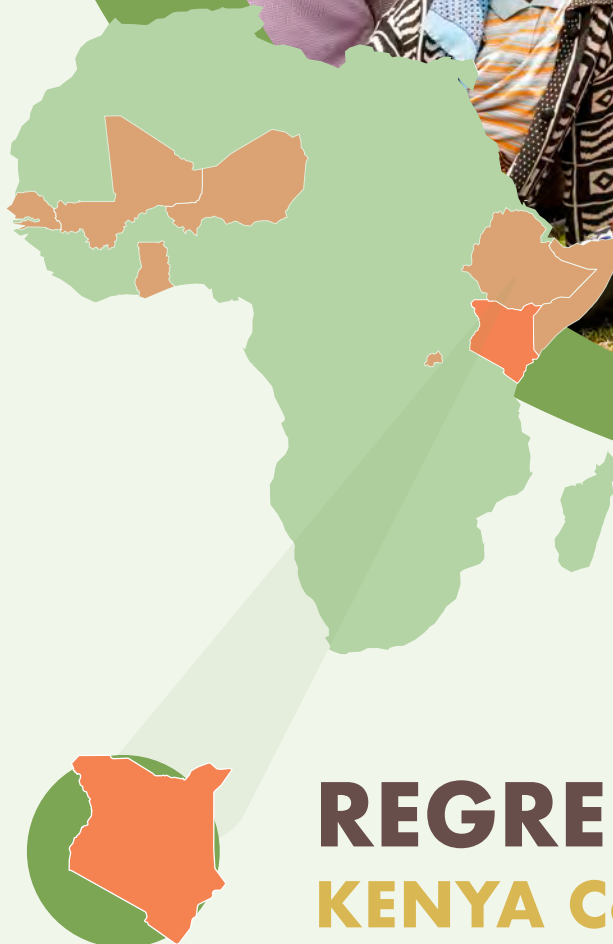




Image: Members of the Likia tree nursery in Nakuru County, Kenya. Photo Credit: Regreening Africa/Brian Gathu



# REGREENING AFRICA

## KENYA Country Overview



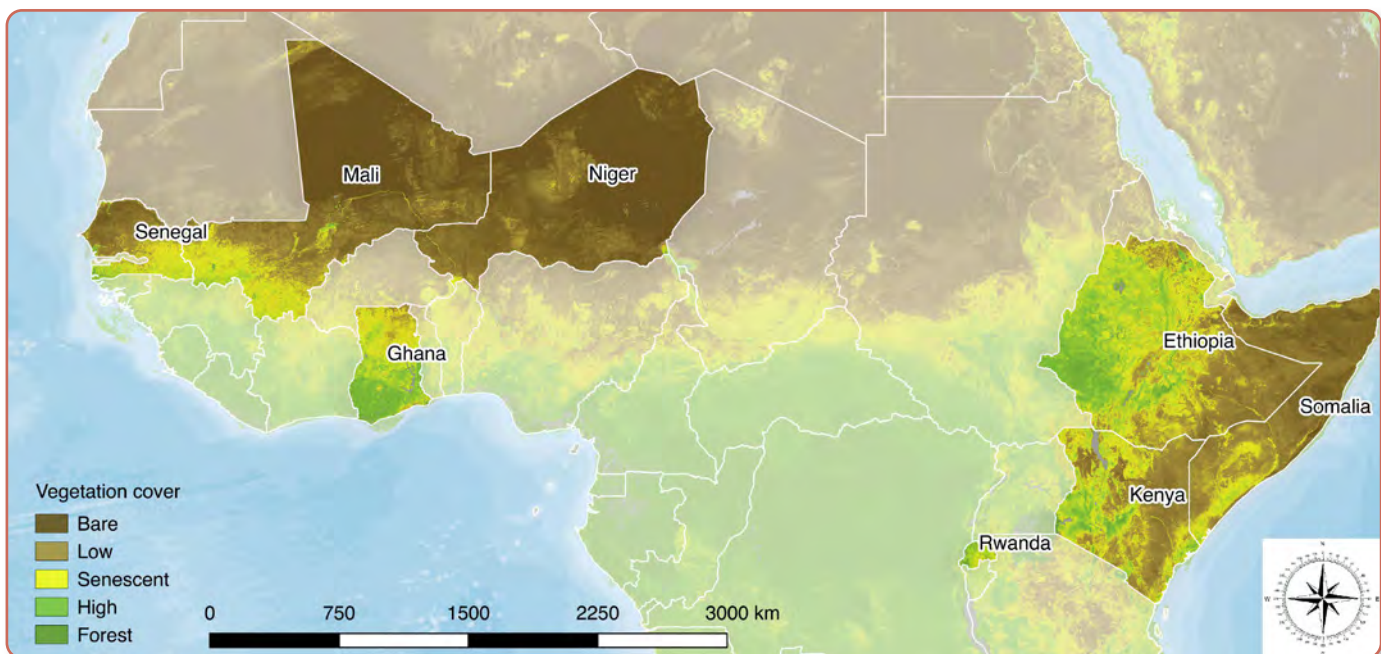
Funded by European Union





# Regreening Africa Program Overview

Regreening Africa is an ambitious five and a half-year program (2017-2023) that seeks to directly 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 across one million hectares in Ethiopia, Ghana, Kenya, Mali, Niger, Rwanda, Senegal, and Somalia, thereby catalyzing a much larger scaling effort to regreen tens of millions of hectares of degraded land across the continent.



