

BANANA FARMING

Introduction

Banana is a perennial crop that does well in most tropics. They do well in fairly hot and humid areas with adequate moisture.

Ecological requirements

Soils: Deep, well drained and fertile soils. Preferably, the soils should also be rich in humus

PH: Slightly acidic to alkaline with a range of 6 - 7.5. Add Agricultural lime if the soils are too acidic.

Varieties and Spacing

The spacing depends on the variety, soil fertility level, and rainfall (water availability). With good rainfall space as following:

- Short variety (Dwarf Cavendish, Giant Cavendish) 2.5 m × 3 m.
- Medium variety (Valery, Williams) 3.0 m × 4.0 m
- Tall variety (Lacatan, Poyo) 4.0m × 4.0.

Land Preparation

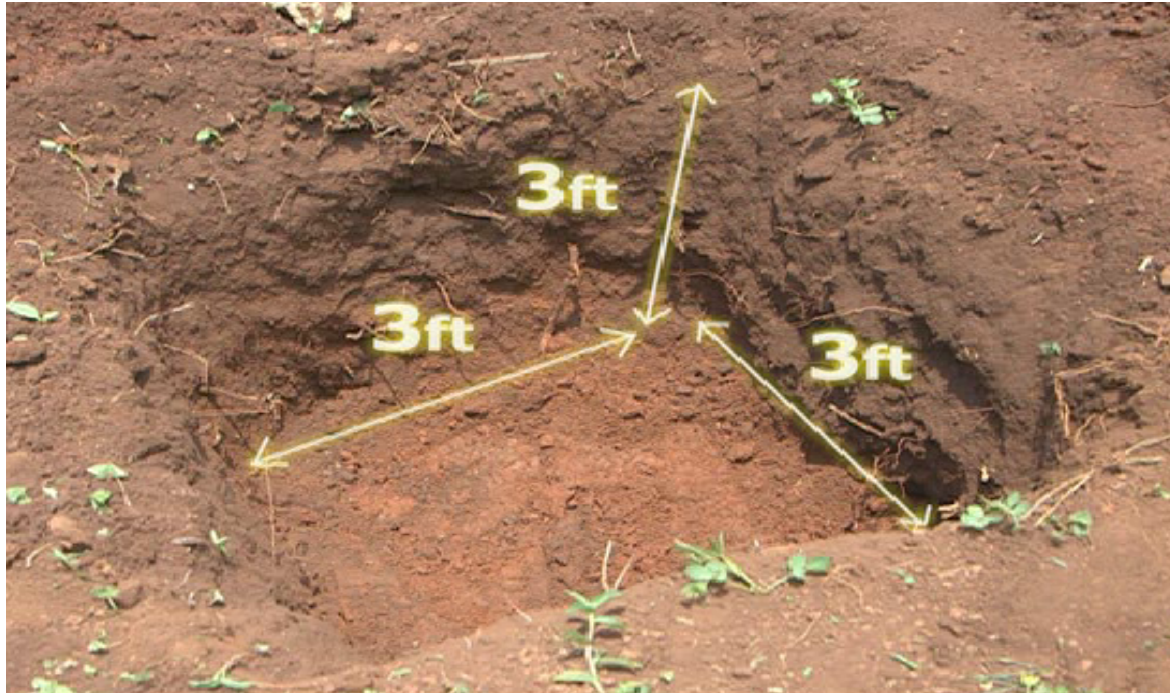
Select a place where bananas had not been grown before in your shamba

Prepare the land well by ploughing and harrowing to a fine tilth

Establishment

To plant bananas:

- Make a hole measuring 3 feet by 3 feet by 3 feet (although this may vary with the variety)
- Separate the topsoil from the subsoil
- With the topsoil, put 1 debe of well rotten farm yard manure and a handful of planting fertilizers like DAP / TSP fertiliser. This accelerates the growth of pseudo-stems.
- Add two matchboxes of Meticide or Nemacur nematicide to stop nematodes
- Mix the topsoil with manure, nematicide and fertilisers well
- Fill back the hole with the above mixture then followed by the sub-soil
- Choose a 30 cm tall seedling and plant in the centre of the hole
- Mulch the seedling with dry grass
- Water every week.



Sourcing Planting materials

The commonly used planting materials in Kenya are the suckers and Tissue Culture seedlings.

Choose seedlings that are:

- Clean
- Early maturing
- Healthy
- Of good quality
- Disease free
- High yielding
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You can visit any KALRO (Old KARI) near your for Tissue Culture seedlings which has the above features.

Routine Management Practices

Fertilizer and manure application

- Put 1 wheelbarrow of manure twice a year per tree (during the short rains and the long rains). A short forked hoe is used to incorporate the manure shallowly and carefully, to ensure no root damage.
- Top dress with 100 – 125 g of Calcium Ammonium Nitrate (CAN) around each stool each year in a 15 cm ring around the stool

Weeding

- Cultivation should always be shallow because a banana plant is shallow rooted.
- Earthing-up of the stem base is required in windy areas.

