

Somaliland's Frankincense Industry



Land of Punt Somaliland 2500BC, oldest industry in the world up to now still operational

Sustainably harvesting and sourcing natural products from plants (phytochemicals) for cosmetic use has been an important part of the fair trade movement going back to the establishment of The Body Shop by the late entrepreneur Anita Roddick almost 40 years ago (Dennis et al, 1998). Although there has been considerable scholarship on fair trade and also detailed management studies of companies such as The Body Shop, the particular salience of phytochemical supply chains as development tools has not been previously examined. Our research aims to show that the niche phytochemical sectors can provide an important opportunity for states with minimal infrastructure to advance even in the absence of large foreign direct investment or aid programs.

Phytochemicals provide a particularly promising area for developing an environmentally and economically sustainable development path, since they are derived from naturally renewable materials while fetching high prices with appropriate branding. There is also the potential to vertically integrate the sector from ingredients to consumer end-product with relatively low infrastructure investment, particularly with cosmetics that use phytochemicals. Thus, a phytochemical industry which starts from sourcing plants for extraction of the needed compounds can quickly advance to also manufacturing creams and lotions, with far greater speed and less external investment reliance than heavy manufacturing sectors.

To consider such a prospect, we focused on the case the frankincense resin derived from trees in the Horn of Africa. This resin has broad name recognition globally with multiple uses in cosmetics and emerging uses in pharmaceuticals and thus provides an important species to analyse in terms of supply chain dynamics. Of particular interest to us as a source of this resin was the emerging de facto state of Somaliland that presented us with several key attributes that provide for clear analysis as follows:

1. Frankincense resin in Somaliland has characteristics which make it particularly valuable and “brand-able” as compared to other species. Ecologically, it is hard to cultivate Somali frankincense in other locales and hence the establishing a robust supply chain is higher, thus also providing greater opportunity to study this sector longitudinally from its inception (current status) to its development as demand grows and the region develops and diversifies its economy.
2. Since Somaliland is not officially recognized as a separate country by the United Nations, it does not receive major foreign aid. Thus our analysis could focus on the supply chain resilience in the absence of aid programs as a ‘worst case scenario’ of developing such a sector. However, it may also be argued that the non-interference of foreign donors provides advantages as well for governance development without dependence and can thus be instructive as well (Kaplan 2008).
3. The Somali diaspora’s role in facilitating supply access from their land of origin is an example of how the “remittance economies” that have characterized foreign workers are being transformed. Not only is money being sent to sustain families in the homeland by migrants but

business enterprises that provide win-win outcomes are emerging that can provide for more resilient “North-South” connections.

Background on Somaliland and Frankincense



Somaliland is a small “country” with an enormous impact on the political landscape of the Horn of Africa and beyond. Its history is full of transitions and alternations by colonization and the cold war with the greater boundaries of Somalia reshaped again and again. Today its status is a so-called “breakaway republic” from Somalia but that is not how the Somalilanders see it. However, Somaliland lacks recognition as a country from the African Union or any other international body. Without first gaining this recognition, it lacks the ability to join the United Nations or participate in the world political stage. This cascades into a list of international

opportunities it is ineligible for.



Yet in the midst of tremendous political uncertainty this country has made noticeable gains in reducing terrorism and creating stability within an active combat zone. This accomplishment should not go unnoticed by the international development community and policy makers. Foreign Policy magazine designated it a Green Zone in 2010. One of only three places in the world able to accomplish a degree of stability in the midst of - severe poverty, drought, famine, food aid conflicts, terrorism by Al Shabaab, the contagion effect, limited military - all with virtually no government operating budget.

Frankincense has been a valued commodity for trade since ancient times by the Egyptians, the Assyrians, the Persians, the Macedonians, and the Kushites. These resins comprise what is believed to be the oldest global supply chain. The Nabataeans, an Arabian tribe, monopolized the trade nearly

two thousand years ago and maintained their lucrative competitive advantage for more than 5 centuries (Hull 2008 p.275). The northern coast of Somaliland derived its importance from this ancient trade. In fact in Pliny's book XII of Natural History he devotes much discussion to Frankincense. However, the African link in the production of the resin has been obscured since ancient times: "The chief products of Arabia are Frankincense and Myrrh; the latter it shares with the Cave-dwellers Country but no country besides Arabia produces frankincense." (Pliny BC p37) Today we know this to be false but this misconception was in part due to the racist sentiments of the times about Africans and the secrecy around the location and the appearance of the trees.

