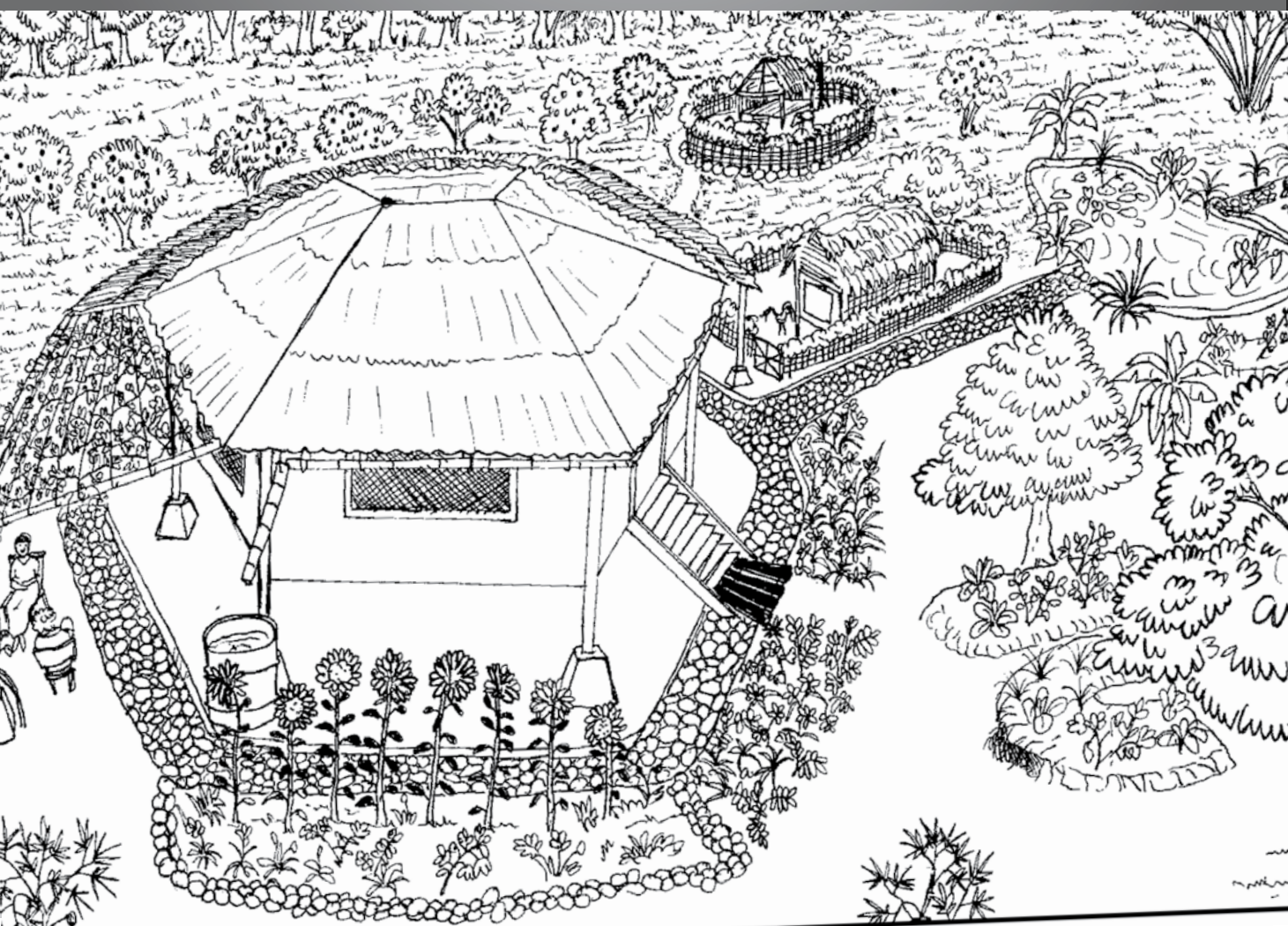




MODULE No 6.

Home & Community Gardens





Notes...

Good Nutrition

Planting a range of vegetables, fruits and grains is important for providing family nutritional needs, especially for children.

Good nutrition is especially important for pregnant and breast feeding women. Other family members need to help make sure that pregnant and breast feeding women are getting enough of the best foods possible.

Some benefits of good nutrition include:

- Reduced health problems
- Faster recovery after sickness
- Children grow better
- A longer lifetime
- More energy for activities
- Increased ability to learn and concentrate. This is very important for children who are still in school. Better food will create smarter people



We need to eat a variety of foods to be healthy.

Every day we should eat vegetables, fruits, eggs, and meat, as well as beans and grains. A wide range of healthy vegetables grown at home will provide many vitamins, minerals, proteins, energy and oils.



Sources of Nutrition from the Home Garden

Vitamin A: Good for eyes, examples are taro leaves, sweet potato leaves, cassava leaves, pumpkin leaves, cabbage, green vegetables, carrot, mango, banana, papaya.

Vitamin C: Good for body health, examples are papaya, citrus, tomato, pineapple, guava, tamarind.

Protein: Strong bones and muscles, examples are peanut, beans, peas, yam, watermelon seeds, banana tuber, moringa seeds, candle nut.

Carbohydrates: For energy, examples are rice, corn, sweet potato, cassava, taro, potato, avocado, coconut (old), jack fruit, bread fruit, sugarcane.

Fats and oils: Good for skin and hair, examples are avocado, milk, chocolate, peanut, candle nut, cashew nut, soybean.

Iron: Good for growth, strength and stamina, examples are mustard, spinach, green vegetables, banana tuber, cassava, sweet potato leaves, dried beans.



Other vegetables such as eggplant, squash, pumpkin, cucumber, onions and radish, and fruits such as watermelons, bananas, apples and much more, also provide a lot of vitamins and minerals. Some types of trees provide very nutritional leaves, roots, sap, trunk and bark.



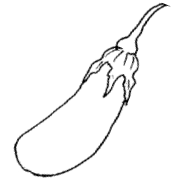
Meat, fish and egg provide a lot of protein, iron and oils. If possible, eat these every day. Dried beans, tempeh and tofu are also high in protein.



Mushrooms are very nutritional, good for health, and provide protein as well as many vitamins and minerals. Mushrooms can be collected in the wild, or by using manure, liquid compost and mulch they can be grown in the garden and vegetable plots. This is because mushroom spores (or seeds) live in and are spread by manure, compost and mulch.



