

I would like to thank you for *The Organic Farmer* magazine that is very educative to farmers. On behalf of Kwinyinyia Farmers Field School members, I request you to send more copies to our group. We are 20 in number. We specialise in Kenbro chicken breed and we intend to go into organic poultry farming. We usually meet on Thursday every week. Thanking you in advance.

Beatrice Nyaga, P.O Box 69, Siakago.



How do I get past issues?

I thank you for the advice given in your news magazine. I have only read *TOF* No.15 of July 2006 given to me by a friend. I wish to request for past issues of *The Organic Farmer* so as to catch up with you. You have advised that any interested farmer will need to buy stamps worth Ksh.350 and send them to you for the same, that was between April 2005 and April 2006. I am willing to pay for all the past issues. Once again thanks for the information contained in your newspaper and please keep it up. Let me request the following: I need additional information on dairy goat rearing so that our group can start such a project. We wish to be supplied with future copies of the newspaper. We also request a visit to our area by one of your officials for grass root contact. I am willing to coordinate the visit as I am involved in many self-help groups in the Timboroa location of Uasin Gishu district. Thanking you in advance.

Evanson N Karanja, Chagaiya Settlement Scheme, P.O Box 115,
Timboroa, Tel: 0724 415145

Dear Mr Karanja,

To get past issues as we explained earlier, all a farmer needs to do is to buy stamps worth Ksh.350, put them in an envelope and send them to us. We use the stamps to send newspapers to other farmers and also defray the cost of photocopying the newspapers for you.

I want to do organic research

I am interested in organic agriculture research; please advice me on where I can get literature in Kenya.

Jennifer, Kenyatta University Tel. 0722
759401

Dear Jennifer,

Thank you for your interest in organic agriculture. We will send you more information on this subject later.

Is *TOF* for sale?

I would like to subscribe to *The Organic Farmer*. Please let me know how. Is it free, do I have to pay a fee and if so, how much? Where can I get back copies of the newspaper? Many thanks, Felix Kaloki, P.O. Box 63453-00619, Tel 0722 780 086, Nairobi.

Dear Mr. Kaloki,

The newspaper is available free of charge to all interested farmers and groups. It is possible to receive the newspaper if farmers provide us with their full address including telephone numbers if possible for ease of contact. We especially prefer mailing to 5 or more farmers sharing one address to reduce cost. Please provide us with the names of other farmers with whom you wish to share the newspaper.

Give us more

I am a Kenyan citizen who is practicing organic farming. One day I came across *The Organic Farmer* and I was very happy with what the paper contained. I liked the articles so much that I would like you send to me any editions containing more about poultry, bee keeping, and dairy keeping. I will be very happy if you address my problem. Lastly I would like to ask if it is possible for your experts to visit our farms.

George O Atolo, P.O Box 128 40107,
Muhoroni Tel 0735 331682.

I need the newspaper

I am a farmer in Kiminini division of Trans-Nzoia district. My farm is situated about 15 km from Kitale town. I grow maize, beans, and vegetables and also keep cattle. My neighbour who is also a farmer recently passed to me some past copies of *The Organic Farmer* which I find very interesting and educative especially to a small-scale farmer like myself. I will be grateful if you could include me in your mailing list.

Joseph L Mudhay P.O Box 2642,
Kitale

Dear Farmers,

If you have any questions or ideas for articles, or if you would like us to publish experiences about your shamba or within your farmers' group, please contact us. We shall get back to you!
SMS ONLY

Tuma maoni yako! Asante.



