# **How to Build Your Keyhole Garden**



### What is a keyhole garden?

Each keyhole garden has a composting basket built into its center. This gives the garden a keyhole shape when viewed from above.

The garden uses a number of layers to retain moisture and nourish the soil. making it more productive than a conventional garden. The composting basket replenishes the soil's nutrients as well. The garden is made from materials that are all available at low cost.

# Benefits of the keyhole garden

### Soil enrichment

- The layers of organic materials decompose over time, adding nutrients to the soil.
- The central composting basket continuously replenishes the soil.

### Moisture retention

• The layers soak up moisture, so the garden requires less water to remain moist.

## Labor saving technology

- The soil re-nourishment and moisture retention reduce the amount of time required to maintain the garden.
- The garden shape makes it more accessible to sick or elderly gardeners.

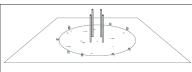
### Low-cost design

- All construction materials should be readily available (at no cost) to gardeners.
- Gardeners might need to purchase seeds for planting, however.

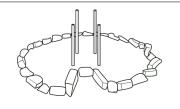
# Year-round vegetable production

• The stones of the keyhole garden wall absorb heat from the sun, protecting crops from the cold winter temperatures in Lesotho.

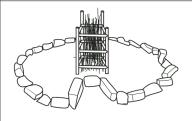
# Steps in Construction



- A circle 2 metres across is cleared.
- Four corner posts are secured into the around.



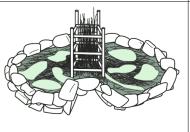
- The outline of the garden is marked with
- The outline dips inwards at the center.



 The basket is encircled with rope and lined with thatching grass to allow water that is poured into the basket to flow into the garden soil.



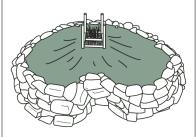
- The first layer of the garden is:
  - iron scraps such as empty food and beverage cans
  - aloe leaves
  - dry animal bones
  - broken clay pots, which can be substituted with fist-size stones
- These materials provide minerals to the soil as well as drainage in heavy rains.



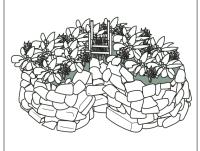
- The first layer is covered with soil that gives nutrients, thatching grass that retains moisture, and wood ash that provides potassium.
- Every layer should slope downwards from the basket so water can flow properly into the soil.
- Soil is added on top of the wood ash.

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- Soil is added on top of the wood ash.
- A thick layer of mixed soil and dry manure is added on top. Using wet manure will kill young seedlings
- Add stones to the garden walls as the layers grow taller.



- Seeds are planted according to the season.
- During the winter, protect plants from the cold with thatching grass or old carpet. During the day, plants should be uncovered so they receive sunlight.

Congratulations! Your keyhole garden will now grow delicious, healthy vegetables all year round.

### Maintenance of the keyhole garden

### Watering

- The garden should be watered regularly so that the garden soil is moist.
- Clean water is used on the topsoil.
- Water from washing hands, laundry, or dishes is poured into the basket. The thatch and the composting in the basket will clean the water.

#### Soil

 Dry manure and topsoil should be replinished in the garden so that it does not become sapped of its fertility.

### **Basket**

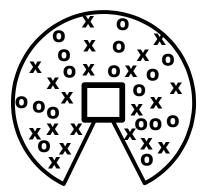
- Uncooked vegetable scraps, dry manure, eggshells, and compost are added to the basket. These replenish the soil.
- The basket will decompose within 1 or 2 years and should be replaced.
- The garden wall near the basket can be pulled away, allowing gardeners to remove the old basket and replace it.

#### **Garden construction**

• Over time, the garden may lose its nutrients, and vegetables stop growing well. You then need to rebuild the garden. This is usually done every 4–5 years.

# Planting your keyhole garden

Space, soil nutrients, and pest management are key considerations in planning your garden. Companion planting is planting different kinds of crops together in the same garden in order to best satisfy those needs. Different methods include planting leafy crops next to root vegetables or planting pest-resistant vegetables (like onion or garlic) next to regular crops. To best ensure that your garden will stay fertile and resist pests, plant a minimum of **four vegetable types.** 



One idea for companion planting.

X: leafy plants

O: root plants

Preferred Crops For Keyhole Gardens	
Root Crops	Leafy Crops
Carrot	Spinach
Onion	Swiss chard
Beetroot	Lettuce
Radish	Rape
Turnips	Mustard spinach
Garlic	Herbs
Crops NOT Recommended For Keyhole Gardens	
Tomatoes	Cabbage
Peppers	Eggplant
Chilies	Maize
Peas	Beans
Potatoes	Squash