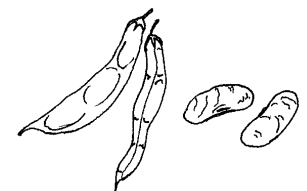
Spices and herbs, such as chili, ginger, garlic, pepper, coriander and basil are also important to eat for the bodies health and are good to use to fight some sicknesses. Traditional medicinal plants, like aloe vera, *kumis kucing*, *samiroto* and *daun sembung*, can also be planted near the house, in between flowers and vegetables.



All plants the family needs can be planted ourselves, which means we are fulfilling the families needs at a low cost. Excess produce can be sold or exchanged.



When cooking, remember that many vitamins are lost if vegetables are cooked for too long or if water used to boil vegetables is thrown out.



**nutritional foods
are needed
every day**

Designing a Garden

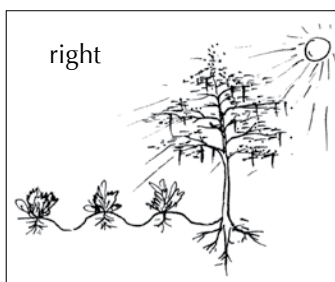
There is a lot of knowledge about agriculture in Indonesia now, which is still growing and developing. Improving food production depends on the knowledge willing to be shared between communities.

This module uses a lot of this knowledge and adds to it new techniques, which use local materials to fit local needs.

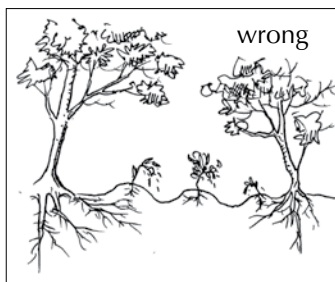
Garden Location

Sunlight

Plants need sunlight to grow. Plants use sunlight and change it into food through a process called photosynthesis.



Almost all plants prefer to receive full sunlight. However, some plants like spinach, beans, cabbage, cucumbers, lettuce, potato, pumpkin and other green leaf vegetables, can still photosynthesize well under some shade.

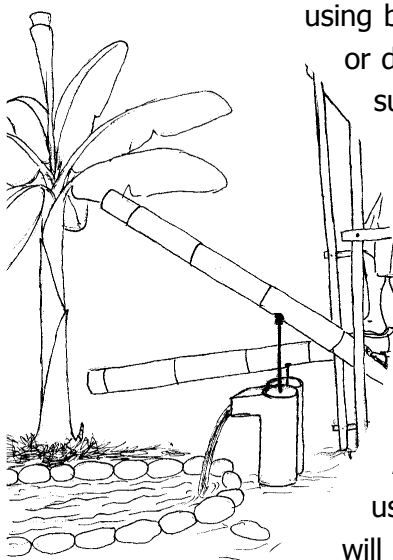


Don't plant tall growing and thick leaved trees, like mango and jack fruit, near vegetable plots. As these trees grow larger, they will block out the sunlight.

Some other types of trees can be planted near vegetable plots, such as banana, papaya, and legume trees like acacia and casaurina. Don't plant too many trees or shade plants, use them only as needed.

Water

Water is always needed for planting any type of vegetable, not only during the dry season, but also during the wet season in some areas that are particularly barren. So, gardens should be close to a water source or have good irrigation. Irrigation can be made using bamboo, metal or plastic piping. Storing irrigation water in a tank or drum closer to the garden will help to provide a continuous water supply. All stored water should be covered to prevent mosquitoes from breeding. Covering water will also help to reduce water loss due to evaporation.



Use gravity to help make irrigation, this is easier and less expensive. By using gravity, water can be run from higher places to lower places. Hand pumps are also good for bringing water up from underground sources.

Any irrigation must be designed in cooperation with other water users. If a community group is formed, tanks, pipes and hand pumps will be cheaper to buy and much easier to maintain.

Soil

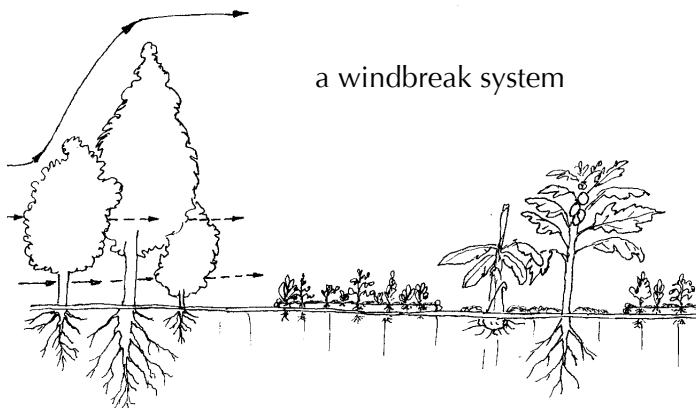


The garden location should have healthy soil, and also be close to the house and a water supply.

Almost all soils can be improved quickly with good techniques and by regularly using mulch and compost.

Soils that contain a lot of clay or are waterlogged need time and specific techniques to make them productive. Maybe it will be more productive to use these areas for something else, such as for fishponds and water plants.

Wind



a windbreak system

Vegetables, especially seedlings, need to be protected from strong winds, which can dry out the soil and reduce moisture in plants. Living fences and windbreaks will help manage problems associated with strong winds.

Other Factors

Root Competition

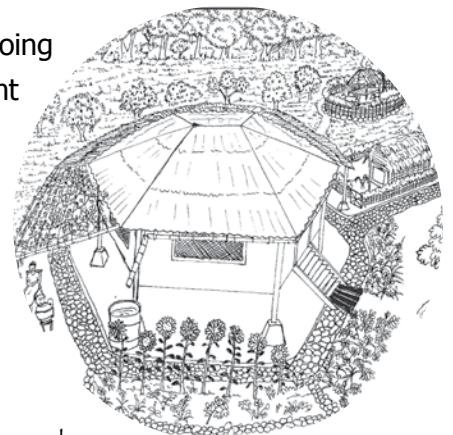
Large trees have roots that spread out up to $\frac{2}{3}$ the height of the tree and the same width as the tree. These roots will compete with vegetable plants for water and nutrients in the soil.

Some trees, such as eucalypt, are especially competitive, so these trees should be either removed from the land or regularly cut back to reduce their roots size. The eucalypt tree also releases an oil (alelopati) from its roots which most other plants don't like. Thin leaf legumes, like acacia and sesbania, or smaller fruit trees, like banana, papaya and guava, are examples of suitable trees to be planted in the garden.

