## **Hope for drylands**

Gum talha from Acacia seyal offers an opportunity for livelihood diversification for Kenya's arid lands

By Francis Gachathi

cacia seyal is a thorny tree that grows up to 9 m high, usually with a flattened crown at maturity. The bark is powdery, white to greenish yellow or orange red. Its thorns are straight and white, appearing in diverging pairs and up to 8 cm long, in some trees basally inflated and fused into bi-lobed galls housing symbiotic ants.

The leaves are bipinnate with 3 - 7 pairs of pinnae each with 11 - 20 pairs of leaflets. The flowers are bright yellow, in round heads. Pods are curved and slightly constricted between seeds, shiny brown, splitting open on the tree to expose brownish compressed seeds.

Two varieties of *A. seyal* occur in Kenya and are quite widespread – var. *seyal*, which has no galls and var. *fistula* with ant galls, often referred to as white galled acacia or white whistling thorn. It is however var. *seyal* that produces the commercial gum talha.

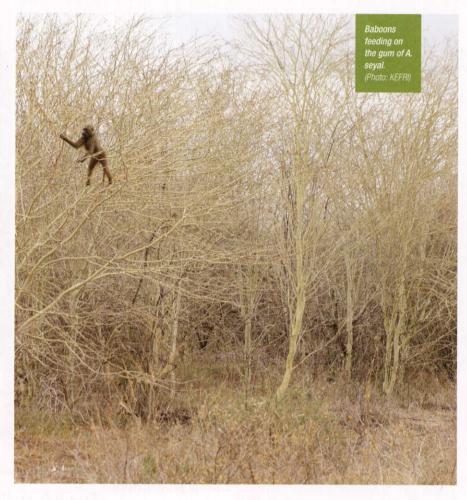
Gum talha is the dried exudate from stems and main branches of *A. seyal*. After the rainy season, gum exudes spontaneously from the trunk and main branches, but the flow can be stimulated by incisions in the bark.

After about two weeks, the gum thickens and hardens on exposure to the air, to form brownish yellow to pale orange lumps of various sizes with a glass-like fracture. The lumps are collected, either while still adhering to the bark or after falling to the ground, in baskets or plastic containers. The majority collectors are usually women and girls as they fetch water, firewood or tend livestock.

Although A.seyal is widespread in Kenya, commercial collection and marketing of gum talha is confined to Moyale, Wajir and Mandera counties. The species thrives best on black cotton soils in low-lying areas. It is very common in the Waachu Dima plains that extend from Ethiopia down to Habasweni.

Local names associated with A.seyal include waachu (Boran), fulai (Somali), iddado (Gabra), lera (Ilchamus), olerai, elereta (Maasai),kisewa (Kamba) lerai (Samburu), alii (Luo), ekoromait, echekereng (Turkana) and mgunga (Swahili), among others.

The local communities exploit gum talha for both subsistence and commercial purposes.



Subsistence exploitation, which involves collection of gum for use as food, is common in times of food scarcity and when herding livestock. Goats and baboons are particularly fond of eating the gum.

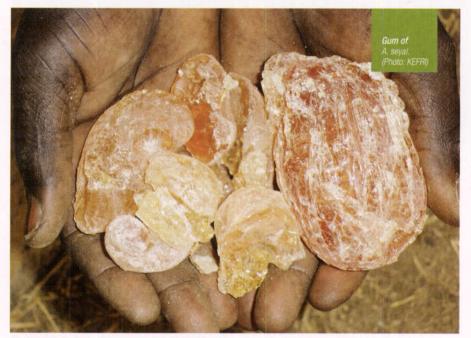
Other uses of the tree include firewood and charcoal, poles and posts, medicine, tannin and dye from the bark, fodder and bee forage. The inner bark fibre is chewed for its sweet and thirst-quenching properties. The Somali and Boran make a wood preservative, locally known as *asal*, by boiling the bark in water.

For commercial exploitation, the gum is sold outright or exchanged for foodstuff (sugar, flour, rice, beans, tea leaves, salt) or related needs like human or livestock medicines. The gum is kept in bigger baskets or plastic containers, awaiting sale either to local agents in remote areas in the bush or local shopkeepers in trading centres who act as agents for exporters.

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Like gum arabic from the *A. senegal* tree, gum talha has export potential. It is used mainly in the food and confectionery sector, in the pharmaceutical industry and in technical areas such as printing, ceramics and textiles. Gum

talha from Kenya is largely sold to Ethiopian dealers with collector prices ranging between Ksh 29/kg in Mandera to Ksh 38/kg in Moyale. Key gum talha collection centres are Moyale town, Gither in Mandera and Korondille in Wajir from where hundreds of tonnes are exported to Ethiopia. Traders complain of poor markets in Nairobi and prohibitive transport costs.

The Sudan dominates the production of gum talha. It is exported alongside gum arabic. Other countries producing gum talha include Nigeria, Chad, Senegal, Cameroon, Mauritania, Ethiopia and Ghana.

Because of historical and other reasons, communities in drylands continue to rely heavily on livestock production and lack diversity in utilisation patterns and technologies for promoting multi-production systems. Successful development of drylands therefore calls for recognising the potential of dryland ecosystems, the key commercial natural resources, institutional structures and opportunities for supporting the drive towards diversifying income sources and sustainable management of the resource bases.

Gum talha is one component of a number of non-wood forest products which, if integrated and balanced with other opportunities for dryland management, can contribute to the economic well-being and long-term viability of such areas. The resource presents potential to diversify the income base of local communities and hence improve their livelihoods. It is an effective strategy for coping with drought in Kenya's drylands in an era of climate change and violent conflicts over grazing and water resources. However, there is lack of sound market information to guide opportunities, trends, prices and general quality requirements and there are no reliable buyers and/or local markets for gum talha.

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