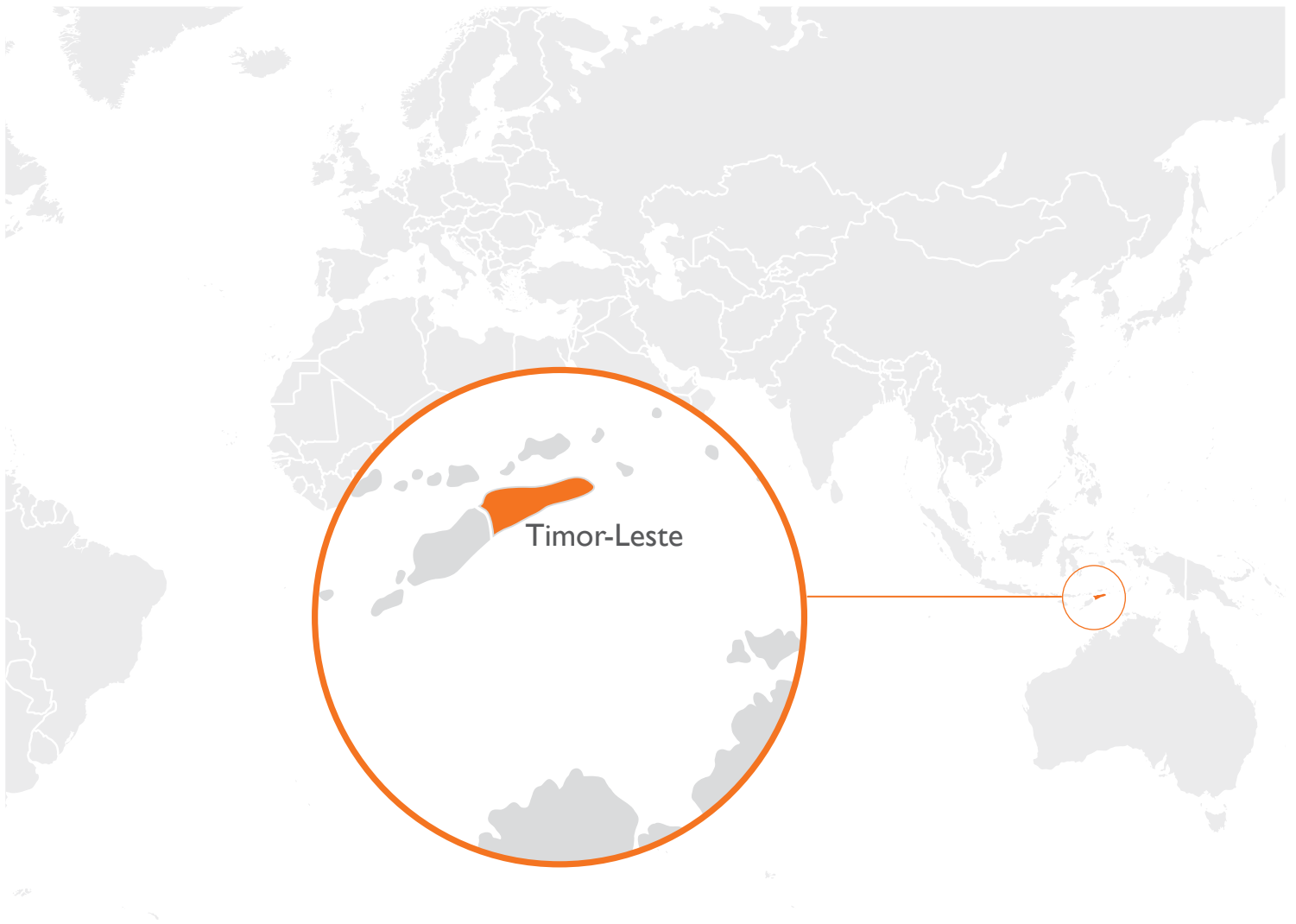




CLIMATE RESILIENCE FOR ALL

Timor-Leste | Impact Brief (2020-2025)



About this report

This evaluation was completed by independent consultants, Elise James and Chloe Morrison. The evaluation and brief were reviewed by the following World Vision Australia (WVA) staff: Harry James, Resilience & Regenerative Advisor; Nami Kurimoto, Evidence Building Advisor; and Yvanah Hernandez, Contract Manager. For more information, contact Yvanah Hernandez, Contract Manager, World Vision Australia: Yvanah.Hernandez@worldvision.com.au.

