

OL 304 Assignment One Homework

Online Learning: Vegetable Garden Care and Maintenance for Family Gardens and Community Gardens.

Center for Sustainable Development: <https://csd-i.org/vegetable-garden-care-family-gardens-community-gardens/>

This week's resources:

Assignment One Discussion

Magee Example Project Assignment One

Download Class Docs 304

Garden Africa: Water Management

OL 303 Specific Links

Healthy Harvest

Sustainable Nutrition Manual

OL 304 Specific Links

IDEP Home & Community Gardens Module 6

IDEP Home & Community Gardens Facilitator's Handbook Module 6

Permaculture Manual - Garden Africa

Assignment 1. Introduction garden maintenance

Part one. Background materials and downloadable handouts

The purpose of this week one assignment is to help your home gardeners learn how to maintain their gardens. Much of this is common sense, however, it may need to be reinforced.

You can exchange this information in a workshop setting in your demonstration garden, or you can incorporate it into your follow-up activities at the participants' individual home gardens.

In order to provide background information and handouts you can download and print, we will be using the two books from the last course, Healthy Harvest and Low Input Food and Nutrition Security. Plus, I've added three new resources, a Permaculture Manual from Garden Africa, and a handbook on Home and Community Gardens by an Indonesian NGO – IDEP. I'm providing links to two documents one is the handbook and one is a set of lesson plans that back up the handbook called the Facilitator's Handbook. I will also provide the link to the full collection of handbooks.

As your specific setting may be different from those illustrated in these handbooks, you might want to confer with the agricultural specialists that you worked with in the last class to make sure that you're going to recommend maintenance activities that are appropriate for your setting.

Part two.

Maintaining a Home Garden

1. Look at your garden every day.

Dear plants look healthy?

Are they vigorous and growing?

If not:

Do they look limp? (Water?)

Are they being eaten? (Pests?)

Are they being stepped on? (Fence?)

Are there weeds? (Mulching?)

Are they yellow and not growing? (Natural Fertilizer?)

Resources:

IDEP Home & Community Gardens Facilitator's Handbook Module 6: pp. 172-173.

2. Weeds.

Pull any weeds out from between the plants -- and put them in the compost heap; composting will kill the weed seeds on the plants.

3. Mulch your garden

Mulching your garden -- placing plant materials on the surface of the soil -- performs three valuable functions at once. Mulching reduces the amount of water necessary for watering your garden by preventing the sun from shining directly on your bare soil and by reducing evaporation. It reduces the ability for weeds to grow, and, as the mulch decomposes through contact with soil microbes and worms it releases nutrients into the soil.

For mulch, use garden waste such as leaves, small stems, grasses, straw or hay. Try not to use weeds that may have weed seeds as mulch.

Resources:

Sustainable Nutrition Manual

IDEP Home & Community Gardens Module 6: pp. 141 – 142.

IDEP Home & Community Gardens Facilitator's Handbook Module 6: p. 168.

4. Appraise your water situation

Do you have plenty of water at the garden site and a hose or a watering can? If so you can water in the evening just after sunset; this will allow the water to penetrate down to the roots in the cool of the evening without suffering from excessive evaporation. Water your garden until just before the water begins to pool on the surface of the soil.

Is your source of water far away -- or do you have a shortage of water?

- Carefully dig out low spots around the base of your plants to both hold water and channel it to the plant's roots.
- Mulch the surface of the soil around your plants to prevent the sun from drying out the bare soil and to reduce the rate of evaporation.
- Consider inserting cans or plastic bottles with holes in their bottom into the ground adjacent to the plants. These containers, once filled with water, will release the water slowly through the holes directly at the plants roots at a rate that the plant can best use the water. Using simple systems like this -- or simple drip irrigation systems you can reduce the water required by 20 m² of garden to 40 L per day down from 240 L needed when surface watering using a watering can or a hose.
- Use 'gray water' from washing dishes, cleaning vegetables, and bathing for watering your plants; try not to get this water on the leaves of the plants.
- Attach a rain gutter along the eave of the roof of your house and direct a down spout toward a barrel. You can use this water for watering your plants when you don't have rain.

Resources:

Garden Africa: Water Management

Permaculture Manual: pp.102 - 107

Healthy Harvest: pp. 46 - 48

Sustainable Nutrition Manual

IDEP Home & Community Gardens Module 6: pp. 140

5. If your plants aren't growing or are turning yellow.

Your plants might need to be fed. Rather than using expensive and unsustainable chemical fertilizers, be sure that you have integrated plenty of compost into your garden bed soil -- and composted manure from chickens, goats, cows, and BBuffalo when you first dig your beds.

Midseason, you can place a thin layer of compost -- or composted manure -- under the surface of your soil and scratch it a little bit into the soil so that the nutrients will release slowly as you water the bed. An alternative is to take a porous bag -- like a burlap bag -- fill it with manure, and place it in a drum filled with water for three days. The nutrients will infuse themselves into the water just like making tea. You can use small quantities of this around your plants just prior to watering in order to give them a boost of nutrients.

Resources:

Healthy Harvest: p. 46

6. Fencing

A common challenge in Gardens is when animals enter a garden and trample, eat or dig up your food crops. Fencing can be made with simple materials such as old fishing nets, bamboo, traditional wooden fencing materials -- or even living fences -- such as cactus plants or hedges.

Resources:

IDEP Home & Community Gardens Module 6: pp. 139.

IDEP Home & Community Gardens Facilitator's Handbook Module 6: p. 179.

7. Stakes and Trellises

Some plants, such as tomato plants, can grow quite tall but they aren't very strong themselves -- so they need to have stakes to support them. Simple branches or bamboo can be pushed into the soil and run up alongside the main stem of the plant. Tie the main stem of the plant loosely (so that the plant stem can continue to grow and not be choked by the tie) to the stake.

Other plants, like peas or cucumbers, would normally grow happily along the ground and take up a lot of space. The way to make their production more efficient is to let them climb up a trellis so there they are growing vertically and taking up very little horizontal space in your garden. Trellises can be made very simply just by sticking branches into the ground. They can be made by placing a post on each end of your garden bed and using string to create a network that the plants can grow up.

The homework to turn in will be:

1. Whether you decided to do a short workshop or use this information to a ring follow-up.
2. A list of the techniques mentioned above that was of the greatest interest or use to your home gardeners.
3. A list of the challenges that your home gardeners face that we can work to provide solutions for during assignment five.
4. A very short paragraph discussing (1) how big the plants are, (2) if they're growing okay, and (3) the attitude of the home gardeners towards this process.
5. A few close-up, detailed photos (if possible) of the follow-up activities or workshop.

Go to Magee's Example Project Assignment one to see what this could look like.

See you next week.

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