

### **About this report**

This brief summarises results from World Vision Zambia's mid-term review of the Sustainable Land Restoration (SLaR) Project, supported by the Australian Government through the Australian NGO Cooperation Program (ANCP). The review was completed by Nagi Consultancy and reviewed by Cameron Reid, Nami Kurimoto, and Alice Muller at World Vision Australia. For more information contact Cameron. Reid@worldvision.com.au.

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Front cover photo: Liveness tends to plants on her land.



### SUMMARY OF FINDINGS

In rural Zambia, populations are heavily dependent on agriculture for their livelihoods, despite experiencing arid and semi-arid conditions and vulnerability to extreme weather events. Poverty rates in rural areas of Zambia have been increasing slowly over time. The Sustainable Land Restoration (SLaR) project aims to benefit 8,475 rural farmers in Katete, Chibombo and Sinda districts by restoring 150,000 hectares of degraded land by June 2027. The SLaR project uses World Vision's tried-and-tested Farmer-Managed Natural Regeneration (FMNR) model to bring about widespread and sustainable land restoration.

In March 2025, a mid-term review (MTR) of SLaR was conducted by an independent consulting group to assess current progress towards project objectives and to measure achievements towards set targets for all project indicators. The MTR found the following key findings:

- A significant increase in FMNR awareness and household adoption since baseline; community awareness has increased by 41%, while household adoption of FMNR techniques has increased by 236%. This increase was seen across both private and communal lands.
- A significant increase in households' utilisation of a range of sustainable agricultural practices, including managing erosion using live barriers, which increased from 16% at baseline to 36% at midline.
- A modest increase in the number of hectares under SLaR-led restoration efforts, from 508,900 to 510,000 hectares, noting that target areas had experienced both severe drought and flooding since the baseline.
- Respondents observed an increase in tree density and soil fertility since baseline.
- Strong indicators of community disaster preparedness, with 93% of households able to employ an effective disaster risk reduction strategy.
- Moderate increases in the percentage of households with equitable decision making in both the productive sphere (21% to 27%) and domestic sphere (27% to 29%).

- Strong engagement with a range of Disabled
  Persons Organisations to encourage the
  participation of people with disabilities in SLaR
  activities, as well as address negative community
  attitudes towards people with various impairments.
  Through SLaR, 40 people with disabilities have
  received tailored support services, including assistive
  devices.
- Strong evidence of positive perceptions of and support for FMNR (and its scale-up) amongst key stakeholders, including national and district government.
- Positive engagement of youth and children in land restoration efforts, through the establishment of 65 FMNR Clubs, both in and outside of local schools.
- Strong consideration and involvement of women and female farmers, with 70 women's groups, organisations and coalitions involved in the project.



The ripple effect of FMNR adoption in Zambia is seen as school students pick up techniques from their fellow community members.

#### **Key recommendations** stemming from this research suggest that:



The project prioritises interventions that build community resilience to shocks like droughts, potentially diversifying livelihoods beyond rain-fed agriculture. To address food insecurity, the project should explore strategies to improve household incomes and promote dietary diversity, with targeted support for female-headed households and those with disabilities.



The project should focus on deepening engagement with government and other non-government organisations to ensure sustained support for scaling up FMNR. This includes advocating for policy frameworks that enable FMNR adoption and providing technical and financial support to partners for effective implementation.



The project prioritises sustained community engagement and empowerment. This involves continued support for 'FMNR Champions', including traditional leaders, and strengthening community-level governance structures to enforce FMNR practices.

### CONTEXT

Zambia was reclassified as a low-income country (from a lower-middle income country) by the World Bank in 2022, following a decline in Gross National Income (GNI) per capita. Poverty in Zambia remains pronounced in rural areas, with nearly 79% of the population living below the poverty line and an estimated 80% relying on agriculture as their primary source of income. However, agriculture only accounts for approximately 3.4% of Zambia's Gross Domestic Product (GDP). In Zambia's heavily degraded agro-ecological regions, widespread land degradation and one of the highest deforestation rates in the world (estimated at 276,000 to 300,000 hectares annually) have further undermined rural livelihoods and climate resilience.

