Regreening Africa

SOMALILAND

Country Information Brief

Best practices, opportunities and bottlenecks for scaling-up regreening practices

Brief prepared by Ibrahim Muse (World Vision, Somalia), Jonathan Muriuki (ICRAF), Sammy Carsan (ICRAF), Dennis Garrity (ICRAF) and Susan Chomba (ICRAF).

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World Agroforestry

World Vision

ELD THE ECONOMICS OF LAND DEGRADATION

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Image: Xasan Axmed Cumar, a nursery committee member, planting neem tree in Xoorey village, Awdal region, Somaliland. **Photo:** Aadan Maxamed Caqli/ World Vision**.**

Introduction

This document provides a brief synthesis of best practices and opportunities for scaling-up regreening /land restoration and sustainable land management in Somaliland, learnt from the implementation of the Regreening Africa program and the experience of implementing partners. This will be useful for informing future European Union (EU) efforts to support regreening in Somalia.

The Team Europe Initiative (TEI) in Somalia is supporting climate change mitigation and adaptation using investments in sustainable and renewable energy as a driver for change. It is expected that increased access to sustainable and renewable energy throughout Somalia will have broad-based benefits across the society. An affordable, clean, and reliable supply of energy reduces CO_2 emissions, creates opportunities for new businesses, and eliminates a significant barrier to the transformational potential of digital solutions in business and service delivery.

A key result area proposed is enhanced climate change adaptation and climate resilience through:

- Somalia's national adaptation program strengthened to deal with recurrent droughts and floods and improve climate resilience of vulnerable communities and ecosystems.
- Improved land management to protect forests and improved land use, strengthened water resources management, and strengthened disaster management capacity both at government and community levels.

With natural resource degradation, Somalia is becoming increasingly vulnerable to conflict over scarce resources highlighting the synergies with TEI on Governance, Peace and Security - Reconciling Somalia.

Increased access to
Sustainable & Renewable energy

Image: Farmer sharing his experiences since adopting FMNR, during the projects' joint reflection and learning mission. **Photo:** CARE.

[1]Regreening refers to an increase in tree/vegetation cover as a step towards full landscape restoration, through the promotion of planting/growing a diversity of tree species and farmer-managed natural regeneration (FMNR) in agricultural and pastoral systems, including associated sustainable land management/soil and water conservation measures, livestock management and other related policy engagement processes.

What have been the main restoration successes, best practices and scalable models for Somaliland?

The ultimate aim of the EU-funded Regreening Project in Somaliland is to foster a massive, sustained landscape restoration movement with uptake throughout the territory. The project has built on the successes of existing restoration programs to provide a solid basis for scale-up.

Scaling-up areas have been established in Odwayne and Baki districts. The program expansion was achieved by building a coalition of local, national and international non-governmental organisations (NGOs) and civil society organisations, collaborating with government at all levels, and with the technical support and overall coordination by World Agroforestry.

Mindset change is a fundamental aspect of building a restoration movement. Thus, the project has focused on shifting the attitudes of all stakeholders by improving their understanding of the many benefits received from investing time and effort in landscape restoration.

A much stronger technical capacity is imperative for the successful restoration of land in Somaliland, particularly grazing land. The project has focused on building technical capacity among government experts, development agents and beneficiaries, organised in various community-based organisations.

***Xeer*, the traditional customary law, has been the basis under which the pastoral communities agree to protect the rangelands and pasturelands**. *Xeer* is a traditional legal system that regulates the affairs and relationships of sub-groups of society such as farmers, nomads, merchants and hunters, among others. It has been relied upon for settling natural resource management (NRM) related disputes in the territory as it is compensatory rather than punitive, and hence widely accepted. Hearings are conducted in the open and decisions require consensus among major parties. Clans indemnify against violation of the decisions reached.

The accelerated action by pastoralists to protect and manage naturally regenerating trees on their farmland. This widespread action can be attributed to pastoralists' improved awareness and knowledge of natural tree regeneration benefits such as the provision of fodder, fuelwood and environmental amelioration.

The farmer-managed natural regeneration (FMNR) model has empowered individuals and communities with responsibility for the care and nurturing of naturally occurring woody vegetation. This rewards the sustainable harvesting of wood and non-timber forest products (NTFP). FMNR can be practiced by men, women and youth, majority and minority ethnic groups, individuals, and whole communities. About 40 FMNR champion members were established and are active in 17 FMNR project sites.

