**SUSTAINABLE DRY LAND RESOURCES MANAGEMENT FOR ENHANCED LIVELIHOODS, FOOD SECURITY AND CLIMATE CHANGE ADAPTATION IN SOMALIA**

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# Policy and institutional capacity gaps in relation to environment and natural resources management and climate change adaptation in Somalia


## Summary

A study to investigate policy and institutional capacity gaps, and identify training and resources needed to strengthen the capacity of the public and the private institutions to enhance sustainable natural resources management and climate change adaptation was carried out using qualitative and quantitative surveys including: individual interviews, focus group discussion and key informant interview to acquire reliable information on existing capacity and gaps of the personnel at the environmental institutions three states (Galmudug, Jubaland and Puntland) in Somalia. The questionnaire survey consisted of both closed and open-ended questions and comments in order to receive in-depth information

### Recommendations

1. ***Establishment of National Forestry and Rangeland Institute***, responsible for Ecological, technological and socio-economic aspects of forest resources studies i.e. forest inventories, regeneration, reforestation, production, harvesting, processing and trade.

2. ***Re-establishment of forestry extension programme*** which stopped three decades ago to train and retrain farm owners and exploiters on techniques of domestication, planting and harvesting important NTFPs species with multiple purpose use for agroforestry systems.

3. ***Establishment of Forest and Range Management College***: currently the major capacity gap is the human capital, because the country has no higher institutions that produce trained forestry personnel.

4. ***Research on the nutritional and calorific values*** of major consumed NTFPs and value adding activities and processes.


### Results

**Policy and institutional capacity gaps**

There are huge gaps in capacities of institutions and individuals to manage the environment and natural resources in Somalia. Over 90% of all the individuals interviewed had no formal environment and natural resources management trainings. In Jubaland, only two persons had a Master's degree in natural resources management out of 17 employees. The situation is worse in Galmudug as none of the staff had any formal training on environment and natural resources management. During key informant interviews, one respondent said, "The ministry of Environment, Climate change and rural development of Galmudug just exist by name", and further said "the ministry has no mentionable workplace facilities or trained staff". This is consistent with the fact that, for over three decades Somalia had no fully functioning central government coupled with prolonged civil war. These had devastating effects on the institutional capacity of all government institutions, particularly the environment and natural resources management sectors. Education institutions collapsed, civil servants, teachers and researchers fled the country for asylum, and research archives, data, Lab equipment and literature resources have disappeared.

In Puntland however, due of long-time security stability, its institutional capacity is much better than the other two states. Approximately 90% of the staff of the ministry of Environment, Agriculture and Climate change of Puntland had basic environmental management trainings and this is mainly because of security stability which gave them the opportunity to attract expatriates that were giving training to the staff through UN agencies and also as the oldest federal member state, the institutional capacity was built over time. Table 1 summarizes the capacity gaps and the capacity building needed in three states.

**Policy gaps**

Somalia has never had a forestry policy. The main laws governing the forestry sector are the Law on Fauna (Hunting) and Forest Conservation (Law No. 15 of 25 January 1969). In the last three decades there has been a gap in terms of the regulatory framework. In 2020, the country developed and adopted the National Environmental Policy and the National Climate Change Policy. In addition, there is a draft National Charcoal Policy, draft National Forestry Policy and the draft Environmental Management Act.

The National Environmental Policy states that the government shall "*Promote the production and marketing of incense, as well as other health-related plants and their businesses".* This is a direct reference to the enhancement of NTFPs utilization. Similarly, the draft National Forestry Policy recognizes the importance of NTFPs to the economy. In 1985 Somalia was the world's largest source of incense, and produced over 2,000 tons. The draft policy states: "*Local people in Somalia have harvested frankincense for millenniums, but there is a growing global appetite for frankincense. The global demand presents an enormous economic opportunity for Somalia to become a leading exporter of frankincense. This is an opportunity to diversify the economy and enhance the livelihoods of the people."*

These policy commitments indicate that the government is keen to develop the forestry sector in general and NTFPs in particular. However, agroforestry is not specifically mentioned.

## Literature


- World Bank. (2020). Somalia Country Environmental Analysis: Diagnostic Study on Trends and Threats for Environmental and Natural Resources Challenges.
- Somalia country environmental profile first draft (2021)
- Somalia National Environmental Policy.
- Somalia National Climate Change Policy.
- Somalia Draft National Charcoal Policy.
- Somalia Draft National Forestry Policy.
- Somalia Draft Environmental Management Act.


## Conclusions

Institutional capacity gaps strongly influence land use changes and capacity building needs. Key challenges for (agro) forestry include (a) shortage of human resources capital and institutional capacity, (b) security and political instability, (c) natural assets depletion and (d) rapid population growth paired with high urbanization rates. Negotiations on the state formation and the institutionalization of federalism elevate tensions over natural resource shares and representation among Somalis, often trigger violent conflict among inter-and intra-clan systems. The collapse of the state and governance structures as well as the lack of security, resulting in chronic conflict, and a lack of rule of law has placed enormous obstacles to consistent and sustainable management of environmental resources in the country. The resulting rapid deforestation has created conditions for desertification in semi-arid areas.


**About the Author**

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*Table 1: Capacity gaps, training needs, and infrastructure and resources needs*

| Capacity gap | State (s) | Training | Infrastructure & resources needed | Rank |
|---|---|---|---|---|
| Sustainable management and utilization of natural resources | All | Forest resources management | • Establishment of state level dryland forest research centres<br>• Establishment of nursery and forestry trial sites<br>• Forest lab equipment<br>• Weather station equipment e.g. wind vane, rain gauge, mini-max thermometers at secondary and tertiary institutions and district headquarters<br>• Training classes and auditorium<br>• Computers, print and Software Programmes<br>• Data management & data analysis<br>• Professional trainers | 5 |
| Biodiversity restoration | All | Biodiversity conservation Rehabilitation of degraded land | • Land rehabilitation techniques; Soil and Water conservation, Agroforestry, Famers-Managed Natural regeneration & enclosure systems, and local species identification trainings<br>• Marine ecology and Marine resources management trainers | 5 |
| Environmental management | All | Mainstreaming Rio Conventions Environmental Impact assessment | • Industrial waste management and pollution prevention<br>• Plastic waste management<br>• Training and awareness raising | 5 |
| Waste management | All | | | |
| Climate change | All | GHG inventories data base, Measurement, Reporting and Verification (MRV) systems Adaptation and mitigation | • Establishment of Emission and Air quality control research station | 5 |

Scale: 5=Extremely important, 4 = Very important, 3=important, 2=less important, 1=not important