Mulching

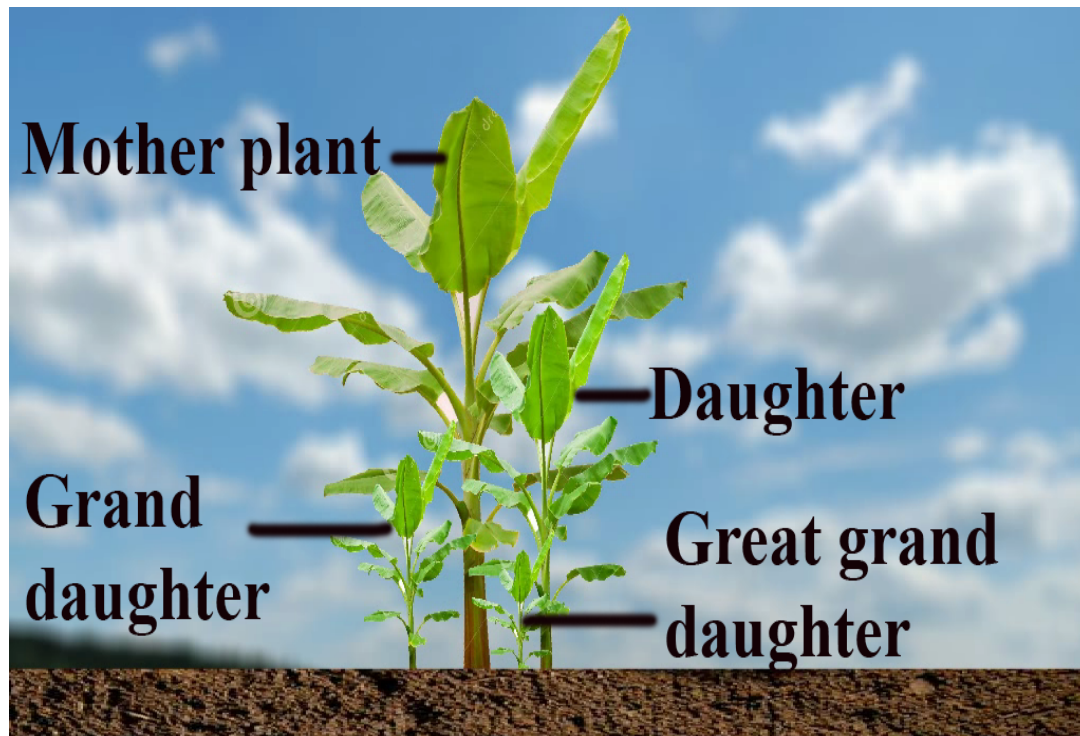
- Put heavy mulch cover to suppress unwanted weed growth, retain moisture, and provide humus for a good soil structure. You can use grass or banana leaves.

Pruning and Stalking

- This helps you to get bigger and higher quality bunches as well as managing sucker growth.
- Dead leaves should be removed at least twice a year.
- After harvesting, the pseudo-stem should be cut off from the plant at ground level.
- Staking of the fruit bearing pseudo-stem should be done to prevent breakage caused by heavy bunches.
- Stake with wood by digging a hole 40 - 60 cm deep at the base of the stem to install the prop.
- Tie the bunch to the prop near the portion where the fruit stalk emerges from the stem using Y-sticks.

Banana stool management

- Have only 4 trees stands of different ages in a hole i.e. mother, daughter, granddaughter and the great granddaughter.
- Surplus suckers should be removed as early as possible in their development and perhaps used as planting material.



Irrigation

- Water is needed particularly at flowering. Therefore, in drier areas supplemental irrigation may be necessary during this time.

Windbreaks

- Bananas are adversely affected by strong wind. Plant in sheltered positions and in blocks, rather than in strips.
- If planted in blocks, the plants provide each other with some protection against the wind.

Crop Rotation

- Rotate your banana field after 8 years. For a poorly managed field, rotate after 5 years.

Stop banana Pests and Diseases

The common Pests and diseases that kill your banana trees are:

- **Weevils:** Eat the stems so the trees fall. Dig up and burn infected trees so weevils do not move to other trees.
- **Nematodes:** Attack the roots. To stop nematodes, use a Nematicide powder like Meticode or Nematicur at planting, remove infected stems and do not intercrop bananas with maize, cowpeas or sorghum.
- **Black Sigatoka disease:** Leaves turn yellow so the banana trees give small bunches. Use resistant varieties and take off infected leaves.

Maturity

Bananas are ready for harvesting after about 12-15 months. However, maturity indices may vary widely among varieties. Yield of up to 14 ton/acre per year is possible under good management.

Marketing

We don't directly link farmers to a ready market. We recommend that you seek for a market early enough before harvesting considering that bananas are perishable if left to overripe.

Some of the possible destinations include: schools, hotels and nearby market.

Kindly visit consumers around your and enter into contracts with them.

Online platforms like OLX and Facebook also do offer good market access.