Distance from house

Having the house and vegetable garden close together will save time, energy and costs.

Because of this, we must first decide which types of plants are going to be planted. Larger plants that don't need intensive management and are not for every day use can be planted further away from the house. While, plants which do need intensive care and can be used every day should be planted close to the house, such as vegetables and bamboo. Gardens made close to the house will also receive benefits from house wastes.



Preparing the Garden

Garden Plot Design

In conventional agriculture, garden plots are generally made in long rectangular shapes and straight lines. These shapes actually are only suitable in low lands, while in higher areas where the land is sometimes more sloped, these can be very difficult to make. Isn't it true that we can find no square or rectangular shapes in nature?

Only commercially focused people are benefited from using this type of system, because they can count how many trees and plants they have. Try to think and act creatively, remember that beauty and natural patterns are also important.

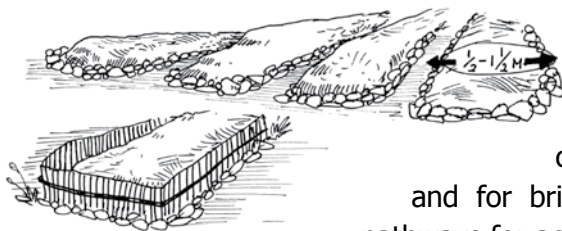


The easiest way to make garden plots is by following natural shapes, follow the natural shape of the land you are working on. Besides the shapes looking more interesting, pest problems will reduce and land use will be maximized. Working against nature increases the possibility of problems. Raised garden plots should always be surrounded by rocks, bamboo, wood or any other material that will:

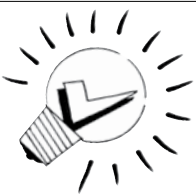
- Hold the soil
- Hold more water in the soil
- Hold mulch
- Allow the soil to build up

Good garden plot design will improve soil quality. Improving the quality of the soil will also improve production.

Garden plots should be wide enough to hold water, but small enough so that all of the plot can be reached without being trampled. A width of $\frac{1}{2}$ meter to 1 meter is good, or maybe



$1\frac{1}{2}$ meters if you have long arms. If the garden plots are often stepped on this will cause soil compaction, which is not good. Garden plots should be designed with main pathways which can be used for bringing in compost and mulch, and for bringing out garden produce, as well as smaller pathways for access and to make garden maintenance easier.



SMART IDEAS!

During the wet season, the edge of garden pathways can also function as swales to collect and hold water.

There are many other garden plot designs which function very well in dry lands and conserve water maximally.

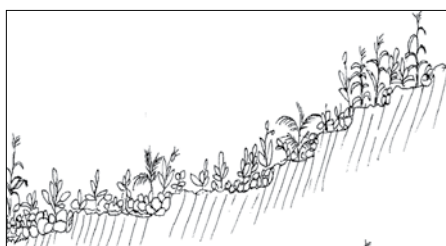
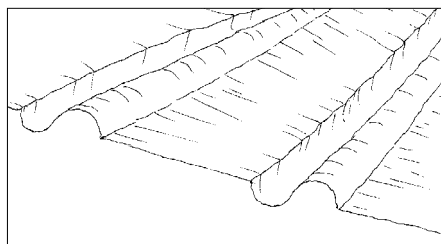
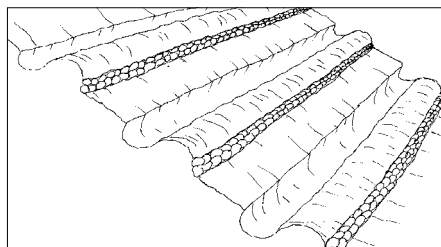
Swales

For areas with sloped land, swales are a great way to make vegetable gardens. This can even be used for small home gardens.

On steep slopes, swales will help prevent erosion, while still holding water and nutrients in the soil. Swales and terraces should be made following the shape of the land, so that if heavy rains come this will not create problems.

For vegetable gardens, smaller swales are usually better.

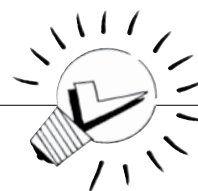
On steep slopes, make smaller swales about 1 meter apart. On gentle slopes, make the swales larger, about 2 meters apart. (For more information about how to make swales, see Module 8 – Forests, Tree Crops and Bamboo).



Terraces

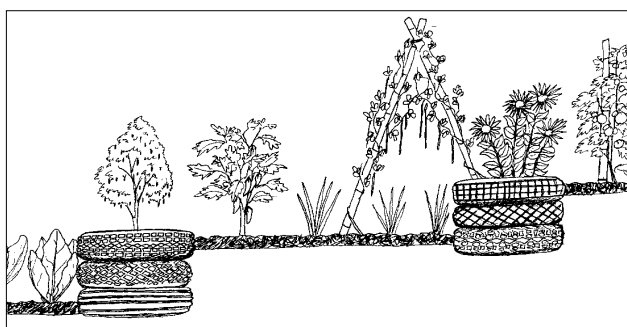
Terraces are similar to swales because they are made following the land contour. Terraces cut into the land, and are usually stone or clay walls designed to hold the land in place.

Terraces take more time, energy and cost more to make, but they will make the land very productive. Terraces are used in many countries and there is a lot of information about how to build and use them.



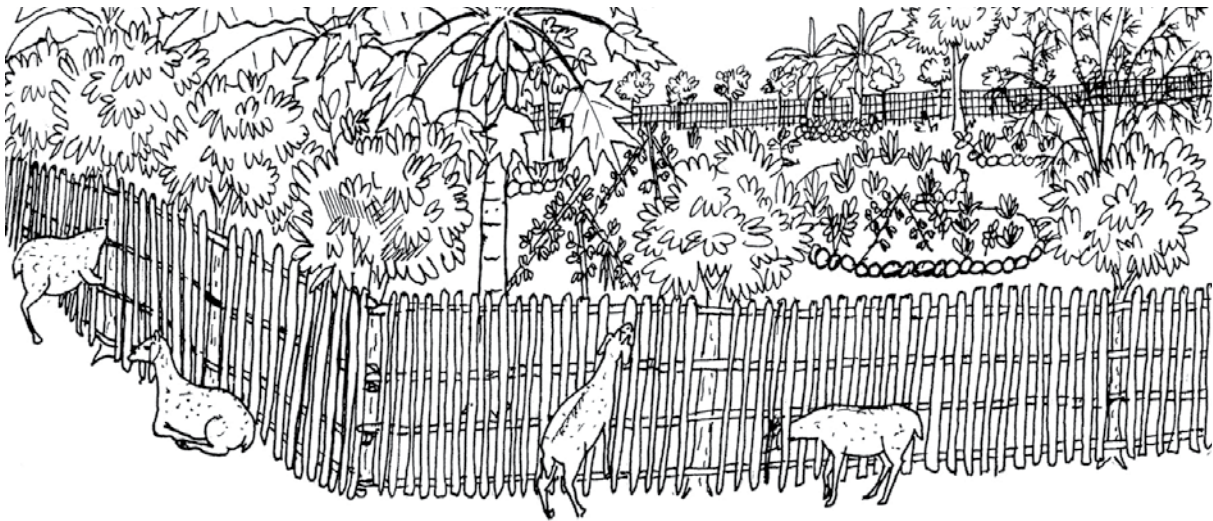
SMART IDEAS!

