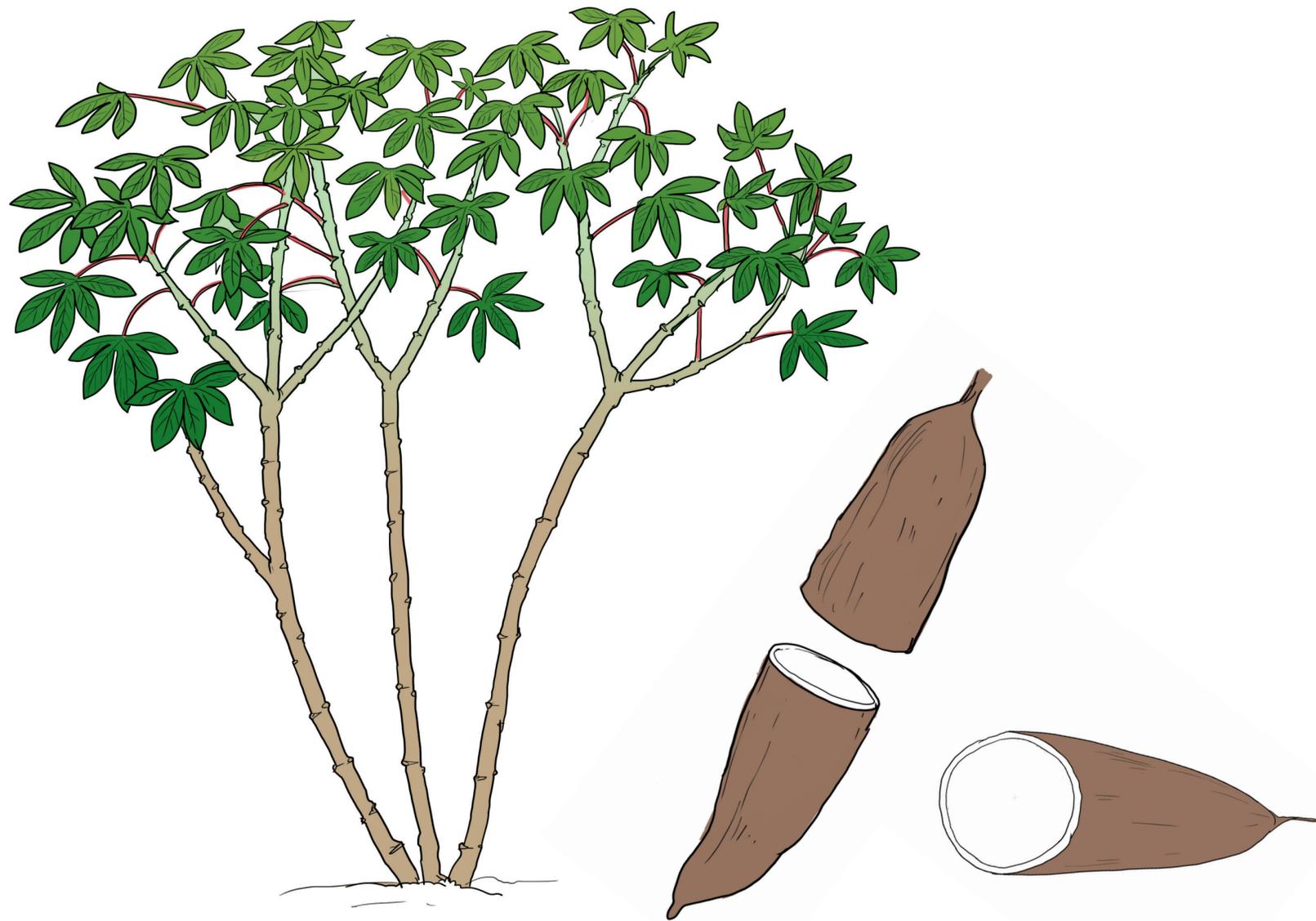
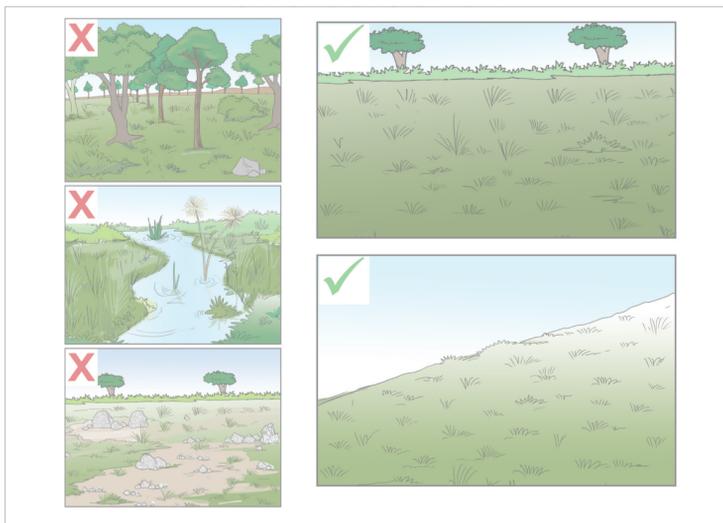


Good agricultural practices for cassava: planting, field management and seed storage



