



The sap of the Gum Acacia that is used to produce Gum Arabic

# REPLANTING OF WILD NATIVE SPECIES WITH A HISTORY OF USE TO REVIVE TRADITIONAL LIVELIHOODS

**WHERE:** KORDOFAN REGION, SUDAN<sup>8</sup>

**AREA OF RESTORATION SITE:** THOUSANDS OF HECTARES

**HABITAT TYPES:** WOODLANDS

**PROJECT LEAD:** [FOGA](#)

## HOW IS THE USE OF WILD SPECIES SUPPORTING THE GOALS OF THIS RESTORATION PROJECT?

Gum Arabic serves as a crucial economic lifeline for impoverished communities across Sudan and sub-Saharan Africa. Gum Arabic production typically involves small-scale farmers and low-income ranchers, who often use it to enhance household income during the off seasons of their main economic activities, increase cash flow and ensure food security. This practice is particularly vital for vulnerable groups, including women, ethnic minorities and seasonal or low-income workers. Small-scale farmers in this area have witnessed a decline in their income from Acacia tree cultivation due to deforestation, leaving them unable to adequately support their families.

This restoration project aims to help communities restore Gum Acacia *Senegalia senegal* forests both for ecological purposes, and to support improved income opportunities particularly for women in Sudan. Women-led groups are responsible for propagating and planting Acacia trees *Senegalia senegal* in desert areas. Gum Arabic (also known as Acacia Gum) comes from the sap of the Acacia trees, and is valued for its medicinal uses, as well as its widespread application in food and industrial products. The Acacia trees also play a crucial role in halting desertification and soil erosion and have fire-breaking capabilities and cooling effects, therefore offering numerous benefits for both people and nature.

Intervention areas were once abundant with Acacia trees that have undergone significant degradation over time. During the last fifty years, these woodlands were replaced by various forms of agriculture such as grain and peanut cultivation. This transition reflects a shift in economic priorities, with older residents recalling a time when the profitability of peanuts overshadowed that

of Gum Arabic, leading to the current state of land use. However, there is now a growing awareness of the adverse effects of such changes, prompting efforts to rehabilitate and restore these degraded areas. In the absence of any protected areas in the region, these restoration activities are crucial for preserving the ecological balance and biodiversity of the landscape.

## STRATEGIES TO SUPPORT SUSTAINABILITY

FOGA, a private company, is actively involved in supporting restoration activities, and sustainable use of Gum Arabic. Typically, farmers are limited to harvesting and selling crude Gum Arabic to local village traders. Subsequently, the goods pass through a network of roaming regional traders spanning various villages, followed by a cleaning process managed by different agencies before reaching import-export channels. This lengthy supply chain reportedly involves up to eleven intermediary steps, leading to heightened transaction costs and reduced benefits for local harvesters, who endure harsh conditions while living below the poverty line. As a result, locals often resort to destructive practices, such as tree cutting for firewood and charcoal burning, in search of alternative income sources, leaving the land depleted.

In contrast, FOGA took a markedly efficient approach by cutting out intermediaries, directly procuring the raw ingredient, processing it in their own cleaning and spray drying facilities, and overseeing exports and imports independently. By fostering short supply chains, FOGA was able to produce gum at a competitive final price, with Acacia trees providing a reliable source of gum and income to the harvesters. Such a direct strategy is uncommon within the gum trade industry. The final prices exhibited significant fluctuations, with many companies opting not to disclose their pricing structures, but processed gum had the potential to be marketed in the European market at rates ranging from USD4-20 per kilogram.

The dual objective of creating local employment and fostering entrepreneurship

delivered a positive impact on communities. By providing meaningful work opportunities within their own villages, young people are less inclined to migrate to cities, something that promotes social cohesion and stability. The project had planted 250,000 trees before 2023 and another 230,000 during 2023. Twenty village nurseries were established in collaboration with Ecosia in the Kordofan region. These are managed by women-led cooperatives. FOGA also empowers women-led communities to establish and manage nurseries for growing Acacia saplings. This equips them with new skills and, crucially, also provides income opportunities through the sale of Arabic gum.

Each tree begins to produce about 5 years after planting, which generated an income of USD4-5 annually. This offers not only an income and indemnity to farmers against seasonal fluctuations in the prices of their agricultural products but is also an important source of foreign exchange to Sudan, injecting annually between USD100-120 million into the economy. This project also involves training of local communities in agroforestry techniques, enabling them to maximise the use of free spaces between the trees to diversify their income beyond the Gum Arabic season. Reportedly, local communities can cultivate more crops in the shade of the Acacia trees. In a women-led association in Shagra village (North Darfur), they successfully cultivated several vegetable crops such as beans and eggplants.

More information about this restoration landscape can be found on the FOGA project site.

<sup>8</sup> Due to the ongoing conflict in Sudan, all factory and trading operations described in this case study have been suspended, making fair and transparent trade currently unattainable.