



Ministry of Agriculture,  
& Food Security

# Steps in **BACKYARD GARDENING**

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A photograph of a green watering can and a potted plant with purple flowers in a garden setting. The watering can is on the right, and the potted plant is on the left. The background is a lush green garden with various plants and flowers.

## Steps to Backyard Gardening

# Introduction

## What Is Backyard Gardening?

Back Yard Gardening is the growing of crops in limited space around the home to provide food for the household.

### **Home grown vegetables are:**

- fresher
- healthier
- more nutritious
- less expensive

## What are the benefits?

- Produces low cost food
- Produces food year round
- Saves money
- Engenders physical and mental health
- Enhances the aesthetics of your home

## Vegetables can be divided into the following types:

- **Leaf vegetables**, grown for their green leaves, such as spinach, lettuce, cabbage.
- **Fruit vegetables**, grown for their fleshy fruits, such as tomatoes, eggplant and sweet pepper
- **Seed vegetables**, grown for their dried seeds, such as groundnuts, string beans, pigeon peas
- **Root vegetables**, grown for their fleshy roots or lower stems, such as carrots, cassava, sweet potatoes and yams.
- **Miscellaneous vegetables**, such as cauliflower, asparagus, onions

## Two Methods of Backyard Farming:

- Open Field Gardening
- Container Gardening



# OPEN FIELD GARDENING

## Steps to Open Field Gardening

Step 1:  
Site Layout

Step 2:  
Land  
Preparation

Step 3:  
Planting

Step 4:  
Watering

Step 5:  
Weed  
Management

Step 6:  
Pest/Disease  
Management



### Step 1: Site Layout

**Select a location:** Observe your surroundings during different times of the day and select the best area where there is at least 6 hours of sunshine. A well drained soil and not too shallow area will be ideal.

### Step 2: Land preparation

*(It is advisable to get your soil tested for nutrients levels and organic matter content. This can be done at the Government Laboratory.)*

- Clear area of any debris or unwanted material
- Composted livestock manure can be incorporated to improve the nutrient quality, organic matter level and water holding capacity of the soil.

**Caution must however be observed when using chicken manure.**

**The use of uncomposted chicken manure must be avoided to prevent the spread of certain pathogens. It must be composted for at least 120 days to prevent the spread of diseases as well as the destruction of certain diseases.**

- Make 1-2ft drains to separate the beds.
- Height of bed should be approximately 10 inches from the level of the drain.
- Width of beds 3ft- 5ft

DRAINS  
↔  
1ft-2ft



↔ BEDS ↔  
3ft- 5ft



## Step 3: Planting

### Three method of planting:

#### 1.Direct Seeding

#### 2.Transplant seedling

#### 3.Plant cuttings

**Direct Seeding:** First, read the direction on the seed package to determine expiry date. If the seeds are new, then the germination rate should be high. If seeds are old it may be best to increase the number per hole to guarantee adequate germination. *(See chart for spacing and depth on page 10)*



**Transplanting:** To transplant, dig a hole in the soil slightly larger than the cell of the tray in which the seedling is growing. Carefully remove the seedlings from the tray, it helps to turn the plant upside down and apply gentle pressure to the bottom and the plant ball will slide out.

Place the plant in the hole and cover to the first leaves.



#### Plant Cuttings

**Sweet Potato:** Selection of vine cutting:  
Tip cuttings of 8-10 inches long should be insect and disease free.

**Cassava stem cutting:** - sticks/pieces 8 - 10 inches long, should be cleanly cut from the middle of the mature plants which are diseased free. Younger material tends to be soft and susceptible to dehydration and soil borne pathogens.



## Steps to Open Field Gardening

### Step 4: Water

Seedlings should never dry out, so irrigate daily while they are small. Taper off as the plants get larger.

New transplants also need frequent watering, until their roots become established. How often you need to water depends on your soil, temperature, and how often it rains. Water slowly and deeply, so the water soaks in instead of running off into the street/drain.

To minimize evaporation, water in the early morning or late in the evening.



### Step 5: Weed Management

Controlling weeds in your gardening should be ongoing, hand picking, the use of the hand fork and mulches should give adequate control. Only use herbicide in difficult situations.

**Mulch** To help keep weeds out and water in, cover the soil with a couple of inches of mulch. Types of mulches are, hay, plastic, coconut/coir.



### Step 6: Pest/Disease Management:

In controlling pests in a garden always take into account its proximity to the family living quarters, hence excessive use of chemicals should be avoided as much as possible. Natural methods like garden hygiene & crop rotation should be encouraged.

**Ants:** Flood ant nest with boiling water, spray insecticidal soap.

**Worms:** Hand pick or use insecticidal soap. Cover plant with netting or use row covers.

**Slug and snails:** Hunt at night and place in salt water.

### Natural Controls

*Neem oil, pepper sprayers, sticky traps, soaps.*



# CONTAINER GARDENING

## Steps to Container Gardening

**Step 1:**  
Choose an  
Area

**Step 2:**  
Select  
Container

**Step 3:**  
Preparation/  
Soil Mix

**Step 4:**  
Planting

**Step 5:**  
Watering

**Step 6:**  
Weed  
Management  
Pest

**Step 7:**  
Disease  
Management

## *Steps to Container Gardening*

### **Step 1: Choose an area**

Choose an area where there is at least 6-8 hours of sunlight and not close to dripping roofs.

### **Step 2: Selection of Containers**

Select containers that were not previously used for harsh chemicals and are not biodegradable. Type of containers that can be use: Drums, blocks, tyres, pots, cans, plastic containers and growing bags.

Holes must be punched in the bottom of all containers to allow excess water to drain. Roots allowed to stay in water are more susceptible to disease and may rot.