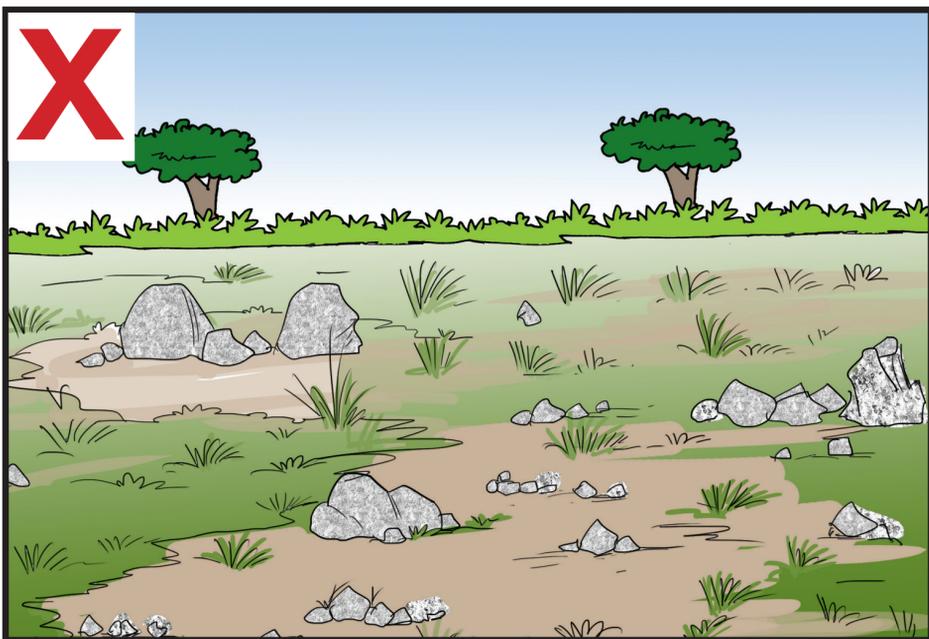
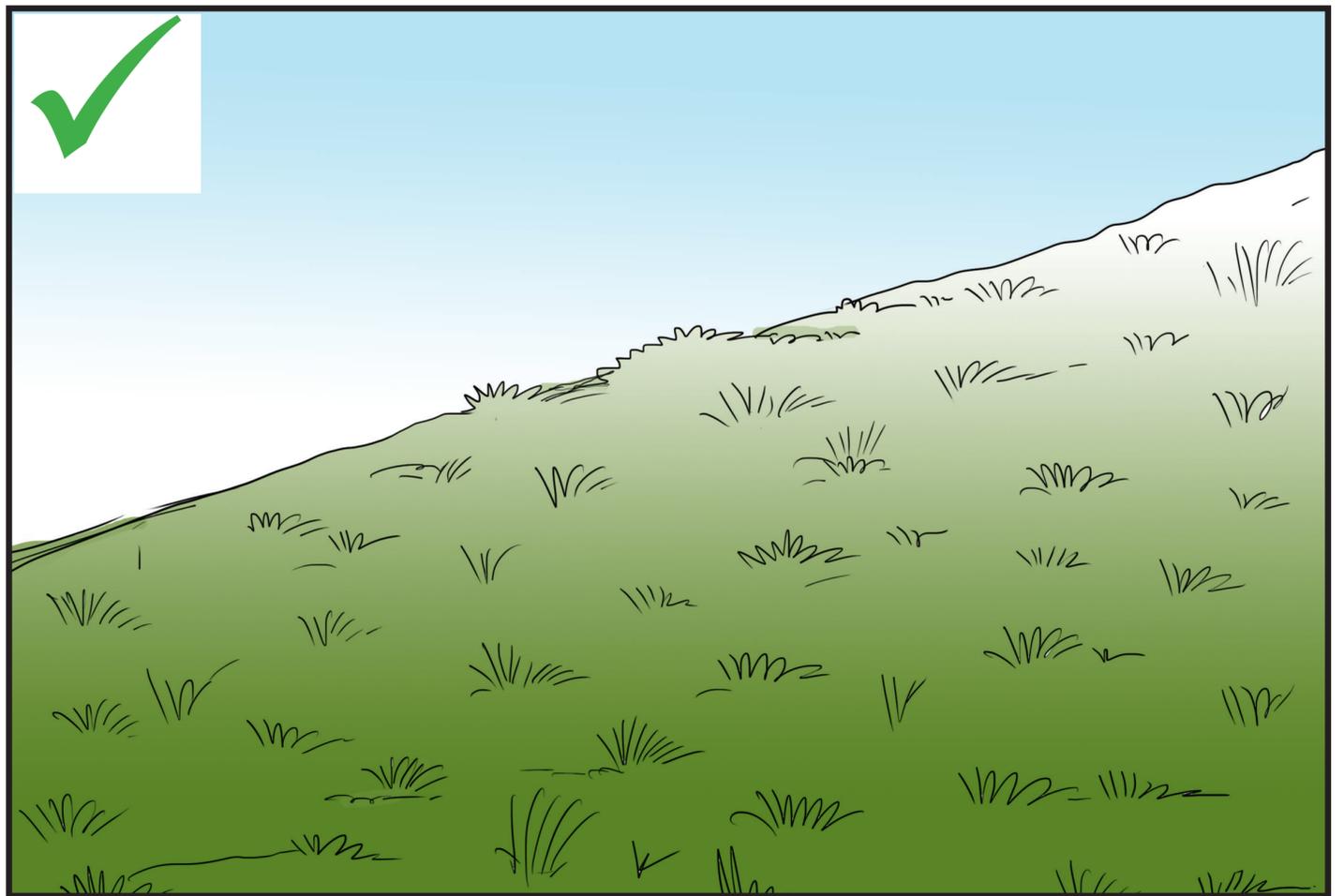
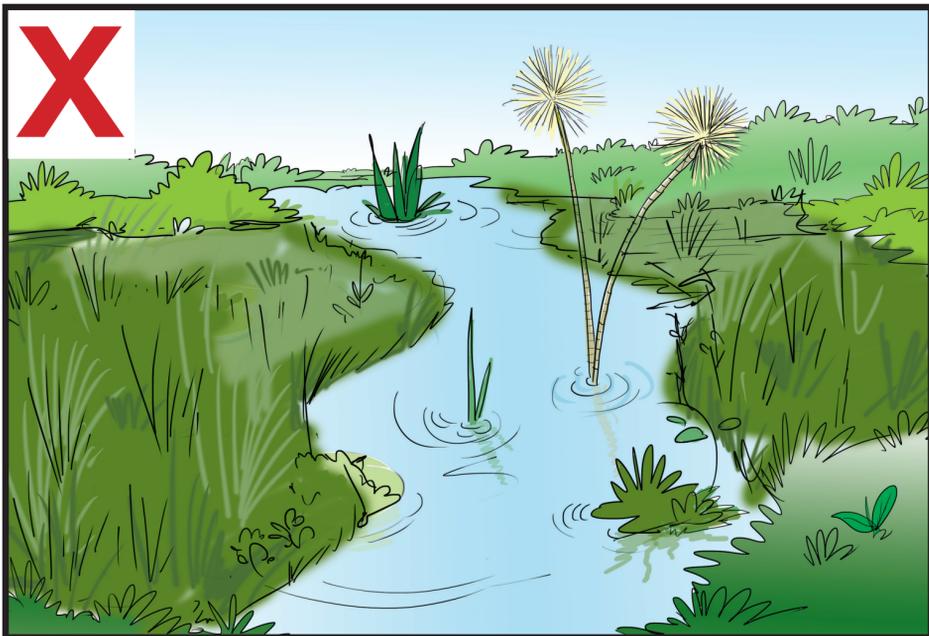
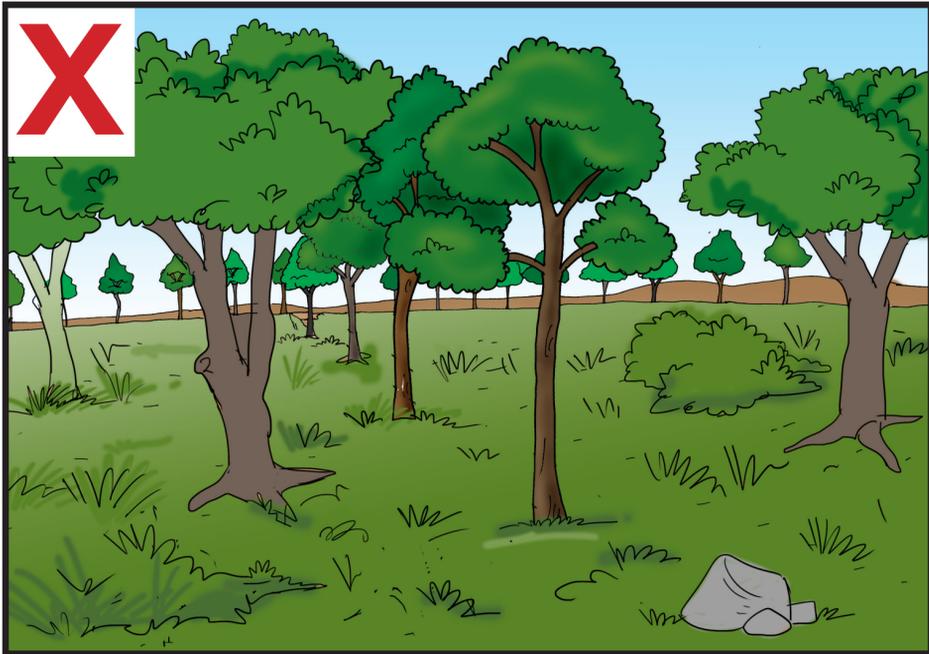


Site selection

Before planting cassava, locate a good site.

- Avoid stony or rocky areas
- Avoid planting in shaded areas
- Avoid swamps or places which are likely to flood during the rainy season
- Avoid newly cleared forest land since rotting tree roots may harbour dry rot disease that can affect cassava tubers
- Soil should be fertile and well drained
- Flat land or gently sloping hills are okay

Site selection



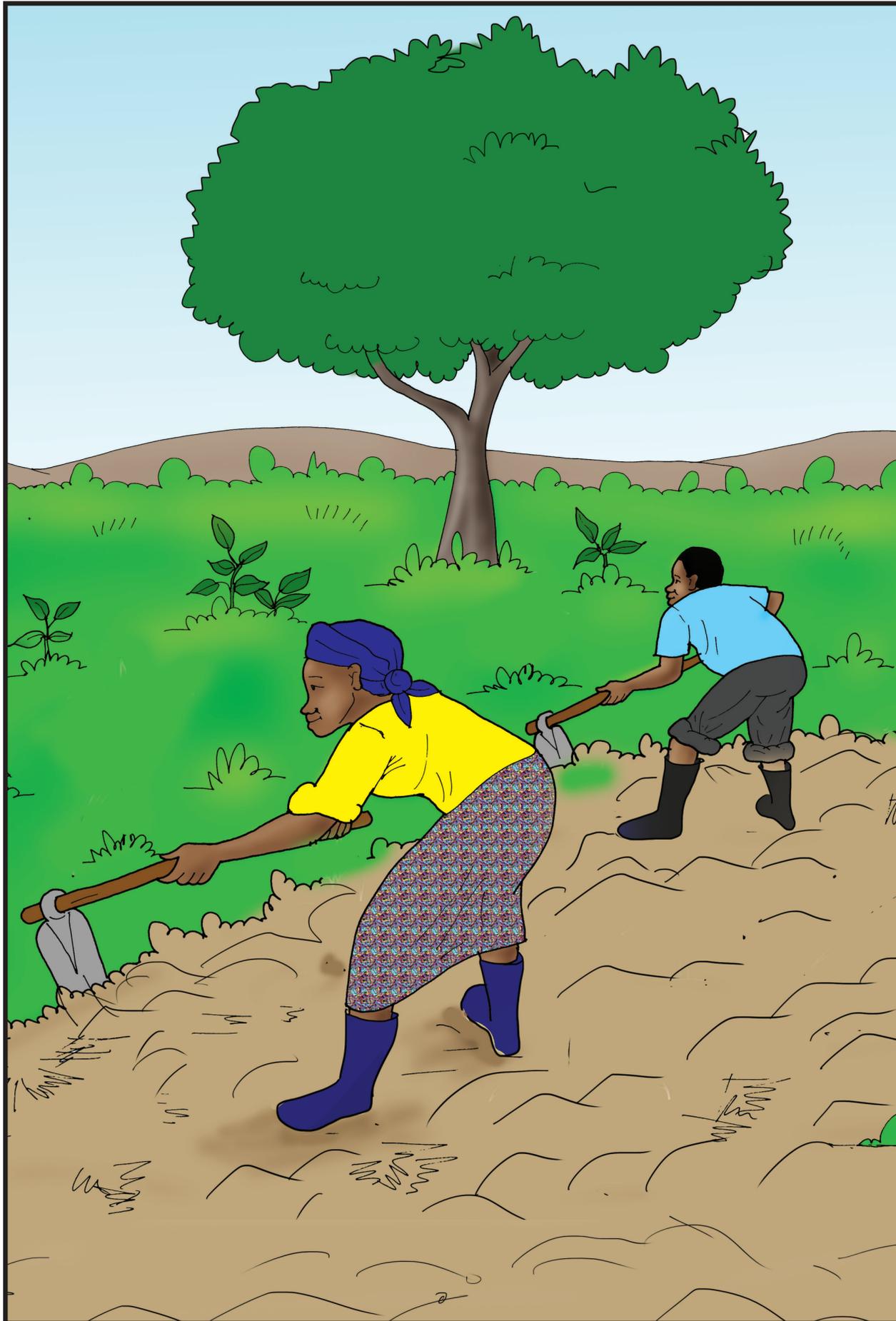


Land preparation

Once a location has been selected, the land must be prepared for planting.

