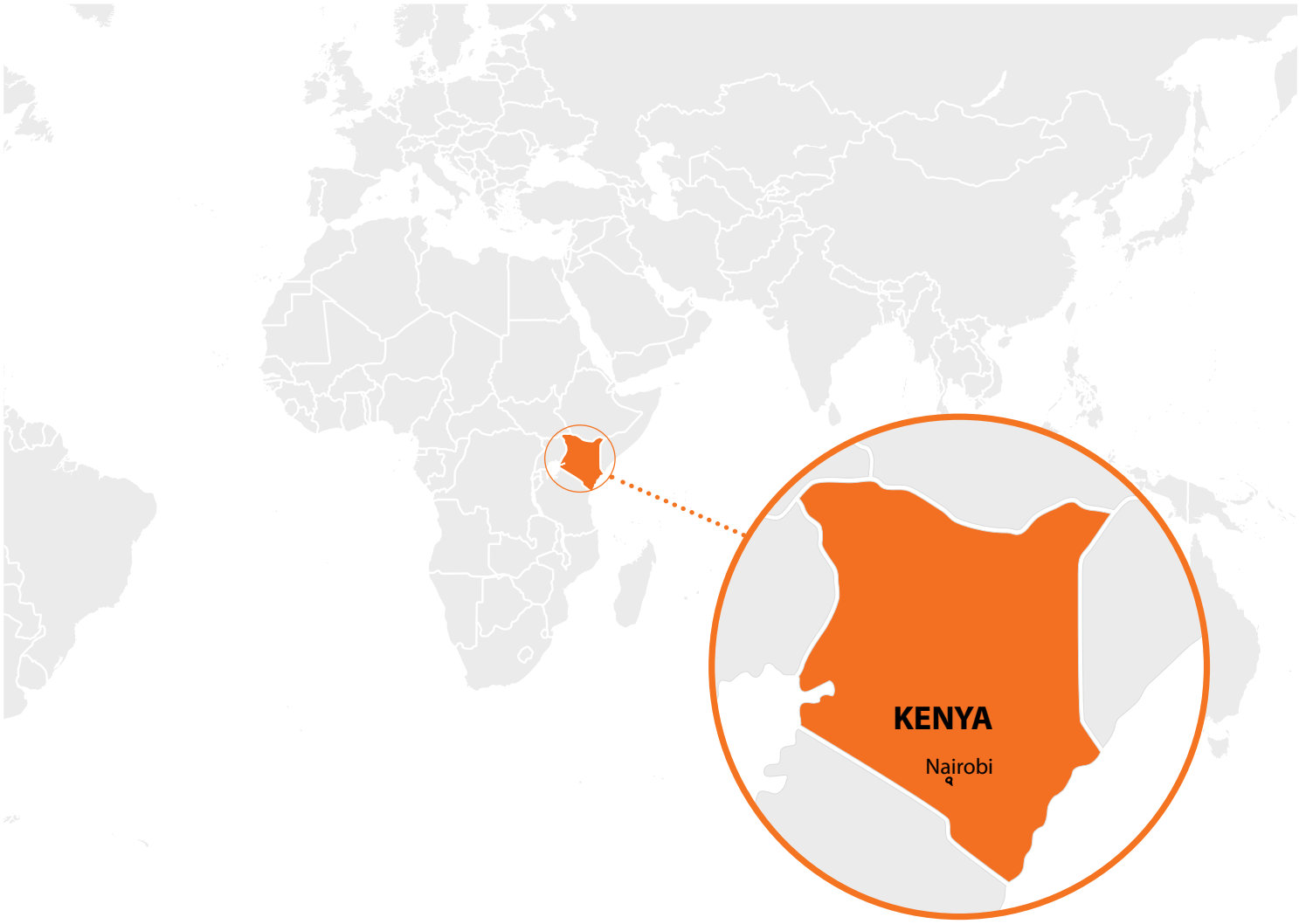
World Vision

CENTRAL RIFT FMNR SCALE-UP (CRIFSUP2) PROJECT

Kenya | Progress Brief | (2021-2026)



Acknowledgments

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Front cover photo: FMNR farmer Sally smiles as she harvests her crops.

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SUMMARY OF FINDINGS

Arid and semi-arid areas of Kenya, like the Central Rift Valley, struggle with land degradation. This can be severe in some locations, where soil erosion and poor water retention threaten land sustainability. People rely heavily on forest products such as trees for fuel and fencing around farmland, as well as pastureland for grazing, and are often forced to engage in practices that further exacerbate land degradation. The Central Rift FMNR Scale-Up Phase 2 Project (CRIFSUP2) is a farmer-led World Vision initiative that aims to strengthen food security and climate resilience for 11,000 smallholder farming households across four counties between July 2021 and June 2026. To achieve this, CRIFSUP2 works towards bringing about three key outcomes: 1) Increased area of land under restoration with FMNR and other techniques 2) Diversified livelihood options for small-folder famers and pastoralists and 3) Creating an enabling policy environment.