Even in Pliny's time the pressure on the trees to produce was of concern "it used to be the custom, when there were fewer opportunities of selling Frankincense to gather it only once a year but at present day trade introduces a second harvest." Pliny goes on to state "I find it recorded that one of these lumps (of resin) used to be a whole handful, in the days when men's eagerness to pluck them was less greedy and they were allowed to form more slowly." (Pliny p45) The ancient uses of Frankincense (some continue today) included embalming, fumigating, making perfume, sacred religious uses and in traditional medicines including Chinese and Ayurveda.

In modern times potential uses have taken on a new importance in Western medicine. Anti-inflammatory and anti-carcinogenic properties of boswellic acid in frankincense have been noted in both animal and human trials (Efferth et al, 2011). Additional research at the University of Oklahoma concluded: "frankincense oil appears to distinguish cancerous from normal bladder cells and suppress cancer cell viability. Microarray and bioinformatics analysis proposed multiple pathways that can be activated by Frankincense oil to induce bladder cancer cell death. Frankincense oil might represent an alternative intravesical agent for bladder cancer treatment." (Frank et al 2009)

These resins whether burned as incense, used as essential oil, or in medical trials to cure cancer certainly have a prominent place in the Somali culture and economy. After livestock, these resins are the second most important source of foreign exchange through exports for Somaliland. Before the collapse of the government of Somalia officials estimated that 10,000 families were primarily dependent on gathering the resins (Farah 1994 p3).

There are two types of *Boswellia* that grow in Somaliland. *Boswellia sacra* (syn *B. carterii*) with the Somali name *moxor*, which yields a resin locally called *beeyo*. The second is *Boswellia frereana* with the Somali name, *yagcar*, which yields resin locally called *meydi*. *B. frereana* is an endemic species found only in the Somali Frankincense region. The Myrrh trees by contrast grow more widespread, mainly in dry inland areas. Apart from Somaliland (and Saudi Arabia where small quantities are produced mainly for domestic use), Ethiopia, Sudan and India rank as important resin producers. However these resins are comparatively of inferior quality frankincense (Frank 1994 p6).

The harvest of Frankincense is done by making a number of precise incisions into the bark and letting the resin ooze out and solidify over a number of weeks. Then the harvesters return to each tree to collect the resin. This procedure is repeated from two to three times over the 5 month harvesting season.

Today the trade of resins has been documented by photojournalists with images of camels carrying sacks to the red sea for shipment to the Middle East and beyond. These idyllic images stir sentiments of being connected to an ancient and sacred process, however this trade has stood still in time to the disadvantage of Somaliland harvesters, while the world it supplies has modernized. The implications for this include the harvesters of the raw resin are left at the bottom of the industry, disconnected from the profits gained by more powerful Somali and Arab middlemen and end product producers outside of Somaliland. This scenario is not new to Africa and it is certainly a form of Neocolonialism.

Most importantly, this paradigm does not benefit the sustainable economic development of Somaliland. In fact it works to erode gains by not helping to secure basic quality of life for harvesting

communities resisting terrorism and food insecurity violence. These are the very people who are serving as "homeland security" and allowing for the latest democratically elected government in Hargeisa to move forward. Moreover it erodes the human, social and natural capital the region has built through thousands of years of experience in the resin trade and is losing its competitive advantage from a lack of ability to raise itself up to the international playing field and protect its industry internally and externally.