- Preparation should be done at the end of a dry season to allow for planting at the first rains of a rainy season.
- Begin by slashing or removing tall grasses and shrubs.
- Ploughing before planting is recommended to loosen soil for healthy root establishment. Ploughing may be done by hand with a hoe, by ox-plough or with a tractor.
- The depth of ploughing should be 15-30 cm to prevent nutrient-rich top soil from moving down too deep.
- Ridges running along hillsides may be formed to prepare hilly land or in areas where water is scarce.

Land preparation





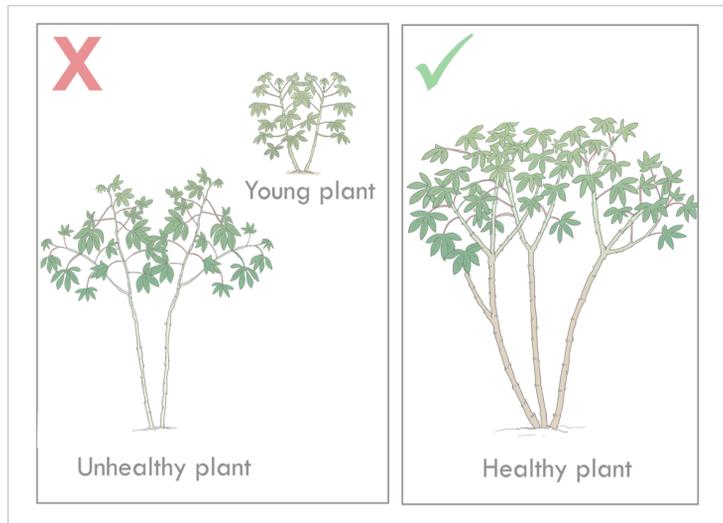
Land preparation using herbicides

Herbicides may be used in the process of land preparation.

- Stubborn weeds such as couch grass (lumbugu) may be destroyed with herbicides such as glyphosate.
- When applying herbicides, always wear protective clothes such as overalls, gloves, head protection and gum boots.
- Apply herbicides before ploughing.
- Ask extension workers for details on where to buy herbicides and how to apply them.

Land preparation using herbicides





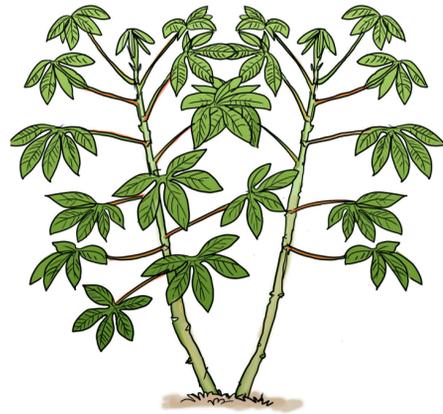
Stem selection

Cassava is grown by planting stem cuttings from healthy plants. Healthy plants must be identified to obtain clean stem cuttings.

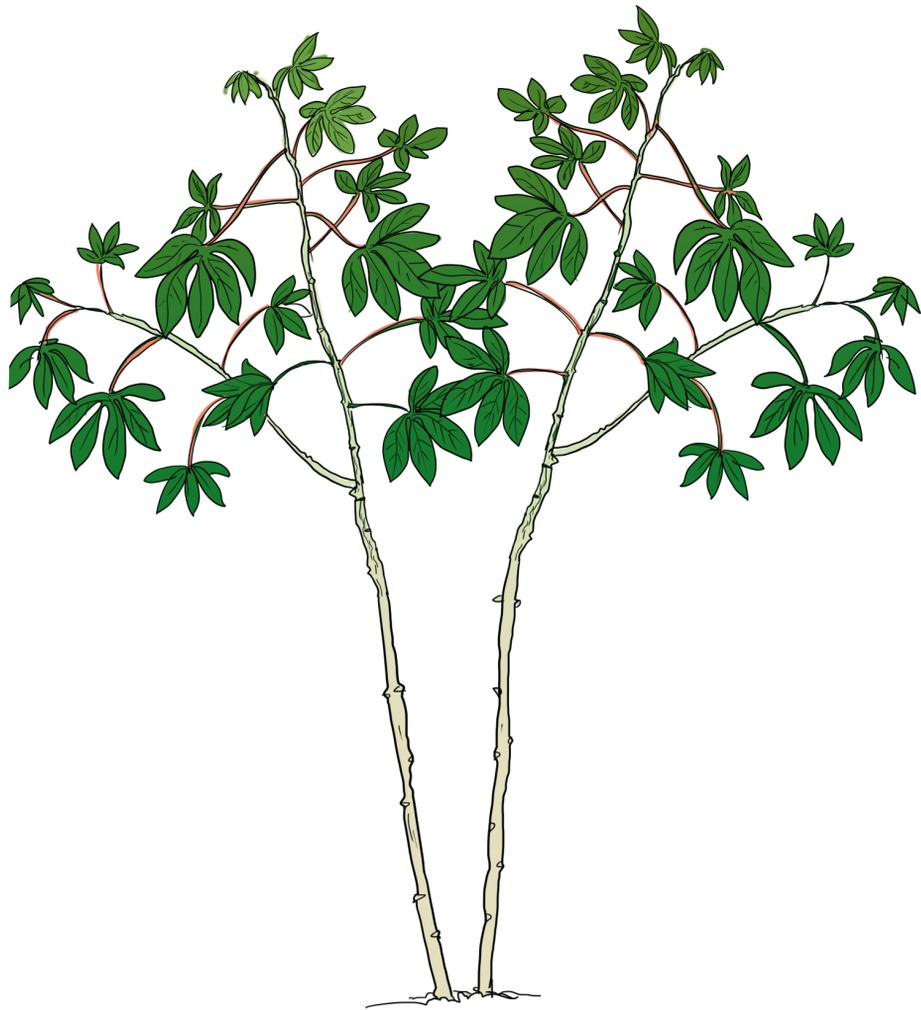
- Plants should have stems (at least 2-3cm in diameter).
- Stem cuttings should be sourced from plants aged 10-18 months.
- Cassava brown streak disease (CBSD) is a disease that can result in up to 100% crop losses. CBSD is spread by planting a stem taken from an infected plant, so only use stem cuttings from a garden free of CBSD.
- Use varieties from species known to grow well and that are tolerant to disease, such as NAROCASS 1 or NAROCASS 2.