In late 2024, a mid-term review (MTR) was conducted by an independent consultant to assess the project's progress towards its objectives, the relevance of the project's design, and to learn about challenges that need to be overcome over the remainder of the project. The MTR utilised a mixed-method approach, using household surveys, focus group discussion and key informant interviews to collect data from a range of stakeholders including male and female farmers, children, community leaders and project staff.

KEY FINDINGS

1. The MTR found evidence of significant progress towards goal level project indicators around **food security and household resilience** since baseline measurement. This includes an increase in the proportion of households with sufficient diet diversity from 61% to 91%, an increase in the proportion of households with year-round access to sufficient food from 33% to 39%, and a significant decrease in the proportion of households experiencing moderate to severe food insecurity, severe hunger, or living in poverty.

2. Strong positive results were found towards achieving **landscape restoration**, with 95% of households adopting FMNR practices, compared to only 16% at baseline. 93% of households also reported a noticeable improvement in their local landscape over the preceding 12 months, while 85% observed that there has been an increase in soil fertility. Other positive findings were a significant increase in tree density, a doubling of people reporting earning an income from the sale of tree products from baseline, and women saving almost 2.5 hours per day as a result of agricultural innovations.

3. Compelling evidence of the **diversification of household incomes** was also apparent, with 68% of households reporting having increased incomes, while the proportion of households using improved financial services in the preceding 12 months rose from 40% at baseline to 61% at midline. Gains were also noted for women, with an increase in the proportion of households with equitable decision-making rising from 29% to 34%, and the proportion of women and men with supportive attitudes towards women's economic participation significantly increasing from 52% to 75%.

4. Good evidence of having an **enabling policy environment** was also found, with six Citizen Voice and Action (CVA) groups established to advocate for policy improvements in environmental protection. Awareness of local by-laws/regulations on land use increased from 46% at baseline to 82% at midline, while those around tree management also rose from 52% to 88%. In one target county, a petition was submitted to the county government for the amendment of Section 9 of the Charcoal Production Association's 2009 Forest (Charcoal) Regulations. Seven manuscripts highlighting FMNR's multifaceted benefits have been published to create wider public awareness.

KEY RECOMMENDATIONS

1. Aim to reach more people to create and sustain a wider impact. Assessing Lead Farmers' performance and replacing low-performing Lead Farmers with Replica Farmers and providing performance-based incentives could be some strategies to do this.

2. Promote alternative income-generating activities such as vocational training, small business, beekeeping, and poultry farming (especially for young people), to further diversify income sources. Include more off-farm livelihoods options.

3. Enhance CVA groups' capacity to advocate for environmental policy enforcement, including county level by laws. Groups should be able to advocate with local governments to ensure effective implementation of policies and regulations, including those around charcoal burning and tree cutting.

4. Increase the participation of and benefits to people with disabilities. Either partner with Disabled Peoples Organisations or government departments to reach more people with disabilities. Simultaneously, community sensitisation should continue to further improve community attitudes towards people with disabilities.

CONTEXT

According to the Kenyan Ministry of Environment's 2015 assessment report on land degradation, 61% of land in Kenya is degraded, and nearly half of this is severe degradation, where soil erosion and poor water retention threaten land sustainability. At least 12 million people live in degraded areas, most of them trying to live on agricultural and livestock practices that further damage land and forests. In the Central Rift region, as soil erosion accelerates, water catchment capacity decreases and farmers can face intense seasonal storms, floods and droughts in a single year. In this region, people rely heavily on forest products such as trees for fuel, and pastureland for grazing. Some areas here are classified as marginally agricultural, receiving below 300 mm to 1500 mm of rainfall per annum. Low precipitation has gradually diminished ground water levels and depleted the land available for farming and pasture. The forest cover in these regions reduced significantly between 1990 and 2010.

FMNR farmer Sally smiles as she reflects on keeping her farm in good condition with her children.

PROJECT OVERVIEW

The Central Rift FMNR Scale-Up Phase 2 Project (CRIFSUP2) is a five-year, farmer-led World Vision initiative that aims to strengthen food security and climate resilience for 11,000 smallholder farming households in the arid and semi-arid lands of Kenya. Running from July 2021 to June 2026, the project targets households in eight sub-counties within Baringo, Elgeyo-Marakwet, Nakuru, and West Pokot and hopes to see 10,000 hectares of land under restoration by the end of the project. To achieve its overall goal, the project is working towards three key outcomes:

OUTCOME 1: Increased area of land under restoration with FMNR and other restoration techniques.