This effective and inexpensive restoration practice has been well-proven in certain parts of the country. Now the project aims to expand the practice throughout the country during the coming decade.

Soil and water conservation practices. Physical measures, such as the construction of soil or contour bunds, have worked well in controlling runoff and in retaining rainwater. These measures have enabled the regeneration of vegetation cover in rangelands and were particularly successful in both Baki and Odweyne identified FMNR sites including Old Baki, Cadaad, Xeego, Baki 3, Beerato, Ceelsame, Odweyne Casha-Cado and Qaloocato.

Tree species planting and agroforestry nursery sites. Quality planting materials offering good field survival and tree products are lacking for many planting programs. Nine agroforestry nurseries were set up in Baki and Odweyne over the last two years. These nurseries produced about 2,000 seedlings that were used for FMNR site enrichment planting as well as for supporting 250 women home gardening practices. The fruit producing trees contribute to improved nutrition in these households.

Regreening Africa nurseries provide entrepreneurs with opportunities for new local businesses. The nurseries have already supplied approximately 400 seedlings to private tree planting programs and government buyers, worth an estimated USD 390. Determining the sites for setting-up nurseries, selecting tree species and sourcing quality germplasm are important factors that contribute to the success of such businesses.

Photo: ©Kabir Dhanji (CRP)

What are the social, cultural and technological issues that may hinder the adoption of regreening activities?

Predominant **pastoral system of rearing livestock based on a nomadic lifestyle.** This hinders the adoption of land restoration practices as the nomads continuously move seeking pasture and water. While men move with their livestock, women are confined to domestic chores which creates a gap in the management of fields under restoration without real mindset change.

Open grazing of livestock. This leads to overgrazing and hinders the self-regeneration of rangeland and pasture lands. Since grazing lands are vast and communally owned, physical fencing of fields under rehabilitation are limited by prohibitive costs, while social fencing has mixed chances of success.

Elite capture of traditional institutions. This weakens the enforcement of clan by-laws permitting tree resource degradation and deforestation. Community leaders and scholars are hesitant to declare fatawa (a ruling on a point of Islamic law given by a recognised authority) on resource management when powerful political and market forces are driving resource extraction and degradation. This especially contributes to excessive tree cutting for firewood and charcoal production.

Lack of technology for early warning systems. Such technology is important for informing the wider pastoral community about the possibility of drought onset and serious pest incidences, such as locust invasions.

Lack of machinery. Machinery is needed for the construction of sustainable water harvesting structures.

Low level of participation by women. In Somali culture, women are traditionally confined to housework and men tend to be engaged in businesses external to the house.

What are the main policy, regulatory and governance barriers to regreening activities and how can they be addressed?

There are many policy, regulatory and governance measures that promote regreening activities such as the Environmental Act, Environment Policy and regulations, the National Strategy for Environment Conservation and traditional by-laws employed by local clans to protect the environment. However, **these policies are ineffective due to weak implementation and poor resourcing.** Traditional institutions seem to be better accepted in the communities than formal policies and legislation. Hence, linking the two systems to support enforcement of traditional by-laws will go a long in scaling-up regreening activities.

Local laws and by-laws that do not offer women equitable participation in value chain development such as the marketing of firewood, charcoal, timber, frankincense, and myrrh. Women have no rights to standing trees in communal land. They also lack the capacity to establish and own trees. Engagement with community leaders and scholars to enable the inclusion of women's rights in traditional institutions while supporting the establishment of trees valued by women in croplands could address this bottleneck.

Photo: ©Axel Fassio/CIFOR

What are the most promising value chains and investment opportunities that could incentivise regreening activities, and how could they be supported?

Fuelwood

Source of production: mainly comprising *Prosopis juliflora*. Prosopis is an invasive tree species which has invaded large areas of Odweyne and Baki. The tree is an aggressive invader in its native range, especially in frost free areas.

Market: there are no known markets yet.

Key constraints for sustainable commercialisation

- Lack of knowledge and appropriate technological materials;
- Lack of financial resources; and
- Lack of a clear market approach.

Potential methods for overcoming key constraints

- Capacity building especially training on tree management and firewood production;
- Provision of appropriate technological materials and training;
- Lack of financial investments to commercialise sustainably; and
- Market establishment and linkage of farmers to markets.