Stem selection

X

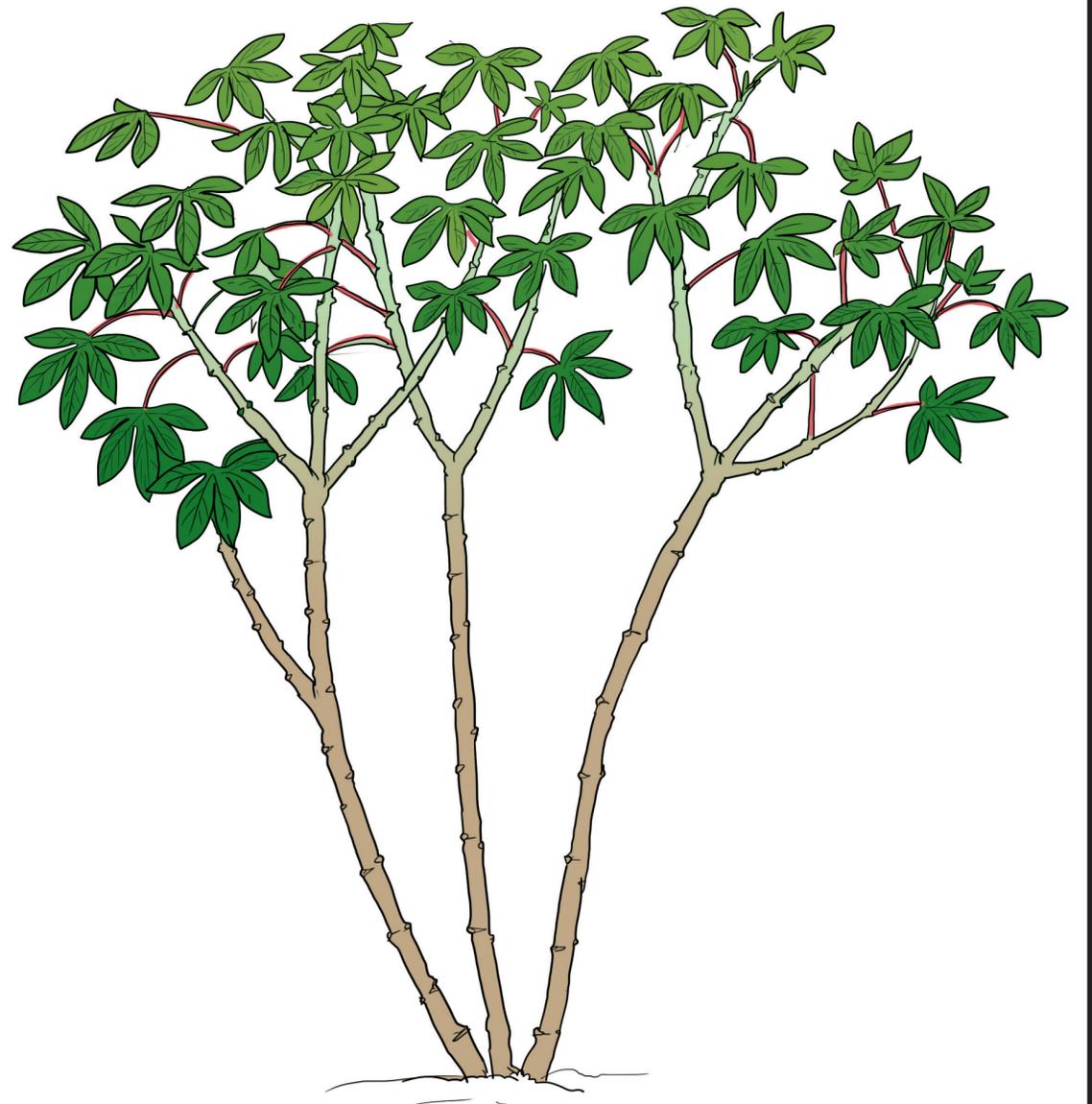


Young plant

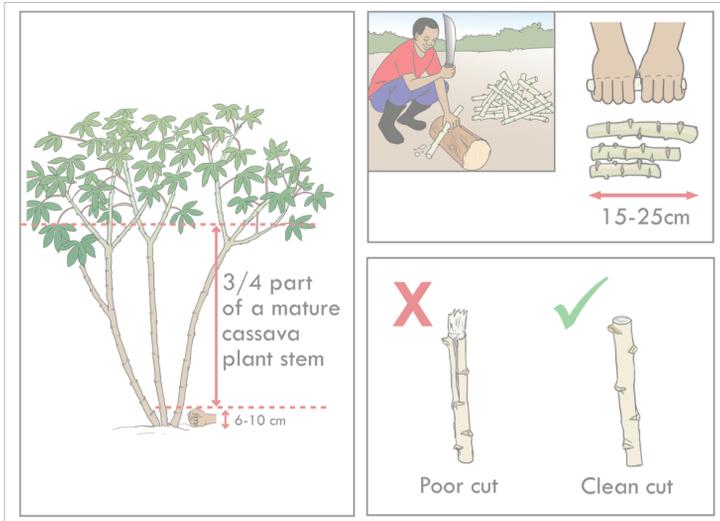


Unhealthy plant

✓



Healthy plant

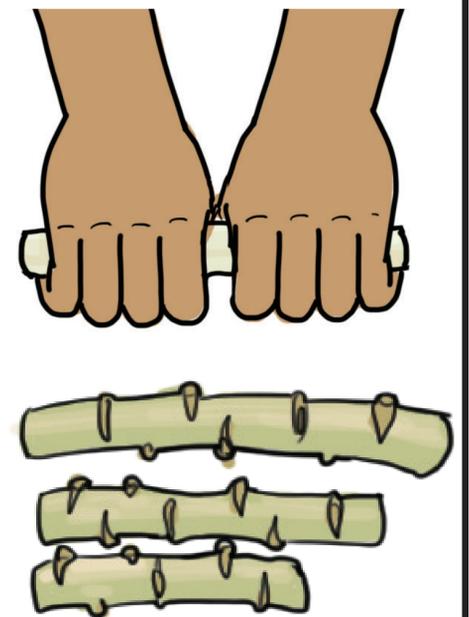
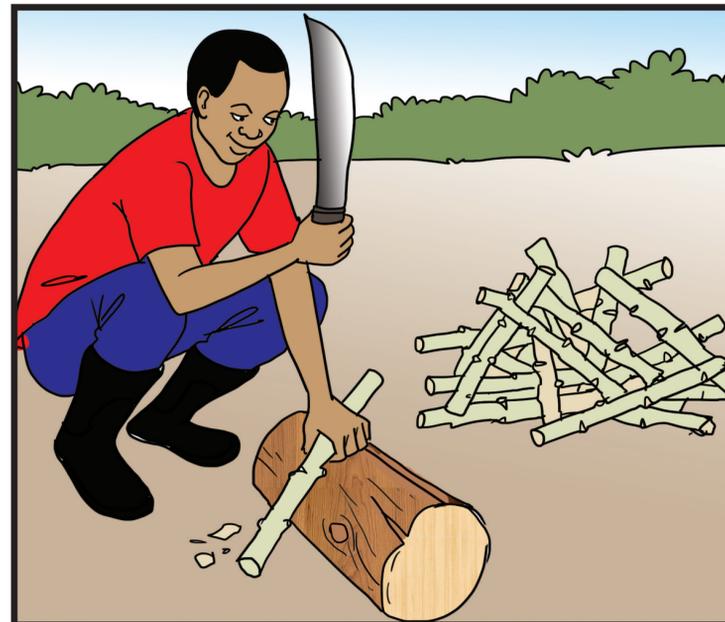
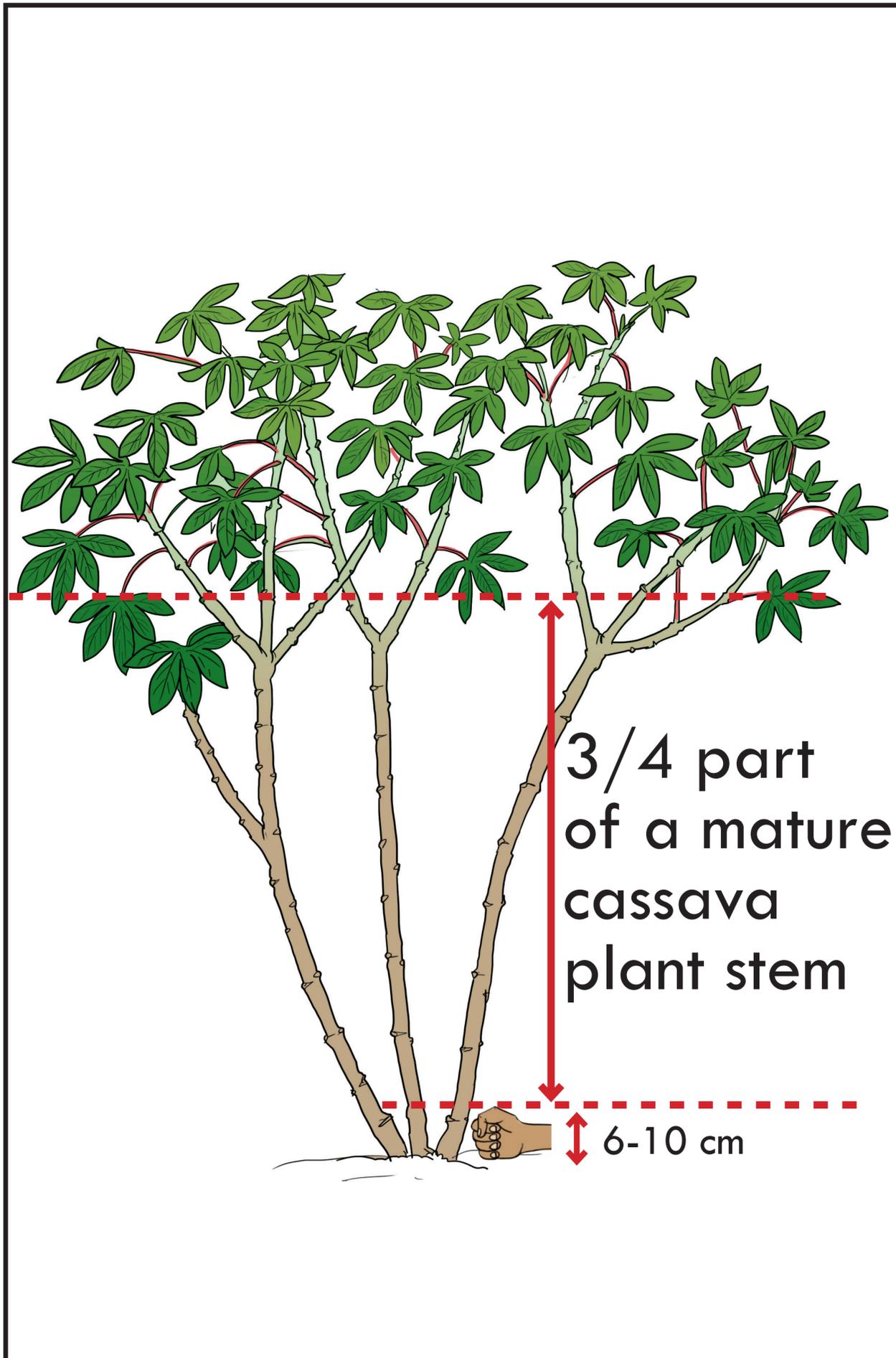