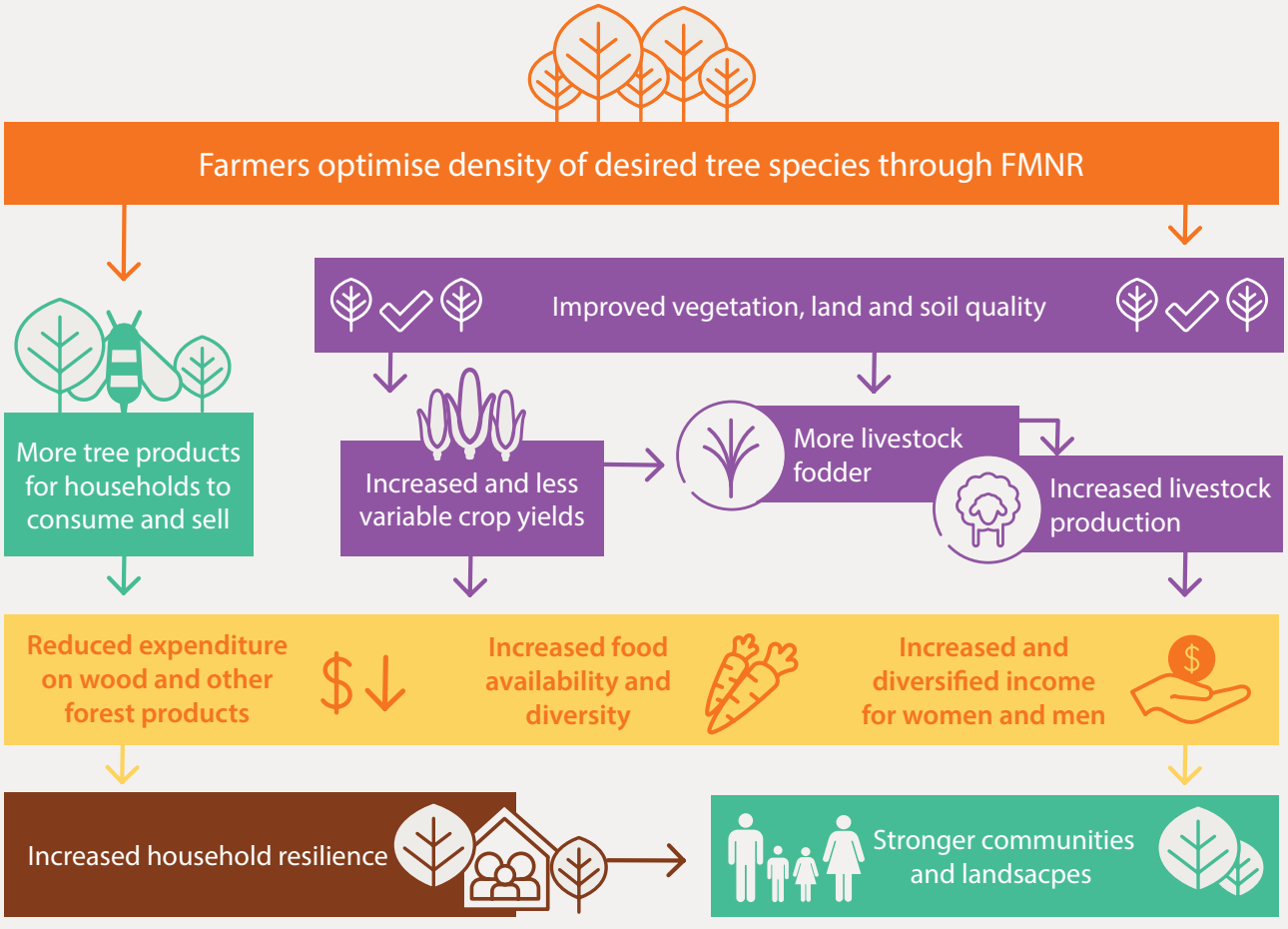
OUTCOME 2: Diversified livelihood options for small-folder famers and pastoralists.

OUTCOME 3: Creating an enabling policy environment and structures that support the uptake of FMNR and other restoration techniques.

The project also ensures that gender equality, disability inclusion, and social inclusion are addressed and integrated into project activities and approaches. The project is funded by the Australian Department of Foreign Affairs and Trade (DFAT) through the Australian NGO Cooperation Program (ANCP). CRIFSUP2 not only engages smallholder farmers and community members, but also children and local schools. CRIFSUP2 was preceded by the first phase of CRIFSUP, which ran from July 2017 to June 2021.

CRIFSUP2 uses a number of World Vision's tried-and-tested models including:

Farmer-Managed Natural Regeneration (FMNR) is a low-cost land restoration technique used to combat poverty and hunger amongst poor farmers by increasing food and timber production and resilience to climate extremes. In practice, FMNR involves systematic regrowth and management of trees and shrubs from felled tree stumps, sprouting root systems or seeds. The regrown trees and shrubs, which help restore soil structure and fertility, inhibit erosion and soil moisture evaporation, rehabilitate springs and the water table, and increase biodiversity.