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



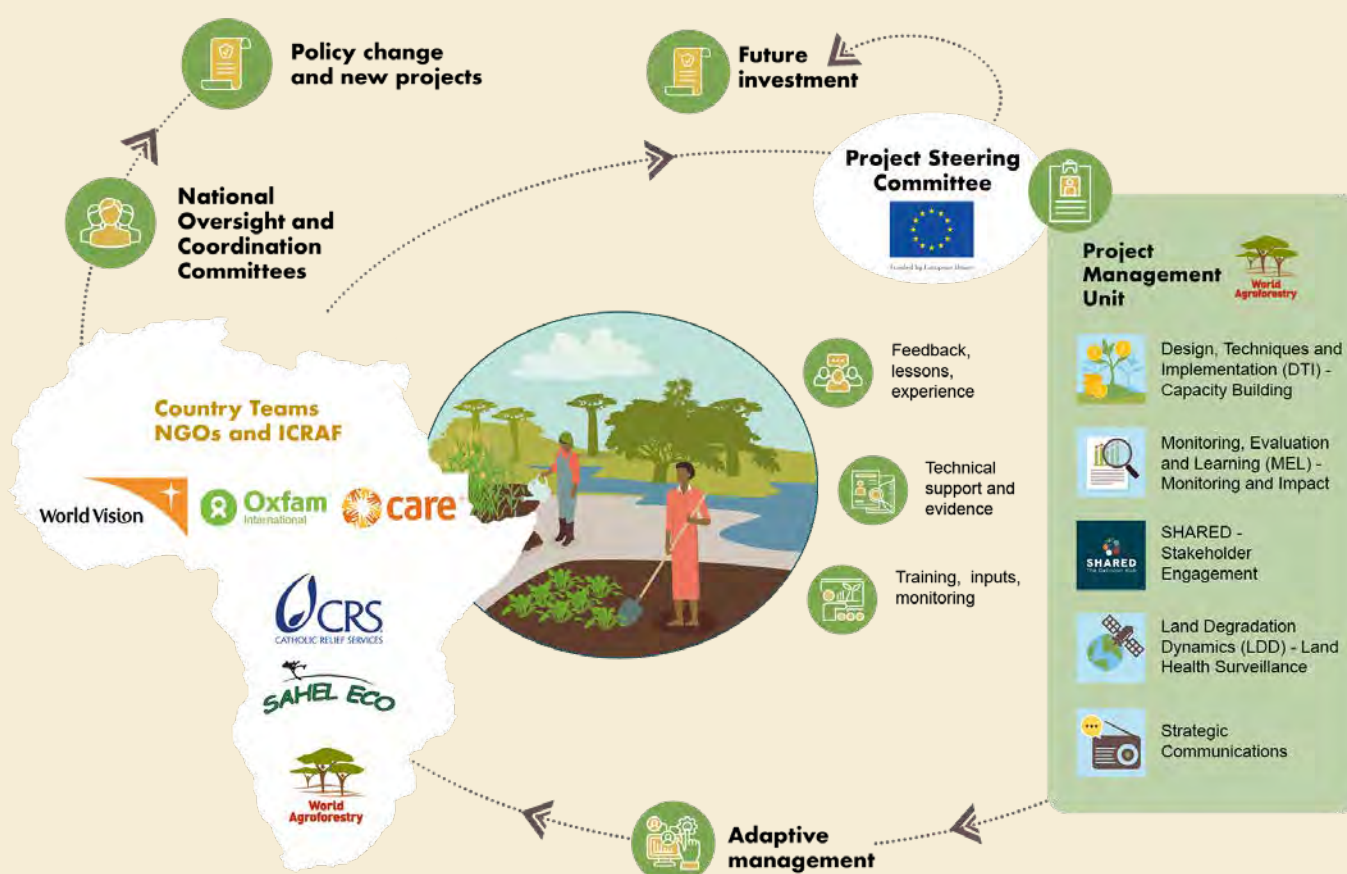
By incorporating trees into croplands, communal lands and pastoral areas, regreening efforts make it possible to restore Africa's degraded landscapes.

To achieve this, Regreening Africa has mobilized and worked with diverse partners to scale-up evergreen agriculture, using locally appropriate techniques such as Farmer-Managed Natural Regeneration (FMNR), Assisted Natural Regeneration (ANR), grafting, nursery establishment, tree planting, and other forms of agroforestry and sustainable land management interventions.

### Agroforestry has many benefits:

- It increases carbon storage, both above and belowground
- It increases soil's ability to absorb and retain water
- Trees slow strong winds and provide shade from heat, boosting crop and grass yields
- Tree roots improve the structure of the soil, preventing erosion
- Trees are efficient providers of multiple ecosystem services
- Trees that fix nitrogen in the soil provide fertilizer for crops
- Trees produce food, fuelwood, fiber, fodder, resins, timber and medicine which boosts incomes, food security and nutrition.