CR4ALL is supported by the Australian Government through the Australian NGO Cooperation Program (ANCP). The views expressed in this publication are the author's alone and are not necessarily the views of the Australian Government.

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Front cover photo: The Climate Resilience for All project encourages children as the future caretakers of their environment through tree planting.



SUMMARY OF FINDINGS

Timor-Leste is a lower-middle income country and is highly susceptible to natural disasters and the ongoing impacts of a changing climate, experiencing both severe droughts and flooding events. World Vision's Climate Resilience for All (CR4ALL) project, funded by the Australian Department of Foreign Affairs and Trade (DFAT) was implemented from October 2020 to June 2025 across three municipalities in Timor-Leste. The project aimed to enhance household and community resilience to climate change through inclusive disaster response, improved climate-adaptive agricultural practices, and diversified, nutrition-sensitive livelihoods.

In 2025, an endline evaluation was conducted to assess the overall effectiveness of the project, using a mixed-methods approach and drawing (where possible) on existing secondary data. The endline data collection involved over 600 individual surveys, 22 key informant interviews, and 9 focus group discussions.

The evaluation highlighted the following key achievements:

- A notable improvement in local resilience levels in terms of people being better prepared for disasters and having increased access to positive coping mechanisms.
- A significant increase in access to relevant assets over the life of the project, from less than 20% across all three municipalities at baseline, to at least 95% at endline.
- A 31% reduction in the number of beneficiaries experiencing 'moderate' or 'high' crop losses during adverse climatic conditions; from 88% at baseline, to 70% at mid-term and 61% at endline.
- 82% of households were found to know the relevant early warning signs and what to do in case of an emergency.
- 94% of households felt 'somewhat' or 'very' prepared to face a disaster event.
- 90% of households have a disaster preparedness plan in place.
- A significant increase in farmer's adoption of a range of improved agricultural and environmental practices; for example, the percentage of farmers using organic pesticides increased from 27% at baseline to 77% at endline.
- 85% of farmers are practising FMNR, agroforestry, terracing and/or reforestation.
- 92% of farmers are practicing improved food storage techniques; an important component of ensuring long-term food security.



Regenerated land in Timor-Leste.

- 100% of households reported earning an income from at least one of the alternative livelihoods promoted by the project.
- 91% of households were found to have sufficient diet diversity.
- A marked increase in the proportion of people with savings, from 26% at baseline to 44% at endline. For people with a disability, those who had savings increased from 32% at baseline to 57% at endline.
- An upswing in access to financial services, from 69% at baseline to 76% at endline. The establishment of savings groups using the S4T model has been a clear success for the project.

The evaluation also provided the following key recommendations:

- Transition S4T groups to cooperatives in the second last year of projects (rather than the last), to maintain support from World Vision while building self-confidence in group members to function on their own.
- Think of ways to encourage farmers (especially those in savings groups) to keep investing in their agricultural inputs - e.g. purchasing their own plastic tubing. This could be piloted through subsidy methods.
- Address water scarcity issues alongside, or before, agricultural programming to strengthen gains in agricultural productivity and food security. Consider partnering with organisations focused on water provision for agriculture or implement climate-smart agriculture projects alongside existing water resource management programs.
- Use integrated programming by having complementary projects running alongside each other rather than having a staff team trying to implement several different programming models within the one project. This may reach a smaller number of people overall but provides a more holistic package of community interventions.

CONTEXT

Timor-Leste, as a lower-middle income country, faces significant vulnerabilities to climate change. Approximately 70% of its population are reliant on rain-fed agriculture, however, the region experiences extreme climate fluctuations influenced by the El Niño Southern Oscillation, leading to severe droughts and unpredictable rainfall patterns. These changes exacerbate existing vulnerabilities, causing increased crop losses, water scarcity, and food insecurity, with child stunting rates among the highest globally.