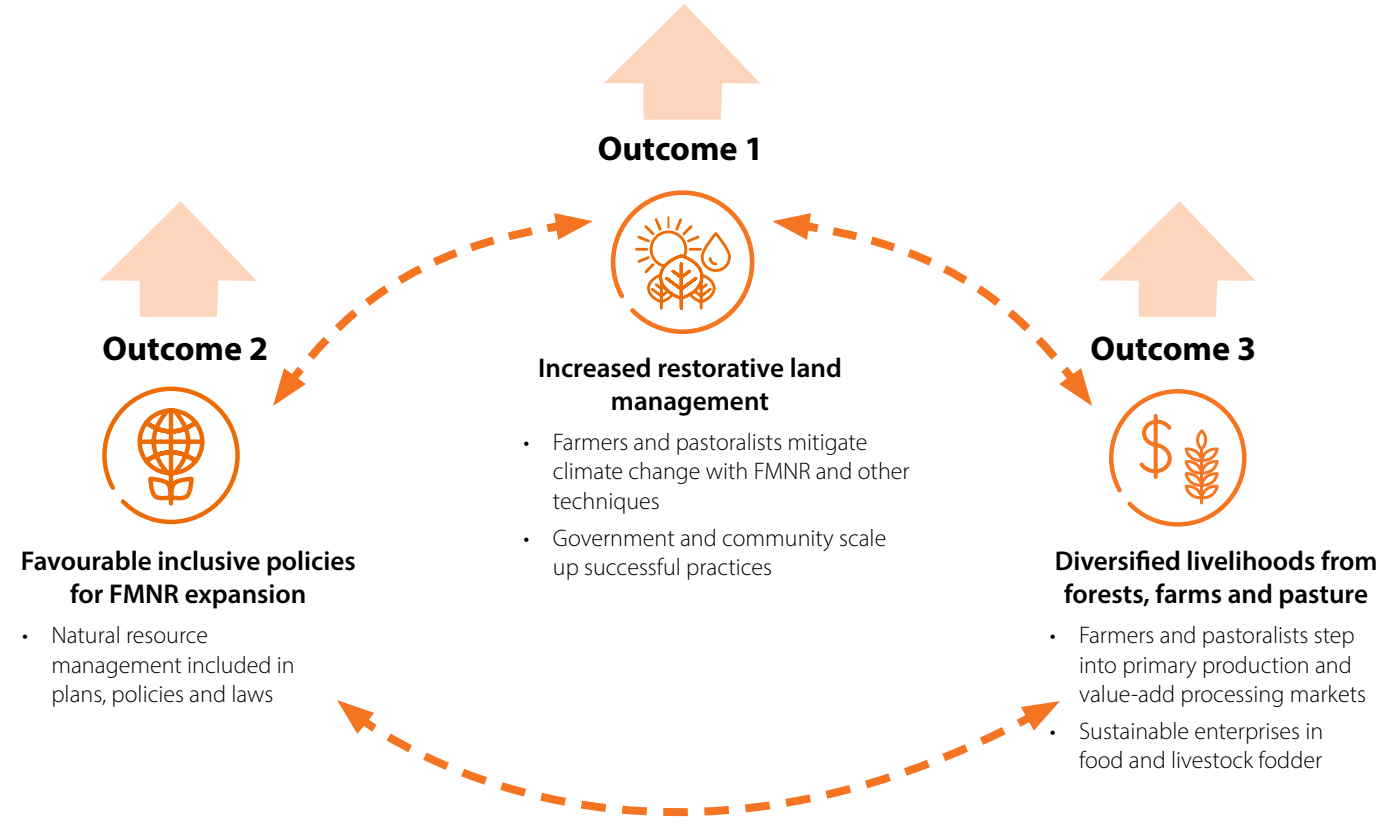


Citizen Voice and Action (CVA) is a local-level advocacy methodology that encourages and transforms dialogue between communities and government in order to improve services. CRIFSUP2 uses CVA to champion social accountability within project sites; to increase community engagement in governance of FMNR, budget processes and strategies, and to influence policy, county by-laws, and establish monitoring scorecards to hold service providers accountable.

Savings 4 Transformation (S4T) is World Vision's savings group model; a savings group is a voluntary group of people who come together to regularly save and lend money in a safe way.

CRIFSUP2 Theory of Change:

Goal: To restore the environment, strengthen livelihoods and grow climate resilience for 55,000 people by 2026.



EVALUATION OVERVIEW

World Vision Australia commissioned a mid-term review (MTR) to assess CRIFSUP2's progress towards its objectives, the relevance of the project's design and implementation strategy, and to learn about challenges that need to be overcome for the remainder of the project to be successful. The MTR was conducted by an independent consultant.