Stem preparation

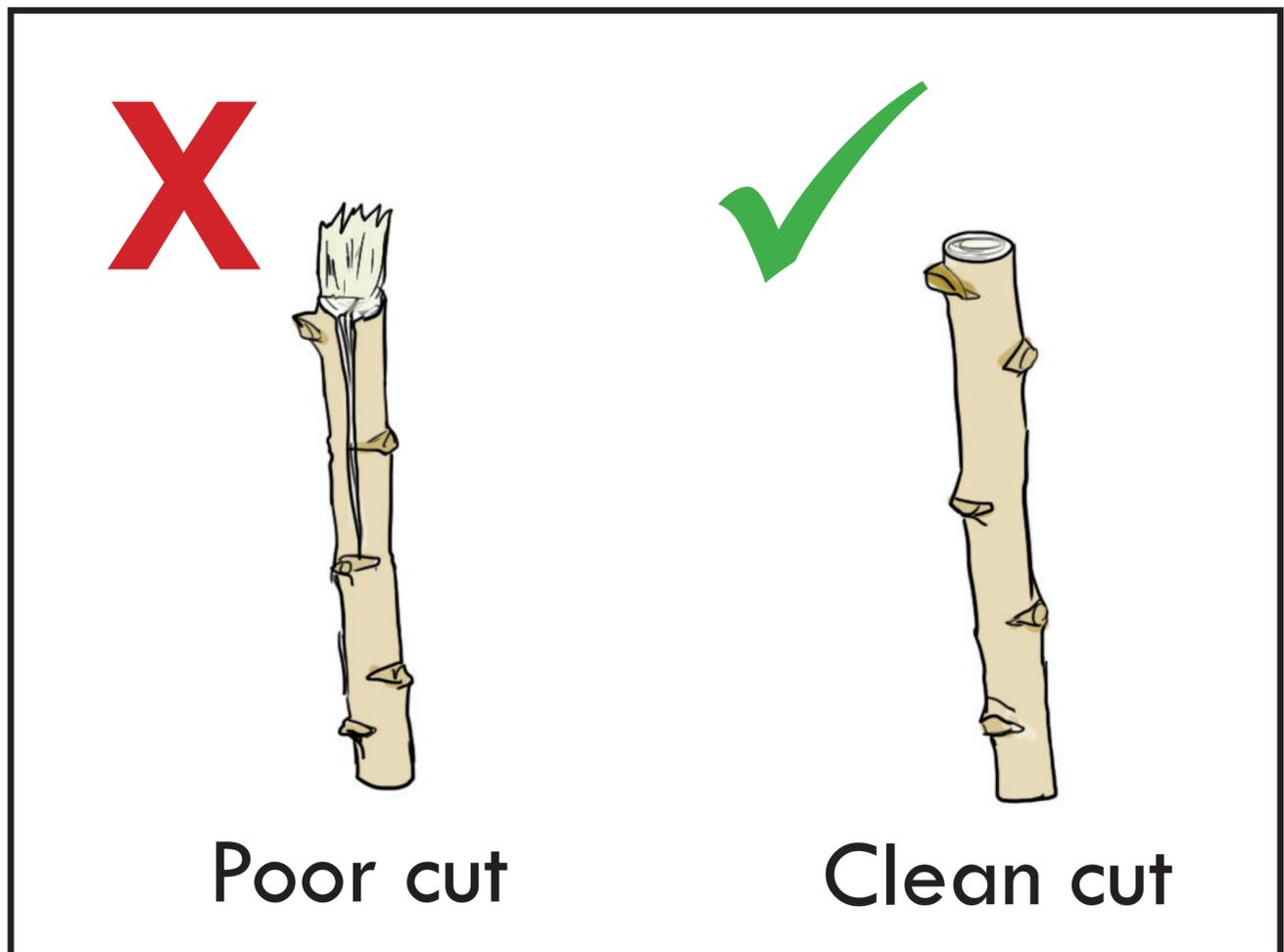
Follow the correct steps to get the best cuttings for planting.

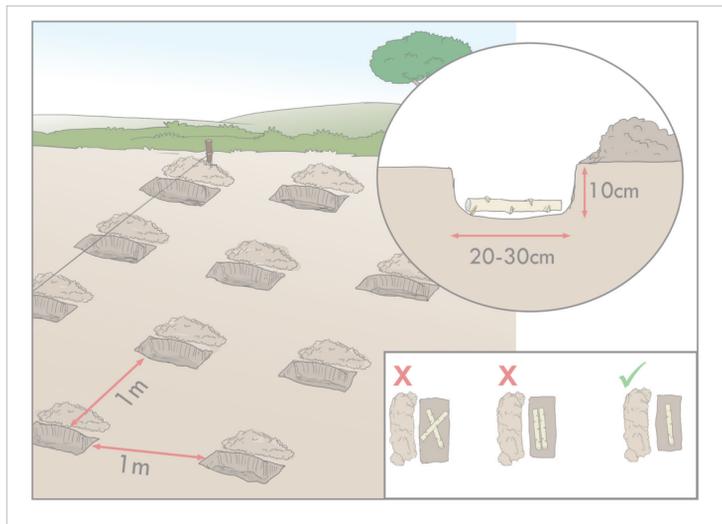
- Stem cuttings should only be cut from the mature part of a cassava plant, starting from 6 cm above the ground.
- Stem cuttings should measure 15-25 cm in length and have at least 5-7 nodes.
- Make sure that all cuts are clean and straight, with no signs of splintering or splitting.
- Handle the stems carefully when transporting to the field to avoid bruising or damage to the nodes.

