

# Survival Growing boxes and Mandala gardens for Zimbabwe's COVID-19 fight.

The Grow Box is a great and economical system for growing vegetables in wooden boxes.



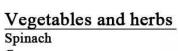


## Advantages of using growing boxes

- Extremely easy to set up and use
- Economical
- Water efficient and potentially more productive than conventional gardening
- Can't over-water vegetables and you don't need to re-add fertilizer
- Can use it to grow vegetables anywhere

Vegetable wooden boxes can be used by people living in dense, high rise flats with small balconies, as well as backyard dwellers or residents of informal settlements and tenants, creating equal opportunities for food security for all members of society.

Zimconserve beneficiaries receive personalized training on how to grow seedlings, nutritional content, and how to maintain the box, before receiving the box. This allows a powerful sense of empowerment and attachment that will connect the beneficiaries to the wooden boxes.



Covo

Rape

Mustard

Lettuce

Onions

Carrots

Tomato

Green Pepper

Basil

Lavender

Strawberry

Thyme



Fully stocked

Fully stocked

Size 90X 45 X40cm high

Size 120 X 45 X 40 cm high

#### A Mandala Garden is a raised garden bed using keyhole pattern.





It is meant to be a domestic garden able to feed a family all year. It can also be scaled up in order to feed more people. It is usually a circle shape on a flat area.

### The advantages of it are:

- To allow a very dense crop association in varied patterns permitting an improvement of soil building and pest control
- to maximize edge effect as trees are associated to veggies, tubers, water area, or whatever you want to put in it;
- To be particularly aesthetic;
- To gain space in your horticultural area because the ratio of path to garden is less;
- To avoid water wastage;
- To be able to practice (if wanted) no dig agriculture;
- To be sure that each plant benefits from the same amount of attention as they are all together.

This type of garden seems to be really useful when built close to the kitchen as it permits having all desired veggies and herbs whenever you need. It can also be widened and placed in another area (for example zone 2) in order to provide a market scale production.

#### How does it work?

In the center we can put, for example:

- A pond;
- A washing area or external shower with a banana circle to filter grey water;
- A nitrogen-fixing tree;
- A compost heap

Those elements are meant to provide humidity, shade and ecology to the garden. All around the keyhole beds it is mulched to keep in the moisture and prevent the need to weed. This allows a high diversity of crops in a quite reduced area.

The keyhole bed is usually more efficient when it reproduces the permaculture zone system. In this order, it is advised to place the more frequently picked plants (herbs) closest to the path, then the one that get picked regularly (as ladies finger, beans, tomatoes, etc.) and finally the long term crops that usually get picked in one time (any root crop for example). In this pattern we can also include small fruit trees at the back of the keyhole beds in order to provide shade and mulching to the garden.