- Try to make the edge of the swale or terrace higher using rocks or other materials. This will help hold more mulch, compost and water in the soil
- On steep slopes, make sure that heavy rains won't cause erosion or land slides. Use legumes to hold the soil in place, as well as for serving many other functions



Fences

Fences are very important if you don't want pigs, goats and other animals eating all of your vegetables!



Remember that fences are multifunctional. Using a fence to separate two areas will save time, labour and resources. Planting a living fence will provide many more functions than a normal fence. Some of these functions include acting as a windbreak, trellising for vines, and for providing shade, animal habitats, and erosion control.

Living fences can be made from many different types of plants and trees, and can produce a range of products. Some products from living fences could include human food, animal fodder, mulch and compost material, medicines, wood, weaving material, nitrogen fixing legumes and natural insecticides.

Living fence materials: Leuceana, cactus, sesbania, moringa, tall grasses.

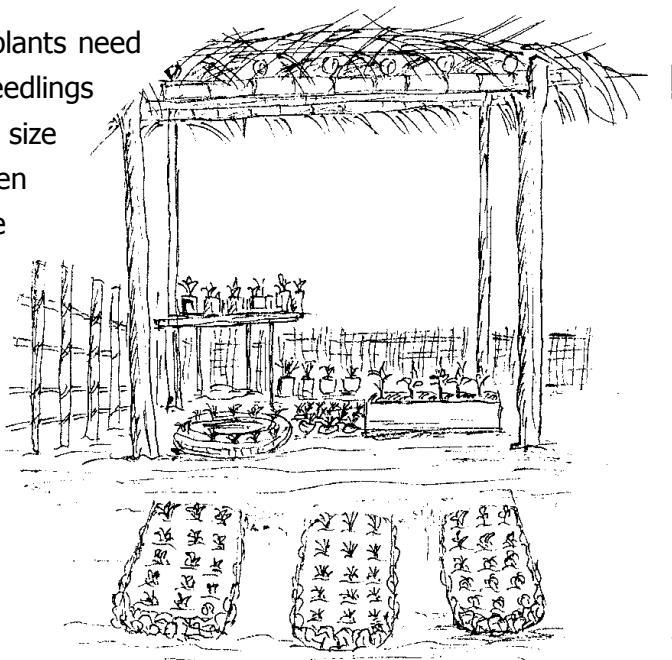
Other fence materials: Rocks, wood, bamboo, old fishing net, old tin roofing.

Small Garden Nurseries

A garden nursery is important because plants need more care when they are still young. If seedlings are cared for carefully, the quality and size of vegetables will improve. A small garden nursery can be made from inexpensive and natural materials. You can also make a small movable nursery.

A nursery needs to have shade, healthy soil, and protection from animals, pests and disease.

Don't ruin the land around the nursery by digging up soil for use in the nursery.



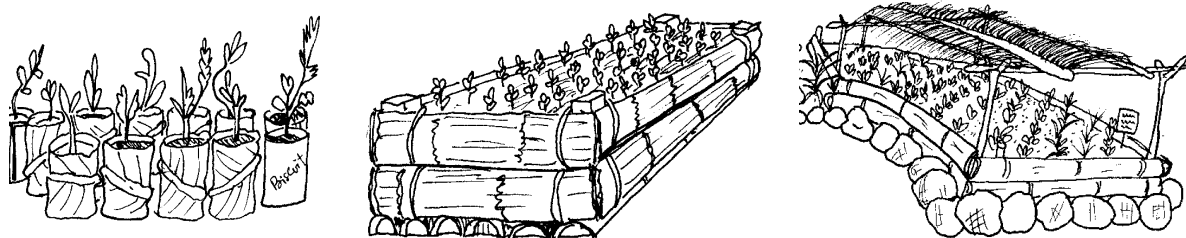
Following are some soil mixtures which are good for use in nurseries:

1. 30% compost / dried manure, 30% soil, 30% sand, 10% ash / rice husks
2. 50% compost / rice husks, 50% soil / sand

The soil needs to be combined with other materials. Sand and rice husks provide drainage, which makes root growth easier. Compost and dried manure provide nutrients and hold more water in the soil.

If seedlings are being planted directly into the garden, add rice husks, sand, compost and dried manure to help the seedling grow better. Also, build a temporary shade structure for the first 3-4 weeks after planting.

You can also just use containers as a nursery substitute. Many old materials can be reused as seedling containers.



Garden Additions

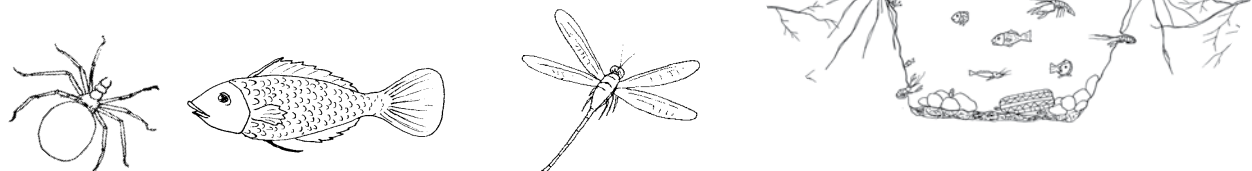
The garden can also be planted with small fruit trees, perennial plants, legumes and flowers. This will protect the garden from strong winds, provide food for humans and animals, and materials for making mulch and compost. Pollinators and pest predators, like birds, bees, spiders and other insects, will also be attracted into your garden. Increasing pollination of fruits and vegetable flowers will produce more fruits and vegetables per plant. Pest predators will feed on insects and pests, which will reduce the number of pests in your garden.