Deforestation, driven by agricultural expansion and unsustainable agricultural practices, further compound environmental degradation, decreasing land productivity and increasing risks of floods and landslides. In addition, a loss of forest cover disrupts the water cycle, leading to decreased groundwater recharge and further reducing water availability

for communities. Rural households are largely dependent on agriculture-based livelihoods and have limited access to financial services; this hinders their ability to adapt or diversify their livelihoods, leaving them exposed to climate-related shocks.

Timor-Leste's susceptibility to natural disasters, compounded by inadequate coping strategies and governance, positions it among the world's most disaster-prone countries. Women and individuals with disabilities bear the brunt of these challenges, with women facing barriers to land ownership and decision-making, while people with disabilities encounter significant social and economic obstacles. Addressing these disparities is crucial for enhancing community resilience and ensuring inclusive climate adaptation actions.



Pedro implements FMNR techniques on his farm to develop more climate-resilient cropping systems.

PROJECT OVERVIEW

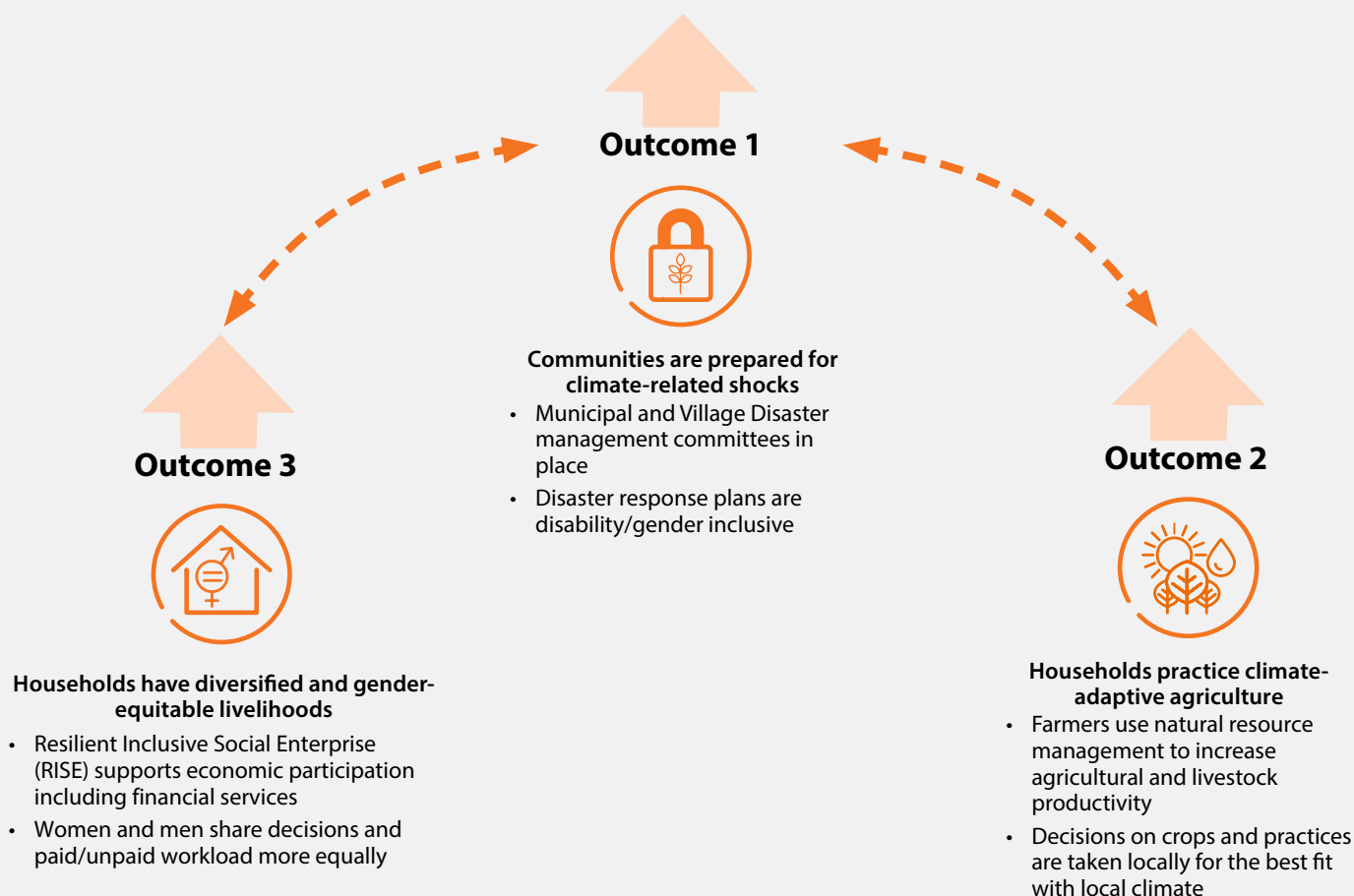
World Vision Timor-Leste's Climate Resilience for All (CR4ALL) project, funded by the Australian Department of Foreign Affairs and Trade (DFAT) through the Australian NGO Cooperation Program (ANCP) was a five-year initiative running from October 2020 to June 2025 that aimed to enhance household and community resilience to climate change through inclusive disaster response, improved climate-adaptive agricultural practices, and diversified, nutrition-sensitive livelihoods. The project aimed to directly benefit 15,444 people from 17 villages across Aileu, Baucau and Manatuto. The project set out to achieve its overarching goal by working towards the following three project outcomes:

- **Outcome 1:** Communities are prepared for a gender and disability inclusive response to climate-induced disasters.
- **Outcome 2:** Households practice improved climate-adaptive and inclusive agriculture.
- **Outcome 3:** Households have diversified, climate-resilient and nutrition-sensitive livelihoods, supported by more gender-equitable and disability inclusive relations.

Given Timor-Leste's vulnerability to climate impacts, the project prioritised engagement with women, youth, farmers, and local disaster management committees to bolster disaster preparedness.

CR4ALL's Theory of Change

Goal: To boost the resilience of households and communities to the impacts of climate change, reaching 15,444 people by 2025.



The project utilised a range of tried-and-tested approaches including:

- Resilient and Inclusive Social Enterprises (RISE)
- Farmer Managed Natural Regeneration (FMNR)
- Sloping Agriculture Land Technology (SALT)
- Savings for Transformation (S4T)

RISE: is a business training program designed to empower individuals and to build sustainable livelihoods through social enterprises. The program supports participants in developing their business models while also promoting social impact, improved gender norms, and disaster resilience.

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.

SALT: is a soil conservation and food production system designed for hilly or sloping lands, particularly those prone to erosion. It involves planting dense hedgerows of nitrogen-fixing trees and shrubs along contour lines to create a natural terrace system. These act as living barriers; trapping soil, reducing runoff, and improving soil fertility.

S4T: is World Vision's savings group model; a savings group is a voluntary group of people who save and lend money together in a safe way. Through S4T groups, men and women in poor communities set up their own groups that save money together in small amounts and lend to each other when needs arise, such as a family member's illness, children's education and falling income due to droughts.

CR4ALL focused on promoting equitable decision-making and enhancing agricultural practices through community partnerships. The project collaborated with women's organisations, disability groups and local disaster committees to strengthen local community resilience. It also partnered with the Ministry of Agriculture and Fisheries (MAF), who provided support for climate-adaptive agriculture activities. In addition, the project partnered with G-SIG, a specialised, youth-led Geographic Information Systems volunteer organisation, to map and document FMNR sites. This initiative aimed to identify the extent of community-led restoration efforts, delineate site boundaries, and catalogue the types of tree species present.

EVALUATION OVERVIEW

An endline evaluation of CR4ALL was conducted by independent consultants Elise James and Chloe Morrison in March-April 2025. The evaluation employed a mixed-methods approach to assess the project's effectiveness, sustainability, and the extent to which gender equality, and disability and social inclusion aspirations were met, guided by five Key Evaluation Questions. Data sources included a review of existing (secondary) project data, 602 individual surveys with beneficiaries from 443 unique households, 22 key informant interviews, and 9 focus group discussions.

