

Opportunities and challenges for sustainable production and marketing of gums and resins in Ethiopia

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Chapter 5

Challenges, opportunities and actions for sustainable gum and resin production

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5.1 Challenges and opportunities

Ethiopia's dry forests are notably important natural resource endowments of drylands that have long contributed to human welfare and environmental health. In addition to their direct and indirect support of the livelihoods of 15–20% of Ethiopia's population, their commercial gum and resin products make them socio-economically important resources beyond the local level. These products are generating considerable foreign currency earnings for the country, and thus government and business interest in boosting production is growing. The government has targeted dry forests in its strategy to diversify its export goods to secure foreign currency (PASDEP 2005). Such intensified interest can lead to short- or medium-term changes to existing management and production systems. Decentralised (region-based) resource governance and improved regulatory frameworks are also showing signs of creating more responsible resource-base management and production systems.

The contribution of gums and resins to local livelihoods is increasing. This is expected to stimulate improved, locally evolving resource ownership, as shown in the emerging domestication of the resources such as in Tigray. Private sector involvement in the industry is increasing, and NGOs are intensifying their efforts to improve management of the resources for sustainable livelihoods. Overall, the growing interest from all sides – government, NGOs, private entrepreneurs – is likely to increase the economic and social benefits derived from these resources and consequently their management.

Nevertheless, despite the growing local and national importance of the gums and resins subsector, several factors continue to hamper sustainable management of the resource base:

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- climate change, political agenda or national economic policies and market forces that are forcing adaptation through new livelihood activities, particularly shifts towards increased crop cultivation;
- cultural transformations occurring through the penetration of urbanization, foreign religions, formal education and increased interaction with outside communities that are collectively weakening traditional cultural systems of resource management; and
- the shift from communal ownership and management of the resources through indigenous institutions to more individualistic and private-based ownership and management.

The following sections set out a SWOT analysis of the current resource management and exploitation systems to examine the existing strengths to build upon, weaknesses to avoid, opportunities to grasp and threats to prepare for.

5.1.1 Strengths of the gums and resins subsector

Following are indicators of the strengths of Ethiopia's gums and resins subsector.

- Economic incentives from the subsector are attracting increasing private investment.
- Growing recognition of the importance of the resources to rural livelihoods and environmental quality is spurring increased involvement of development partners such as NGOs in supporting local efforts and national and/or regional government initiatives for improved management and exploitation of the resources.
- The use of gum producing species for gum-resin exploitation when done properly is environmentally friendly and can allow the country to comply with the international agreements it has signed, such as the CCC, CBC and CCD.
- The resources have multiple values and functions, including providing fodder for livestock production, wood for charcoal and nectar for apiculture; this can encourage improved integrated management as a climate change adaptation mechanism, a route that several donors are interested in and seeking to pursue.
- The country has an efficient loan provision system and availability of credit for those interested in investing in the subsector.
- The subsector can attract research and development efforts at various scales.

5.1.2 Weaknesses of the gums and resins subsector

Despite the considerable importance of the gums and resins subsector to Ethiopia's local and national economies, the following factors constrain the proper use of resources.

- Infrastructure development and access to areas where gum- and resin-producing trees grow are poor. This leads to higher energy costs, which eats into profits and can discourage investment in the subsector.
- In their natural form, gum-producing trees are scattered across wide areas located in hot climates and mostly on rugged land. Consequently, production is arduous and labour intensive and the subsector is less competitive in attracting labour. These limitations coupled with low product prices may discourage many private companies from continuing their involvement in the subsector.
- Despite the long tradition, ambiguities in access rights and ownership lead to unsustainable and irresponsible exploitation and resource degradation.
- Poor handling and lack of quality control, especially for products from the Borana area, are obstacles to improved and sustainable marketing.
- The slow process of land leasing and lack of monitoring over production processes are allowing over-exploitation, thus damaging the natural stock.
- Lack of value-added processing that weakens income gain from the resources.
- Low community mobilisation and involvement in the management and protection of the resources.

5.1.3 Opportunities

The following points describe opportunities for better and sustainable development and exploitation of the gums and resins subsector.

- Improved recognition of the contribution of the resources to rural livelihoods and the national economy and their potential in sustainable land management, which has been incorporated into Ethiopia's current national strategy (PASDEP) as well as several international conventions such as desertification control.
- Increased government attention to the resources for diversification of export products and, consequently, growing encouragement and various incentives such as tax exemptions for importation of goods needed for the production and management of the resources for those investing in the development of the resources. This could encourage entrepreneurs to invest in developing the resources.
- The existence of a long tradition and rich indigenous knowledge regarding the biology and silvics of the woodlands and their species.

