



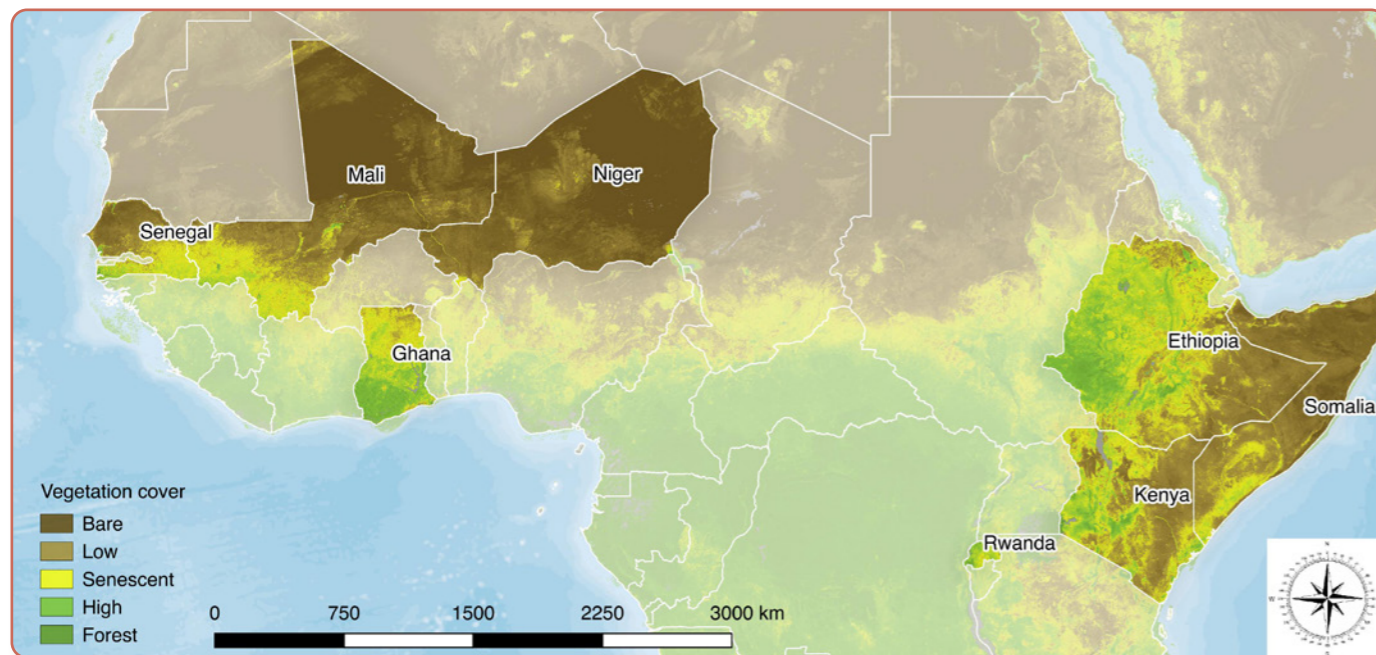
# REGREENING AFRICA

## SENEGAL Country Overview



# Regreening Africa Project Overview

Regreening Africa is a five year program which commenced in 2018 that seeks to reverse land degradation across eight countries in sub-Saharan Africa by integrating trees into agricultural systems while improving the livelihoods, food security, and climate change resilience of smallholder farmers. The program's vision is to spur regreening among 500,000 households and across one million hectares in Ethiopia, Ghana, Kenya, Mali, Niger, Rwanda, Senegal and Somalia.