Stem preparation



15-25cm



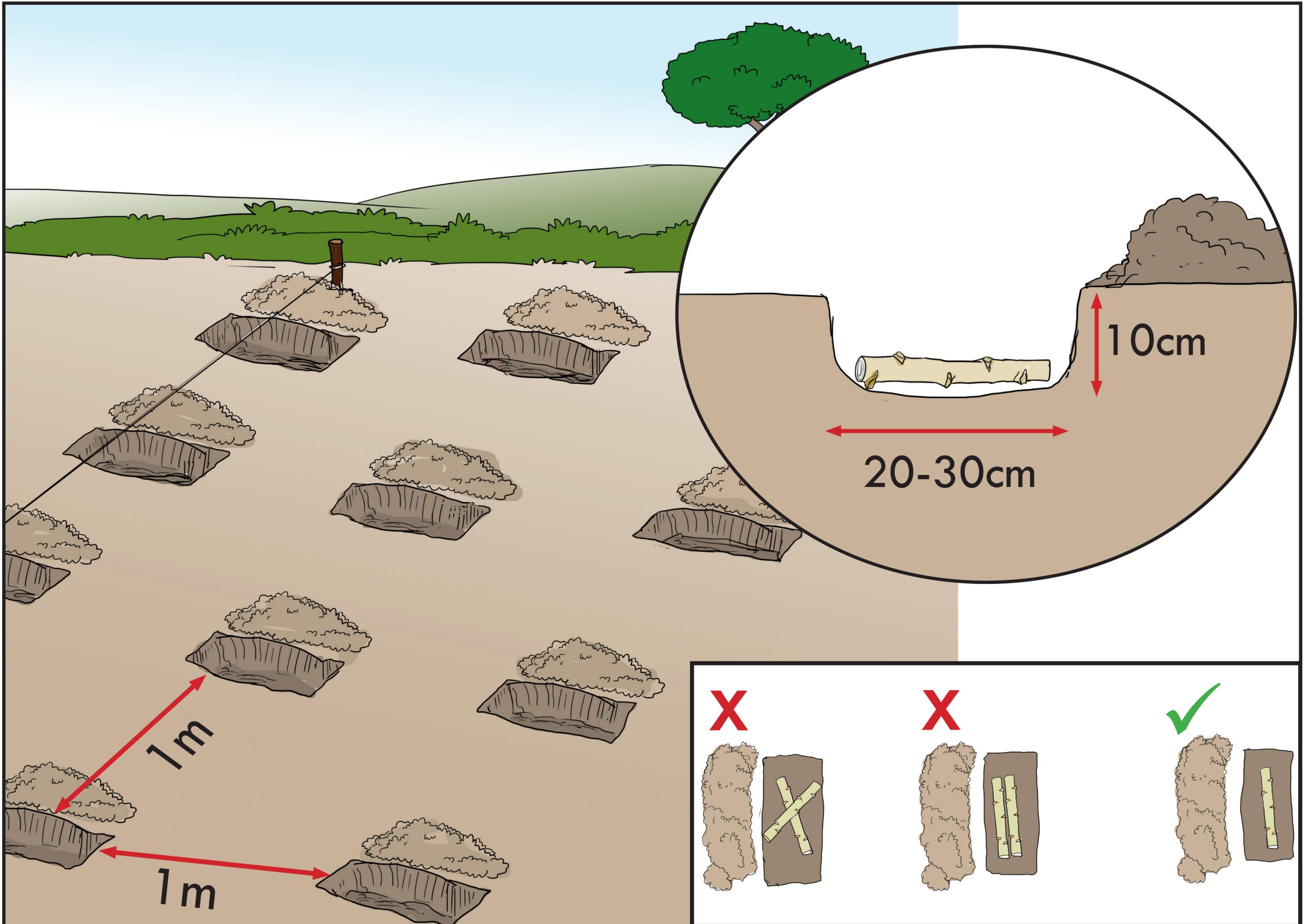


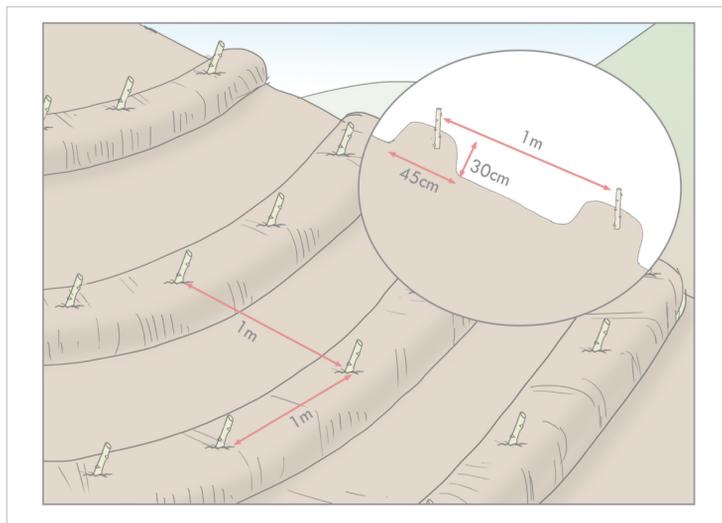
Horizontal planting

This method is suitable for planting on flat land.

- Holes are dug in the plot before planting cuttings
- Planting depth should be 6-10 cm in holes 20-30 cm wide.
- Hole spacing should be 1m x 1m; 1 meter between plants and 1 meter between rows. Long strings may help to plant in a line.
- Place 1 stem cutting in each hole and lightly cover with soil.
- Plant cassava at the beginning of the rains of the 1st or 2nd season for good crop establishment.
- To plant 1 acre, use 8 bags (each containing 500 stem cuttings) to prepare for 4,000 plants.

Horizontal planting



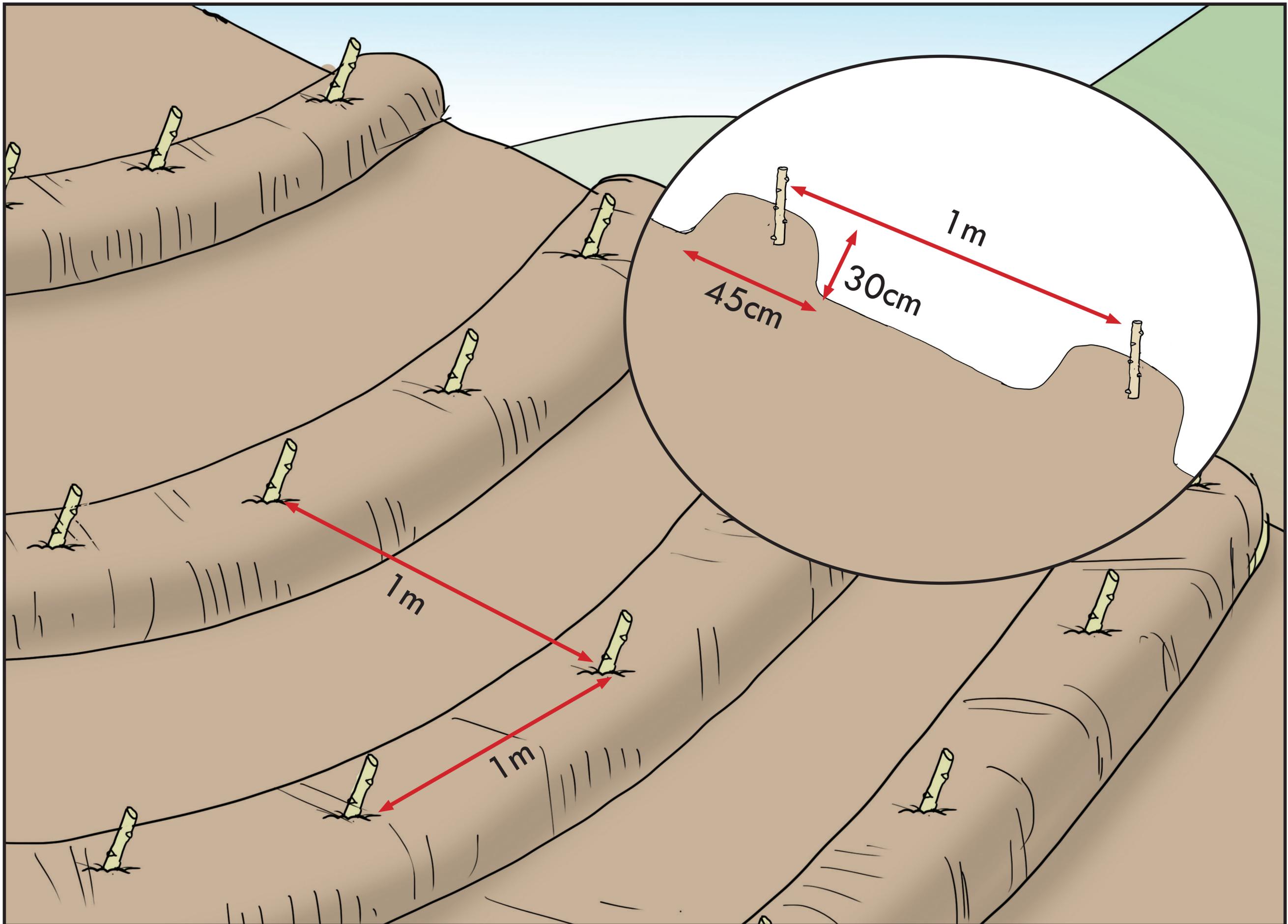


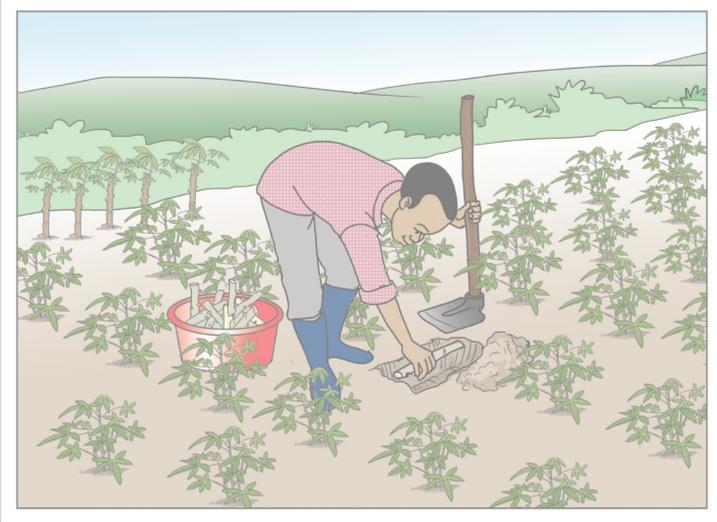
Vertical planting

This method is suitable for planting on hilly land or in dry areas.