The program's unique engagement approach, partnership model, and advisory capacity operate with a goal of sustaining the land restoration movement within local and country-level influence 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 and pastoralists 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) with local governments and communities. Through the use of monitoring tools like the Regreening Africa App developed by ICRAF, citizen scientists are empowered to take charge of monitoring the initiative's progress and giving stakeholders a more holistic picture of local realities.





## Context for addressing land degradation in Kenya

### Land degradation is a pressing issue. Land restoration is a crucial investment.

Desertification affects around 45% of the African continent. The unpredictable rainfall and frequent droughts of Northern Kenya's arid and semi-arid lands are being exacerbated by climate change. This disproportionately impacts the rural poor who heavily depend on natural resources. More than 12 million Kenyans live in areas that are affected by land degradation.<sup>1</sup> Land degradation across Kenya poses threats to rural livelihoods, water supplies, and wildlife habitat.

**From 2001 to 2021, Kenya lost 368,000 ha of tree cover, equivalent to a 11% decrease in tree cover since 2000.**<sup>2</sup> Deforestation comes at a significant economic cost: the United Nations Environment Programme reported that in 2010 **deforestation deprived Kenya's economy of 5.8 billion shillings (US \$ 68 million).**<sup>3</sup>

The work of Regreening Africa addresses these negative trends.

”

**Money is not only in gold but also in trees. People should therefore invest in agroforestry for better livelihoods, food security and land restoration.”**

Joseph Tinkoi, World Vision  
Regional Manager



*Image: A tree nursery operator in Elgeyo Marakwet, Kenya.  
Photo credit: Regreening Africa*

<sup>1</sup> Economics of Land Degradation, <https://www.eld-initiative.org/en/country-work/africa/kenya/>

<sup>2</sup> Global Forest Watch, <https://www.globalforestwatch.org/>

<sup>3</sup> UNEP, Deforestation Costing Kenyan Economy Millions of Dollars Each Year and Increasing Water Shortage Risk (2012).