Photo: ©Axel Fassio/CIFOR

Tree based products (sesame seeds (seeds and oil))

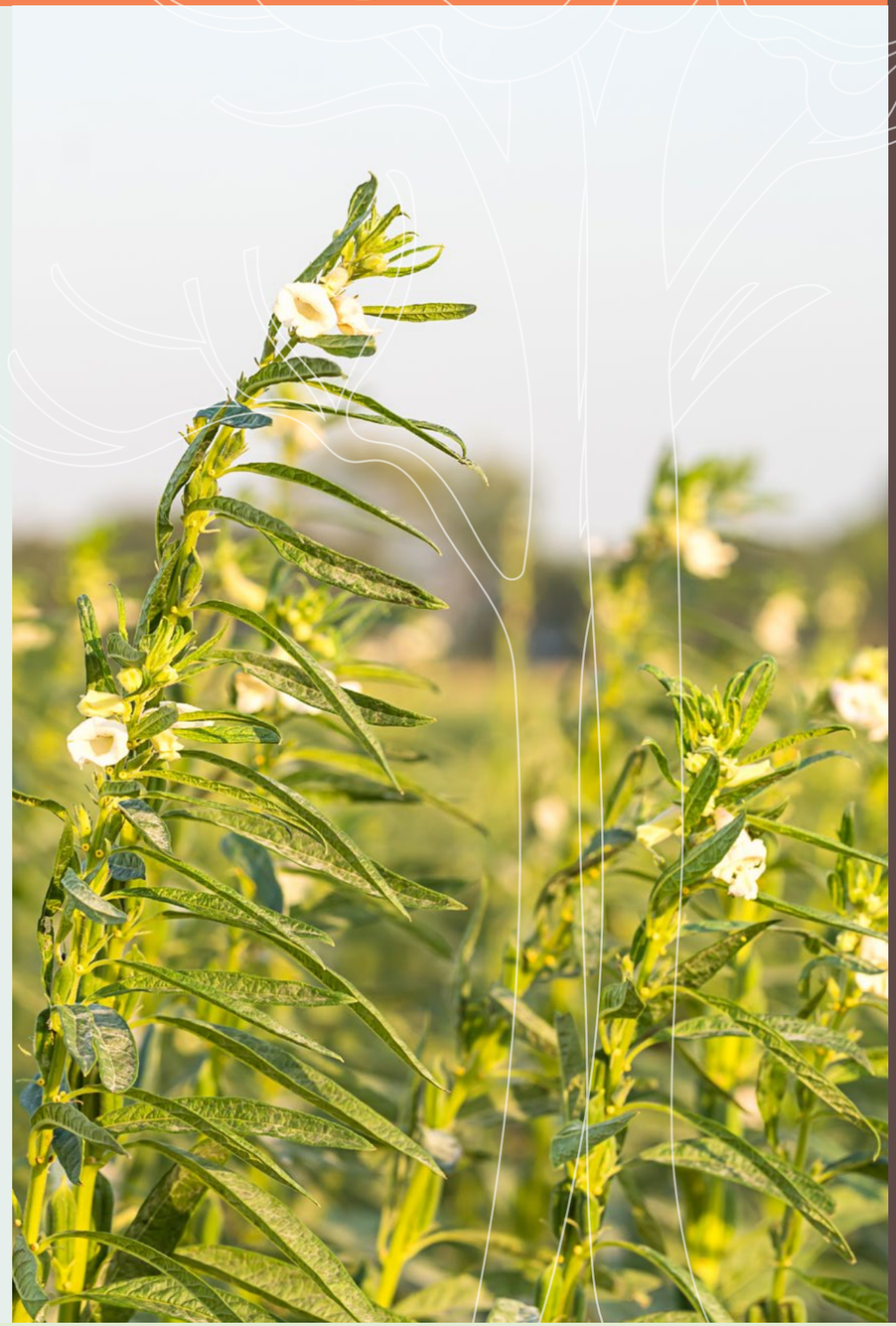
Source of production: in many areas in Somaliland, sesame seeds are cultivated as a crop by local farmers. The sesame seed contains a high oil content, unsaturated fatty acids, proteins, and various minor nutrients.

