

Somali Sap: Sustainable Resin-Gum Agroforestry & Carbon Sequestration in Somalia

CONCEPT NOTE

CONCEPT NOTE

July 2025



Contents

0. Executive Summary	2
1. Project Overview	3
2. Context and Rationale	3
3. Project Approach.....	4
4. Expected impact.....	5
5. Key Project Stakeholders	6
6. Funding Requirement & Budget.....	7

0. Executive Summary

We invite donors and development agencies to fund the preparatory phase of Somali Sap, a large-scale carbon sequestration and agroforestry initiative designed to reverse land degradation, create sustainable livelihoods and unlock new climate finance opportunities in Somalia.

By establishing natural tree stands and managed plantations of high-value resin- and gum-producing species, the project will increase tree cover, generate carbon credits and transform Somalia's resin-gum sector into a structured, high-value industry. At full scale, Somali Sap will rehabilitate approximately 10,000 hectares of degraded land, sequester around 1.5 million tonnes of CO₂ over 30 years and provide stable incomes for about 2,500 households, reducing reliance on unsustainable practices.

The 1,000-hectare pilot will validate the model and establish the foundation for expansion to 10,000 hectares, making Somali Sap one of East Africa's largest sustainable agroforestry initiatives. The project's long-term financial sustainability will come from carbon finance, credit revenues and resin-gum exports, ensuring continued impact beyond the initial grant funding.

We are seeking US\$ 300 thousand in grant funding to ensure Somali Sap is fully investment-ready, allowing the project to secure additional capital for the 1,000-hectare pilot. The funding will catalyse a scalable solution for climate resilience, ecosystem restoration and rural economic empowerment while unlocking sustainable financing mechanisms for long-term growth.

The project will be hosted and co-implemented by Kaalo Aid, a well-established NGO active in Puntland since the early 1990s. Somali Sap is also a member of the Somali Climate Action



Platform (SCAP), ensuring full alignment with the Government of Somalia's national climate strategy and the Green Somalia campaign.

1. Project Overview

Restoring degraded land, generating carbon credits and strengthening Somalia's role in the global resin-gum trade.

Somali Sap is a large-scale carbon sequestration and agroforestry initiative designed to reverse land degradation, create sustainable livelihoods and unlock new climate finance opportunities. By establishing natural tree stands and managed plantations of high-value resin- and gum-producing species, the project will increase tree cover, generate carbon credits and transform Somalia's resin-gum sector into a structured, high-value industry.

This initiative is built on three key pillars:

- Land restoration and climate resilience, reversing the effects of deforestation and desertification.
- Market-driven agroforestry, commercialising high-value resin and gum production.
- Carbon finance and sustainable funding, securing long-term revenue through verified carbon credits.

Led by a consortium of expert partners, Somali Sap is designed for scale and long-term sustainability:

- Somali Roots leads community engagement, secures land access and drives afforestation efforts.
- Savo structures the business model, builds market linkages and ensures commercial viability.
- Africa Carbon Partners manages carbon certification, financing, credit generation and sales.
- Kaalo Aid joins as the official local host and implementation partner, leveraging its deep roots in Puntland and trusted community relationships to support effective delivery on the ground.

The project will begin with a 1,000-hectare pilot, validating its carbon and commercial potential before expanding to 10,000 hectares, making it one of East Africa's largest sustainable resin-gum agroforestry initiatives.

2. Context and Rationale

Somalia's landscapes are degrading, but its native resin-gum trees offer a path to restoration and resilience.

Centuries of overgrazing, unsustainable land use and climate change have accelerated land degradation and desertification in Somalia, reducing vegetation cover and



weakening rural economies. Without intervention, these challenges will continue to threaten livelihoods and limit economic development.

Yet, Somalia is home to some of the world's most commercially valuable resin- and gum-producing trees, which naturally thrive in arid conditions. Frankincense, Myrrh and Gum Arabic are key exports, supplying international markets in pharmaceuticals, cosmetics, food production and aromatherapy. However, poor resource management, unsustainable harvesting and fragmented market access have weakened the long-term viability of the sector.