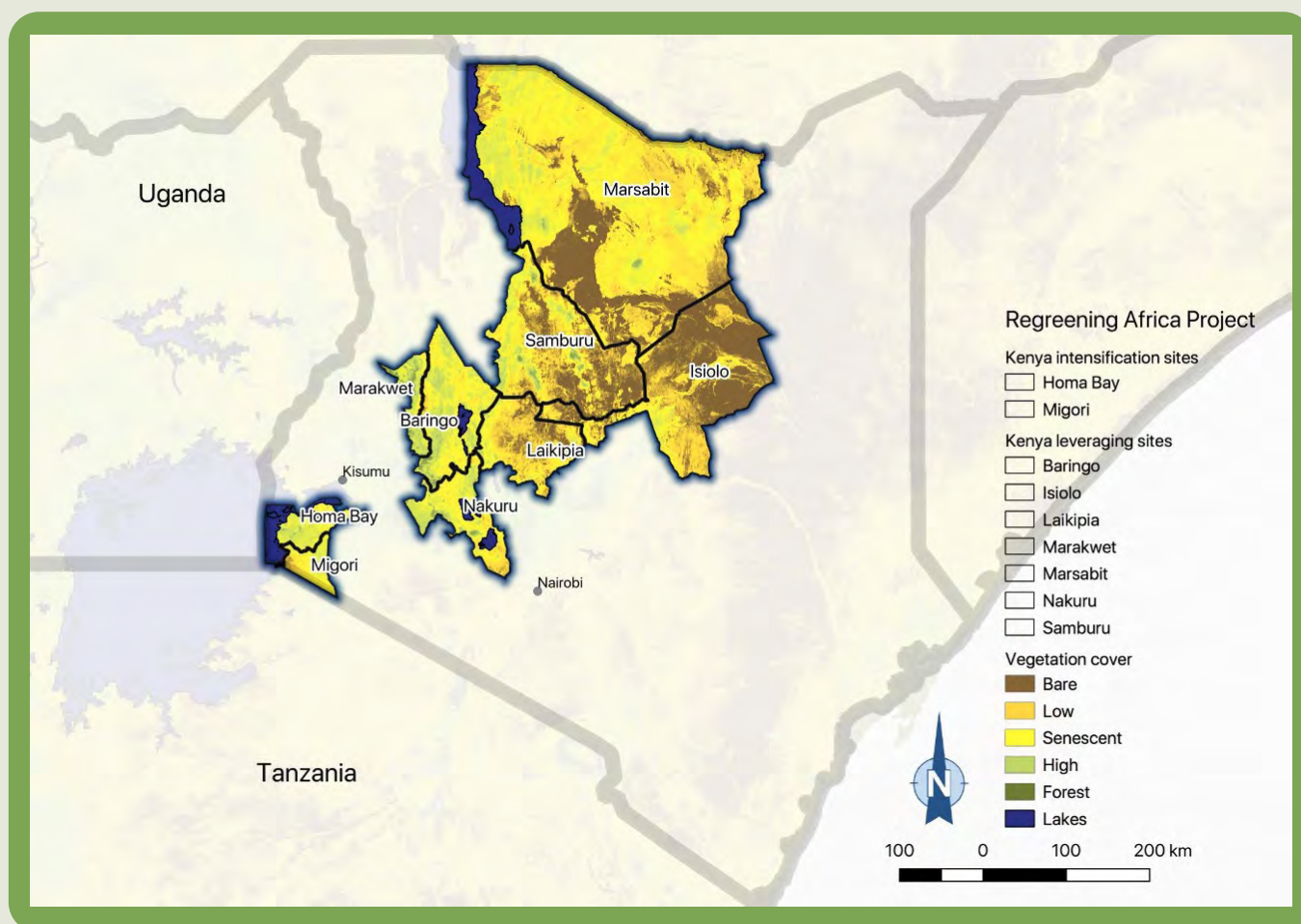


## Kenya Operational Overview

By bringing together a diverse range of stakeholders, Regreening Africa is catalyzing land restoration across Kenya.

Regreening Africa operates within the following sites in Kenya	The primary partners in Kenya
<ul style="list-style-type: none"> <li>• <b>Western Region:</b> Migori and Homa Bay counties</li> <li>• <b>Central Rift Region:</b> Nakuru, Elgeyo Marakwet and Baringo counties</li> <li>• <b>Northern Region:</b> Isiolo, Laikipia, Marsabit and Samburu Counties</li> </ul>	<ul style="list-style-type: none"> <li>• ICRAF</li> <li>• World Vision Kenya</li> <li>• National and Local Government Agencies</li> <li>• Faith-Based Organizations</li> <li>• Community-Based Organizations and Local Communities</li> <li>• Technical working groups</li> </ul>

### Project Invention Map





## Kenya's Primary Regreening Strategies

**Agroforestry** – the deliberate and systematic integration of trees with crops, communal areas, and pasture (where appropriate), which is central to the sustainable management of land and maintenance of healthy landscapes. In addition to a multitude of environmental benefits, such as limiting erosion and increasing carbon storage, soil health, and water retention, agroforestry also provides an additional source of food, fuel, and marketable tree products for farmers and pastoralists.

**Agroforestry can take many forms. Below are the agroforestry practices that collectively make up the focus of Regreening Africa in Kenya:**

### FMNR (Farmer-Managed Natural Regeneration)

Systematic regeneration and sustainable management of trees and shrubs beginning with tree stumps, roots, and seeds in the soil. FMNR takes place on agricultural lands, commonly smallholder plots. FMNR draws on indigenous techniques of the Sahel and can increase the number and diversity of trees in fields, largely indigenous or local species. Trees cultivated through FMNR have better survival rates as they use pre-existing root structures, and thus face less water stress.

#### To accomplish this:

- 1 Farmers select desired tree shoots and for each, choose a number of the tallest and straightest stems to keep.
- 2 Remove the unwanted stems and side branches. Manage any threats to remaining branches, such as those from livestock and fire. Use the cut branches as fuelwood and the leaves as mulch or fodder.
- 3 Support emerging saplings with appropriate materials such as sticks, stones, etc. to quicken its growth and attain a straight stem.
- 4 Cull emerging new stems and prune side branches from time to time.<sup>4</sup>

Protected trees are most commonly used for construction and firewood.

### ANR (Assisted Natural Regeneration) and Community Forests

ANR and FMNR share the same practices, however, ANR takes place on communal lands where priority is given to protect mother trees and wildlings.



<sup>4</sup> Rinaudo, T., Muller, A., & Morris, M. (2019). *Farmer Managed Natural Regeneration (FMNR) Manual*. 204. <https://fmrhub.com.au/fmnr-manual/>.

## Nurseries

Controlled spaces where young tree seedlings or other plants are propagated in large quantities for eventual transplant into fields or for sale in markets. They are most suitable for areas with less ideal soil conditions and commonly see a higher survival rate of plants compared to traditional tree planting. Seeds are mainly supplied through local dealers or from saving on farm seeds.

## Tree planting

The process of transplanting tree seedlings. Planting high value tree-crops, such as mango and avocado, has been promoted and value chains for tree crops have been strengthened. In Kenya, trees have most commonly been planted in gardens, external boundaries, and woodlots.



## Grafting

Grafting is a horticultural technique where the tissues of two plants are joined to continue their growth together. The upper part of the combined plant is called the scion while the lower part is called the rootstock. Trees grafted from healthy rootstock will grow faster, develop quicker, and are more resilient to environmental pressures such as droughts. Used largely for fruit trees, they offer the opportunity to improve the quality of the fruits, shorten the fruiting period of trees, and accelerate the returns on investments for slow growing indigenous species.

**In 2020, I decided to start the avocado nursery where I source scions from Habex and get a skilled person to help with grafting."**

Pamela Kimeto



## Key Achievements: Creating more sustainable environments and livelihoods



### Livelihoods - Creating more sustainable livelihoods



Reported reach as 84,238 hectares



33,422 households

This data has not yet been verified by the endline analysis.