Flowers and herbal plants will add beauty and fragrant smells to the garden, as well as providing many other benefits.

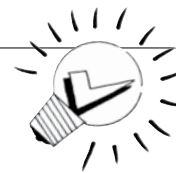
Ponds

Ponds will provide many benefits in different ways. Ponds can produce fish, vegetables and materials for making mulch and compost.

Make one or two ponds near the garden area, the pond will attract frogs, small lizards, insects and birds, which will all function as pest predators in your garden.



SMART IDEAS!



- Excess water in the wet season can be stored in ponds to prevent water laying stagnant on the ground
- To manage the problem of mosquitoes laying eggs in ponds, add a handful of neem leaves to the pond once every three months. Neem leaves will help stop mosquitoes from breeding, but won't harm other pond creatures. Frogs, lizards and fish, especially tilapia fish, will feed on mosquito eggs and larvae



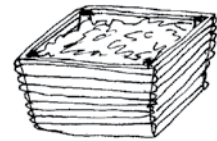
BEWARE!

Chemicals from pesticides and herbicides can kill many plants and animals living in your pond.

Garden Maintenance

Providing Plant Food

Garden plots should be covered with compost at least 2 weeks before planting. Compost can be lightly turned into the soil if nothing has been planted, or just leave the compost laying on top of the soil. Add more compost 1 or 2 weeks after planting. Make sure adding compost does not disturb the plant roots. After composting, add a thick layer of mulch on top.



Liquid compost can be used on garden plots every 1 or 2 weeks, but make sure to dilute with water before use. There are many different ways to fertilize the garden. It is up to you to decide which method works best for your situation.

Use EM (Effective Micro-organisms) with other soil improvement techniques to increase results.

All of these techniques will improve soil quality, structure and nutrient content so that there is enough food available for plants to use.



Watering

1. Always water early in the morning or in the late

afternoon. Morning and afternoon is better for watering because watering at night could promote fungus growth, while if you water at mid day, water will evaporate before it can soak into the soil, so the water is just being wasted



2. Making garden edges will help to hold more water in the soil. Use rocks, bamboo, wood or other materials to hold the soil in place

3. Mulch will protect the soil from hot sunlight and prevent water evaporation. This will also reduce the soil temperature and the amount of water needed for each garden plot

4. Making windbreaks around garden plots will save a lot of water. Wind dries out plant leaves and makes them lose water, so the plant then uses more water from the soil. Less wind means plants need less water

5. Watering with pipes. There are many used water bottles around and burning these bottles causes pollution. One way of reusing these bottles is by turning them into watering pipes, so that they water deep into the soil. Bamboo can also be used as a pipe, especially for fruit trees

Some benefits of watering deep include:

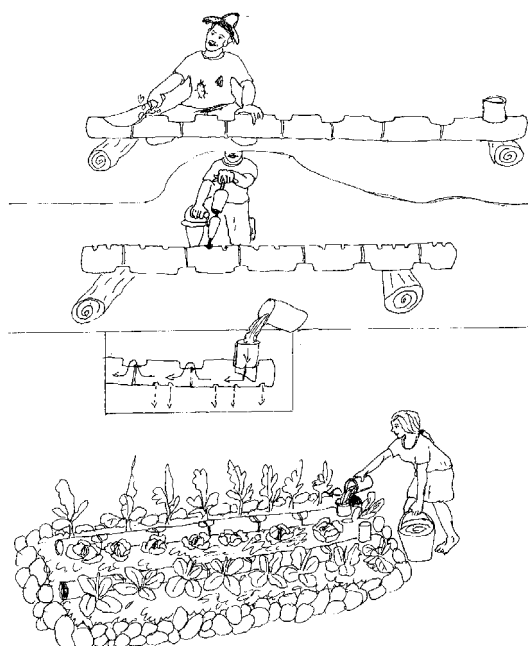
- Water evaporation is reduced because water is released in the soil, not on top of the soil



- Water can be concentrated at the roots of each plant
- Only a small amount of water is used
- Watering pipes can also be used to give liquid compost to plants



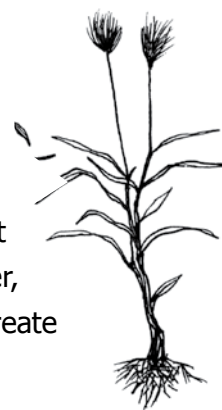
6. Garden plots which are dug low need less water than raised plots, especially for in very dry areas



Weed and Pest Control

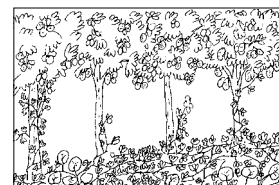
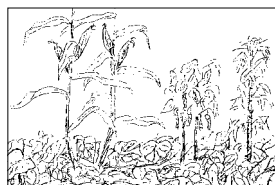
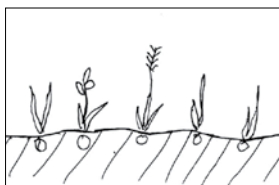
Weed Control

Weeds are an easily available mulch and compost material, which can also be used as animal fodder. Weeds should be more understood as a benefit rather than a problem. Reuse weeds to help keep the soil healthy. However, removing weeds can take a lot of time, and some types of weeds do create problems if they are not controlled.

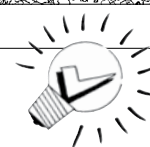


Some natural methods to control weeds:

1. Continuously mulching the garden. Mulch stops sunlight from reaching the ground surface. When weed seeds grow they need sunlight to photosynthesize and keep growing, when sunlight is blocked by the mulch, almost all weeds will die. Try not to use weeds that contain a lot of seeds in the mulch because these may grow, and this will spread more weeds. If using quick growing grasses in mulch, make sure the grasses have been dried first so that they will not grow in the garden
2. Use integrated planting systems. Vine plants and ground covering plants, such as pumpkin, beans, sweet potato and potato, can be planted under cassava, corn and other larger crops, to prevent weeds from growing. This same technique can be used for fruit trees or other tree crops
3. Use weed barriers. Make a weed barrier along the outside of garden plots to stop fast growing weeds. This weed barrier can be:
 - A space around the edge of garden plots which is always kept free of weeds
 - A small, thick living fence to prevent fast running grasses from entering the garden. Lemon grass and other smaller grass plants can be used as a living fence weed barrier
4. Every time soil is turned, weed seeds are encouraged and are more likely to grow. Therefore, if you turn the soil less, fewer weeds will grow
5. Use animals as 'tractors'. This is a good way to remove weeds and their seeds, while fertilizing the land at the same time
6. Remove weeds before they produce seed. If weeds are removed when they are still young, the roots of vegetables will not be damaged because of weed removal



SMART IDEAS!

