

Sustainable Agricultural Livelihood Restoration, Rehabilitation and Resilience in Kenya Training Manual

3.3.2 SUB-MODULE 2. DOUM PALM PRODUCTS

The Doum palm fruit (*Hyphaene thebaica*) is a desert palm tree with edible oval fruit, originally native to the Nile valley. It is a member of the palm family, Arecaceae. The trunk of this small palm commonly branches into two like Y and often each branch divides again in a Y form, giving the tree a very distinctive appearance; it is dichotomous and arborescent in nature. It is listed as one of the useful plants of the world.



Doum palm tree and fruit

(Photo: [HYPERLINK “http://www.istocchopen.com/”](http://www.istocchopen.com/)www.Istocchopen.com)

The Doum palm is one of the commonly available plants in several areas of northern Kenya and has potential to provide alternative livelihood options. The tree has economic, ecological, social and medicinal values for several communities. Some of the major products of Doum palm include baskets, sleeping mat, milk containers, brooms, ropes, hats and house thatch (makuti). The tree is also commonly used in traditional rituals and ceremonies among several pastoral communities. Doum palm further protects riverine ecology due to its confined growth suitability along the flood basins and tolerance to desiccation and livestock disturbance. Because of the various uses, there is growing interest in Doum palm in different parts of the world. This module covers the sub-module listed below.

Doum Palm distribution

The Doum palm is a common palm in East Africa. It belongs to the Coryphoideae subfamily of the Arecaceae family of genus *Hyphaene* also. It is predominant in Africa and has eight species, namely; *H. compressa*, *H. guineensis*, *H. coriacea*, *H. macrosperma*, *H. reptans*, *H. petersiana*, *H. dichotoma* and *H. thebaica*. The palm tree is distributed in dry regions of Africa, Arabia, and India. In Kenya is widely distributed in hot areas (Figure 3.3). Common in dry northern areas along river courses and lakes (Turkana) also very common at the coast.

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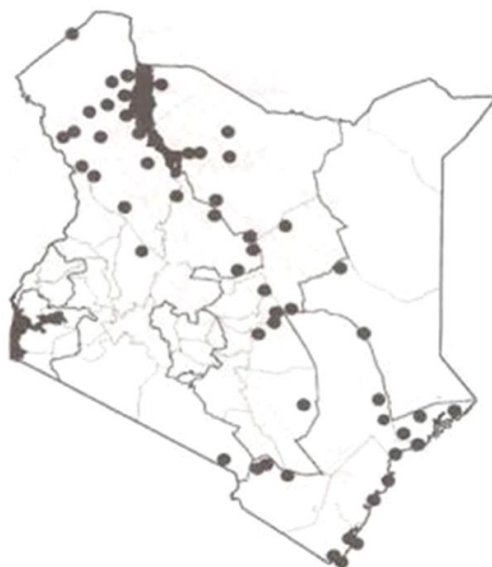


Figure 3.3. Distribution of Doum palm in Kenya (Photo: Maundu P. and Bo Tengnas)

The Doum palm is already adapted to ASAL and can sustain the ever-growing population in these areas yet there is very little focus on it. It grows in wadis and at oases found in arid and semi-arid lands (ASAL) of Eastern African countries. This palm grows well between 0-1400 m altitude, a mean annual temperature of above 28°C and a mean annual rainfall of 100-600mm. It is one of the few perennial plants vastly growing in ASAL. There are no known mechanisms for Doum palm propagation and conservation in Kenya.

Previous studies indicate that date, coconut, areca and African oil palm have been domesticated, but there is no documented evidence on Doum palm domestication, despite its importance in predynastic Egypt.

Doum palm conservation

Despite the important economic role and contributions, the Doum palm is still poorly understood and evaluated. Of concern is the steady decline of Doum palm populations in Africa due to destruction of their cradle habitat, drought, and overharvesting, thereby exacerbating pressure on the remaining African Doum palm accessions leading to loss of their gene pool. Intensive harvesting of juvenile leaves strongly affects the development of the Doum palm, Doum palm wine tapping also presents a destructive practice that severely modifies the composition and density of the populations.

Product making

To make various products from the Doum palm the following steps are usually followed.

- Step 1. Identify the best young suckers from the palm.
- Step 2. Cut the suckers - one per palm using a sharp panga or knife in a slanting shape
- Step 3. Dry the lodop (young suckers) in the sun for about 3-5 days under a shade.
- Step 4. Make various types of doum products.

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Products and uses

Various parts of the Doum palm produce different types of products including;

- The roots of Doum palm are used for treatment of bilharziasis while the fruit is often chewed to control hypertension.
- The hard seed inside the fruit, known as ‘vegetable ivory’, is used to treat sore eyes in livestock using charcoal from the seed kernel as well as making buttons and small carvings, and artificial pearls.
- Doum palm fruit is also a source of potent antioxidants.
- The fruit has a brown outer fibrous flesh which is normally chewed and spewed out.
- Doum palm kernel is edible when it is unripe but hard when it is ripe
- The trunk is also used for local craft and construction.
- The foliage is used to make mats, ropes, baskets, and hats while the stem with the leaves is used for construction purpose.

In Turkey and Kenya, the powder made from the outer covering of the fruit is added to water and milk and left to stand to make a mild alcoholic drink; in other countries, the terminal meristem is tapped for making palm wine. The thin dried brown rind is used in the manufacture of sweetmeats, cakes and molasses. The social and economic uses are shown below.

SOCIAL AND ECONOMIC USES OF DOUM PALM	
Sociocultural	Economic
Young fruits are used as special marriage beads worn during marriage and other ceremonies.	Doum palm protects the source. “We have water because of Doum palm”
Palm used as protection from misfortunes associated “bad eyes”. It is usually tied around the neck of the new-born child and the mother. During marriage ceremony the bride, bridegroom and the best man wear palm around the knee. A special marriage hut called “Dulube” usually made by the mother for the newly married girl is made of Doum palm.	It is an important grazing resource. It is salty and serves as a supplementary salt source to animals.
Used as a symbol of blessing. “may God make you like Barrunya (Doum palm)”	Eaten fruits are re-used as charcoal Threshed fruits mixed with blood are carried in skin containers and eaten like flour during food shortages. Fruits are boiled and taken as tea in absence of sugar Used in making brooms, mats, baskets, traditional containers and other products, which have economic value

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Doum Hamper Baskets: (Photo: Rema Collections)

Marketing of Doum palm products

Marketing prospects should be located and developed promptly when one engages in Doum palm production. To make your Doum palm enterprise financially successful, you must have a way of selling the products. The marketing methods and the price may determine ability to pay expenses and make a profit. Some of the marketing channels include; relatives, neighbours, local stores or export. It's important to ensure that one is acquitted with the county and state regulations governing the sale Doum palm products.

Further reading

[www.kalro.org/sites/default/files/Doum-palm-and-its-products-Dec 2017](http://www.kalro.org/sites/default/files/Doum-palm-and-its-products-Dec%202017).