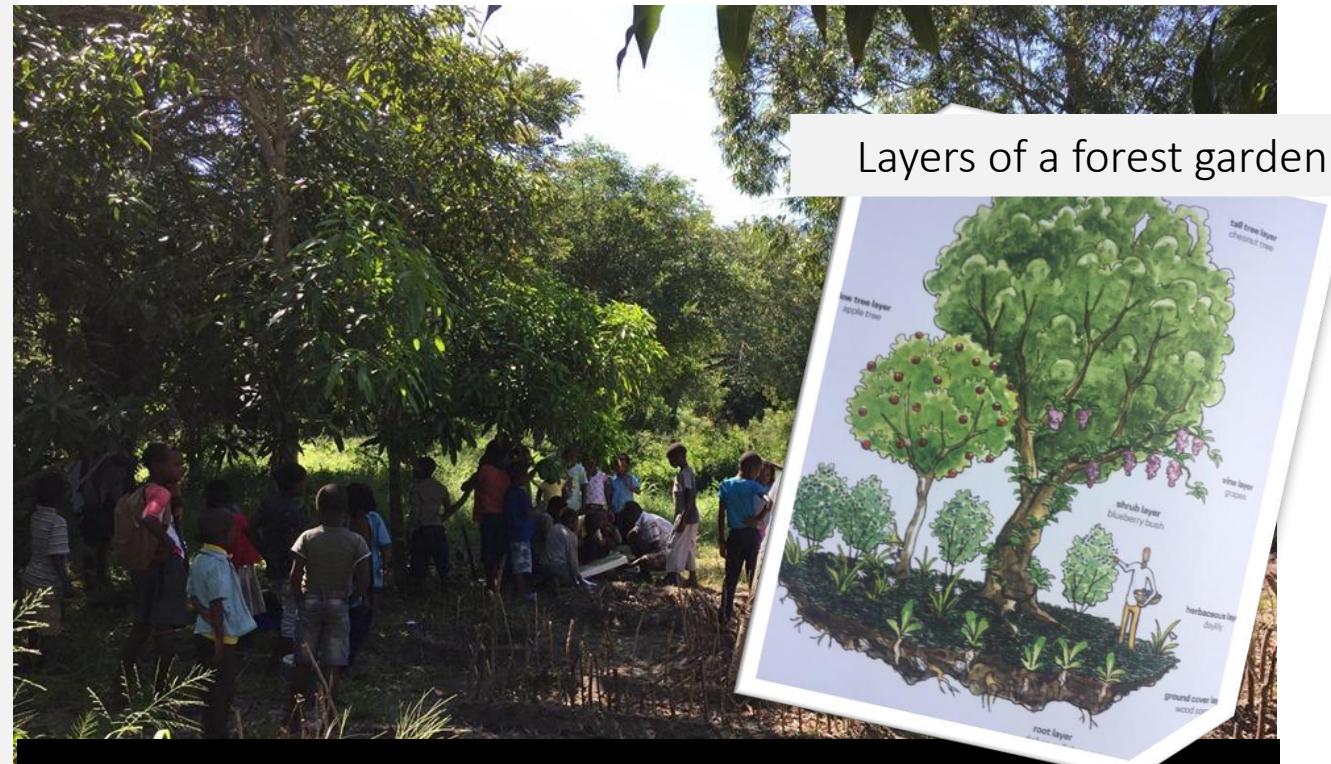


Agroforestry Systems

Agroforestry is a systems that grow trees to aid in the provision of agricultural products. Good examples include orchards, nitrogen-fixing tree, alley cropping, and forest gardens





Forest gardening

The idea of forest gardening is growing the things we need in a divers. Forest gardening has several goals. For instance, we want to design that if we compare a monoculture orchard to a forest garden of the same size, we hope to receive more overall value from the polyculture. Another goal is for a forest garden to become a largely self-maintaining system.

Layers of a forest garden

A forest garden can have several layers:



The tall tree layer. The upper canopy layer require the most space and have the biggest impact on resources (sunlight, water and nutrients).

The lower tree layer. This layer is where most fruit tree live.