In response, African governments - including Zambia's – have voluntarily committed to restoring 100 million hectares of land by 2030, under the the African Forest Landscape Restoration Initiative; Zambia has committed to restoring two million hectares of land by 2030. These efforts contribute to a global land restoration initiative called the Bonn Challenge, which aims to restore 350 million hectares of degraded land by 2030.



Aerial shot of community members tending to their land.

# **PROJECT OVERVIEW**

World Vision's Sustainable Land Restoration (SLaR) Project in Zambia aims to restore 150,000 hectares of degraded communal and private farmland between July 2022 and June 2027, using the Farmer Managed Natural Regeneration (FMNR) approach. The project aims to benefit 8,475 people in rural farming households in Katete, Chibombo and Sinda districts with improved and enhanced resilient livelihoods, market linkages and associated industries. The project is funded by the Australian Government through the Australian-NGO Cooperation Program (ANCP).

The SLaR project aims to achieve its overall goal through realising four key outcomes:

- **Outcome 1:** Increased hectares under communal and individual land regeneration (i.e. FMNR) practices in Eastern and Central Provinces.
- **Outcome 2:** Key external partners mobilised and empowered with technical knowledge, evidence and resources to scale up FMNR.
- Outcome 3: Grassroots movements are a catalyst for widespread FMNR promotion and adoption.
- **Outcome 4:** Conducive policy environment created for natural resource management (i.e. FMNR) implementation.

## THEORY OF CHANGE

Goal: Restore 150,000 hectares of degraded land using Farmer Managed Natural Regeneration (FMNR), benefiting 8,475 people by 2027.

### **Increase FMNR practices**

- FMNR champions establish FMNR demonstration sites
- Enhances inclusion of minority groups including female-headed households and people with disabilities



#### **Conducive policy environment**

- Key stakeholders reflect on FMNR
- National policy on land restoration formulated

### Key partners mobilised and empowered

- Critical stakeholders commit FMNR
- Platforms for stakeholders to work together created and strengthened



# Facilitate grassroots movements for FMNR promotion and adoption

- Enhanced environmental awareness and action
- Community groups connected with policy makers on land use
- Media messaging promotes FMNR



**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.



**Empowered World View (EWV)** is an enabling project model that can lead to deeper and more sustainable changes in child well-being when combined with other project models. EWV is a behavior change model that seeks to address dependency mindsets and promote individual empowerment among people living in poverty. The EWV curriculum uses Biblical principles to engage individuals on issues of identity, self-esteem, hope, and vision for the future. It has been shown to have a positive impact on an individual's level of empowerment, increasing their ability to become agents of change within their own lives, their families and communities.



**Gender Equality, Disability and Social Inclusion (GEDSI)** is an approach that integrates these three elements into programs to address the root causes of inequality and exclusion, particularly for vulnerable children and adults. It aims to create more equitable and inclusive systems and practices within the communities where World Vision works. GEDSI focuses on a) achieving equal rights, responsibilities, and opportunities for all genders, b) ensuring that people with disabilities have equal access to resources, services, and opportunities, and c) addressing inequalities stemming from various social factors like ethnicity, caste, religion, socioeconomic status, and more.



**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. SLaR 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.

The project partners with the Enhanced Smallholder Livestock Investment Programme (ESLIP) funded by the International Fund for Agricultural Development, World Wide Fund for Nature (WWF), Zambia Land Alliance, Zambia Agency for Persons with Disability (ZAPD), and the Government of Zambia's Forestry Department, among others.

### **EVALUATION OVERVIEW**

A mid-term review (MTR) of the SLaR project was conducted by a local consulting group - Nagi Consultancy - in March 2025. The purpose of the MTR was to assess current progress towards project objectives and to measure achievements towards targets for each of the project indicators. It also explored the effectiveness and sustainability of project interventions in target communities, as well as providing specific and actionable recommendations to World Vision for the remainder of the SLaR project as well as their broader approach to land restoration initiatives.