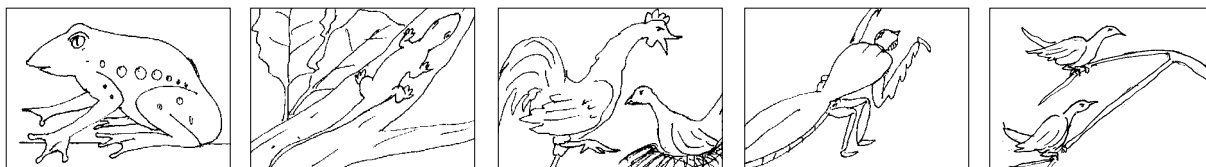


Lets create new weeds! These new weeds can be useful plants, which are intentionally planted to grow fast and spread easily. Choose a few types of vegetable, animal fodder or legumes that can function as weeds, it is important that these plants grow easily and quickly.

Pest Control

Pest control in the garden does not just mean exterminating pests. Controlling pests in a sustainable way involves using a number of techniques, from which the results will not be achievable from just using pesticides.

These techniques improve soil quality, encourage pest predators and prevent pests. If pesticides are still needed, use natural pesticides, not chemical pesticides. (For more information about pest management and recipes for making natural pesticides, see Module 9 – Integrated Pest Management).



examples of pest predators

Planting Methods

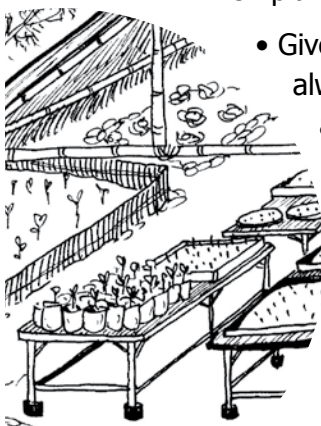


Seedlings

Plants will react to damage or mistreatment, especially when still seedlings. Any damage caused will slow plant growth and reduce the amount of harvest.

For good seedling care, give special care to:

- Plant small seeds about 2 cm deep and larger seeds 3-4 cm deep. Don't forget to water seedlings every day
- If planting large seeds in containers, soak the seeds first to encourage faster growth
- Don't plant too many seeds in one pot. When the seedlings grow, they will need space for root growth. If planted too close together, plants will compete. Also, many roots will break as they are separated, and this will slow plant growth
- Increase the amount of sunlight seedlings receive for as long as one week before being transplanted in the garden. This technique is called 'hardening seedlings' and is used to prepare seedlings for stronger sunlight conditions in which they will later grow
- When planting seedlings in the garden, make sure they receive enough water
- Give special attention to plant roots. Make sure that plant roots are always facing down. Don't leave plant roots exposed to sunlight and avoid root damage
- Don't plant seedlings at mid day, when the sunlight is at its hottest
- Provide shade for about a week after the seedlings have been planted in the garden. A temporary shade structure can be made of anything, from legumes to woven coconut palm, or any other available material



Succession Planting

Don't plant all of your garden plots at once. By planting 3 crops of the same vegetable at different times, you will get 3 harvests. Even though harvests will be smaller, they will be extended and provide continuously. Also, less harvest will have to be thrown out or will go rotten. You can also plant different types of vegetable, which can be harvested at different times. Every type of plant needs a different amount of time to be ready for harvesting, so crop harvests will happen at different times.



Food Calendar

A good technique for planning continuous food production is to make a food calendar.


Step 1: Make a list of all the vegetables and grains you want to grow. You can add illustrations to the list if you like

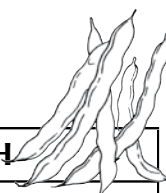
Step 2: Write down the planting times and harvest times

Step 3: Write out each month on the calendar, and list what was planted and what will be harvested each month

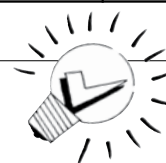
Step 4: If there are months that do not have harvests, consider:

- What else could be planted to be harvested in that month?
- Are there different types of plants which can be planted?
- Are there other techniques to increase harvest and make harvest times longer?
- What types of crops can be harvested continuously throughout the year?

JANUARY		FEBRUARY		MARCH	
planted	harvested	planted	harvested	planted	harvested
					

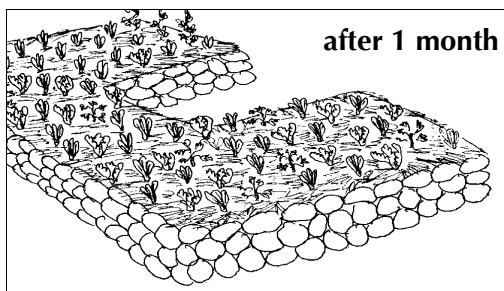


SMART IDEAS!

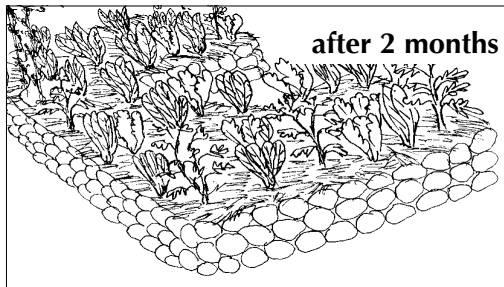


If you have enough water supply, planting can be extended through most of the year. Mulch, compost and good garden design will help keep water in the soil for longer. This will extend the production period for crops.

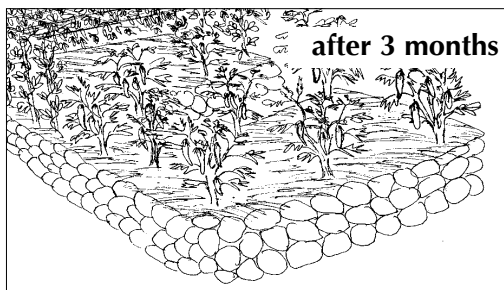
Using Different Plant Growth Periods



Every plant has a different growth period and will produce harvest at different times. You can use this knowledge to increase production in each garden plot.



