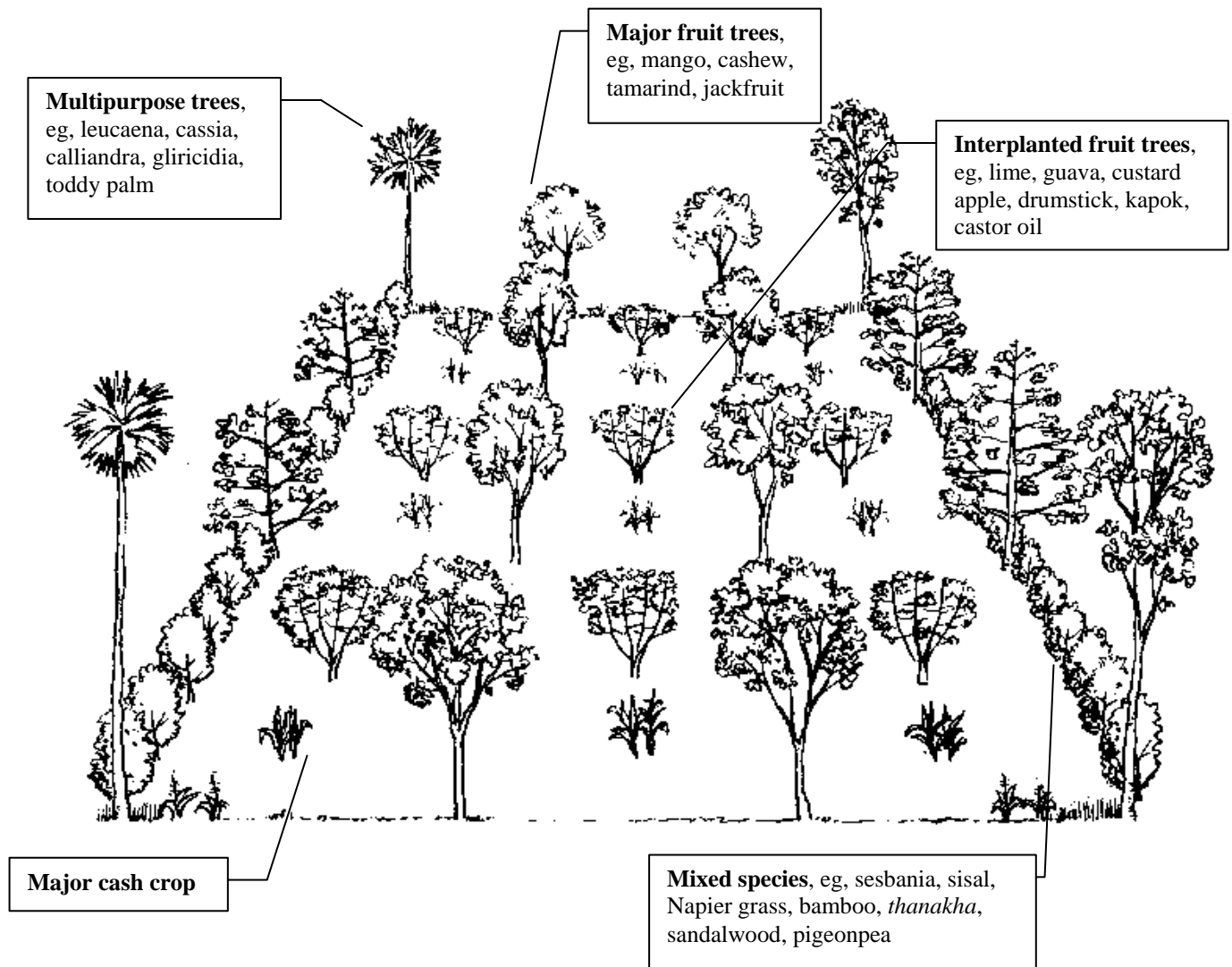




Multi-storey gardening



Multi-storey gardening is a way of planting a mixture of crops and trees of different heights and different uses: food crops, cash crops, fruit trees, woody perennials, fodder and forage.

Multi-storey gardening is especially useful if farmers want to change from farming a single food crop to a more productive and profitable use of their land.

Suitable sites

- Fairly deep soil with good drainage.
- If possible, close to a reliable source of water.
- Close to the farmers' house to guard fruit against theft.
- Fairly large area: a minimum of one acre of land for a good mixture of plants.
- Do not use on steep slopes.

Advantages

- Farmers can earn more money from the various types of produce, both immediately and over many years.
- The different sources of income protect the farmers from drought, market price changes, and other risks.
- The variety of crops improve the environment by improving soil fertility, and reducing the temperature and humidity.

Limitations

- Weeding, mulching, pruning, pollarding and thinning need a lot of labour.
- Fruit trees and other plants need a moderate amount of investment.
- Seedlings of some fruit tree and fodder species can be hard to get.
- Choosing the wrong species or planting trees too close together can shade crops or deprive them from soil nutrients.

Choosing trees and crops to grow

- **Major cash crop:** The farmer should choose the crop he or she prefers.
- **Major fruit tree:** Choose a fruit tree for a major source of money over many years. *Examples:* mango, cashew, tamarind, jackfruit.
- **Inter-planting fruit tree:** These fruit trees produce quickly and provide a secondary source of money. *Examples:* lime, guava, custard apple, drumstick, kapok, castor oil.
- **Multi-purpose tree:** These trees produce poles, post, timber and fuelwood, and can also yield livestock fodder, leaves for vegetables and medicines. *examples:* leucaena, cassia, calliandra, gliricidia.
- **Mixed species (woody perennials or shrubs or grasses):** Other plants can be useful in the home or elsewhere. *Examples:* sesbania, sisal, Napier grass, bamboo, *thanakha*, sandalwood, pigeonpea.



Recommended spacing

Species	Examples	Spacing	Remark
Major cash crop		Closer	As normally practised
Major fruit tree	Mango, cashew, tamarind, jackfruit	30 ft x 30 ft	Planted in rows
Interplanted fruit tree	Lime, guava, custard apple, drumstick, kapok, castor	10 ft x 10 ft 15 ft x 15 ft	Planted in rows between major fruit trees
Multi-purpose tree	Leucaena, cassia, calliandra, gliricidia, toddy palm	12 ft x 12 ft for woody species 3 ft x 3 ft for fodder species	Planted around the edges of the farm
Mixed species	Sesbania, sisal, Napier grass, bamboo, <i>thanakha</i> , sandalwood, pigeonpea	6 ft x 6 ft or varied	Planted in suitable places in the cash crop or in gaps.