**500,000** households, across **1 million hectares** in eight countries in Sub-Saharan Africa.

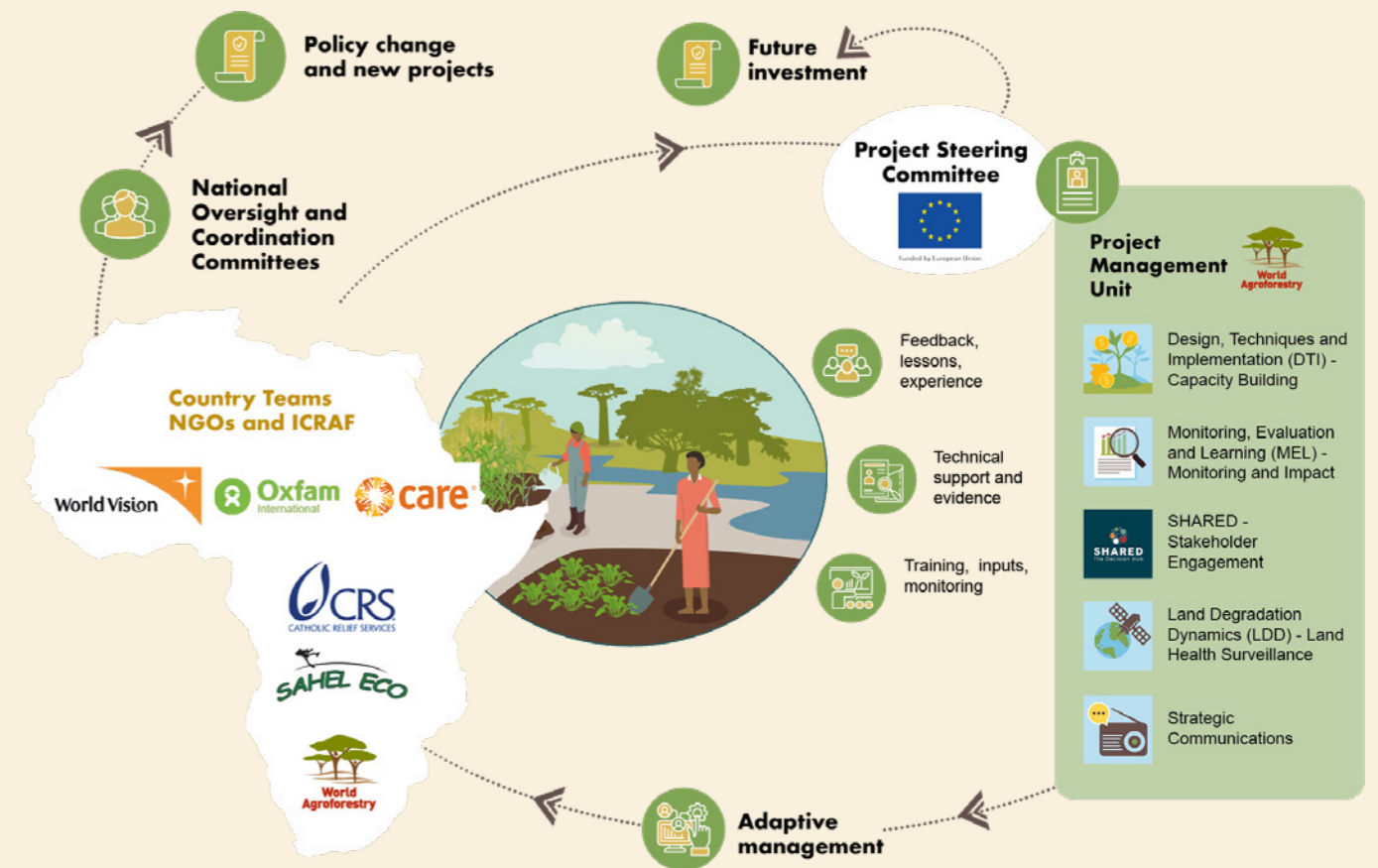


By incorporating trees into croplands, communal lands and pastoral areas, regreening efforts make it possible to restore Africa's degraded landscapes.

To achieve this over the past five years, Regreening Africa has been mobilizing and working with diverse partners to scale-up evergreen agriculture, using locally appropriate techniques including Farmer-Managed Natural Regeneration/ Assisted Natural Regeneration (FMNR/ANR), tree planting and other forms of agroforestry and complementary sustainable land management interventions.

The program's unique approach, and partnership ensure engagement processes and advisory capacity operate with a goal of sustaining the land restoration movement beyond the five-

year program. Thus, Regreening Africa engages in strategic decision-making for scaling, working across the eight countries to collect and apply evidence in multi-stakeholder engagement and policy processes. The program promotes proven land restoration techniques adapted to suit the needs of farmers under varying socio-ecological contexts. While adapting to diverse circumstances, the program prioritizes gender, youth empowerment, and food security as outcomes of implementation. The program operates as a consortium of research partners (ICRAF) and implementing NGOs (World Vision, CRS, Care, Sahel Eco, Oxfam).