These challenges have prompted the Government of Somalia to prioritise land restoration through its national climate strategy and the Green Somalia campaign. Somali Sap's inclusion in SCAP ensures strategic alignment with these national initiatives and strengthens its legitimacy and policy support.

Somali Sap provides a scalable, sustainable alternative. By combining carbon finance, reforestation and commercial agroforestry, the project will build a community-driven model for ecosystem restoration and economic growth.

3. Project Approach

Land Use Model

A phased approach that ensures rapid implementation and long-term scalability.

Somali Sap will roll out in two phases, balancing measured growth with risk mitigation. The 1,000-hectare pilot will refine methodologies, validate carbon sequestration potential and establish early market linkages. The full 10,000-hectare expansion will build on these foundations, increasing production while securing long-term carbon financing.

The project integrates:

- Assisted Natural Regeneration (ANR) to restore tree cover and promote biodiversity.
- Managed plantations to enable sustainable harvesting and improve resin and gum yields.
- Agroforestry systems that blend tree crops with sustainable grazing and complementary crops, strengthening ecosystem resilience.

Potential Tree Species & Benefits

Drought-resilient tree species that restore land and generate high-value commercial products.

Somali Sap is considering the following tree species:

- *Acacia senegal* improves soil fertility, supports drought resilience and produces gum arabic, a key ingredient in food, pharmaceuticals and cosmetics.



- *Boswellia frereana*, known as the “King of Frankincense”, is highly valued in perfumery, traditional medicine and essential oils.
- *Commiphora myrrha* produces myrrh resin, which is used in healthcare, skincare and aromatherapy.

By leveraging these climate-resilient species, Somali Sap will not only restore degraded land but also develop sustainable income streams for communities.

Community & Livelihood Integration

Empowering communities through land security, training and market access.

Somali Roots is ensuring land tenure rights and benefit-sharing agreements, giving pastoralists, smallholder farmers and resin harvesters a stake in the project's success. The project will provide technical training in sustainable harvesting, tree management and regenerative agroforestry, helping communities transition from unsustainable practices to long-term economic stability.

To maximise commercial opportunities, Savo is developing direct export partnerships, linking Somali resin and gum producers to premium international buyers. This will position Somalia as a global leader in sustainable resin and gum production, creating a more equitable and high-value supply chain.

Carbon Credit Mechanism

A self-sustaining carbon finance model that funds reforestation and long-term expansion.

Africa Carbon Partners will certify, verify and sell high-quality carbon credits, ensuring Somali Sap meets Verra (VCS) and Climate, Community & Biodiversity (CCB) Standards. Early donor funding will establish the project, while long-term financing will come from carbon financing and credit revenues and resin-gum exports, enabling continued expansion beyond 10,000 hectares.

By implementing rigorous carbon monitoring, the project will track sequestration rates, biodiversity gains and soil improvement, ensuring long-term impact.

4. Expected impact

Somali Sap delivers measurable climate and economic benefits at scale.

Preliminary target impact outcomes include:

- Land restoration: Rehabilitating ~10,000 hectares, increasing biodiversity and improving soil fertility.
- Carbon sequestration: Capturing ~1.5 million tonnes of CO₂ over 30 years.



- Sustainable livelihoods: Providing stable income for ~2,500 households, reducing reliance on unsustainable practices.

In addition, Somali Sap will strengthen Somalia's resin and gum value chains, increasing exports and trade partnerships.

5. Key Project Stakeholders

Somali Sap is led by a strong consortium that combines local expertise, commercial acumen and carbon finance to ensure long-term success.