The MTR used a mixed-methods approach, using household surveys to collect quantitative data and key informant interviews (Klls) and focus group discussions (FGDs) to collect qualitative data. The household survey used a range of sampling methods to select which villages and households would participate, ensuring that MTR data could be directly compared to baseline data. The survey engaged 1,781 households and was administered through a structured questionnaire.

Households surveyed for the MTR are not the exact same households surveyed at baseline, due to random selection. This creates a challenge when comparing landholding indicators between baseline and midline values. There were also a few interviews that could not be conducted due to the unavailability of selected traditional leaders.

KIIs were conducted at the national and district levels with project partners and various stakeholders, including District Commissioners, officers from the Ministry of Chiefs and Traditional Affairs, and Zambia Agency for Persons with Disability. KIIs were also conducted at the community level with Chiefs, faith leaders, women's group members and others. A total of 72 FGDs were held in communities during the MTR, involving men, women, boys and girls with and without disabilities.

### **FINDINGS**

#### **RESULTS AT GOAL LEVEL**

MTR data from key informants on land under restoration indicates a total of 510,000 hectares of land under indirect restoration at the midline. Compared to the baseline value of 508,900 hectares, this represents a modest 0.22% increase. A significant decline was found in the percentage of communal land under direct restoration since baseline, while there was a 20% increase in hectares of private land under direct restoration. There were reports from people during FGDs of "serious hunger" during drought, and issues with soil erosion during floods, both of which have occurred since baseline and may have affected land activities and led to the abandonment of communal land. Land tenure may also be an issue, especially for women, given that land ownership is normally given to married men.

#### **RESULTS UNDER OUTCOME 1**

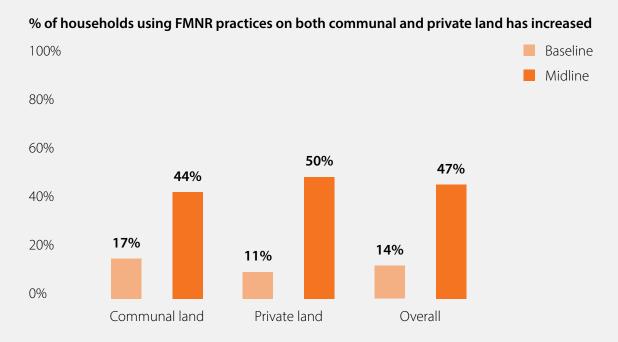
The MTR found a 41% increase in people's awareness of FMNR since the baseline, as outlined in the graph below.

#### **Awareness of FMNR has Increased**



The hectares reported at midline is based on stakeholder survey responses rather than direct quantitative documentation. This differs from project monitoring data, which draws from FMNR Champion records, where each champion oversees a set number of follower farmers, each responsible for a defined area designated for restoration. According to this monitoring system, 92,305 hectares are currently under direct project-led restoration, a 1,243% increase compared to baseline (6,871 hectares). GIS mapping is ongoing to further verify and refine these figures.

There was also a significant increase in the proportion of households adopting FMNR, from 14% at baseline to 47% at midline, however this was found to be higher in male-headed households compared to female-headed households.



The MTR also found strong results in terms of the uptake of a range of different sustainable agricultural practices since baseline, as summarised in the table below:

Use of Sustainable Agriculture Practices	Baseline	Midline	% increase
Conservation agriculture	12%	98%	717%
Conservation smart agriculture	29%	39%	34%
Erosion control with live barriers	16%	36%	125%
Stump and shrub regeneration	14%	56%	300%
Agroforestry	31%	48%	55%
Fallowing	25%	31%	24%

There were also good results across a range of Outcome 1 indicators when comparing baseline and midline values, including the following:

- An increase in the percentage of households who observe that tree density has increased from 12% to 36%.
- An increase in the percentage of households with year-round access to sufficient food, from 6% to 17%.
- An increase in the percentage of households with equitable decision making in the productive sphere from 21% to 27%.
- An increase in the percentage of households with equitable decision making in the domestic sphere from 27% to 29%.
- An increase in the percentage of households reporting that soil fertility has increased from 17% to 39%.