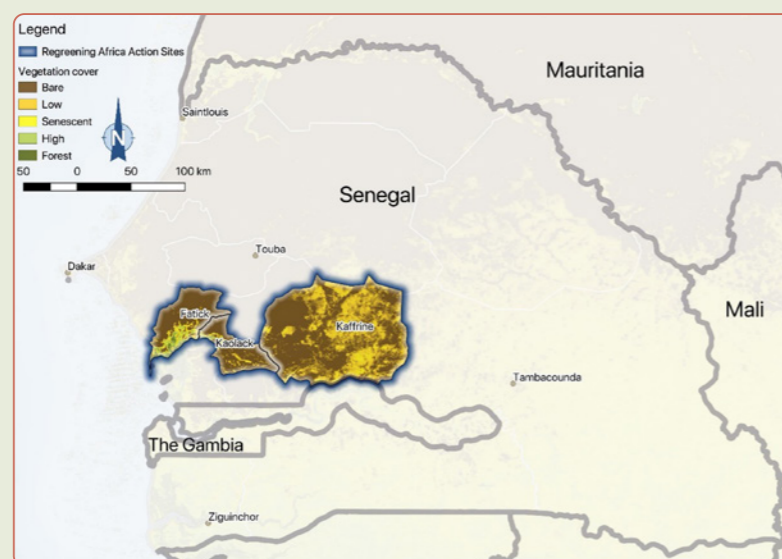




## Context for addressing land degradation in Senegal

Farmers in the peanut basin of Senegal, who have historically cleared most of the trees in their fields to grow peanuts and other crops in 'clean fields', are turning the tide of agricultural practices by engaging in land restoration interventions on farms and within the landscape of the Peanut Basin area of Senegal.

The country has experienced a worsening trend of land degradation since the 1970s, which according to a 2019 Economics of Land Degradation (ELD) report, had reached two thirds of Senegal's valuable arable land and around 34% of the country's total area by 2014. Degradation of soils presents a major loss of productivity, while restoring degraded soil to health presents a clear opportunity for both economic growth and food security in this fast-growing country.



Regreening Africa operates in the Kaffrine, Kaolack, and Fatick Regions with World Vision Senegal and ICRAF Sahel as primary partners and Institut Sénégalais de Recherches Agricoles (ISRA) among its local partners. Meanwhile, the National Oversight and Coordination Committee (NOCC) benefits from synergy with representatives of the Senegalese government (Ministry of the Environment, Ministry of Agriculture, National Institute of Education, and National Council of Consultation and Cooperation of Rural People). World Vision had previously supported FMNR/ANR restoration efforts in Kaffrine, providing experience and a model of best practices for the current project. Over the five years of the project, engagement has focused on increasing public awareness of

the country's new Forest Code that expands access to tree-based livelihoods, as well as partnering with national and regional governments to foster adoption of regreening practices at scale. Raising awareness of land degradation and regreening has taken place through the medium of radio, caravan, and market day messaging, as well as through advocacy by faith leaders and faith-based organizations. In the Senegal context, FMNR has seen the greatest rate of adoption and success, with other methods such as tree planting beginning to attract interest later on. Farmers have witnessed an increase in crop yields, fodder and soil organic matter and a reduction in erosion.



## How Regreening Africa promotes land restoration in Senegal

Implementation in Senegal operates on two levels. First, Regreening Africa works directly with local communities, expanding scale to remove the structural and behavioral barriers to regreening. We raise awareness of the drivers and impact of land degradation, building the capacity and engagement of agricultural extension officers and local communities. Work is directed towards strengthening tree-based value chains, especially with non-timber products. These aspects empower rural populations to improve living conditions while building resilience against climate change, especially expanding opportunities for women and rural youth, thus limiting migration to cities or abroad. Secondly, World

Vision, with guided support from ICRAF (especially via the SHARED component), supports policy, practice and investment decisions of civil society and rural institutions. A large gap addressed here is both the lack of funding towards agroforestry research and the lack of synergy between policy, advisory, and knowledge transfer. Development partners, the private sector, and local and national policy-makers are provided with technical support that informs their investment decisions and creates synergies with other land restoration initiatives to increase the speed and scale of adoption, supporting development of rural infrastructure and food systems.