The MTR utilised a mixed-method approach, with data collection divided into two stages. The first stage involved a household survey conducted in late 2024, targeting respondents from 1,340 households across the four target counties. 57% of survey respondents were women, and 21% of surveyed households were female-headed. 38 survey respondents (2.8%) were identified as a person with a disability. A two-stage cluster sampling technique was used to select these households. Data was collected digitally using the Kobo Toolbox application and analysed using the Statistical Package for Social Sciences (SPSS). The second stage of the MTR employed qualitative methods, including document reviews, Focus Group Discussions (FGDs), Key Informant Interviews (KIIs), child participation sessions, and transect walks - a method used to gather spatial data and insights about an area by systematically walking through it with local stakeholders - with purposive sampling used to ensure diverse representation among respondents. FGDs and KIIs engaged various stakeholders, such as male and female farmers, youth, government representatives and faith leaders, and qualitative data was analysed thematically to complement quantitative findings.

One key limitation of the MTR was that the quantitative data collection for the baseline and the MTR was done at different times of the year. While the former had happened in May, the latter was done in early December. The baseline was conducted at the end of long rains, while the MTR was conducted at the end of the short rains. At the time of the baseline study, the country was in its third consecutive year of drought. This can have significant impact on findings, especially where no counterfactual was available. A counterfactual refers to what would have happened to the same individuals if they had not been exposed to a specific intervention (i.e. CRIFSUP2 activities in this case).

Sally feeds her chickens.

FINDINGS

The MTR found that the CRIFSUP2 has made significant progress on almost all of its goal and outcome level indicators. Towards **goal-level** indicators, the MTR found significant improvements in household food security, with a 6% increase in households reporting year-round access to sufficient food and a 14% reduction in food insecurity. Dietary diversity has also improved, with average dietary diversity scores increasing from 3.8 to 5.8 from baseline to midline. The proportion of people who are able to provide well for their children has also increased (particularly for female-headed households), while poverty levels have decreased since baseline, as summarised with all goal-level indicator results in the table below:

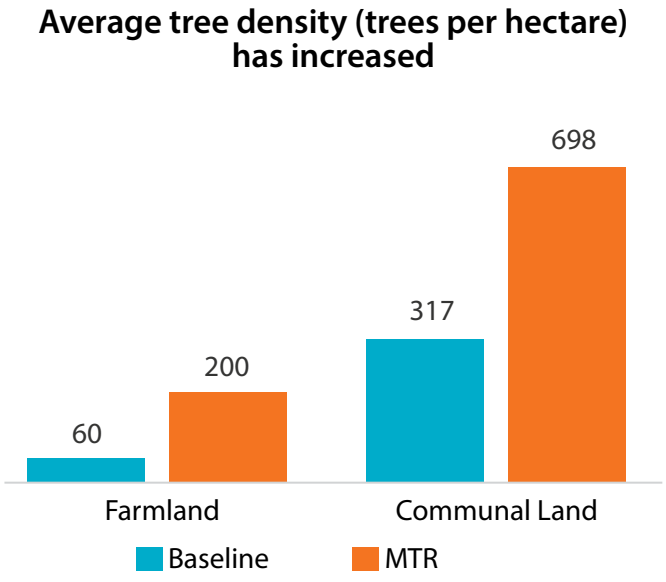
Goal: Strengthening food security Resilience and livelihoods for smallholder farmers and pastoralists in Cental Rift Kenya by 2026 through FMNR and other restoration techniques.

Indicators	Baseline	MTR	Change
% of households able to provide well for their children	41%	45%	↑ 9.8%
% of households with year-round access to sufficient food	33%	39%	↑ 18.2%
% of households in moderate or severe food insecurity during last 12 months (by FAO FIES-GSS)	72%	58%	↓ 19.4%
% of households in poverty (national line, PPI)	39%	31%	↓ 20.5%
% of households with severe hunger	8%	1%	↓ 87.5%
% of households with sufficient diet diversity	61%	91%	↑ 49.2%

People felt that project interventions were a key contributing factor to these positive results, with all stakeholders agreeing that project interventions have directly increased local soil fertility; *"Improved farming methods such as crop rotation, planting cover crops, and using natural manure have increased soil fertility"* (Women's focus group). This, combined with timely and adequate rains, has resulted in good crop yields.

At baseline, 40% households were able to employ at least one effective disaster risk reduction or positive coping strategy, this proportion has now increased to 60%. The MTR found many more households had developed a climate change plan, up from only 17% at baseline to 64% at midline. Of those households who suffered a shock or disaster during the 12 months preceding the MTR, 82% reported having successfully recovered.