The MTR also discovered, however, that there are broad trends of increased levels of poverty in a range of livelihood indicators, which is consistent with challenges cited by MTR respondents relating to extreme weather events, reduced access to critical resources and, ultimately, increased vulnerability (especially for women). The proportion of households reporting experiencing moderate or severe food insecurity in the preceding 12 months was found to be 94% at midline (no baseline measurement). The percentage of households reporting experiencing shocks had increased from 41% to 64% from baseline to midline. The use of five different soil conservation practices had all decreased since baseline and the proportion of households reporting increased soil erosion had risen from 28% to 38%. Extreme weather events appear to be at the centre of these challenges, compounding the poverty situation in the community. That said, the increase in uptake of FMNR among target households despite the livelihoods crisis is encouraging.

"In my village, we have more than 300 hectares under FMNR. The adoption rate is quite good. People have accepted FMNR. People in the community have accepted it due to experience of calamities, mostly floods, drought, and fire. Definitely, there is no doubt on adoption"

- FMNR champion in Mungule Chiefdom

"In the FMNR program we are protecting the land and the soil. We started by putting by-laws and we also prune trees to protect the forest in this community. I can't tell the land coverage for the forest given the many forests that we have, but some of the plots are as big as five hectares. We educate the community on how the cutting down of trees has destroyed the land and tell them to protect these trees by ending charcoal and bush burning. We do call for community meetings, and as a champion, I do have 'follower farmers' and these followers have their own personal forests. When the program first started, a lot of people thought their land would be taken away, but we assured them that this was not the case, increasing confidence to participate in FMNR"

- FMNR Champion in Mbangombe Chiefdom

"We are doing farming. Of course, maize is the major crop although we also plant sunflower, soybean and a little cassava. Others are now doing sweet and Irish potatoes. Most people are practicing diversification of agriculture...Because of droughts and other natural calamities, the land has not been performing as well as it should. This is a major challenge, because if people plant beans and it all dies out, there is overdependence on vegetables from the garden as people don't normally plant beans in their gardens"

- Headman in Mungule Chiefdom

### **RESULTS UNDER OUTCOME 2**

The MTR found strong results towards Outcome 2 indicators, including an increase in the positive perceived value of FMNR by key stakeholders from 78% at baseline to 90% at midline. The number of stakeholders engaged in supporting increased prioritisation and resource allocation for scaling up FMNR also rose, from 21 to 45. There was also an increase in the number of key stakeholder plans, strategies, policies or programs influenced to increase the prioritisation of FMNR during this period, from 4 to 25.

The project has engaged several inclusive development organisations, including ZAPD, to implement the 'Training of Practitioners' initiative for community members, including women and people with disabilities. This involved 6,761 people who received FMNR training, with 305 (4.5%) being people with disabilities. Organisations interviewed during the MTR, including WWF, Zambia Land Alliance, and ZAPD, unanimously acknowledged the importance of FMNR for both environmental restoration and the enhancement of community livelihoods. However, a key concern shared by the interviewees was the need to address the specific needs and challenges faced by vulnerable populations - particularly women and people with disabilities - in FMNR initiatives, as well as challenges with achieving widespread adoption of FMNR across the target districts.

#### **RESULTS UNDER OUTCOME 3**

Indicators under Outcome 3 were not measured at baseline, however the midline data is summarised below:

- Percentage of people reached with FMNR messages via social marketing and communication activities = 1%
- Percentage of households able to employ an effective disaster risk reduction strategy = 93%
- Number of women supported to assume leadership roles = 25
- Number of women's groups, organisations or coalitions actively involved in the project = 70
- Number of people receiving disability support services specific to their needs = 40

The project has established a total of 65 FMNR Clubs, targeting children and youth both in and out of school. Through teachers who have been trained in FMNR, the project facilitated the establishment of FMNR School Clubs for children with and without disabilities, recruiting a total of 604 pupils. Each of the three target districts have now formed 10 FMNR School Clubs. During FGDs with children, they consistently reported having shared their knowledge about FMNR and environmental conservation with family, friends, and community members, motivated by a desire to promote better environmental practices and address concerns such as deforestation and land degradation.