The shrub layer. This perennial layer is full of woody plants in a range of sizes that produce food and fibers and provide wildlife habitat.

The vine layer. We can grow productive vines in our forest garden for food. These can be trellised up the trees.

The root layer. The underground dimension, we can benefit from a variety of root crops.

Technic



Alley cropping



**Tropical Banana
Guild**



Alley cropping



For production-focused systems, alley cropping is a concept that deserves more attention. Incorporating bands of tree crops into fields of annual grains, pulses, and vegetables offers a number of benefits.

Alley cropping system intersperses rows of young fruit trees and berry bushes with rows of annual vegetables.



Tropical Banana Guild

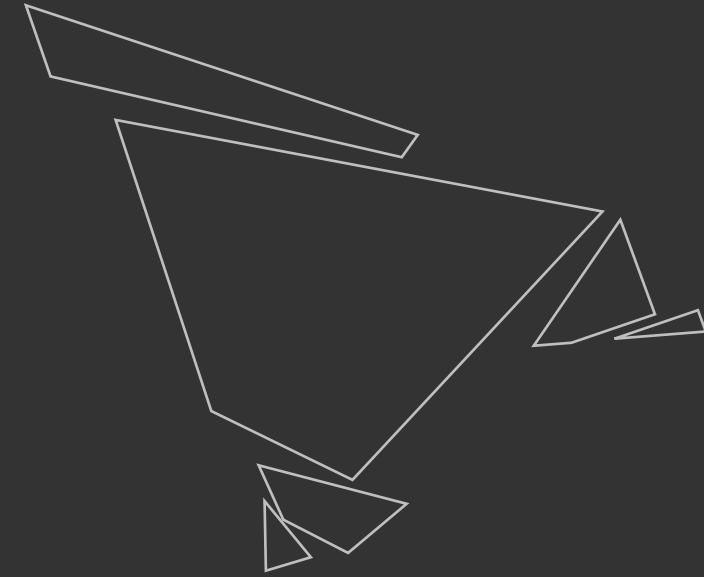
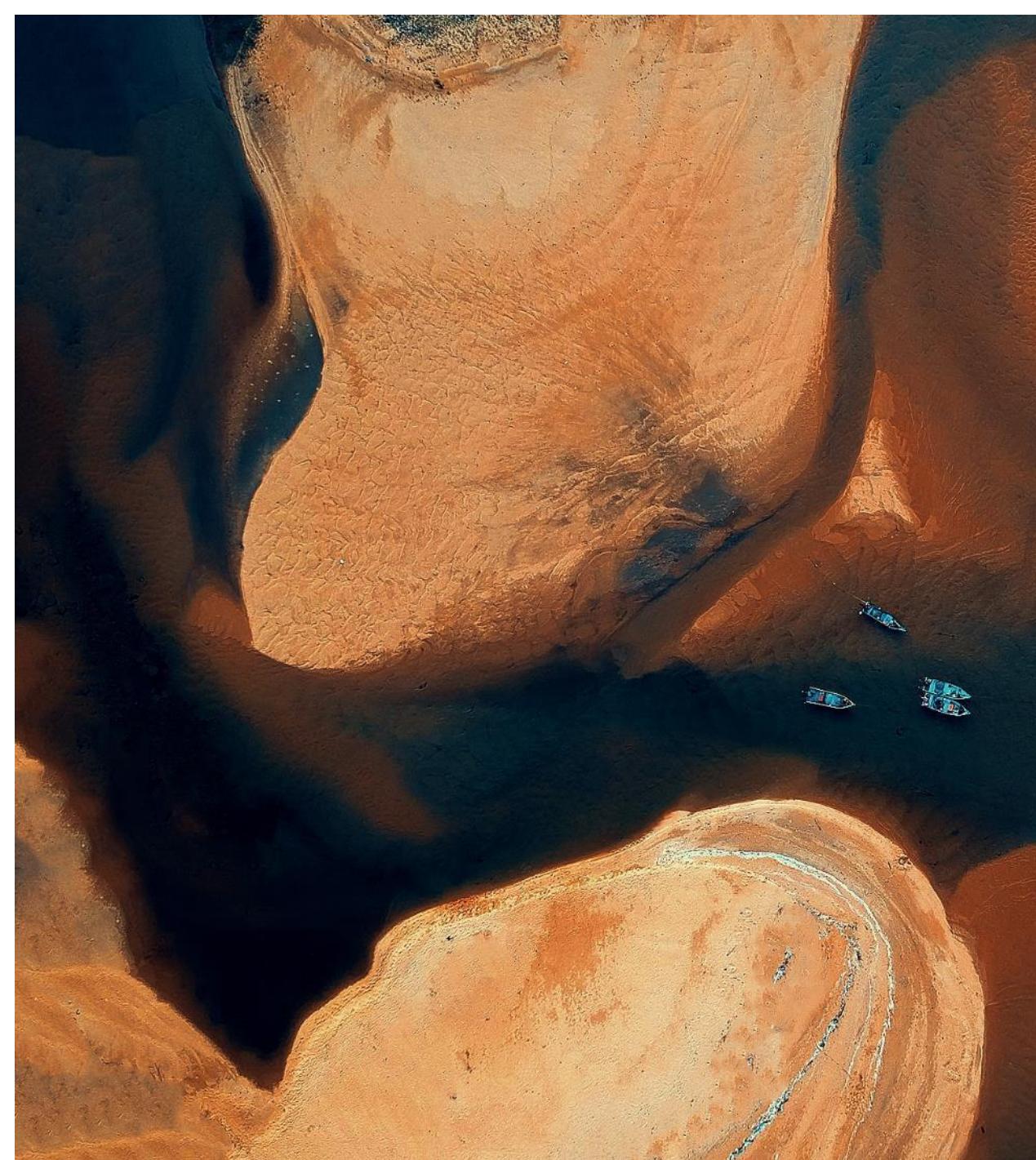