Lettuce, mustard greens and other green leaf vegetables grow quickly and can be harvested in 1 to 2 months. Eggplant, chilies, cabbages, capsicums, tomatoes and beans need 3 months or more to be ready for harvesting.



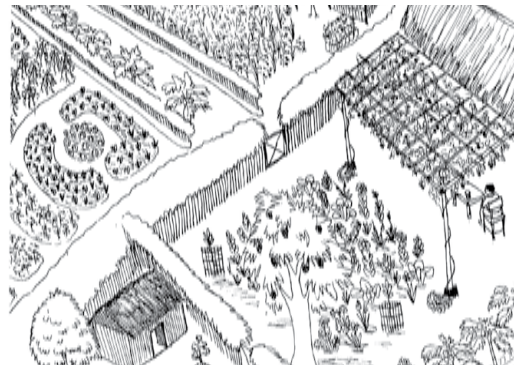
It is better if these plants are all planted at the same time, so lettuce and green leaf vegetables will be ready for harvesting before the other vegetables have grown large. Afterwards, there is still a following harvest of the other vegetables which take longer to produce. This means we will have more harvest times, with more crop variety.

Be careful not to disturb the roots of long term crops when harvesting the short term crop.

Using Different Plant Heights

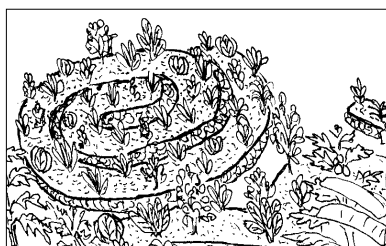
Plants that grow to different heights can be planted together to increase production amounts, while at the same time saving space in each garden plot. Make sure that smaller plants are receiving enough sunlight.

Taller plants can be used as a place to grow smaller climbing vine plants.



Using Different Garden Plot Heights

Using different garden plot heights can increase production and planting area. Different heights will allow more root growth and better access to sunlight.



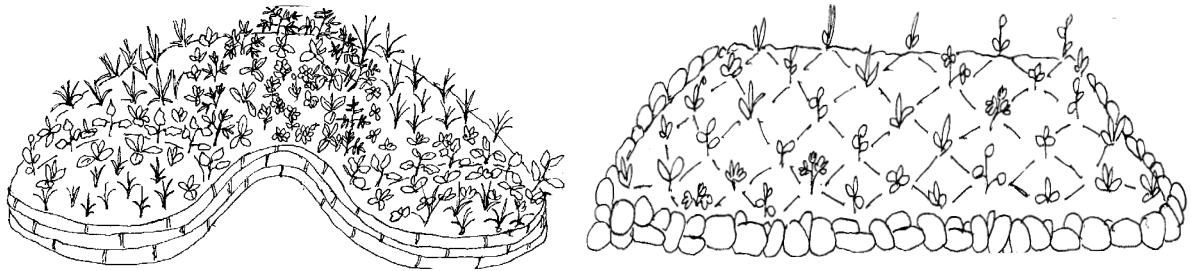
Using swales on sloped land will provide more planting area and also provide different micro-climates. The bottom of swales are wet and sometimes full of water in wet season, so water plants, like *kangkung* and taro, can be planted there. The top area is drier and other crops can be grown there.

Crop Rotation

Different types of plants use different amounts of nutrients. Crop rotation helps to balance the amount of nutrients in the soil. Plant rotation will also help reduce pest and disease problems.

It is better not to plant the same type of vegetable in the same garden plot twice in a row. All beans can be considered as one type of vegetable. Tomato, eggplant, potatoes and capsicum can all be considered one type of vegetable because they are all from the same family (solanaceae).

Once every two years, give each garden plot a few months of rest time to recover its stock of nutrients. During this resting time, add compost and mulch to the soil.



Crop Integration

Growing different crops together will reduce pest and disease problems, because pests will need more time to move from one plant to the next. Also, there will be less of each type of vegetable to be attacked by pests. Therefore, pest problems will be much easier to control.

Some plants will benefit from other plants growing near them. For example, garlic helps to repel aphids (a very small pest, that in large numbers can damage tomatoes, capsicum, cabbage, green vegetables and other crops). Aphids don't like garlic. Therefore, by planting garlic near plants which aphids like, it will help to discourage and reduce the amount of aphids.

Planting flowers and herbs in garden plots will attract insects, which will help with pollination, as well as increase the number of pest predators. So, this is also reducing pest problems.

Beauty is an important part of every garden. Integrating different types of plants together will make the garden much more beautiful and appealing.

SMART IDEAS!



- You don't have to plant vegetables and other crops in straight lines. Different patterns might even increase produce
- Place long term crops, which don't need a lot of maintenance and will only be harvested once, at the back of the garden plot or in places which are difficult to reach. Place short term crops, which need more maintenance, and will be harvested over and over again, in areas of the garden plot which are easily reached. This will make gardening easier, and reduce soil compaction in garden plots

Following are some examples of vegetable combination which are commonly used:

- Corn, pumpkins and beans
- Tomato, garlic and basil. This combination grows well in smaller gardens and will help to protect each other from pests
- Chilies and tomato
- Sunflowers planted around the garden will help reduce pest problems
- Cabbage, tomato and garlic
- Carrot, onion, cabbage and lettuce
- Cucumber, beans and peas
- Sweet potato and taro. This combination works well for soils containing many rocks



SMART IDEAS!

Make a rock pile about 2 x 2 meters. Use large rocks, at least hand sized, so that there are many gaps in the pile. Around the rock pile dig a shallow pit, about 1 hand length deep. Add sweet potato and taro cuttings when filling in the gaps in the rock pile. Continue to add soil, rocks, and sweet potato and taro cuttings until the pile is 1 meter high or more.

The result will be a pit or cave that can be used to grow sweet potato and taro coming outside of the pile. The rocks will protect the plants from mouse pests. Don't forget to add compost or fertilizers. Use cut banana stalk as mulch. This will help to keep the pit moist.