Key constraints for sustainable commercialisation

- Low yields which can be attributed to poor cultivation techniques in unirrigated areas, low usage of compost/manure and other soil fertility enhancement methods, and significant yield losses during threshing;
- Lack of appropriate machinery/technology for hulling, threshing, and oil extraction etc.; and
- Knowledge gap on the establishment of sesame under agroforestry systems for crop performance and yield gains.

Potential methods for overcoming key constraints

- Provision of improved varieties tolerant to biotic and abiotic stresses like diseases, pests and drought;
- Investment in sustainable land management (SLM) practices;
- Linkage of smallholder farmers to micro-financing institutions; and
- Encourage local investors to locally fabricate and sell appropriate machinery technology for hulling, threshing, oil extraction etc.



Summary of other sustainable land management investment opportunities

Integrated water and land management. Somaliland is water scarce and this constraint highly impacts livelihoods as well as land restoration activities. Investments in water infrastructure, such as berkards, boost restoration activities by providing water for tree nursery establishment. Restoration activities also need to focus on soil conservation structures that enhance water capture in-situ to accelerate grass regrowth, thereby creating areas optimal for FMNR.

Investment in *Xeer* rehabilitation. Somaliland government institutions are more functional than those in other parts of Somalia, but they are yet to effectively support NRM. Community institutions have demonstrated capacity to enforce social fencing, which allows for the rehabilitation of large areas of grazing land. Allocating resources to support these institutions and properly link them with formal institutions holds great potential to increase returns on NRM investments.

Training on high density rotational grazing systems. This approach can be piloted in some areas to support community rehabilitation in combination with FMNR. Since most of the grazing land is denuded and no longer productive, working with community leaders to enclose land and move livestock across paddocks could support regenerative activities.

What are the best practices for gender and youth inclusion in the regreening movement?

Women have participated in reseeding practices in FMNR sites and communal pasture lands.

Women and men have participated in FMNR practices like pruning trees and the construction of soil and water conservation structures.

Youths and marginalised groups are involved in raising tree seedlings in the nurseries and tree planting activities.

Women and disadvantaged groups are involved in nursery management and production of seedlings.

Photo: ©Stephan Gladieu (World Bank)

What are some key tools and methods for monitoring regreening activities?

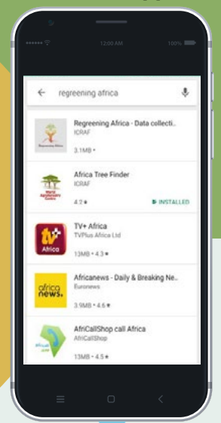
The Regreening Africa App is a mobile-based android application that allows users to collect data at farm level on a range of land restoration practices that allows for robust landscape level monitoring.

Why do we need it?

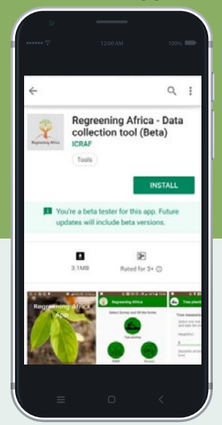
The Regreening Africa App links land restoration activities implemented by farmers farmers and pastoralists to large global initiatives, providing evidence that can positively inform these efforts, whilst simultaneously assessing their effectiveness on the ground.