In a tropical banana guild, The banana provides sun and wind protection, soil moisture conservation and juicy mulch. Meanwhile, all the other plants provide various to help the fruit tree get established.

How to make tropical banana guild.

- Step 1. Prepare the soil (diameter 1 sq.m.) for planting
- Step 2. Add fertilizer (compost, manure, or a mixture) and till the soil
- Step 3. Plant banana in the center
- Step 4. Plant fruit trees around banana
- Step 5. Plant the cover tree around circle
- Step 6. Water the trees

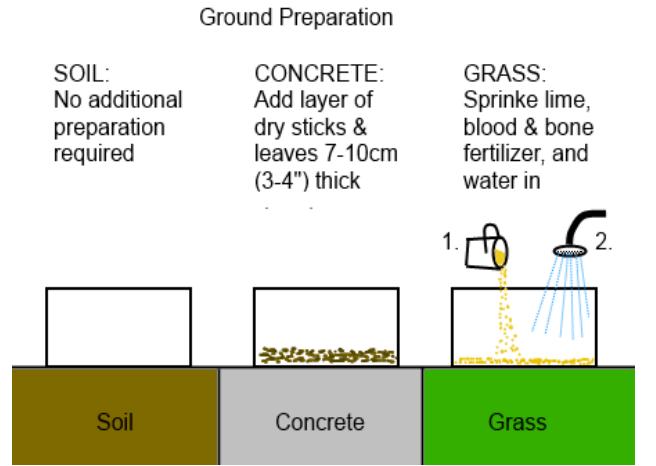




Soil improvement

No dig gardening

There are many variations of how we can build a “no dig gardening”, but they all use the same underlying principle, which is soil building. No-dig gardens can be constructed anywhere because this technique creates soil.



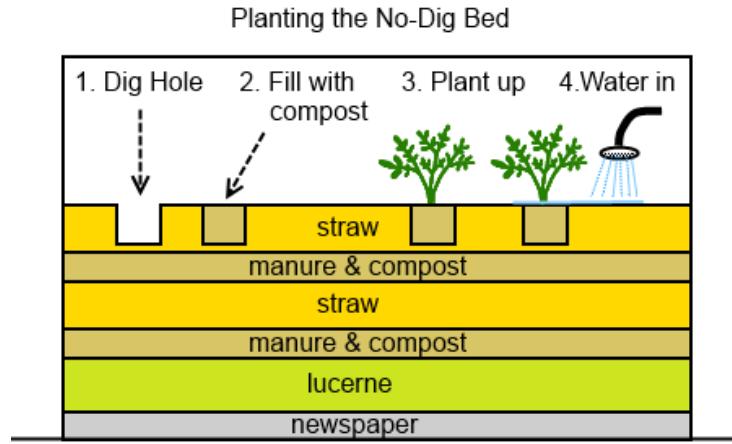
Step 1.