Awareness and adoption of FMNR is largely spreading organically through FMNR Champions and FMNR Clubs, as well as through drama groups spreading FMNR messages during community performances. FMNR Champions have led on-farm demonstrations and learning sites and received bicycles and branded T-shirts to help them move through communities to raise awareness and adoption of FMNR. Other mediums have included billboards, radio broadcasts and signposts telling people not to cut down trees.

"I told a friend [about FMNR] and he also went to tell his parents and now they have a forest they are taking care of"

- Male child member of FMNR Club

#### **RESULTS UNDER OUTCOME 4**

There is only one indicator under Outcome 4 with a comparison baseline value; 'Number of key stakeholder plans, strategies, policies or programs influenced to increase prioritisation of FMNR'. This was four at baseline and 26 at midline, well on its way to meeting the target of 38. In addition, six Disabled People's Organisations (DPOs) are actively involved in the project, while a total of 1,712 people received training in disability awareness and inclusion.

SLaR has engaged 45 stakeholders who are supporting increased prioritisation and resource allocation for scaling up FMNR, against a target of 40. Evidence from Klls with partners at the national level indicates that most partner organisations have incorporated FMNR into their plans, strategies or policies, and several have committed funding to its implementation. ESLIP, for example, integrates FMNR training into its budget and work plans, demonstrating a high degree of institutionalisation.

Nyanje Chiefdom has drafted by-laws, and all three Chief Representatives have called for the formulation of standardised by-laws on environmental protection and governance for Chibombo District. Further, the project has collaborated with Zambia Land Alliance members to facilitate the development of community by-laws that integrate gender and disability considerations. This process involved sensitisation meetings across Chiefdoms, feedback collection, and the submission of draft by-laws to traditional leaders. Additionally, the project has enhanced the capabilities of local leaders through provision of CVA training, which aims to foster community-driven implementation.



The community keeps a close watch of their crops to ensure they are growing well.



FMNR Champion Adraida smiles as she stands on regenerated land in her community.

# **ADRAIDA'S STORY**

Adraida is a farmer and FMNR champion, thanks to World Vision's Sustainable Land Regeneration (SLaR) project in Zambia, supported by the Australian Government. Adraida's community was once mostly arid, with farmers struggling to keep up with the management of their crops and the price of seedlings.

This all changed when Adraida became involved in the SLaR project, learning about the land restoration technique of FMNR and also joining a women's savings group in her village. She first began championing FMNR by teaching her fellow savings group members about the benefits of it and then how to prune and regenerate trees. Adraida shared, "I was glad that my fellow women had so much hope in me. At last, I could bring about some of the much-needed answers to restoring our land in the community as most of it was once deforested land."

News of Adraida and her group's success found its way to other women in their community through word of mouth. This then had a ripple effect on the uptake of FMNR, with women all over the community learning the technique to prune and regenerate their own land. Together, these women are now looking to regreen their entire community and hope to influence other districts to do the same.

### **SUSTAINABILITY**

FMNR is a highly sustainable approach given its simplicity, the limited inputs it requires, and the manifold benefits it provides to those who use it, which only increase over time as trees grow to full size and biodiversity increases. However, the MTR found clear evidence of conflict between conservation efforts and people's immediate economic needs in the face of rising poverty indicators, particularly for female-headed households. While the project is seeing strong growth in community awareness and adoption of FMNR techniques, for the project to be sustainable in the long term, it will need to address the immediate economic needs of target households while still promoting long-term environmental sustainability.

### **CROSS CUTTING THEMES**

### **GENDER EQUALITY**

FGDs revealed that women, both with and without disabilities, generally demonstrated good understanding of FMNR principles and practices and could clearly identify the environmental benefits of FMNR, including soil erosion prevention and shade provision. GEDSI training was both done separately and embedded in other trainings, including in EWV for entrepreneurship and the Training of Practitioners initiative. Despite prevailing challenges, instances of increased male support indicate a potential shift towards greater gender inclusivity in FMNR and restoration activities. The project's strategies, including lobbying for land rights, promoting women's groups, and conducting men-only sessions, contributed to this positive shift in men's attitudes towards women's participation, including in programs such as SLaR.