Key project stakeholders include:

- **Somali Roots** – A nonprofit organisation focused on sustainable community development and environmental restoration. Somali Roots tackles poverty, climate change and social inequality through community-led agroforestry, certified carbon credit projects and sustainable fisheries. With official support from the Puntland government and the Ministry of Environment, Range and Climate Change, Somali Roots has secured access to 10,000 hectares for Somali Sap, with potential to expand further. The organisation integrates regenerative agriculture, biodiversity recovery and economic growth, ensuring that local communities are central to the project's design and long-term benefits.
- **Savo** – An award-winning BCorp specialising in sustainable business building, investment banking and venture development. Savo works across forestry, regenerative agriculture and climate-focused industries, whose role is to ensure that Somali Sap is structured as a viable and scalable business that attracts long-term investment.
- **Africa Carbon Partners** – A leading developer of high-integrity carbon projects across Africa, with over 700,000 hectares under management. Africa Carbon Partners ensures that Somali Sap meets global certification standards, unlocking sustainable carbon finance while delivering long-term environmental and economic value.
- **Kaalo Aid** – A leading Somali NGO with a longstanding presence in Puntland, Kaalo Aid brings deep experience in community development, natural resource management and project implementation. As the official local host and co-implementer, Kaalo ensures effective on-ground coordination and trusted delivery. Their involvement also facilitates institutional support and accelerates project acceptance among target communities.

Somali Sap is also a member of the Somali Climate Action Platform (SCAP), a multi-stakeholder coordination body working closely with the Ministry of Environment to align climate projects with Somalia's national climate strategy and the Green Somalia campaign. This ensures that Somali Sap contributes directly to national targets and benefits from institutional support and visibility.



6. Funding Requirement & Budget

A high-impact, scalable investment opportunity in climate action and sustainable livelihoods.

Somali Sap seeks an initial grant of US\$ 300 thousand to ensure Somali Sap is fully investment-ready, allowing the project to secure additional capital for the 1,000-hectare pilot, covering:

Budget Item	Description	Cost Estimate
A. Project Management	Overseeing execution of the feasibility phase, ensuring coordination between technical teams, regulatory bodies and stakeholders. Includes administrative costs, risk mitigation strategies, reporting structures and contingency planning. This will also include scenario planning for scale-up beyond the pilot phase.	US\$ 90,000
B. Land, Ecological & Legal Feasibility	Conducting land suitability assessments to determine optimal locations for tree planting, evaluating soil conditions and climate resilience, and mapping legal frameworks for land tenure security. This includes reviewing land ownership structures, ensuring compliance with national environmental regulations and identifying risks related to land access. It will also assess expansion feasibility for scaling to 10,000 hectares.	US\$ 60,000
C. Carbon Baseline & Feasibility Study	Measuring baseline carbon stocks, estimating sequestration potential and assessing eligibility for certification under Verra VCS and/or similar frameworks. Includes financial modelling for carbon credit revenue and evaluating pre-finance options. It will also assess the impact of planting densities, tree growth rates and sequestration potential at scale.	US\$ 45,000
D. Stakeholder & Policy Engagement	Conducting consultations with local communities, landowners and government agencies to align on project benefits, secure buy-in and mitigate risks. Includes negotiating land-use agreements, structuring equitable benefit-sharing models and ensuring compliance with forestry, conservation and climate policy frameworks. This phase will also explore early-stage ESG and certification requirements for sustainable trade.	US\$ 30,000
E. Commercial Viability & Investment Readiness	Assessing global and regional demand for resin and gum products, identifying buyers and commercial partners and developing financial projections for long-term sustainability. Includes defining the business model, determining optimal harvest periods and resin tapping cycles, assessing expected yields, evaluating logistics and processing feasibility and conducting workforce planning. A competitor benchmarking study will compare Somali Sap with other successful resin-gum projects.	US\$ 75,000
Total:		US\$ 300,000



Future funding will be sustained through carbon financing, credit revenues and resin-gum exports, enabling establishment of the 1,000-hectare pilot and expansion to 10,000 hectares and beyond.