Regreening Africa App

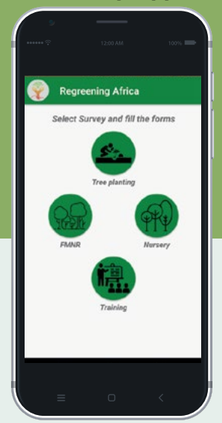
Locate App



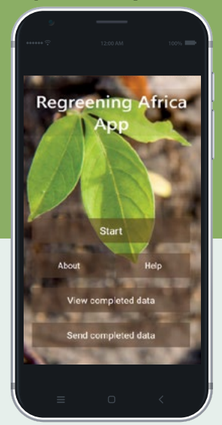
Install App



Start up App



Open survey forms



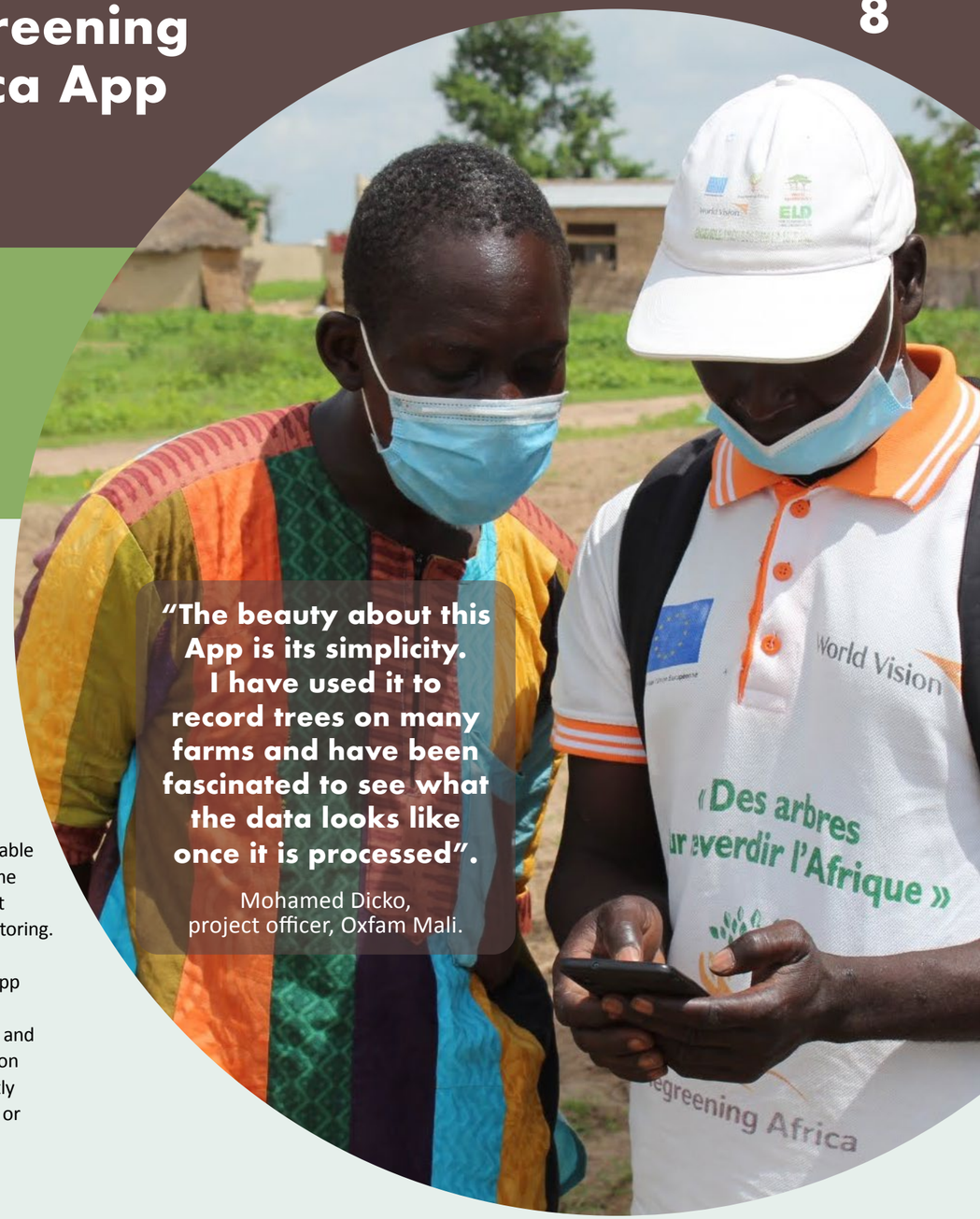


Photo: Joseph Bidiar/ World Vision Senegal.

What is unique about the Regreening Africa app?

The App is a data collection and monitoring tool. The information collected can be integrated into various types of analytics and combined with information on land health and other thematic data.

The App enables stakeholders including farmers to record and track their land restoration practices. The locations of their activities are geo-referenced and species diversity and growth are recorded in real-time.

Data collected through the App is freely and instantly available to the users and various outputs from the synthesis of the data, such as critical land health indicators, are then shared with the public through the Regreening Africa Dashboard.

The App is continually updated and the design and interface amended, based on farmers, extension agents and project implementing teams to add requested data and ensure the design and functionality match the user needs.

The Regreening App was developed in close consultation with stakeholders, with continual interaction between the World Agroforestry development team and users.

Project implementors are able to use the data for real-time decision support in project implementation and monitoring.

Data collected using the App is combined with spatial assessment of land health and can be applied in soil carbon monitoring, relating directly to climate neutrality goals or restoration targets.