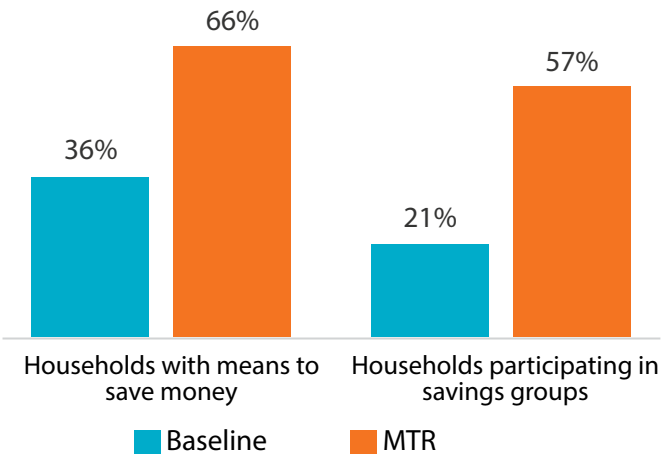
Under **OUTCOME 1** - improved landscape - the project has trained 1,110 'Lead Farmers' (52% women) who have, in turn, trained nearly 10,000 farmers, referred to as 'Replica Farmers'. FMNR adoption was seen in 95% of surveyed households, with 94% of respondents reporting they had seen a visible improvement in the local landscape over the last 12 months. Tree density per hectare has increased significantly since baseline on both private farmland and communal land, as displayed in the graph below:



Soil fertility improvements were reported by 85% of households, with the same percentage also reporting increased access to FMNR products. The percentage of households reporting earning an income from FMNR in the past 12 months has more than doubled since baseline, from 12% to now 28%. Households with access to firewood, building poles, timber and non-timber forest products has also increased from 83% at baseline to 88% at midline.

Under **OUTCOME 2** – diversified incomes – 70% of households surveyed during the MTR reported experiencing an increase in income. Respondents attributed these changes to; a) having better yields due to more rains in the previous year, b) practicing climate-smart technologies, c) increased availability of fodder due to pasture management training, hence improved livestock production and productivity, d) practising FMNR, and e) the opportunity to save and take loans through savings groups. Beekeeping, kitchen gardens, income from FMNR sites and small enterprises were other cited sources for diverse household incomes. The proportion of people reporting getting an income from tree products during the preceding 12 months increased from 12% at baseline to 27% at midline. The MTR found significant increases in households' access to savings mechanisms, including participation in S4T or other community-based savings groups, as outlined in the graph below:

Households have greater access to savings mechanisms



Without exception, respondents in all four counties considered S4T groups to have directly contributed to increased food security and household income. The project has now established 103 of these groups over Phase 2. The MTR noted that market linkages remain underdeveloped, however, with most farmers still selling products directly to consumers or traders. Also, having all sources of household income anchored to the farm poses a risk to the sustainability of economic gains, as drought or flood may cause a major setback to a farming family.

Under **OUTCOME 3** - an enabling policy environment - the project has established six CVA groups to advocate for policy improvements in environmental protection. People's awareness of local by-laws and regulations has improved significantly; awareness of by-laws/regulations on land use increased from 46% at baseline to 82% at midline, while those around tree management rose from 52% at baseline to 88% at midline. Given the slow pace of policy change work, the project has focused its efforts on two counties: Nakuru and Elgeyo-Marakwet. In Nakuru, the project is pushing to get FMNR included in the Forest Management Bill and in Elgeyo-Marakwet, a petition was submitted to the county government for the amendment of Section 9 of the Charcoal Production Association's 2009 Forest (Charcoal) Regulations. The project is partnering with Moi University and the Kenya Forest Research Institute to conduct research on FMNR. Two policy briefs have been developed and shared with relevant stakeholders and seven manuscripts on FMNR - highlighting the models' multifaceted benefits - have been published to create wider public awareness.

Overall, the MTR found that project activities are highly relevant to the needs of community members and there was strong consensus that the project also aligns with government priorities. Satisfaction rates regarding project activities and results were also high. While all respondents agreed that the project is successfully addressing community needs, men and women prioritised slightly different aspects upon reflection. Men focused more on economic benefits (e.g. increased income, S4T groups), land management, and diversified incomes, whereas women placed stronger emphasis on food security (e.g. food availability, poultry keeping etc), household well-being, and the overall environmental impact, especially in improving soil fertility and tree cover. Furthermore, the approach of Lead Farmers training Replica Farmers was seen as being highly effective, allowing for efficient use of resources and reaching a higher number of farmers.

While the project has been successful in engaging many children through the Children's/4K Clubs, some felt that the project needs to increase support to schools in establishing demonstration plots, to further promote personal uptake of agricultural and environmental practices by children. Children's visits to local FMNR practice sites and parents' attendance of individual project presentations or exhibitions could be a way of promoting such an interaction.