## How Regreening Africa has engaged with rural populations in Senegal

As for field engagement, a cascading training model on FMNR/ANR techniques was used at the commune level. Project animators (i.e. coordinators), who were empowered through enhanced training on monitoring land restoration, identified and trained farmer leaders on FMNR/ANR techniques. In turn, these farmer leaders advocate for and disseminate knowledge on regreening practices within their respective communes. Gaps remain to be addressed among farmer

leaders, communities, nurserymen, and project facilitators with knowledge of ANR practices and land tenure laws. Efforts have further included organizing women's entrepreneurship around baobab products, where gaps in entrepreneurship skills remain to be addressed. Direct seeding has been piloted during this reporting period. Open grazing remains the main challenge to both ANR and tree planting interventions.



## Key interventions and practices in Senegal

**Agroforestry** – the deliberate and systematic integration of trees with crops, communal areas, and pasture, which is central to the sustainable management of land and maintenance of healthy landscapes. Benefits of agroforestry range from carbon sequestration and biodiversity to boosting the integrity, hydration, and nitrogen fixation of soils, while providing an additional source of food, fuel, and marketable tree products for farmers and pastoralists.

Practices of agroforestry can take many forms. Below are the agroforestry practices that collectively make up Senegal's project focus:

### FMNR/ANR (Farmer-Managed Natural Regeneration/Assisted Natural Regeneration)

Systematic regeneration and sustainable management of trees and shrubs beginning with stumps, roots, and seedlings of already established living trees. This is the most common practice in Senegal. FMNR takes place on agricultural lands, while ANR takes place on public lands. Drawing on indigenous techniques of the Sahel, FMNR improves soil health, reduces erosion, and increases the number of trees in fields. Additionally, FMNR species can be exploited for fuelwood, fodder, construction, or marketable fruits and medicinal products. To accomplish this:

- 1 Farmers select desired tree shoots and for each, choose a number of the tallest and straightest stems to leave.
- 2 Remove the unwanted stems and side branches. Manage any threats to remaining branches from livestock, fire and competing vegetation (weeds), use the leaves as mulch.
- 3 Cull emerging new stems and prune side branches from time to time.<sup>1</sup>



### Tree Planting

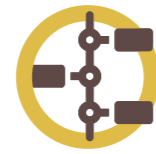
Traditional planting of seeds or young plants is the most popular activity at the village level in communal lands, with trees being placed primarily as boundaries or within croplands and gardens. As with other methods, these trees can be used for fruit and other non-timber product value chains.



### Nurseries

Controlled spaces for propagation of large quantities of trees and other plants – are more suitable for areas with less ideal soil conditions. These see a higher survival rate of plants compared to traditional tree planting. Seeds are mainly supplied through NGOs or from saving on-farm seeds.





## Timeline of Key Events

### YEAR 1 (2017-2018)



Project launch



Establishment of a National Oversight Coordination Committee (NOCC)



Baseline studies conducted



Strategic planning meeting held in Ethiopia with the country teams and the Project Management Unit (PMU) to harmonize approaches and reorient the country teams for effective implementation of activities in the second year

### YEAR 2 (2018-2019)



Country visit from World Vision Australia staff to strategise way forward, based on lessons from Ethiopia meetings



Information workshops carried out regional, departmental, and local levels - development committees in each sector were in attendance



45 project facilitators were recruited and received hands-on training on agroforestry and restoration practices and in turn supported farmer training and identification of lead farmer trainers



30 partners from technical services (INP, DEFCCS, ISRA, DA, SDDR) acquired new knowledge on species inventory and soil properties such as water infiltration and soil organic carbon qualities



Facilitated the development of the participatory community action plan on evergreen agriculture scaling



Validation of value chain scoping survey findings was completed through workshops involving project implementers, government departments and local actors



ICRAF also contributed to the mobilization of partners and capacity building of the project team through trainings on Land Degradation and Surveillance Framework (LDSF), value chains, planting techniques and stakeholder engagement through the SHARED (Stakeholder Approach to Risk-Informed and Evidence-based Decision-making) approach

### YEAR 3 (2019-2020)



Learning event held in Kenya organized by World Vision Australia in collaboration with ICRAF



New Senegal Forestry Code interpreted

- Community workshops held at project sites to communicate enhanced community user rights supported through the New Forest Code



Monitoring visits to farmers practicing FMNR



Evaluation of priority tree species in Kaffrine, Kaolack, and Fatick



Women groups supported with elaboration of business plans focused on Baobab, Shea butter, and Soumbala (Parkia)