Features of the Regreening Africa App

TREE PLANTING MODULE

- Record details of farmers and regreened plot
- Chatacterise species composition and assess tree planting practices
- Track tree growth
- Field boundary recorded
- Number of trees planted
- Date(s) planted
- Location of trees planted
- Survival of trees

FARMER MANAGED NATURAL REGENERATION (FMNR) MODULE

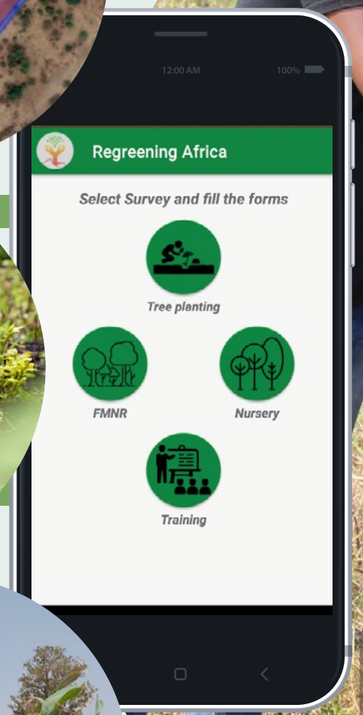
- Record details of farmers and regreened plots
- Characterise dominant species composition
- Assess FMNR practices

NURSERY MODULE

- Ensuring that farmers have access to quality planting materials and a wide range of species for tree planting
- Record nursery information and location
- Record nursery practices
- Record nursery production

TRAINING MODULE

- Record training details
- Record gender participation in training sessions



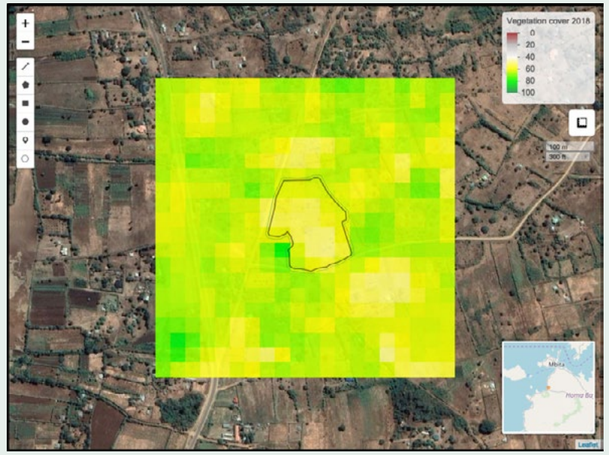
Assisted crowd sourcing, through data collection across multiple countries and contexts is giving critical insights into drivers of land degradation. This will allow for more effective restoration efforts to be designed and implemented on the ground.

Photo: Felix Mulindagabo/ World Vision Rwanda.

Regreening Africa

Image: Ahmed Mohammed, technical officer, taking field officers through the Regreening Africa App during the project's JRLM field visits in Somalia, 2020. **Photo:** CARE Somalia.

Geo-spatial mapping of real-time land restoration efforts using tools that capture landscape change. Given the sparsely populated and extensive geography, geo-spatial tools are of significant value to Somaliland SLM monitoring.



Surveys including baseline, endline, uptake etc. The use of IT/web-based tools to undertake surveys reduces human errors and administration time. Further, the surveys help to capture socio-economic aspects of land restoration and can be used for ground truthing in geo-spatial approaches. Standardised instruments used by various actors could help in feeding data to national level dashboards.

Dashboards at state-level growing into federal-level. These will help with reporting on the restoration achievements of various actors, given the increasing interest in SLM work in Somalia.

Joint monitoring and learning events. The state institutions are not very strong, this calls for joint action by various actors to facilitate learning, feedback and planning. This will also contextualise actions in localities that may differ with others and that may not be properly captured in national documents.

Valuable resources that can be consulted for further information:

- Regreening Africa baseline survey reports for Puntland and Somaliland
- ELD reports for Somalia
- UNCCD, 2016. Somalia National Action Program for the United Nations Convention to Combat Desertification
- World Bank, 2020. Somalia Country Environmental Analysis (diagnostic study on trends and threats for environmental and natural resources challenges)

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twitter.com/RegreenAfrica

facebook.com/RegreenAfrica

RegreeningAfrica@cgiar.org

M.Bourne@cgiar.org