We have trees on our farms that are appropriate for bee farming, and now with the skills that we have acquired, accessing modern beehives would help us better our yield."

Joyce Achieng



Image: Farmers participate in beekeeping value chains to sustain and expand farm tree diversity. Photo credit: Regreening Africa/Kelvin Trautman



## Additional Top Impacts



Support from Regreening Africa was critical to the formation of the **National Forest Landscape Restoration Implementation and Action Plan (FOLARAP)** and the National Agroforestry Strategy.



**Youth and women were engaged and supported** through collaboration with schools and the establishment of environmental clubs and savings groups.



**Partnerships with faith communities and institutions** has resulted in successful promotion of land restoration.



**The promotion of community forest associations (CFAs) and lead farmer models** has catalyzed bottom-up regreening uptake.



**The establishment of Rural Resource Centers (RRCs)** has been crucial in scaling up restoration activities.



**Value chains, tree nurseries and mother blocks** were supported, supplying farmers with high quality products and additional livelihood opportunities.

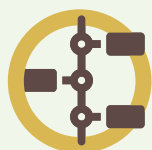


”

**Choosing to include avocado trees in my farm is like light shining every day on me.”**

Rose Kiptoo

*Image: Rose Kiptoo, harvesting avocados at her farm in Eldama Ravine, Baringo County. Photo credit: Regreening Africa/Brian Gathu*



## Timeline of Major Impacts and Events

See Regreening Africa's major impacts and events over the years - the multi-faceted work done through this program falls into the following categories:

### Impact Areas



#### Livelihoods

Creating more sustainable livelihoods



#### Landscapes

Strengthening resilience to changing climates



#### Capacity

Growing and mobilizing skills and expertise



#### Outreach and Advocacy

Knowledge turns to action



#### Policy and Enabling Environment

Integrating decision makers at all levels



#### Women and Youth

Change requires engaging everyone



#### Partnership Building

Engaging across sectors



#### Program Governance

Increasing the efficiency of operations



#### Evidence Learning and Adaptation

Evidence informing practice

## YEAR 1

**(2017-2018)** Project launch - Year 1 was characterized by planning events, assessments, and the identification of relevant project sites and actors



**Additional grants secured for scaling out** regreening efforts.



**Value chain activities & regreening options identified.**



**The EU launched the agricultural finance initiative (AGRIFI)** in Kenya to support investment in smallholder value chains.



**Project engagement activities with farmers** were carried out in the Migori and Homabay Counties of Kenya. These activities identified fertilizer trees, fodder tree growing, improved fruit farming (such as grafted mango, avocado, oranges and guava) and tree diversification as critical options to incentivize scaling of FMNR techniques.



**The identification and formation of village regreening committees has been initiated.** Each lead farmer

serves as a resource person that builds the capacities of fellow farmers and supports.



The **survey instrument**, which includes the indicators for a 'Regreening Index,' was piloted by two ICRAF social scientists in Kenya and refined.



**SHARED workshop** held.



**496 lead farmers were identified** and trained on regreening practices.

## YEAR 2

**(2018-2019)**



**Value chain validation workshops were conducted.**



**Discussions were initiated** with a private firm, Kenya Papaya Planters Limited, to link farmers in Homa Bay to pawpaw contract farming.



**Regreening options identification work was completed** for direct implementation sites in Migori and Homabay Counties. These cover

FMNR, fruit tree farming, enrichment planting, rehabilitation of degraded lands (especially gold mines, hill tops and river basins), development of tree-based value chains, reseedling of pasture grasses, conservancy approach and invasive species management. With the support of lead farmers and partners, model sites have been established and several of the options applied.





**World Vision Kenya identified nine local Civil Society Organizations** in Migori (5) and Homabay (4) to support regreening efforts. They were supported to overcome organizational challenges.



**Five Government extension agents** (Departments of Agriculture, Environment and Livestock; Kenya Forest Service) benefited from knowledge provided on FMNR, regreening approaches and gender mainstreaming.



**Following notable progress in the establishment of tree nursery infrastructure**, nursery manuals were created and preparation began to create refined versions to support training modules. Training on nursery management and grafting techniques has been completed.



**923 lead farmers were identified** and trained on regreening practices. Each is expected to have reached another 10 farmers from within their villages.



**Evaluation of priority value chains** for implementation began. Further value chain activities were initiated and business and enterprise development strategies were initiated with implementers.



**A survey instrument and protocol were developed** to measure the uptake of the regreening activities promoted by Regreening Africa and were adapted for Kenya.



**A stakeholder validation workshop held** in February 2019 was used as an opportunity to create awareness among farmers on the need to integrate trees with crops. The implementing partner set up demonstration plots following recommendations from the baseline findings.



**Communication activities** were identified and activities such as advocacy radio programs were initiated.

## YEAR 3 • (2019-2020)



**A meeting, which brought together project officers from the eight countries, was held in January 2020 in Kenya**, before the COVID-19 pandemic. Country team representatives had intensive sessions with each of the ICRAF components and had the opportunity to interact with other country teams and share insights on approaches, successes, and challenges.