Theoretical and practical knowledge of restoration practices presented to teachers and students



Local and National radio programs used to create awareness on sustainable restoration practices (30 shows by 12 radio stations in the Fatick, Kaolack and Kaffrine regions. Estimated reach is 15,000 listeners per show)

- Frequent refresher trainings and reflection meetings with radio hosts conducted
- Blog post written about radio communication activities



Tree planting day organized to raise awareness



Newsletter highlighting successes and lessons learnt published in French and English and outreach materials (e.g., t-shirts and signposts) printed



National Workshop - "Regreening in Senegal" - hosted by IED Afrique



Virtual JRLM (Joint Reflective Learning Mission) event



Mr. Ndiaye, Deputy Mayor, Segregatta commune, Kaffrine region, set aside a budget line specifically for enrichment of community forests as he was inspired by the witnessed results of other communes undertaking restoration activities



World Vision team schooled farmers and forestry agents on the Regreening Africa App

### YEAR 4 (2020-2021)



Cross Country Learning Conferences (Virtual) - "Gender Transformative Approach"; "Empowering and mainstreaming youth in landscape restoration"; "Developing and expanding agroforestry value chains as an incentive for land restoration"



Digital Event - "Restoring Africa's Dryland: Accelerating Action on the Ground" - Global Landscape Forum (GLF)



Regional Conference in Fatick - Sustainable Agriculture Projects - AGRISUD International



Virtual JRLM (Joint Reflective Learning Mission) event



Field Visits conducted



Uptake survey completed



Through the partnership with Fatick Forestry Service, 22 nurserymen benefited from tree production training



To support the lead farmers, 50 booklets with relevant information were provided



67 project beneficiaries from Kaolack and Fatick participated in exchange visits to five villages (8 sites) in Kaffrine



Capacities of enterprise groups grown through continual development/improvement of product business plans and value chain development activities focused on the fruit sector were supported



To help reduce tree cutting and ease the difficulties women face when collecting firewood, 1,600 improved stoves were made available to farmers adopting FMNR/ANR



Caravans used to present the project with a larger audience for the regreening messages and interventions

### YEAR 5 (2021-2022)



The women's group in Secco Keur Savely village gained administrative control and ownership of more than eight hectares of land after successfully negotiating with the village chief. This represent a breakthrough for women's land security, as well as a step toward greater social justice in land restoration efforts



Partnership building with faith leaders and faith-based organizations with regards to greater restoration advocacy



Year 5 Regreening Africa SHARED Senegal Engagement Event



## What have we achieved in Senegal through the project?



### Livelihoods - Creating more sustainable livelihoods

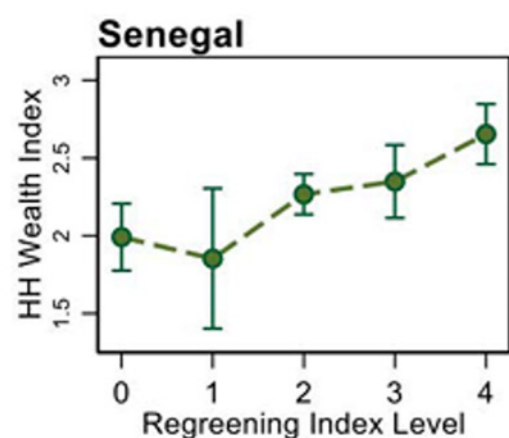


Figure 1: Graph showing that a higher wealth index is associated with undertaking agroforestry activities.

- By September 2020, 29,707 households were reached in Senegal with land restoration interventions and practices to implement within farms, communities and landscapes. Of these households, approximately 35% took up these practices.
- Households that undertook agroforestry activities experienced a higher wealth index, correlating with lower rates of food insecurity. Regreening Africa aims to increase average household income by 10%.
  - While a useful income generating activity, value chains for non-timber forestry products (NTFPs), such as baobab and mango, need to continue to be strengthened and the number of trees per hectare needs to increase for greater economic potential.