Preparing the ground



Step 2.

Lay down newspaper



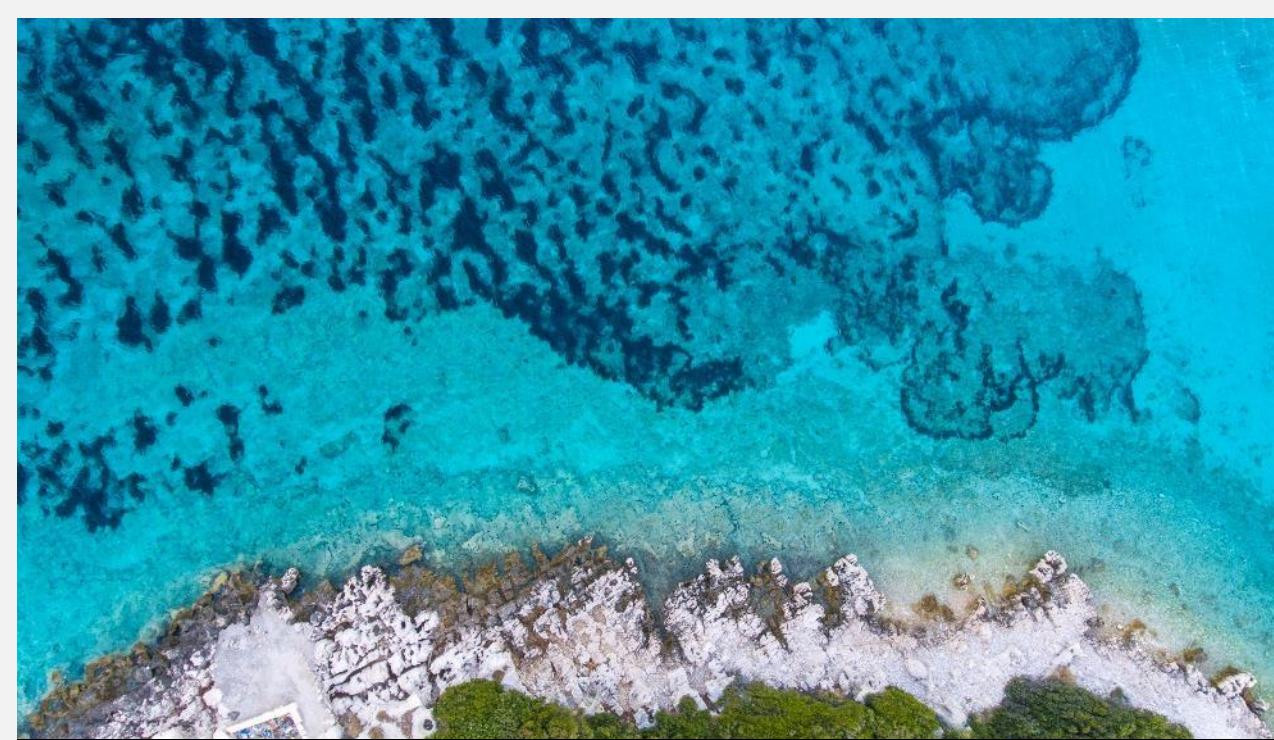
Step 4.

Water and make pockets of compost in top layer and plant up

Step 3.

Lay down organic matter, manure & compost

Water management



Greywater from kitchen



Make garden bed for used greywater from kitchen

- **Greywater**
- Greywater refers to the water that come from sources not containing human waste. This includes kitchen sinks, bathroom and shower. In places where water conservation is a high priority, this greywater can be used to help irrigate a productive landscape.