### **Step 3: Preparation of Soil Mix**

- One (1) part of topsoil
- One (1) part builder's sand
- One (1) part well rotted pen manure (cow, horse, sheep)
- Fill container, additional soil mix maybe needed after first planting



### Recommended media depth:

**4-6 inches:** salad greens, garlic, radish, basil, cilantro, thyme, mint, and marjoram.

**8-12 inches:** beans, beets, carrots, chard, cabbage, pepper, eggplant, tomato, squash, rosemary, parsley, lavender, and fennel.

***Please avoid container with harsh chemicals, biodegradable or containers that release toxins.***

### Step 4: Planting

Transplant seedling into damp or moist soils, place seedling in small holes and cover. Observe spacing requirements.

**NB:** *In container gardening it is preferable to use seedlings instead of seeds.*



### Step 5: Watering

Check the soil for moisture, irrigate only when necessary. Do not flood the containers with water.

### Step 6: Weed Management

Hand pick to remove any weeds.

**NB** *there is no need for herbicides in container gardening.*

### Step 7: Pest/Disease Management:

Use information from open field gardening







## Tools for Backyard Gardening



**Watering Can**



**Hand Tools**



**Fork**



**Protective Wear**



**Rake**


















**Soaker Hose**



**Sprayer Bottle**



Vegetable	Planting depth by seed (in)	Distance between rows (in)	Distance between plants (in)	Days to harvest	Days to Germination
 Beets	1	8-10	2	56-70	4-5
 Chinese Cabbage	1/2	20-30	7-12	28-35	4-5
 Carrots	1/2	14-24	2	80-100	4-6
 Celery	1/8 - 1/4	18-24	6-9	85 to 120	4-6
 Cabbage	1/2	16-24	12-16	55-75	4-6
 Cassava	1/2	One row/bed	20-24	210-300	
 Lettuce	1/2	20-30	7-12	28-35	3-4
 Okra	1/2	15-20	5-10	42-56	4-6
 Eggplant	1/4—1/2	24-36	18-24	112-168	4-6
 Sweet Pepper	1/4	33-40	9 -12	77-90	5-7
 Sweet Potato		One row/bed	12-16	98-126	
 Tomatoes	1/2	33-66	18-24	70-80	4-6
 Beans	1, 1/2	8-16	2-3	42-56	4-5
 Pumpkin	1	18-24	12-24	55-75	4-5
 Cucurbits (melon, squash, cucumber)	1/2	16-24	12-16	55-75	4-5

## LIQUID MEASUREMENT

1 tablespoon	1/2 fluid ounce	3 teaspoon	15ml 15cc
2 tablespoon	1 fluid ounce	6 teaspoon	30ml 30cc
8 tablespoon	4 fluid ounces	1/2 cup	118ml
16 tablespoon	8 fluid ounces	1 cup	237 ml

## Tips

- Foliar feeding is a method of fertilizing through a plant's leaves. This type of fertilization will give you more vegetables with higher nutrition and better flavour.
- Use compost and organic mulches to improve your soils. Having good soils is key to successful back yard gardening.
- Harvest rain water to irrigate your plants.
- Monitor/check your plants especially early in the morning for insects.
- Keep small notes and pictures of your crops to share with the Extension officer if required.
- Wind breaks helps to protect your plants and improve production.
- Understanding of 3 essential elements during the crop's life-cycle will ensure your crops have the right nutrients at each stage of development.

**Nitrogen** – promotes leafy growth.

**Phosphorus** – promotes root growth.

**Potassium** – promotes fruiting and flowering.



## Hints on natural pest control for your garden

With the concern for human health and the physical environment effective sprays can be prepared from a mixture of different insecticidal plants.

### Chilli Pepper mixture

Hot pepper is said to give good control of aphids, flies, ants, and caterpillars. To prepare the pesticide one should boil about half a kilogram (one pound) of pepper in about 3 litres (1 gallon) of water for about 15 minutes. Add 30 grams of soap and stir, add another 3 litres of water, cool and strain.

### Neem

Grind leaves, dilute with water and strain, this mixture is said to be effective against caterpillars and weevils.

### Marigold

Marigold is said to be effective against blight, mildew and fungal diseases. They also are believed to repel aphids, caterpillars, flies and nematodes. When preparing this pesticide large quantities of flowers and leaves should be soaked in water and left for 5 to 7 days. The mixture should be stirred often so that the material breaks down evenly. When the material has decayed it should be diluted with an equal amount of water and some soap added.

### Wood Ash

Wood ash is reputed to control cutworm, slugs, and snails. Fresh ash from any wood can be used. Ash should be sprinkled around seedlings as soon as they sprout to control cut worms.

### Flour

A spray made from two cups of fine white flour, well stirred into 5 to 10 litres of water is said to be very effective against mites and aphids. The mixture should be applied in the morning, as the heat of the sun increases, the mixture dries out and the insect becomes encrusted where they shrivel and die. The flour will fall from the leaves or is washed off by rain or irrigation water.

## Growing Seedlings:

- **Choose an area**

Locate an area which provides 8-12 hours of sunlight and is not windy

- **Selecting a container**

Any container can be used providing its depth is 2-3 inches. Its best to use trays that are specially design/made for seedling.



- **Purchase potting Mix**

Choose potting mix that is made for growing seedlings. Do not use soil from your garden or re-use potting mix

- **Filling container**

Fill container with soil mix to within half inch of the top of the container. Press gently to remove any air pockets.

- **Planting**

Read label for expiry date and germination percentage. Place seed in center of the soil in the tray cell and the cover with soil. Cover seed tray with dry grass and remove at germination.



- **Watering**

Keep soil moist but not soggy, use a watering can.  
Keep record of planting date.



## **CONTACT INFORMATION**

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**Ministry of Agriculture & Food Security**