\*A load of donkey is equivalent to 140 kg of groundnuts or millet



## Landscapes - Strengthening resilience to changing climates

- By year 4 of the project (2020) 32,202 hectares were under new regreening practices.
- FMNR/ ANR was the main option identified for Kaffrine, Fatick and Kaolack, however, tree planting was particularly promoted in some parts of Kaolack where natural regeneration is not feasible due to high levels of degradation and salinity.
- Erosion in these regions is high, but regreening practices conserve and improve soil.
- There are now 22 nurseries in Kaffrine, where FMNR/ANR is difficult to practice due to its environmental conditions.
  - Seedlings from nurseries have higher survival rates compared to direct sowing.

### ANR conserves soil moisture and reduces the amount of fertilizer in the field"

Moustapha Touré, Animator

### 10 feet of Kad in a field can give you a production of 10 loads of a donkey\*"

Ibrahima Diallo, Farmer

Image: Adoption of regreening practices by a woman, head of the household in Touba Mbella.



## Capacity - Knowledge turns to action



“  
**Seeing once is better than hearing 100 times”**  
 Sector Head of Water and Forests Guinguineo (Captain Sall)

“  
**A well sensitized predator can become a good practitioner”**  
 Badara Ndao, Facilitator

- There has been significant use of the Regreening app in Senegal with 14,000 farmers registered, supporting strong flows of data and information.
- Advocacy for regreening support through partnership with government ministries, research institutions, and regional administrative bodies.

Image: A farmer is trained on how to use the Regreening app.



## Women and Youth - Change requires engaging everyone

- Sensitisation and workshops with mayors on better land governance to facilitate equitable access to land for all, especially women and young people, resulted in 2.71 ha of land being given to women in the commune of Thiare for tree and market gardening.
- NTFPs are especially important for increasing women’s participation in the market and a women’s collective focused on baobab powder was created in Kaffrine.
- In areas where there has been significant natural regeneration, women no longer travel long distances to collect firewood, reducing burdens of labor and time.
- School nurseries provide engage youth and teach them regreening practices they can take back to their households.

Image Top: A student of Ndiayenne school in Guinguineo presents the school nurseries.

Image Right Successful planting in a 5ha area managed by a group of 107 mostly young women.

“  
**Integrating environmental education into schools will help to train citizens who care about protecting nature”**  
 Prefect of Guinguineo





## Peacebuilding - Building trust and collaboration

- This project has reduced conflict between farmers and herdsman through local leadership meetings involving all relevant stakeholders.
- Sessions held to disseminate the new Forest Code to enhance community understanding and improve the relationship between the forestry officers and the community.
- Sessions on land tenure issues were conducted to mitigate conflicts arising from land issues.



## Partnerships - Engaging across sectors

- New partnerships in 2020-21 with Réseau des associations villageoises d'épargne (AVEC) de Ndiognick – Network of Village Savings Associations of Ndiognick – PRODER (Programme de Développement des Energies Renouvelables) — Program for Development of Renewable Energy. Meetings were held with these partners and especially with PRODER, which proposed a protocol to the project for combined actions around regreening and training of staff.
- In 2021, we participated in a national workshop organized by IED Afrique with a theme of Regreening in Senegal, permitting exchange between NGOs, universities, and the private sector. Also in the past year was a regional conference in Fatick organized by AGRISUD international on the theme of sustainable agriculture projects. Other partnerships provided space for mutual learning in technical services including ISRA-CNRF, the Ministries of Agriculture and Water and Forests, ASPRODEB, INP, NOCC, and ANCAR. Regreening Africa has maintained relationships with regional administrative bodies, with administrators from 9 communes having attended workshops we hosted.

Image Right: ©Ollivier Girard (CIFOR).



## Policy and Enabling Environment - Integrating decision makers at all levels

- The Senegalese Government's new Forest Code allows clearer tree tenure by issuing free permits to profit from tree products from trees on land that citizens have rights to. However, the reality of greater land access has not caught up to laws, as the permitting process still requires application and interaction with bureaucracy, to which producers describe reticence.
  - Some officials have been reported to elicit bribes for their services. Public messaging, as well as visits and workshops by program staff and animators, aim to disseminate knowledge of these laws.
- Decentralization of decision-making on agroforestry concerns to the local level comes with the benefit of tailored decisions but the consequence of uneven access to agroforestry livelihoods. Some communes do not support agroforestry. A coordinated agroforestry policy framework at the national level does not yet exist.



**Environmental management is a shared concern”**

Babacar Kebe, Sub-Prefect



Image: First Regreening Africa SHARED Senegal Engagement Event, Dakar, Senegal.





## Regreening Africa



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