Cocos nucifera

Naturalized

Common Names: Digo: Mnazi; English: Coconut palm; Giriama: Mnazi; Luo: Naas; Kamba: Munathi; Swahili: Mnazi.

DESCRIPTION: A palm with a slender trunk up to 20 m, often curved, the trunk swollen at the base where typical 'stem roots' can be seen. BARK: Grey-brown, smooth with regular leaf-scar rings. LEAVES: 20-30 leaves top the single trunk, pinnate, each taking a month to grow 2.5-5 m long, with many long, narrow, sharp-pointed leaflets arising from a stiff midrib. FLOWERS: Arise from a branched stalk beside leaves, orange-yellow, very many, scented male flowers at the tip and fewer female flowers at the base, 12-20 together. FRUIT: Large and oval, about 30 cm long, a green outer covering turning yellow, 3 layers within and liquid coconut 'milk' in the centre, becoming sweet as the fruit (a drupe) matures. The seed embryo lies on the inside layer with a massive food store of thick white albumen—the kernel or 'coconut flesh'.

Ecology: It grows naturally at sea level in light sandy soils. The only species of *Cocos*, its origins are thought to be in the Pacific. Now grown throughout the tropics in hot humid coastal areas. In Kenya it is commonly grown along the coast. Planted in a few inland areas mainly as an ornamental (Lake Turkana, Lake Victoria, Kitui). Agroclimatic Zones I–IV, but naturalized only in very humid areas.

Uses: Firewood, charcoal, timber, poles, utensils, fruit, food, drink (palm wine), edible oil (copra), shade, ornamental, fibre, thatching (leaves), handicraft (leaves).

PROPAGATION: Seedlings raised in trenches for 4 months before planting out.

SEED: The outer skin encloses the outside layer, a thick, fibrous husk. The inner 'nut' has a hard shell with 3 circular eyes. **treatment**: Bury the whole fruit in the ground, tip end up, with about ¼ of the fruit above the surface of the soil. It will sprout through the largest 'eye' after heavy watering. Transplant when first leaf is about 15 cm. The thick endosperm provides nutrients for the embryo for some time.

storage: The nuts are adapted to being dispersed by floating on seas or oceans, so will store for some time if kept whole without drying.

Management: In good conditions at sea level it bears a first crop after 7—8 years.

REMARKS: One of the world's most useful trees, of great economic importance due to its many

Arecaceae (Palmae)

important uses. Planting should be encouraged around Lake Victoria and in the western Rift Valley as a backyard tree or with other crops. The outer husks, the 'coir' of commerce, can be used for ropes, etc. The dried kernel is 'copra' from which coconut oil and dried coconut are made. When flowering the shoot can be tapped to make palm wine, which is also used as yeast for bread making.

FURTHER READING: http://www.worldagroforestrycentre.org/Sites/ TreeDBS/AFT/AFT.htm; Beentje, 1994; Dharani, 2002; Jensen, 1999; Katende et al., 1995; Lötschert and Beese, 1983; Maundu et al., 1999; Noad and Birnie, 1989.