**Efforts by Nyatike-Mirema CFA mobilized** the public, government and private stakeholders for restoration of water towers in Migori (including Nyatike-Mirema Hills, Agongo Hills and Otacho Hills, among others). These efforts also attracted British American Tobacco (BAT) Company Limited to support in the provision of seedlings for restoration of Nyatike-Mirema Hills.



**Community forest associations (CFAs)**, environmental conservation groups, church groups and school environment clubs began to be used as multiple strategies to scale options.



**Groups organized into loans and saving groups were linked to the County Department of Agriculture and Food Authority (AFA)** to benefit from capacity building, quality control, and certification of produce for the external market.



**3,087 lead farmers and participating groups were facilitated on extension approaches and scaling models on regreening practices.** 109 tree nursery operators were trained on site at the community level in Migori and Homa Bay Counties, following a high demand on tree seedlings to support land restoration.



**Uptake survey tool was developed and uptake survey was conducted.**



**Data analysis was completed for Kenya and a report was produced.** The results of this analysis/report were discussed with the partners through virtual meetings. Surveys provided useful insights and lessons that have informed the fine-tuning of the interventions in Year 4.



**Intra-household equity dimension** was identified as an area requiring attention and planning measures to improve involvement of women and joint-decision began.



**Asset-based community driven (ABCD)** development was identified and prioritized for implementation in Kenya. This approach is hypothesized to change farmers' perceptions about the assets they own and enhance their level of investment in restoration practices.



**Technical support was provided to the development of the Kenya Agroforestry Strategy.** Lessons and relevant tools from the Regreening Africa project were included.



**A newsletter was published highlighting successes and lessons learnt** and three blogs were written on outstanding farmers.



**Tree planting days were organized** to create awareness, as well as road shows in Migori and Homa Bay counties.



**Community videos by nine farmers were created** to document project activities and motivate behavior change.



**Youth soccer tournaments** were used as an environment for restoration and sustainability advocacy.



**Women were involved in program activities** through village saving groups and training. Additionally, seedlings were supplied to differently abled farmers.



**Farmer field days and exchange visits were initiated to share best practices.**



**Regreening messages were spread** via twenty-five talk shows on three radio stations with coverage across 19 counties and seven complementary TV shows on MBCI TV (estimated reach on both MBCI Radio and TV is 300,000 listeners per show).



**Partnership forged with a youth group in Nakuru to advance land restoration in the county.**



**The establishment of the Participatory Forest Management Plan (PFMP)** was initiated.



**Agroforestry model sites** were established for four groups and supplied with 300 Moringa and 900 mango seedlings.



**Renewable Energy Technical Working Group** was formed in Homa Bay for deliberations on a draft renewable energy policy for the county.



**50,000 seedlings of diverse tree species** planted to reclaim Mirema Hills in Migori County, courtesy of collaboration with BAT and KFS.

**Inter-county learning visits** on tree nursery operations, grafting, FMNR and fruit tree farming were initiated by WVK and KFS.



**KFS allocated 1.2 ha of land to support the establishment of tree nurseries** using seedlings provided by the project.



**Partnerships were made with county governments** in Homa Bay and Migori counties, KFS, Pathfinder International (Homa Bay), and FSK to enhance value chains on mango, avocado, pawpaw and honey production, market linkages and quality control.



**A ten year avocado contract** for Habex Agro Limited was drawn up to secure farmers' livelihoods while ensuring sustainable restoration.



In Homa Bay, **honey farmer groups were linked to Parecma Company Limited.**



**Two lead farmers have been trained by KEFRI on guava production** and supported in setting-up nurseries.



## YEAR 4 • (2020-2021)



To **address market challenges** associated with produce access and volume acquisitions, transport and contracts with private enterprises have been supported and focused on improving producer aggregation.



**Tree nursery and RRC establishment**, provision of diverse tree germplasm, improvements to tree planting and management, and FMNR practices were accelerated across project sites.



**18 sensitisation meetings were conducted.** 11 took place in Migori, in collaboration with the GIZ FMNR Scale-Up Project.



**A formalized framework on engaging partners was developed and implemented.**



**Linkages with 7 county governments and KFS and KFRI** were used to accelerate tree planting activities and tree-based restoration planning and budgeting.



**Enterprises were further supported through participation** in trade fairs, exposure visits and contractual engagements with the private sector, such as Habex Agro Ltd.



**The Migori County Climate Change Policy and Migori County Climate Change Action Plan were supported by the project.**



**The Agroforestry Strategy draft was finalized in December 2020** with technical support from the project.



**Kenya's National Restoration Scaling Conference took place in July 2021** to support Kenya's attainment of its restoration

ambitions and to bring together diverse stakeholders. Over 600 people participated and reflected upon and celebrated the many achievements in the restoration space and identified how they could be amplified. Through this interaction, synergies between initiatives were enhanced and areas for coordinated implementation and monitoring discussed. Mechanisms that will better harness the collective strengths of government with NGOs were identified.



**Kenya restoration conference** took place to support Kenya's attainment of its restoration ambitions and to bring together diverse stakeholders. Over 600 people participated and reflected upon and celebrated the many achievements in the restoration space and identified how they could be amplified. Through this interaction, synergies between initiatives were enhanced and areas for coordinated implementation and monitoring discussed. Mechanisms that will better harness the collective strengths of government with NGOs were identified.