- Ridges are prepared to conserve moisture in dry areas and to prevent erosion on hilly land.
- Ridges should run along a hillside and be made 30cm tall and 45cm wide.
- Cuttings are inserted into the ridge vertically or at a 45° angle with the nodes facing up so that 2/3 of the stem is below ground.
- Plant spacing remains 1m x 1m.
- Plant cassava at the beginning of the rains of the 1st or 2nd season for good crop establishment.
- To plant 1 acre, use 8 bags (each containing 500 stem cuttings) to prepare for 4,000 plants.

Vertical planting





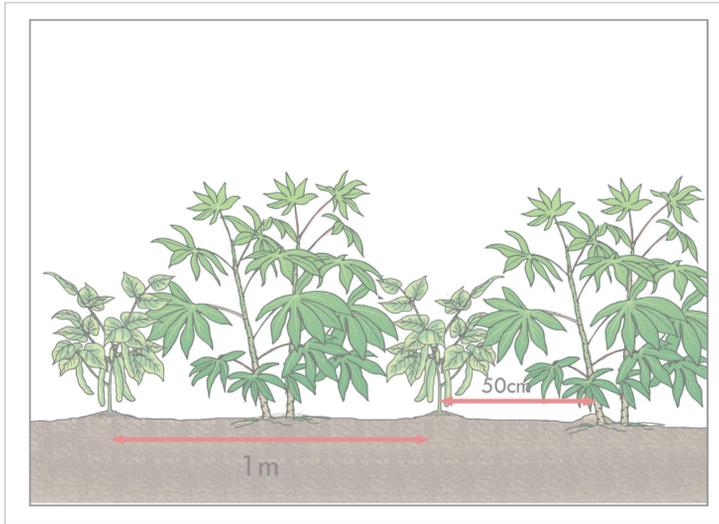
Gap filling

If a cutting has failed to sprout, another can be replanted in the same location to restore and fill in gaps found in the garden.

- Move through the garden and fill gaps within 1 month after planting.
- Move with cuttings and a hoe or panga to create holes for gap filling.
- At the time of planting the entire field, extra cuttings should be placed vertically in the soil at the side of the garden. They can be kept until they are used at the time of gap filling.

Gap filling



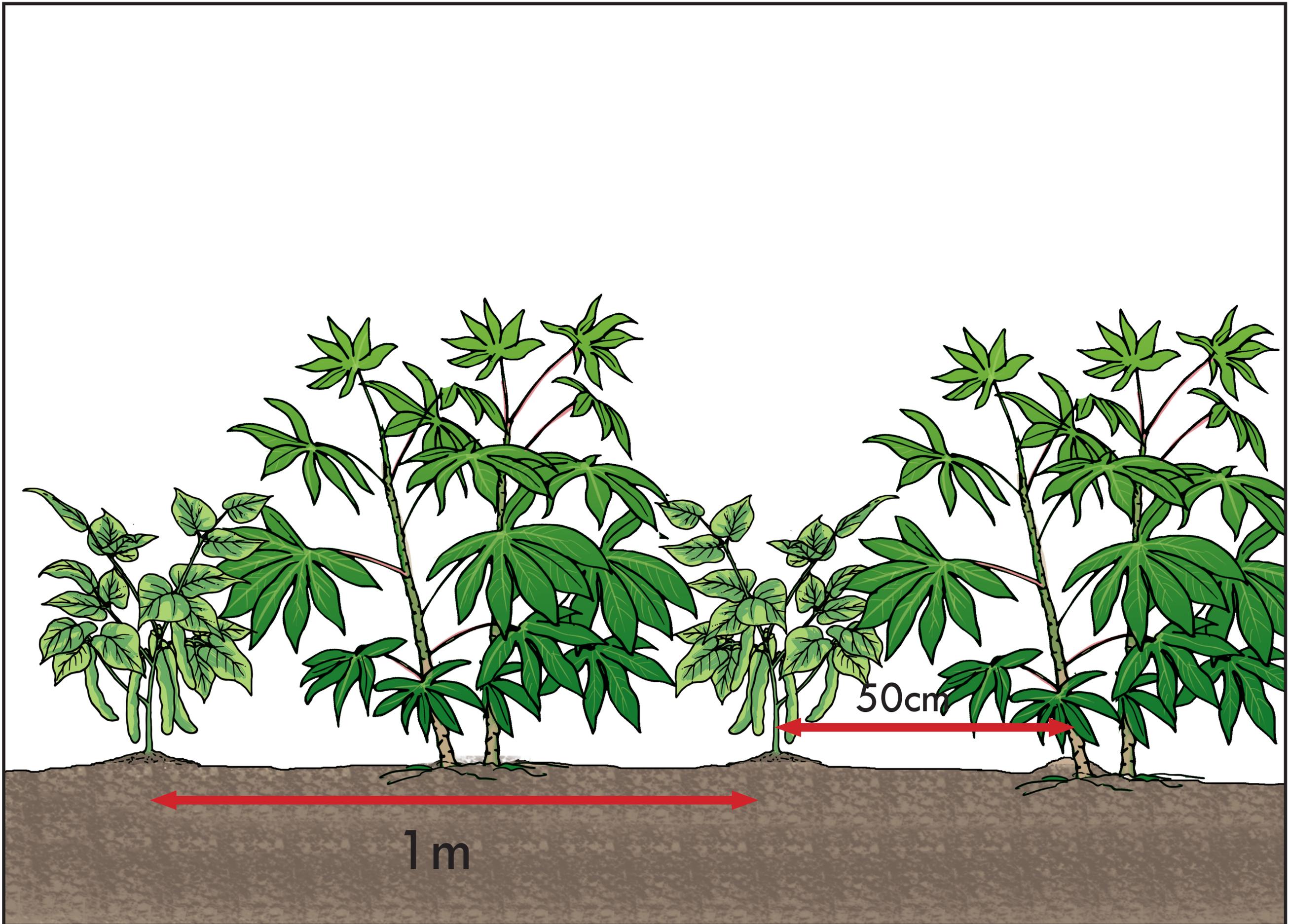


Intercropping

Cassava may be intercropped with other plants.

- Plants most suitable for intercropping with cassava are legumes like beans, peas and groundnuts. Maize can also be intercropped with cassava.
- Intercropped plants should be planted when the cassava has reached 1 month after planting.
- One row of an intercropped plant should be planted between two rows of cassava with normal spacing. The spacing between cassava plants is still 1 m x 1 m with a row of an intercropped plant 50cm from cassava on either side.

Intercropping





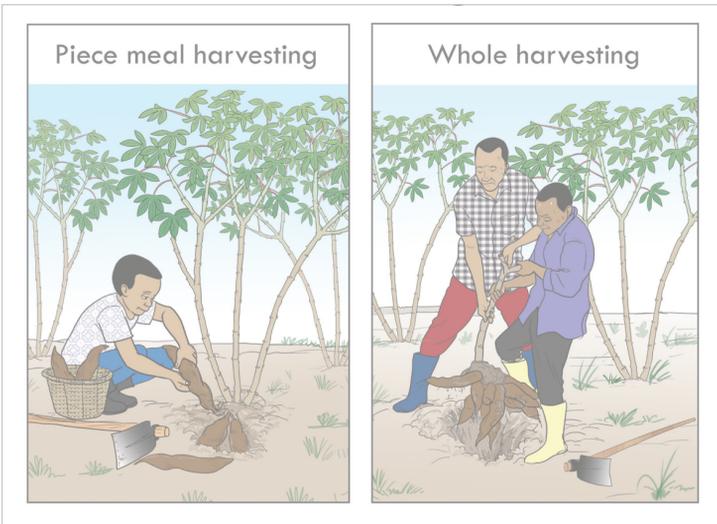
Weeding

Weeding is important to create space for plants to flourish and to make more water and nutrients available to the cassava plants.

- Weeding should be done using a hand hoe.
- Weeding occurs at 1, 3, 5 and 8 months after planting.
- This weeding schedule can be followed the same when cassava is intercropped with legumes.
- Weed control using herbicides (such as glyphosate) can be done at 8 months after planting. When spraying, ensure that the spray does not come in contact with cassava leaves.

Weeding





Harvesting

There are two common types of cassava harvesting

- Piece meal harvesting:

- is when a farmer removes one or two storage roots from a cassava plant, leaving the plant standing to grow more after covering the remaining roots with soil.
- provides food for a family or small homestead.

- Whole harvesting:

- is when a whole cassava plant is removed from the soil.
- should be done carefully to prevent breakage or spoiling to the plant while removing all tubers from the ground.