"More people are able to provide [for their children] as more are now engaged in economic activities. They can sell firewood that they prune from the trees in FMNR sites. They have more produce in their farms because of adoption of climate smart activities"

(Replica Farmer, FGD 16-Men, County 3).

"The environment has really changed, becoming more green and calm. We have more trees that has reduced the speed of wind"

(FGD-FMNR Committee 1, County 1).

"…community members have more food from kitchen gardens, money from sale of fruits, grass … environment has improved as there are more trees. The soil has become more fertile and soil erosion has reduced"

(FGD 4-CVA Group, County 4).

"Many farmers are involved in income-generating activities as a result of training they have received… Most farmers who have been trained by CRIFSUP have implemented projects which have brought change, such as climate-smart agriculture which has increased yields…increased pasture for livestock is also another factor which has improved livestock yields, thus generating more income"

(KII 24, Location Chief, County 4).

"I did not expect that my degraded land would heal so fast as it has. I thought it would take many years"

(FGD 20-Women, County 4).

"The project meets the community needs especially on food security and soil conservation. This has been achieved through FMNR activities…the problem of insufficient fodder for our livestock has been resolved by the fodder we get from the FMNR sites. Now we don't migrate with our animals to other places looking for pasture… the project has enabled farmers to boost their economic status reducing poverty levels"

(FGD 22-Men, County 4).

"The models that are used in FMNR are holistic, by training lead farmers who then train replicates who then further train other farmers. It is for the greater good and the project is easily adopted and sustainable"

(KII 16-Sub-County Livestock Officer, County 3).

"School children are agents of change. They are environmentally conscious now. They are future farmers and can practice on their farms in future. There will be a generation of environmentally conscious people"

(KII 3- Project staff, County 4).

"The project has brought unity between people. Most farmers have teamed up to even form savings groups and do meet to motivate themselves on various activities"

(FGD 11-Men, County 2).

Land in Kenya regenerated using the FMNR technique.

IMPACT STORY

Ezekiel is a 33-year-old farmer and passionate environmentalist, from Kenya's hilly Kipkechir village. He wakes up early every morning to tend to his farm and takes great pleasure in working his 40 acres of land, where he lives with his wife and their two children. However, this is not always how Ezekiel has lived. Ezekiel used to make money by burning wood to make charcoal, unaware of the negative impact this had on the local environment, and contributing to the deforestation of 20 acres of land.

Ezekiel's world changed when he was selected as a Lead Farmer as part of World Vision's CRFISUP2 project which is supported by the Australian Government. Through the project, he was trained on FMNR, soil conservation, intercropping and irrigation. All of this helped Ezekiel to generate an income for his family in an environmentally friendly way.

"I once thought that charcoal burning was the only way to make money and when I saw a tree, I only thought about how much money I could get from it," Ezekiel shares regretfully. "Now, I have been practicing FMNR for the past two years. My land has changed, but most importantly, so has my perspective. The benefits we have enjoyed inspire my family and I to protect the environment," he ends with a smile.

Ezekiel has now trained 15 other farmers who are all collectively regreening their community and have now restored 33 acres of local land.

SUSTAINABILITY

There was complete consensus among MTR respondents that the knowledge they have gained about FMNR and other restoration techniques will last, and that the likelihood of continuing to use these practices and technologies is high, as people are already experiencing their benefits. Many S4T groups and 4K Clubs are also expected to continue beyond the project's lifespan; the former is due to the clear benefits experienced by members, while the latter is a government requirement. While CRIFSUP2 has formed 103 S4T groups to date, the MTR found that some communities had also formed additional groups themselves, which further highlights the sustainability of this model.

However, weak market linkages and the need for stronger policy enforcement were found to be challenges that will need to be addressed over the remainder of the project. Regarding the implementation of various financial, institutional, policy and environmental sustainability measures included in the project's sustainability plan, some either need improvement or have not yet begun to be implemented. The project therefore needs to revisit its sustainability plan, develop a timeline for each action, and monitor progress.

CROSS CUTTING THEMES

Gender Equality: Women's economic participation and leadership roles were found to have increased at midline, with 81% of project-supported groups being led by women. The proportion of households reporting equitable decision-making at home has increased by 14% from baseline. Attitudes towards women's economic participation have improved significantly, with 75% of respondents now supportive of women's economic participation. These changes were attributed to women's engagement in various project activities e.g. their role as Lead Farmers, S4T groups and other trainings provided by the project. On average, women were found to be saving 2.48 hours per day, mainly due to the availability of firewood from FMNR sites and the introduction of improved cookstoves that consume less wood. The proportion of women with increased access to forest products increased from 15% at baseline to 95% at midline. Overall, 55% of CRIFSUP2 project participants are women.