**Documentaries on lead farmers** were produced by various media houses including the British Broadcasting Corporation (BBC), Kenya Broadcasting Corporation, the Standard Media, and Radio Ramogi FM.



**To promote scaling of regreening approaches and practices**, the project has adopted several scaling models, including lead farmers, exchange visits, school environment clubs, CFAs, farmer/producer groups, and farmer-based organizations.





Sensitisation **meetings were conducted to gather evidence of success** from the farming communities and partners and create opportunities for sharing with stakeholders for scaling of regreening practices across the project sites.



**30 regreening learning sites were established** to expose farmers to experiential learning. The learning sites were established in partnership with KFS, KEFRI, county government departments of Agriculture and Environment, FSK, Habex Agro Ltd., and local communities.



**The program strengthened the capacities of county governments and local community structures** for sustainability and greater impact.



**Gender mainstreaming** was integrated into all training to empower men to support women's empowerment and equity. Additionally, community sensitisation and engagement with community leaders and gender champions were conducted to inspire more women and youth involvement and participation in landscape restoration efforts and in decision making.



**44 youth groups received relevant training** to reach out to eight new community tree nursery groups for scaling FMNR. Overall, the program observed an increased involvement of women and youth in undertaking landscape restoration activities.



**26 village farmer groups were established** to facilitate village-based experiential learning by farmers from the local communities.



The finalization of the Migori County Climate Change Action Plan and Climate Change Policy was supported by the program.



A workshop with 34 members from the Nyatike-Mirema Hills Participatory Forest Management Planning Committee for action planning was conducted. This led to the development of an action plan by the Nyatike-Mirema CFA.



**Additional community videos were developed** to showcase project progress.

## YEAR 5 • (2021-2022)



**6 fruit tree mother blocks consisting of 540 seedlings of 8 fruit varieties from 5 species were established.**



**20 nurseries from Migori were provided with 2000 true to type mango scions from four varieties.**



**ICRAF provided seeds (325kgs) of 26 tree species to communities.**



During the reporting period, the **project supported farmers with business skills on nursery entrepreneurship**, honey value chain development, fruit tree value chains comprising avocado, Mango, and Pawpaw to generate income from the surplus produce.





**Farmers received training on grafting** to allow for fast producing, high yielding varieties of mangoes. Additionally, farmers were also supported with high quality diverse germplasm to promote quality products for better markets.



**International Day of Forest, 2022** resulted in the planting of over 1,000 seedlings. Additionally, 200 assorted fruit trees were planted and 300 indigenous trees from LAKECA CBO were donated to God Jope primary school.



**8 FMNR model sites were identified and set as Farmer Field learning sites** in Bakobo Women group site (2), Finhora (2), Alhamdu (2) and Bilitu (2) sites In Isiolo.



**Stakeholders engagement meetings** were conducted to support formation of communities of practices and strategic alliances for regreening scaling at county and national level through formation of strategic alliances.



**15 lead farmers of Marsabit were facilitated to visit** Lambwe Ruma Kaksingri East ward and Kaksingri West ward for capacity building.



**Program facilitated a Training of Trainers (TOT) training** for 30 nursery operators and farmers from Homabay and Migori on best practices for tree nursery management, seed sourcing, hands-on demonstration training on vegetative propagation techniques such as grafting, budding, and marcotting, and nursery entrepreneurship.



**2 reflection and learning forums** with partners on regreening approaches were conducted and evaluation reports were shared in each of the program sites. Additionally, 4 monitoring visits were conducted in Nakuru, Baringo and Migori counties conducted by technical partners led by a team from ICRAF.



**5 community field days and exhibitions** on regreenings approaches were conducted.



**A meeting was held for Elgeyo Marakwet county NRM forum** to assess progress in land restoration and strengthen the network in supporting Regreening approaches in the county.



**3 forums were conducted** to support regreening networks at the county and national levels.



**8 S4T groups from Nyatike sub county strengthened on savings and loans and 30 catholic women association (CWA) women were trained on s4t at the Homabay Cathedral diocese.**



**Water tanks to support tree seedling production were distributed** to Homabay and Marsabit support groups as part of the project rewards system. Additionally, 2 female avocado fruit tree growing farmers in Baringo county, Rose and Pamella were rewarded with 100 grafted avocado seedlings and 20,000 polytubes, respectively.



**15 value chain actors** dealing with high value fruit trees were identified and received sustainable production training. Additionally, 30 farmers in Marsabit received training on honey value chains and beekeeping.



**Sustainability planning workshops were conducted** for two days each with 90 (28F;62M) farmer representatives of 30 FMNR groups.



**The program established global and country-level communication campaigns.** Informational materials on indigenous species and regreening approaches were produced by FMNR lead farmers, KFS, KEFRI and Regreening project facilitators.