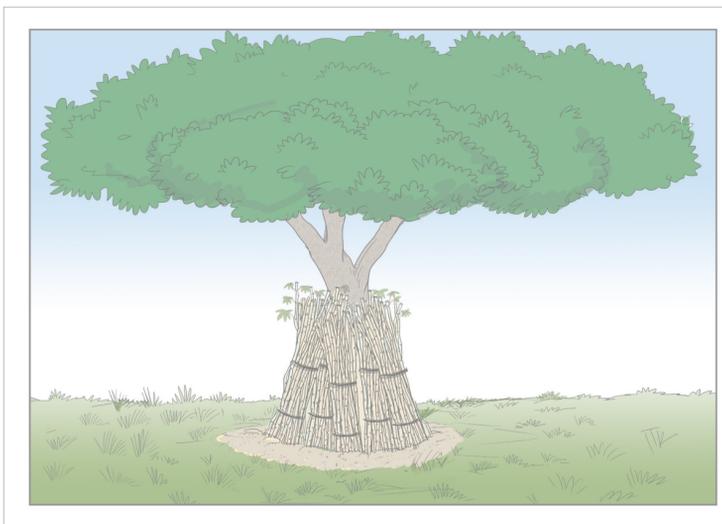
Harvesting

Piece meal harvesting



Whole harvesting



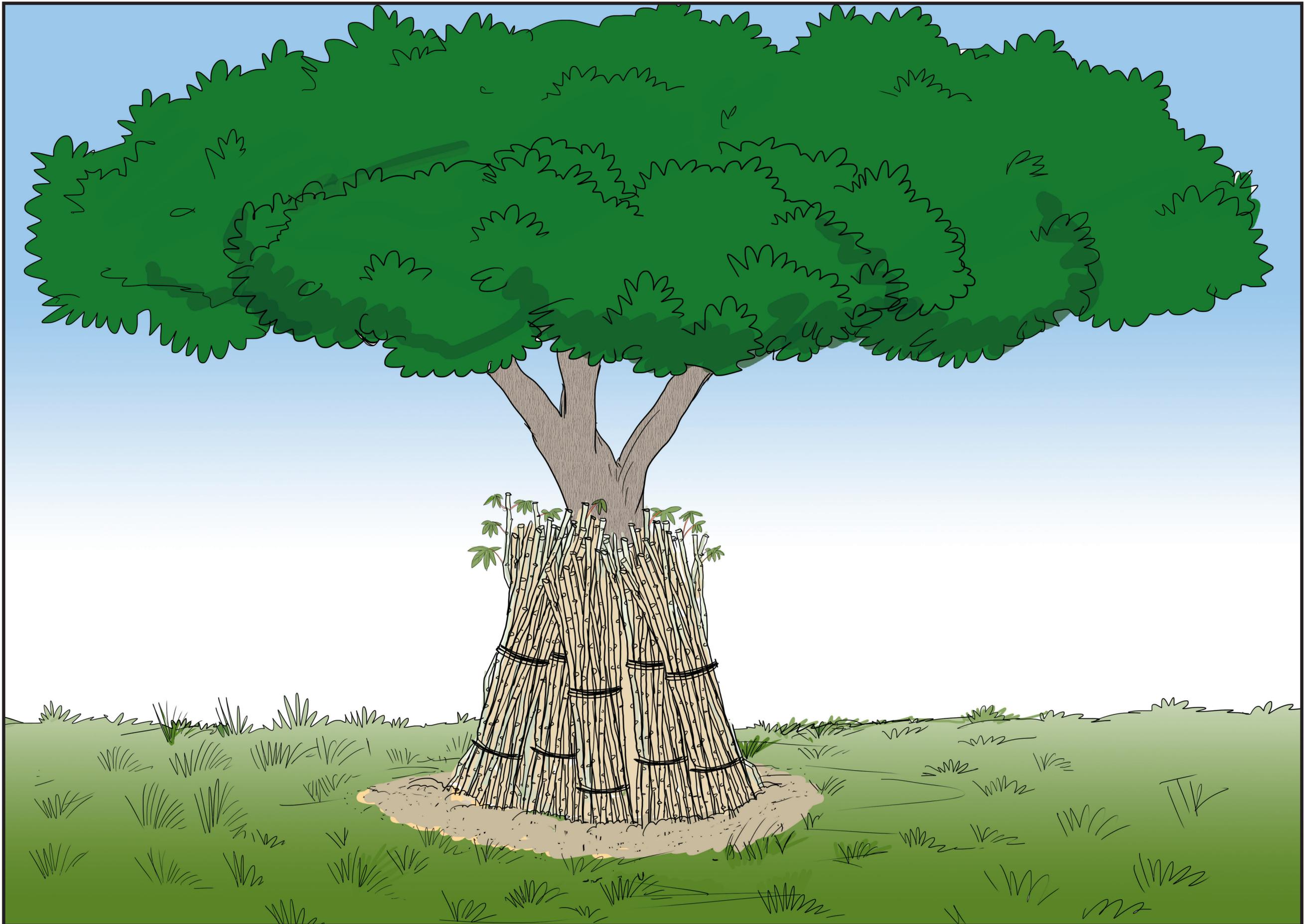


Stem storage

Freshly harvested stems have the best chance of sprouting.

- Cuttings should be stored for a minimum of 1 week and a maximum of three months.
- Stems cut for storage should be about 1 meter in length.
- Bundles of 50-60 stems can be transported easily.
- Stems must not become dried out, so cuttings should be kept in cool and shaded areas.
- Bundles may be stored when placed upright on well-drained soil/ bare ground.
- If storing for a longer amount of time, the ends of the cuttings may be placed in shallow soil that is kept moist by applying a small amount of water.

Stem storage



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- Jennifer Opio - Farmer, Dokolo district
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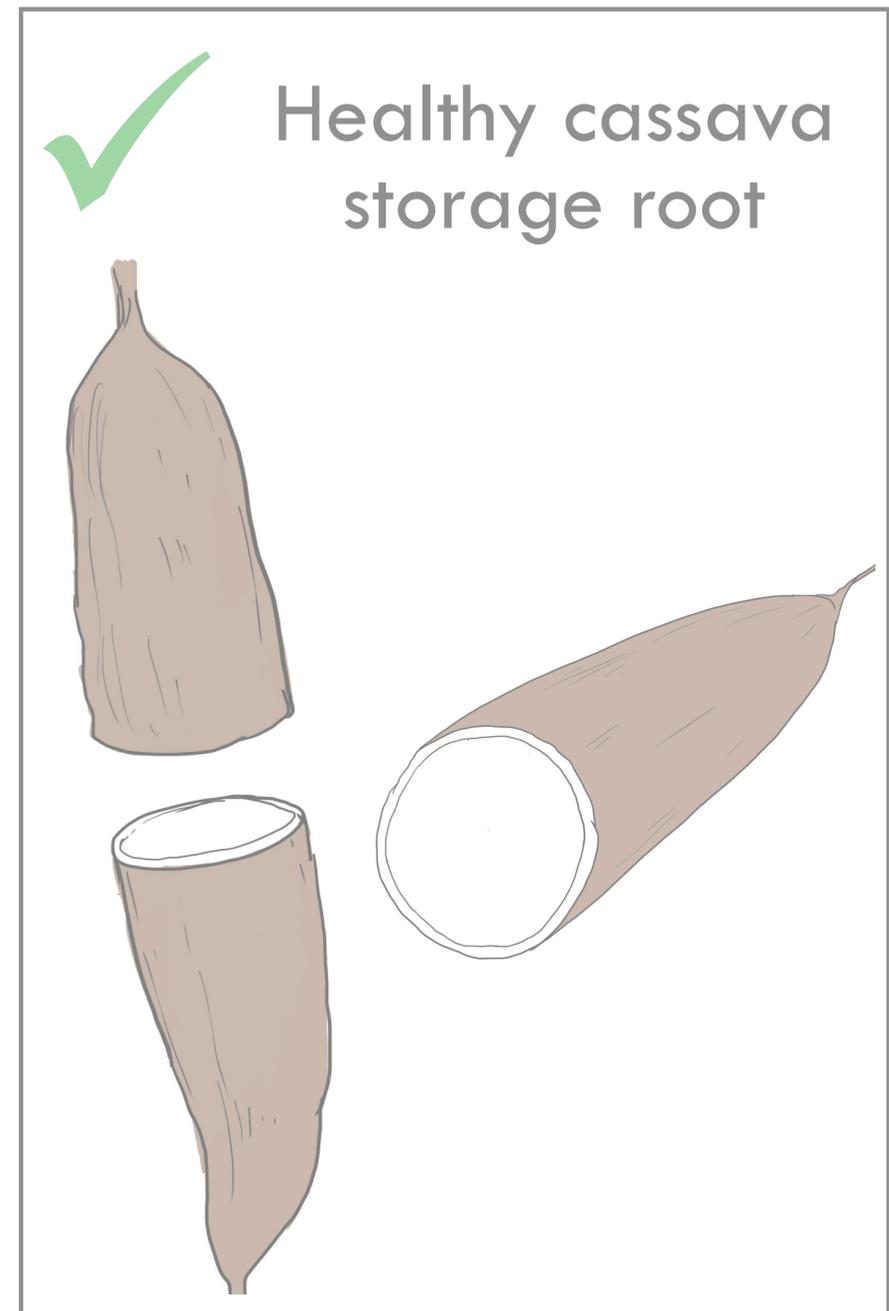
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