

Traditional Knowledge for Frankincense Conservation in Somalia

A Cultural Treasure and Economic Lifeline

Frankincense trees are more than just a source of resin — they are a living emblem of Somalia's heritage. For centuries, these trees have shaped trade routes, inspired cultural traditions, and sustained local livelihoods. The aromatic resin, exuded from the trunks of *Boswellia* trees, has been traded across the Arabian Peninsula and the Horn of Africa for over 5,000 years.

Today, frankincense remains a vital export for Somalia, ranking as the third-largest source of income after livestock and agriculture. In the mountainous landscapes of Puntland, the harvest of frankincense is more than an economic activity — it is a cultural practice deeply intertwined with identity, community, and spirituality across the Horn of Africa.

For generations, this precious resource has been managed through Traditional Ecological Knowledge (TEK) — unwritten systems of rules, practices, and seasonal rhythms passed down orally from one generation to the next. TEK has guided harvesters on when and how to tap the trees, how to protect young stands, and how to keep the balance between use and regeneration.

Yet despite this rich heritage of stewardship, Somalia's frankincense industry stands at a crossroads. The very systems that have sustained *Boswellia* woodlands for centuries are being eroded — not by lack of value, but by lack of recognition. Without inclusive policies that honor and integrate Traditional Ecological Knowledge into conservation planning, both the resource and the communities who depend on it face an uncertain future.

Challenges to the Frankincense Industry

Despite its historical and economic importance, Somalia's frankincense industry faces multiple threats. The absence of an inclusive, harmonized, and sustainable conservation strategy has left room for exploitation by middlemen and international companies. Climate change, overharvesting, and shifting land use further threaten *Boswellia* species.

Globally, Indigenous Peoples are the guardians of 80% of Earth's biodiversity. Yet, they are often excluded from decisions and policies that directly affect their lands and resources, while facing growing threats from environmental degradation. The traditional knowledge they hold is critical for safeguarding ecosystems and tackling urgent global challenges — from biodiversity loss to climate change.

In Somalia, frankincense-harvesting communities possess deep Traditional Ecological Knowledge (TEK) developed over centuries. However, this knowledge is at risk of disappearing entirely — not formally recognized or integrated into conservation strategies, policies, or legal frameworks. The marginalization of TEK not only undermines ecological resilience but also erodes the cultural heritage that underpins sustainable management of frankincense landscapes.

SSI's Commitment to Frankincense Sustainability Conservation Research

In response to these challenges, the Species Saviour Initiative (SSI), in partnership with traditional frankincense-harvesting communities in the Gardafu and Bari regions of Puntland — where *Boswellia sacra* and *B. frereana* grow predominantly — undertook extensive field research from May 2021 to October 2023.

Our goal was not only to assess the ecological state of frankincense trees but also to document and understand the TEK that has sustained these woodlands for centuries. This work was grounded in a conviction that effective conservation cannot be achieved by science alone — it must be informed and guided by the lived experience of the communities who have acted as custodians of these ecosystems for generations.

Our findings reveal that while modern pressures are eroding traditional governance systems, the principles behind them remain highly relevant today. Elders' knowledge of harvest timing, community-based conflict resolution, and sustainable tapping practices offers concrete solutions for restoring degraded areas and ensuring the long-term viability of frankincense production.

Key Elements of Traditional Frankincense Governance

1. Governance Rooted in Community Leadership

- Harvest seasons set by elders to allow trees to recover.
- Rules preventing tapping of young or unhealthy trees.
- Clan or family custodianship regulating access, reducing disputes, and preventing uncontrolled exploitation.

2. Resource Utilization Guided by Respect

- Limited cuts per tree per season.
- Rest periods to maintain tree health and resin quality.
- Certain trees left untapped as “seed banks” for natural regeneration.

3. Conflict Resolution Embedded in Tradition

- Disputes settled through mediation led by elders.
- Restorative solutions like shared harvests or agreed access times to preserve relationships.

4. Harvesting Practices with a Long-Term View

- Avoiding deep or excessive incisions to protect the vascular system.
- Rotating harvest areas to allow regeneration.
- Protecting young trees until maturity to secure future resin supply.

Bridging TEK and Science for a Sustainable Future

Bridging the gap between TEK and scientific conservation methods is not optional — it is essential. By integrating these complementary knowledge systems into national and global conservation frameworks, Somalia can protect its frankincense heritage, strengthen rural livelihoods, and contribute to global biodiversity goals.

SSI is committed to advocating for this integration, ensuring that the voices of frankincense-harvesting communities are heard, respected, and embedded in the policies that will shape the future of this iconic resource. Protecting frankincense is not just about saving a tree — it is about safeguarding a living heritage, a source of livelihood, and a centuries-old partnership between people and nature.

Discover the detailed findings, traditional governance insights, and policy recommendations that can secure Somalia's frankincense heritage for generations to come. [Click here](#) to read the full published report of SSI's peer-reviewed research on frankincense conservation in Somalia