Disability and Social Inclusion: While CRIFSUP2 has been engaging people with disabilities and trying to ensure that interventions are benefitting this group, the total number reached to date has been modest; 42 of the project's Lead Farmers (23 men and 19 women) and 120 of the project's Replica Farmers (66 men and 54 women) are people with disabilities. The total number of people with a disability being reached by the project currently represents 1.45% of total beneficiaries; some of those participating in S4T groups and livelihood activities have also been supported with assistive devices. During the MTR, the project was found to be adhering to DFAT's child protection guidelines, and the project has been successful in improving community cohesion, with 94% of households surveyed during the MTR reporting good social cohesion in their communities, which is up from 85% at baseline.

Environment: Improving the natural environment is a core component of CRIFSUP2, which is primarily achieved through the adoption of FMNR and a range of other land restoration and agricultural practices. Even at the mid-point in the project, there has already been a significant increase in the number of trees per hectare in target areas, along with noted improvements in soil fertility, crop yields and the overall landscape. The project also leverages the '4K Club' model, a Kenyan Government youth initiative originally introduced in 1962 that was reintroduced in 2021 with a renewed focus on sustainability and resilience in agriculture. Each club is a group of 20 young people (8-15 years of age) who learn agricultural practices by hands-on training e.g. growing vegetables, raising small livestock, fish farming and other activities along the agriculture value chain. By working with both current and future farmers, the project is ensuring that the environmental benefits realised through wide-scale FMNR adoption continue long into the future.

CONCLUSION AND RECOMMENDATIONS

The MTR found that CRIFSUP2 has demonstrated significant progress in improving food security, land restoration, income diversification, and gender equity in the target areas. Almost all goal and outcome level indicators have improved substantially from baseline to midline. Largely, the project has been effective in achieving Outcome 1 (landscape restoration) and while performance on most of the indicators for Outcome 2 (diversified incomes) and Outcome 3 (policy environment) have been positive, there is still room improvement, particularly around market linkages, policy improvement/enforcement, and youth involvement in sustainable practices.

RECOMMENDATIONS

1. Develop a clear strategy and implementation plan to **strengthen the value chain** component of the project and track progress towards this.
2. Reflect on progress toward **policy improvement and enforcement** aspects of the project and develop a plan with intended results, human resources and a clear timeline. This should involve CVA groups to ensure local ownership and continuity beyond the project's end.
3. **Enhance CVA groups' capacity to advocate** for environmental policy enforcement. They should be able to advocate with local governments to ensure effective implementation of policies and regulations, including those around charcoal burning and tree cutting.
4. Review the project's targets in terms of **land restoration.** For any future projects, targets should be realistic and set considering the landholding size of smallholder farmers in the target sites.
5. **Expand the S4T component** to include more participants.
6. Consider undertaking an **assessment of existing S4T groups** and fill any gaps to ensure their sustainability.
7. Promote **alternative income-generating activities** such as vocational training, small business, beekeeping, and poultry farming (especially for young people), to further diversify income sources. Include more off-farm livelihoods options.
8. Increase **youth engagement** in Climate-Smart Agriculture practices as well as broader landscape restoration work through training, facilitating access to land via community agreements, renting, mentorship and policy interventions.
9. Aim to reach more people to create and sustain a wider impact. **Assessing Lead Farmers' performance** and replacing low-performing Lead Farmers with Replica Farmers and providing performance-based incentives could be some strategies to do this.
10. For any future projects, consider **covering all locations in a Ward** for wider impact.
11. Provide **further training to diversify income, Climate Smart Agriculture** and **pest/disease management**, as these were mentioned as felt needs by MTR respondents.
12. **Strengthen work in schools**. Involving the broader school community and not only the 4K Club members and patrons; providing materials needed for demonstration site; negotiating for more time in the school timetable for Club activities; encouraging individual projects to strengthen learning on environmental conservation and increasing interaction among children and broader communities were some strategies put forward by various stakeholders.
13. Sustain gender equality and women's empowerment efforts by broader community sensitisation and the engagement of men. Scale up the **GIFT Training** and roll out the **Family Change Maker** model to promote equitable decision-making at the household level.
14. Increase the number of **female-headed households** being reached with targeted support. While the project has been intentional in supporting female-headed households and changes have been remarkable, more effort is needed to bring them at par with male-headed households.
15. Increase the **participation of and benefits to people with disabilities.** Either partner with Disabled Peoples Organisations or government departments to reach more people with disabilities. Simultaneously, continue community sensitisation to further improve community attitudes towards people with disabilities.
16. Set clearer **research priorities** with timelines and resources. If partner organisations are unable to allocate resources, project investment might not yield the desired results.
17. Revisit the project's **sustainability plan** and come up with an appropriate strategy and achievable plan within the remaining project timeframe.
18. Develop an overall **exit strategy**, including a clear timeline and implement it for a gradual phase-out over the remainder of Phase 2.

Sally laughs with her family on their land regenerated using FMNR.

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