One tree yields 24 fruit bunches/year weighing 30Kg each under good management. Each bunch has a potential of 10 litres of oil. Ten trees can give 2400 litres of oil per year and yields can be 4-5 t oil/ha/year.

Processing

Processing can be at home or village level depending on production level.

- Fresh bunches are broken and fruit-lets removed and washed after which they are boiled for one hour.
- Warm fruit-lets are pounded in a mortar at (at home) or a motorized digester at village level.
- Warm water is added to wash out the oil and separate fiber and seed. The mixture is then heated until oil floats on top.
- Floating oil is skimmed off, sieved and stored or sold.

Palm oil utilization

Palm oil can be used to prepare foods at home e.g. vegetables, bean, meat and fish stew, chapatis, rice etc. It can also be locally used for manufacture of soap.
Introduction

Oil palm is an emerging crop grown for its edible oil and high yields compared to other oil crops. The oil is rich in vitamin A and E and can be used in the manufacture of soap, candles while leaves are used for thatching houses.

Agro-ecological requirements

- Warm climate in altitudes below 1000m
- High temp (22-27°C)
- Well distributed rainfall (1000 mm p.a) with no prolonged drought.
- Soils: loams, alluvial, peat soils which should be well drained and slightly acidic (pH 5.5)
- Sunshine of 5.5 hours per day.

The areas include Western Kenya sugar belt and the Coastal region.

Available varieties include:

Hybrid Deli x Ghana, Bamenda x Avros for Western Kenya; and

Hybrid Tanzania x Avros for Coastal region.

These hybrids are available at KARI Kakamega and Mtwapa respectively.

Field establishment and maintenance

Spacing

Use a triangular spacing of 7.8 m between rows and 9 m between plants.

• Preparation of planting holes
  Holes should be 40 cm wide x 45 cm deep. Set aside the top soil to be mixed with FYM.

Planting procedure

- Return some soil-manure mixture to the hole and add 300g DAP.
- Remove plant from bag and centrally place seedling in the hole. Firm the soil slowly to ground level and make a 1m basin around seedling.

Weed control

- Ring weed around young trees.
- Intercrop with legume cover crops or mulch and empty fruit bunches.

- Add humus nitrogen to the soil before the trees start fruiting.

Pruning

For fields below 5 years, prune only to remove dead leaves but for those over 5 years old, retain two leaves below the fruit bunch.

Harvesting and yields

The fruit bunches are produced after the trees are 15 years old. The deep purple fruit-lets turn to orange colour when ripe and a few drop to the ground when ready.

- Use a Malaysian chisel (picture) or panga for harvesting the ripe bunches.
- Cut the leaf holding the fruit and then the fruit stalk so bunch falls to the ground.
- Collect fruits and process within 24 hours.

Diseases and pests

Diseases include death of central spear leaf and basal trunk rot. Pests include rodents and birds.

Weed control

- Ring weed around young trees.
- Intercrop with legume cover crops or mulch and empty fruit bunches.

Add humus nitrogen to the soil before the trees start fruiting.