**Over 40 tree nurseries and sections of the SAKU forest were mapped using the Regreening app.**



## Highlighted Successes

### Community Videos

- farmers telling their own stories



The program trained community members to film short videos to document restoration practices, project activities, and motivate behavior change. Trainees were provided with a smartphone and tripod to produce these videos. Community videos were first piloted in Kenya in 2018. These videos provide an opportunity for farmers to share their experiences and knowledge.



**A successful restoration movement has to be rooted in local communities.”**

Ms. Wanjira Mathai, Vice President and Regional Director for Africa World Resources Institute

### Promotion of Asset-Based Community-Driven Development (ABCD)

The ABCD approach encourages communities and individuals to identify their current assets and to assess how their current assets can best be used to improve their lives and livelihoods.

**The ABCD approach is based on three principles:** ‘everyone has gifts’; ‘relationships build a community’; and ‘start with what you have’. Regreening Africa has worked with 30 community groups in Homa Bay County to co-develop asset and strength based individual and community action plans. “ABCD is an approach, a process, that really focuses on the assets that the people within a community have,” said Lang’at Kipkorir, an ABCD staff member.



*Image top: Regreening Africa | World Vision Ghana/Nathaniel Abadji*

*Image bottom: Women potting seedling at Pamela Kimeto’s nursery farm in Eldama Ravine, Baringo County, Kenya. Photo Credit: Regreening Africa/Brian Gathu*





## Lessons Learned

### Best practices and bottlenecks for scaling up regreening practices

#### What worked well?

- ✓ **Creating mindset change** - shifting the attitudes of all stakeholders by improving their understanding of the benefits received from investing time and effort in landscape restoration.
- ✓ **Building technical capacity** - technical capacity has been built among government experts, development agents and program beneficiaries through continuous awareness creation, training, experience-sharing visits, and peer-to-peer learning opportunities.
- ✓ Technical capacity is imperative for the successful restoration of agricultural land, forested areas, grazing land and watersheds.
- ✓ **Rural Resource Centers (RRCs)** - these have been an efficient and cost effective way to reach large audiences.
- ✓ **Bottom-up regreening uptake** - this been catalyzed through community forest associations (CFAs), school environment clubs, lead farmer models in FMNR, fruit tree farming and tree nursery operations.
- ✓ **Use of community videos**, vernacular radio and TV stations to reach a wide audience of local communities and raise awareness on the urgency of restoring degraded lands.
- ✓ Use of the **Regreening Africa app** is key in monitoring regreening activities.



**We have also been involved in providing platforms for partnerships, knowledge development and peer learning for sustainable landscape restoration."**

Lilian Dodzo, National Director of World Vision

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

- Inter-generational involvement in FMNR and encouraging women groups to use savings for investment in land restoration are effective ways to increase gender and youth involvement in the regreening movement.

*Image: A farmer using the Regreening Africa app. Photo credit: Regreening Africa/Kelvin Trautman*



### What are the key challenges hindering the adoption of regreening activities?

- Land tenure rights in Kenya disincentivize youth from utilizing land. Land title holders are usually adult men and the subdivision of land is a lengthy process.
- The delayed benefits from investing in enterprises such as growing trees that take time to yield income additionally disincentivize youth participation, as youth tend to look for quick money making activities.
- There is gender discrimination in decision-making regarding land use and resource utilisation - as land ownership is still largely vested in men in many communities, women are not able to make decisions on tree planting, hindering their ability to participate in agroforestry value chains.
- Lack of basic processing technology hinders value addition at the community level. This prevents farmers from making value-chain gains. The prices of many commodities are therefore not rewarding, and any losses incurred during peak seasons further disincentive investment.
- Agroforestry (which encompasses both tree planting and FMNR) lacks a firm anchor ministry.
- Free grazing of animals reverse gains by destroying seedlings that have been established on parcels for restoration.
- Sub-division of ancestral land for inheritance by children results in parcel sizes that are not economically viable.
- Weak investment in ASAL value chains.
- Tree seed and supply systems are not well established for quality germplasm.
- Absent, large landowners in the ASALs who do not invest in SLM.





### What are the most promising value chains and investment opportunities that could incentivise regreening activities?



**Fruit trees** (avocado and mango) - the avocado market is mainly international and the mango market is mainly local (both as ripe fruits and juice). The number of processing facilities are increasing.



**Honey** - local market.



**Gums and resins** - international and local markets.



**Firewood** - local market.

### What are the most promising sustainable land management investment opportunities for Kenya?



**Invasive species management** - holistic management approaches are required to address the detrimental impacts of invasive species. *Prosopis juliflora* in particular, has ravaged grazing lands, rendering them economically barren and exposing communities to vulnerability.



**Water harvesting both on and off-farm** - building the capacity of farmers in low-cost small-scale irrigation remains a great necessity for climate-smart production, both in dry and sub-humid areas.



**Soil fertility management** - Poor soil fertility exacerbated by soil acidity remains a key constraint to achieving Kenya's potential for key cereal yields. Various agroforestry practices, such as the incorporation of *Gliricidia sepium* into crop fields, are promising options to improve soil fertility.

*Image: Miriam Nanjola watering tree seedlings in Molo, Nakuru County, Kenya. Photo credit: Regreening Africa/Brian Gathu*





**Regreening Africa**



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