- Strong market demand at domestic and international levels. Growing consumer interest in organic/natural products is boosting demand for products from Ethiopia.
- Organic/natural products could attain higher prices through certification.
- Establishment of Global Mechanisms for securing funding for dryland management; several NGOs and bilateral and multilateral donors can support development initiatives related to dry forest management.
- Extraction of gums and resins is not destructive to the tree and the vegetation ecosystem can also benefit from other global opportunities such as REDD (carbon funds).
- Exemptions from import duties applied for Ethiopia in the US and EU markets.
- Developing countries, mainly Africa, have a considerable share of the gum and incense market, particularly gum arabic and frankincense.
- Value-added processing is possible and will boost returns from the subsector.
- Global demand for gums and resins is rising.
- The policy of private sector-driven development in the country and the growing involvement by private entrepreneurs in the subsector that boosted production and trade.
- Several regional and international institutions exist that can contribute towards the development of the resources, such as Global Mechanisms to facilitate and support fund-raising for national projects, Network for Natural Gums and Resins in Africa (NGARA) to support provision of market information, networking, etc.
- The country has sufficient labour to engage in the large-scale management or exploitation of resources if properly organised and mobilised.

5.1.4 Threats

The following points hinder the achievement of optimal and sustainable use of gum and resin resources, thereby reducing the benefits that the subsector could generate. It is necessary to address and mitigate these threats to ensure enhanced, sustainable benefits from the subsector.

- Climate change, increasing global food and energy prices and low product prices could reduce interest in the management of gum and resin resources.
- Excessive firewood harvesting and improper tapping practices damage trees and reduce their population in the woodlands .
- The area is under intensive grazing, as most herders keep their livestock there.

- Unintentional wounding of trees by herders and improper wounding of trees by local collectors.
- High intensity of forest fires and agricultural expansion.
- Conflicting policies, programmes and strategies, particularly the impact of non-forestry policies such as resettlement, and economic and rural development policies and strategies.
- Changing role of traditional resource management institutions due to exogenous factors.
- Uncontrolled migration and poor legal and regulatory systems, leading to open access to the resource base.
- Low financial and technical capacity of most private entrepreneurs currently interested in the subsector, particularly with regard to engagement in value-added processing and large-scale development activities.
- Population growth and associated migration to the lowlands in search of livelihoods from natural resource exploitation.
- Ongoing land and environmental degradation in the highlands that necessitates large-scale resettlement programmes to the lowlands.
- Climate change, frequent drought, poor performance of the livestock sector will drive further woodland clearance.
- Increasing global prices for food and energy products could accelerate the conversion of woodlands to other forms of land use and expand the use of wood resources for energy.

5.2 Future actions

Ethiopia's naturally growing gum and resin resource base is abundant, and the country has a vast area suitable for developing these resources. Production of gums and resins has increased during recent decades and it is expected to intensify as national economic development initiatives increase pressure on the natural resource base for intensive exploitation. Designing and implementing sustainable production systems is necessary not only to conserve the resources but also to enhance their sustainable socio-economic and ecological significance. To achieve these dual goals, it is essential to implement concerted and integrated multidimensional management interventions. Such interventions require multi-institutional collaboration and integration of actions to optimise impacts for the sustained production and development of the resources. Activities may be shared among various institutions and stakeholders at federal, regional and local levels, including the private sector. Following are some priority activities recommended for interventions in the short and medium term.

- Conducting a national-scale resource inventory (ground and/or remote sensing based), assessing with a high level of accuracy the available resource base in order to provide the business community with reliable information on the quantity, type and quality of currently marketable gum and resin products as well as potentially suitable areas for future development.
- Training and retraining of producers and traders to increase awareness of the need for sustainable management, to build and improve the capacity and technical skills of all concerned (local and business community and development/extension agents) in terms of silvicultural management techniques and to establish systems for ongoing support in managing dryland resources.
- Training and retraining producers in quality control, handling and transport of gum and resin commodities.
- Creating sufficient incentives and promoting sustainable dryland vegetation management through improved and sustained market links, market networks and timely provision of market information.
- Facilitating and supporting the establishment of transparent and effective producers and traders associations and strengthening their function through ongoing technical support.
- Strengthening the collaboration of pertinent institutions in relation to appropriate research to advance the management, production and commercialisation of gums and related dryland products.
- Creating the required infrastructure for documentation and dissemination of information, best practices and lessons learnt from within and outside the country in areas related to gum and other dryland product management and commercialisation.
- Aggressively pursuing value-added processing at various scales to enhance economic gains from the products and create more employment opportunities, while also creating inland capacity for further finished product processing and exports.
- Working collaboratively to tap into Global Mechanisms to channel some essential funds for development in the drylands.

The following more specific and short-term recommendations are also worth outlining.

- Production processes should be closely monitored and trees should be rested for a sufficient period to allow them to recover and regenerate.
- Producers should be given long leases and should be made accountable for changing forest conditions in their respective production areas. For this, monitoring systems need to be established and enforced.

- Ways to engage local communities in the management, production and benefits of the subsector should be seriously considered. Transferring responsibility for forest governance to locals is the best way to fill the institutional vacuum that leads to proper access to resources and thus reduces unsustainable exploitation of the resources; in particular, overgrazing and clearance should be minimised.
- Resettlement should be mainstreamed with improved management and conservation of the forest ecosystem. The resettlers can be organised, trained and thus engaged in the production of gums and resins as well as in complementary activities such as animal husbandry and apiculture that are dry forest ecosystem friendly.

Training and retraining producers in best-practice handling, storage and transportation, including ways to avoid adulteration, are essential steps in building a strong reputation, gaining a sustainable market and competing with other producing countries in the global market.