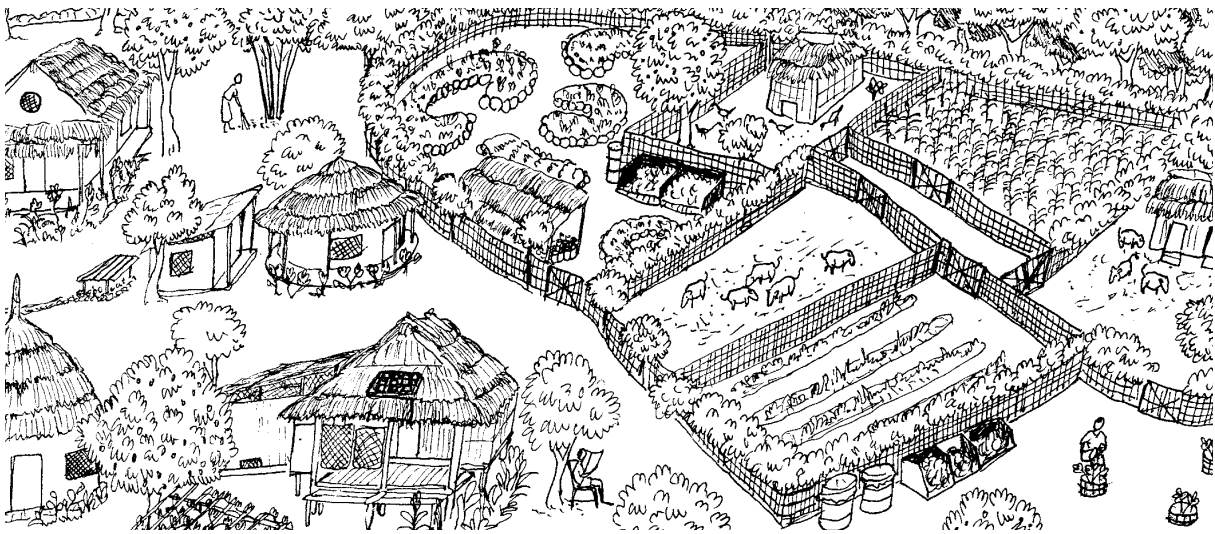


Integration with Animals

Plants need animal manure as their food, and animals need plants as well. This common need can go much further by integrating crops and animals together. This integration could be:

- Land use being rotated between crops and animals. Animals will clean weeds, loosen the soil and provide fertilizer after crop harvests
- For smaller gardens, chickens and pigs can be kept in movable pens to clean and fertilize the soil
- Vegetables can be grown at the bottom of a fish pond, which is dry during the dry season (if the pond is made of clay, and not cement)
- Vegetables can be planted along the edge of fish ponds

(For more information about integrating animals and crops, see Module 11 – Aquaculture and Module 10 – Animal Systems).



Integration with Rice

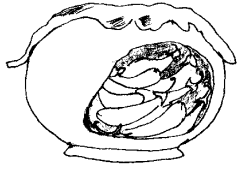
Rice paddy borders can function as garden beds. Vine plants, such as beans, luffa, cucumber and pumpkin can be grown along these borders.

Rice crop and water plants can be grown together in wet areas. Water flowing through the rice paddies can be stored in ponds where the overflow water falls out. This system will work best on sloped land.

This system is just an example, you can create your own new system fitting your needs, as long as the system follows the natural patterns of your land.



Storing and Preserving Produce



This module has provided many ideas for growing crops. But, storing and using vegetables well is also important. Good storage means that vegetables last longer and keep more vitamins. Good storage minimize vegetables that must be thrown out and increase selling opportunities.

Almost all types of vegetables can be left in the ground until needed. However, for some types of vegetables, good storage is essential.

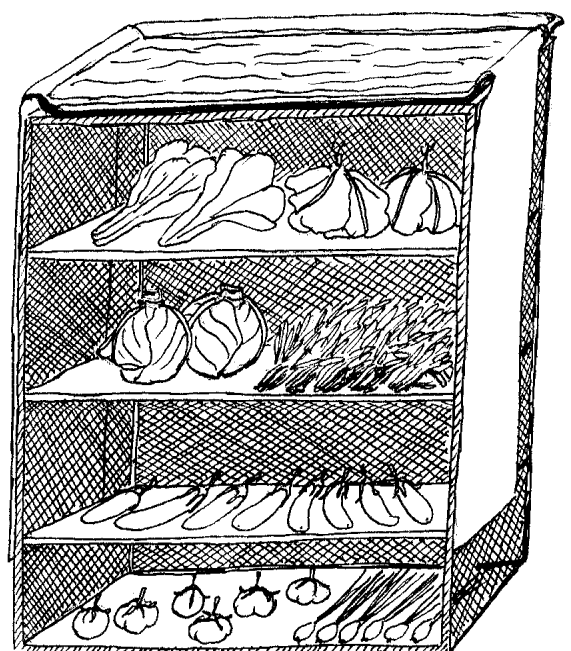
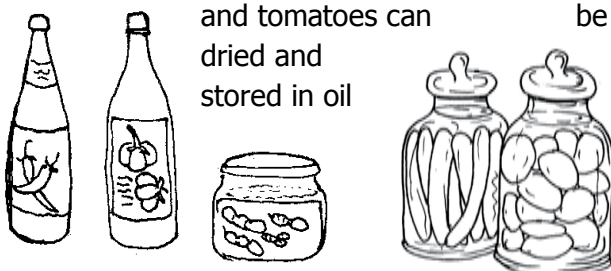
After crops are harvested, clean and throw out all rotten plant parts. Store in a cool place, protected from hot sun and safe from pests or other animals.

Three types of traditional containers which are good for storage:

1. Clay pots, for small vegetables and green leaf vegetables. Cover the top of the pot with a damp cloth and use a string or rubber to tie it on. Keep out of the sun. These vegetables will stay fresh for a few more days
2. In Africa, two clay pots are used, a smaller pot inside a larger pot. Damp sand is placed between these pots. Cover and keep out of sunlight. This technique works better than just using 1 pot
2. Coolgardie safe. This is a simple tool made of a large box covered with wire, it uses water and wind to keep vegetables cool. This container can also be used to store meat or other foods. This container is inexpensive and easy to make. (For more information about Coolgardie safes, see Module 12 – Appropriate Technology)

If too many vegetables are picked during one harvest, and cannot all be sold or eaten, there are a few methods which can be use to store the vegetables, including:

- Solar driers, which can be used to dry vegetables, fish, meat and fruits
- Vegetables and fruits can be preserved as sauces, pasta, pickles and jams. Some examples: Sauces made from tomato, chili, tamarind. Pasta made from peanuts, candle nut, cashews. Pickles made from cucumber, onion, capsicum, cabbage, mango, bamboo. Jams can be made from any type of fruit, except watermelon
- Some vegetables, such as eggplant, capsicum and tomatoes can be dried and stored in oil



Notes...





Notes...