tips and bits

from farmers for farmers

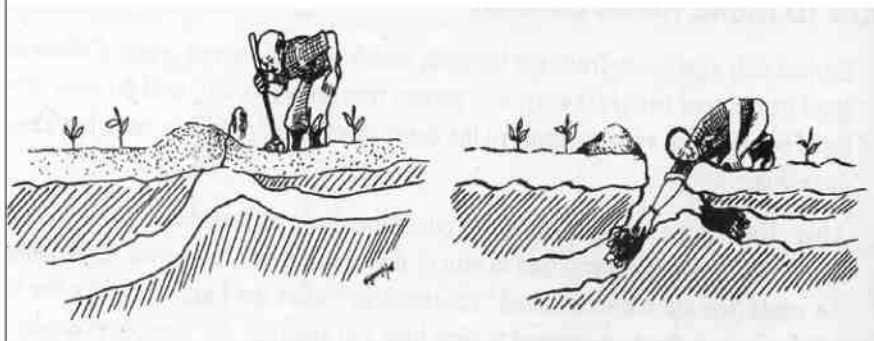
Controlling moles with stinging nettles

Moles are a serious pest to farmers in many parts of the country, particularly in areas with high rainfall. In the past issues of *The Organic Farmer*, we have shown you how to control them using the castor oil plant (the one with red stems), which are cut into small pieces and put into the tunnels and in the process driving away the moles. A farmer in Kenya has found another way to control them using the leaves of the stinging nettle (known as *hila hila* or *Thabai* in Kikuyu language). Moles do not like the nettles because the nettle irritates their sensitive skin. So they move away. All a farmer needs to do is dig the mole hill until you reach the tunnels leading to it on both sides (see sketch). Push the leaves of the stinging nettles as far as you can into the tunnels, and then cover the tunnels with soil. Repeat this in all the molehills you can find. The moles will move elsewhere or they will be eaten by predators.



Note: Please farmers if you have other methods of controlling moles, write to us. We will share it with other farmers.

Source: *Sustainable Agriculture Extension Manual for East and Southern Africa* – Published by International Institute for Rural Reconstruction (IIRR) P.O. Box 66873 Nairobi.



Nutritious feed for your poultry

Option 1: Maize 8kg, Croton (*Mukinduri*) seeds 1kg, beans 1kg, Omena ½kg

Option 2 - Maize 8kg, Sorghum 1kg, Omena 1kg,

Option 3 - maize 8kg, Groundnut dust 1kg, Cassava 1kg

If farmers prepare any of the above three recipes, their chickens will get a balanced diet. The feed is taken by all ages of poultry.

William K Cheruiyot, Aruba farmers group, P.O Box 596, Kitale

Protein content of various forages

Legumes, etc. (high protein)

Lablab, Lucerne
Greenleaf desmodium
Silverleaf desmodium
Centro, Siratro
Calliandra, Leucaena
Mulberry
Star grass
Sesbania, Glycine
Sweet potato vines

Grasses (medium protein)

Napier grass
Guatemala grass
Giant setaria
Guinea grass
Makarikari grass
Rhodes grass
Kikuyu grass
Congo signal grass
Sudan grass, Kow kandy

Crop residue (low protein)

Maize stalks
Stripped maize leaves
Sorghum stover
Banana stems
Barley straw
Wheat straw
Rice straw

see
page
4 and 5

Market Place



Beekeeping. Thomas Carrol from Baraka Agricultural College in Molo is looking for information on organic honey production. Tom Kariuki from Nairobi tells him: "Look in the book from John Njoroge, *Field Notes on Organic Farming*, Kenya Institute of Organic Farming, P.O.Box 34972, 00100 Nairobi. The book contains quite some useful tips".

New magazine. The Kenya Organic Agriculture Network (KOAN) has released a new magazine "KILIMO HAI" The newsletter will be published 4 times a year. It will update farmers and other stakeholders with information on developments in the organic sector both locally and internationally. Farmers interested in getting the newsletter can write to the organisation through the address: KOAN Secretariat, Environmental liason Centre International (ELCI), P.O. Box 72461, 00200, Nairobi. Tel. 020 387 61 19/54 Fax: 020 387 61 25.

Dairy goats. Farming Systems of Kenya (FSK), a non-governmental organisation working with farmers in Nakuru, has a number of farmers groups with male and female goats for sale to interested farmers. Interested? Please get in touch with the organisation: Farming Systems Kenya, P.O.Box 2816, 20100 Nakuru, Tel. 051 221 11 77, 0722 588 143 or 0722 457 260. Ask for David Gicharu or Joseph Muraya.

Export. A German-based company would like to buy organically certified fruits from Kenyan farmers. They prefer mangoes, avocados, pawpaws, and pineapples (Victoria and Baby varieties). Farmers groups or individuals should be able to supply a minimum of one tonne per week. They should indicate the season when they can deliver supplies. Contact Wachira Waikwa, e-mail: nefshi@yahoo.com

Organic fertilizer. Some farmers have complained that they cannot find Mijingu rock phosphate organic fertilizer in Agroveter shops. They can contact the local agent for their supplies at the following address: MIPCO Regional Representative, P.O. BOX 53822, 00200, Nairobi. Tel. 020 386 91 65, 386 96 97 Fax 387 42 16, 0720 817 072 or 0734 911 910