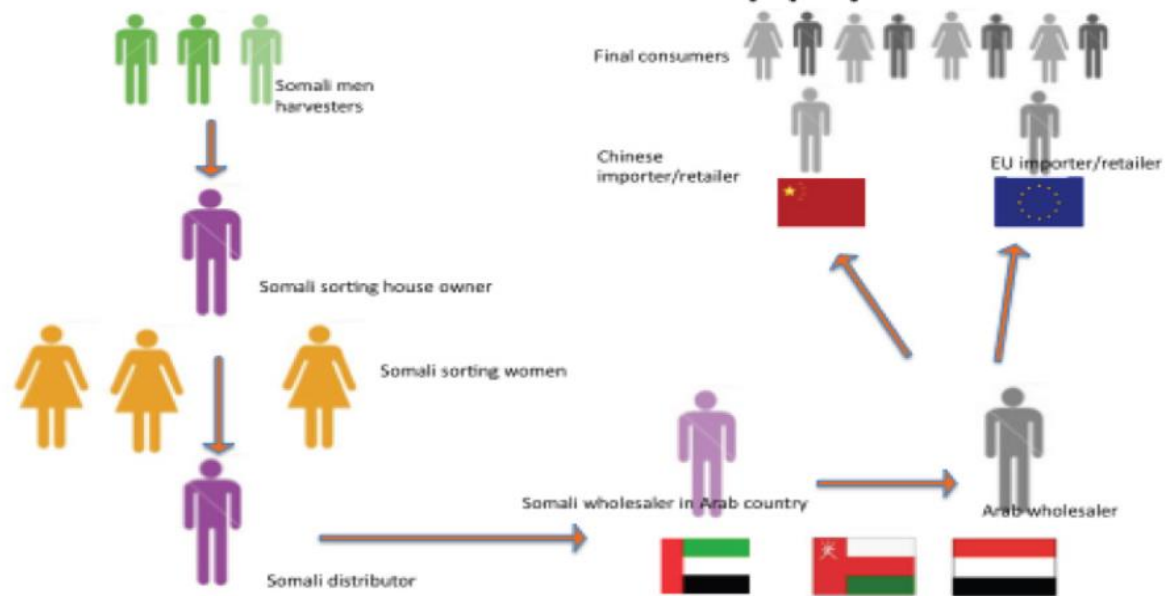
The Sanaag Region



The majority of Somaliland's Frankincense and Myrrh trees grow in the Sanaag region, in the Cal Madow Mountains in the northern part of the country. Extending from the northwest city of Erigavo (the main hub for gathering, sorting, and storing resins) to several kilometers west of the city of Bossao, it features Somalia's highest peak Shimbris, which sits at an elevation of about 2,416 meters (7,927 ft).

The dense mountain forest sits at an altitude of between 700–800 m above sea level, and has a mean annual rainfall of 750–850 mm. In addition to rainfall, Cal Madow receives additional precipitation in the form of fog and winter rains, which sustain isolated forests. During the International Union of Conservation Scientists (IUCN) 1995 assessment of flora and fauna of this region it found that Cal Madow has approximately 1,000 plant species, 200 of which are only found in this mountain range (IUCN 1998).

Somaliland Resin Supply Chain



This exploitation by the Arab middlemen is attributed to their intimate knowledge of the resins, their close proximity to Somaliland, the inability of Somali's to reach external markets themselves, and the fragile state of the resins which require protection from heat and moisture. The exploitation of the Somali did not go unnoticed by the colonizers and subsequent Somali government, whom themselves tried to intervene by setting up cooperatives during the 1900's which failed. Among many reasons cited for the failed attempts to develop an effective enterprise in the sector is the exploitation of Frankincense collectors by their local kin merchants. Prior failures to strengthen the sector caused the Siyaad Barre regime to put the sector under government control of the Frankincense and Gums Development and Sales Agency until the government collapsed in 1991 (Farrah 1991 pp13).

Conclusion

The frankincense trees of Somaliland are in peril and so are the people who rely on them for their livelihoods. In order to improve the situation and help to support peace and stability a coordinated effort between development agencies, the Somaliland Government, business, academics and stakeholders is necessary. To do nothing would be a loss for humanity and yet to intervene properly the harvesters themselves must be consulted and participatory models of involvement implemented for success. As development agencies get involved with government they must seek to make improvements across the entire sector in Somaliland so as not to upset the balance of peace within the country. Clearly, business can have a good or bad impact, mainly by paying the harvesters a fair price or not and discouraging bad actors. As a government official stated "we need a real buyer, people who are serious about protecting the trees and are fair to the sellers, not buyers who only care for themselves thinking only about today." Making changes to this industry can upset old dynamics thus a thoughtful approach to manage potential conflict is also needed.

More broadly this research shows that plant products and niche economic sectors generated by natural products have an important role to play in development which is often underappreciated. As the momentum builds to lift the least developed regions out of poverty through environmentally and socially sustainable ways phytochemicals and their derivative products must be given greater attention.