### **DISABILITY**

The project has linked people with disabilities to DPOs that provide assistive devices, to improve participation, leadership, and livelihood opportunities. The project also conducted awareness sessions with the families and caregivers of people with disabilities to foster better understanding of the capabilities of people with disabilities to engage in FMNR activities. The MTR surveyed 319 households of people with disabilities, representing 18% of the 1,781 sample households. The survey found that 55% of households of people with disabilities who were surveyed about FMNR adoption are currently using the approach, indicating that efforts to integrate vulnerable households into project activities is having some success.

#### **ENVIRONMENT**

Improving the natural environment is a core component of the SLaR project, which is primarily achieved through the adoption of FMNR and a range of other land restoration and agricultural practices. Using FMNR, communities are encouraged to adopt positive behaviours such as targeted pruning, while discouraging them from destructive behaviours such tree cutting and unmanaged livestock grazing. Despite challenges with extreme weather events, the project is seeing a strong uptake of land restoration and agricultural practices in target districts, and the MTR found an observed increase in tree density.

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# **CONCLUSION AND RECOMMENDATIONS**

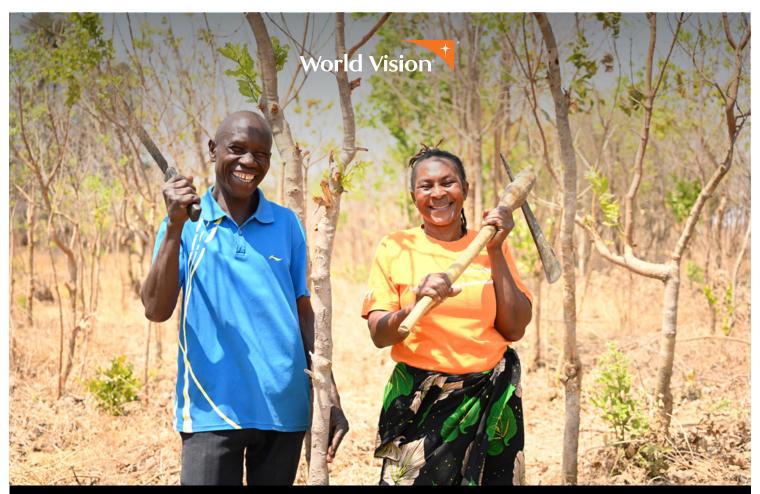
The MTR reveals a complex picture of progress towards **Outcome 1**. While FMNR awareness and adoption have increased since baseline, concerns persist around declining household welfare, food insecurity, and unequal access to resources, particularly for women and households with disabilities. The SLaR project should prioritise interventions that build community resilience to shocks like droughts, potentially diversifying livelihoods beyond rain-fed agriculture. To address food insecurity, the project should explore strategies to improve household incomes and promote dietary diversity, with targeted support for female-headed households and those with disabilities. Continued and intensified efforts to address gender inequalities in resource access and decision-making are crucial going forward, focusing on long-term changes in social norms and practices.

Under **Outcome 2**, the MTR indicates that the project has been successful in engaging partners, however there is still room to enhance the impact of these partnerships. The SLaR project should focus on deepening engagement with government and other non-government organisations (NGOs) to ensure sustained support for scaling up FMNR. This includes advocating for policy frameworks that enable FMNR adoption and providing technical and financial support to partners for effective implementation. Furthermore, SLaR should provide platforms for partners to share best practices and lessons learned, fostering a collaborative approach to scaling up FMNR. It is also important to consider the capacity of different partners and tailor engagement strategies accordingly.

**Outcomes 3 and 4** are intertwined, focusing on grassroots movements and the enabling environment. To strengthen these outcomes, SLaR should prioritise sustained community engagement and empowerment. This involves continued support for FMNR Champions, including traditional leaders, and strengthening community-level governance structures to enforce FMNR practices. Communication strategies should be diversified to reach a wider audience and address specific community needs and concerns. Advocacy efforts should continue to focus on policy changes that support FMNR scaling and address systemic barriers to sustainable land management.



Zambian land regenerated through FMNR.



Liveness and her husband smile as they demonstrate how they prune their trees using FMNR.

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