Limitations included misalignment of some secondary data with the specific objectives of the evaluation, and variability

in definitions of a 'household' during the survey which could have led to measurement errors. The consultants attempted to mitigate this by clearly defining heads of households and adjusting sample counts accordingly. There was also a lack of targets set for some indicators, making it difficult to determine the extent of endline success. Some indicators were also not entirely fit for purpose to measure progress towards certain activities or related outcomes. There is also the chance that when interviews were conducted in different languages, there may have been mistranslation or a loss of nuance when converted to English for the consultants.



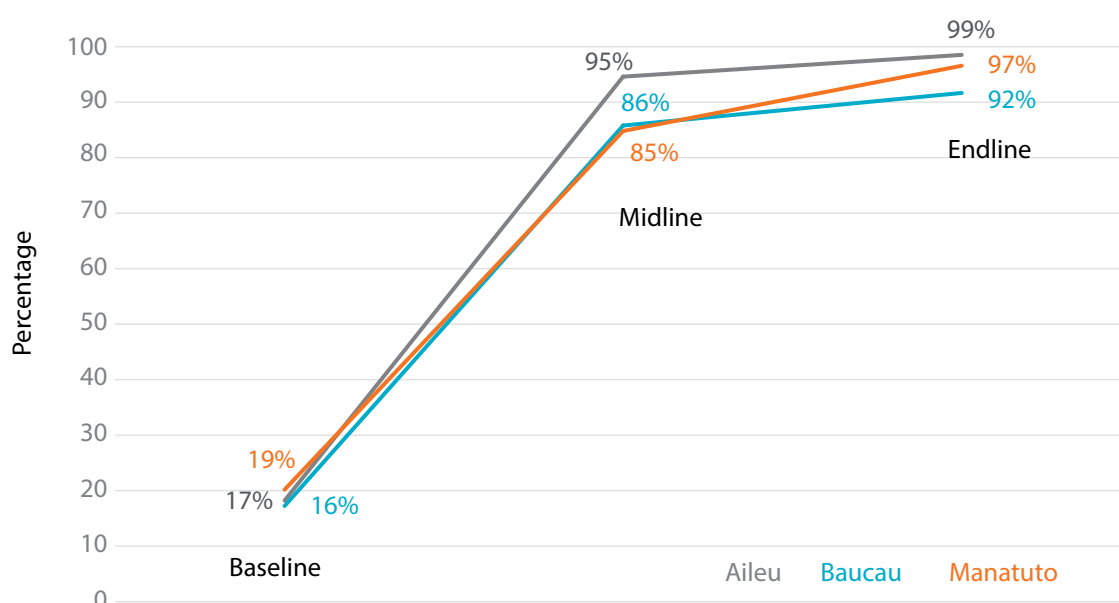
The Climate Resilience for All project helps farmers in Timor-Leste to adapt to climate change.

FINDINGS

The endline evaluation judged the project's effectiveness in reaching its primary goal – to increase household and community resilience to the impacts of climate change – as well as results against the three project outcomes, which are outlined in more detail below. At goal level, the project

has improved localised resilience in terms of people being better prepared for disasters, increasing access to coping mechanisms. One key success was a significant increase in people's access to assets over the life of the project across all three municipalities, as visualised in the graph below:

Access to assets increased substantially during the project



Another success was a steady decrease in the number of beneficiaries reporting experiencing 'moderate' or 'high' crop losses during adverse climatic conditions over the life of the project, from 88% at baseline, to 70% at mid-term and then 61% at endline. This represents a 31% reduction from baseline to endline.

OUTCOME 1: COMMUNITIES ARE PREPARED FOR A GENDER AND DISABILITY INCLUSIVE RESPONSE TO CLIMATE-INDUCED DISASTERS.

The results from the endline study were clear that project participants now feel more prepared for disasters, both at the community and household level.

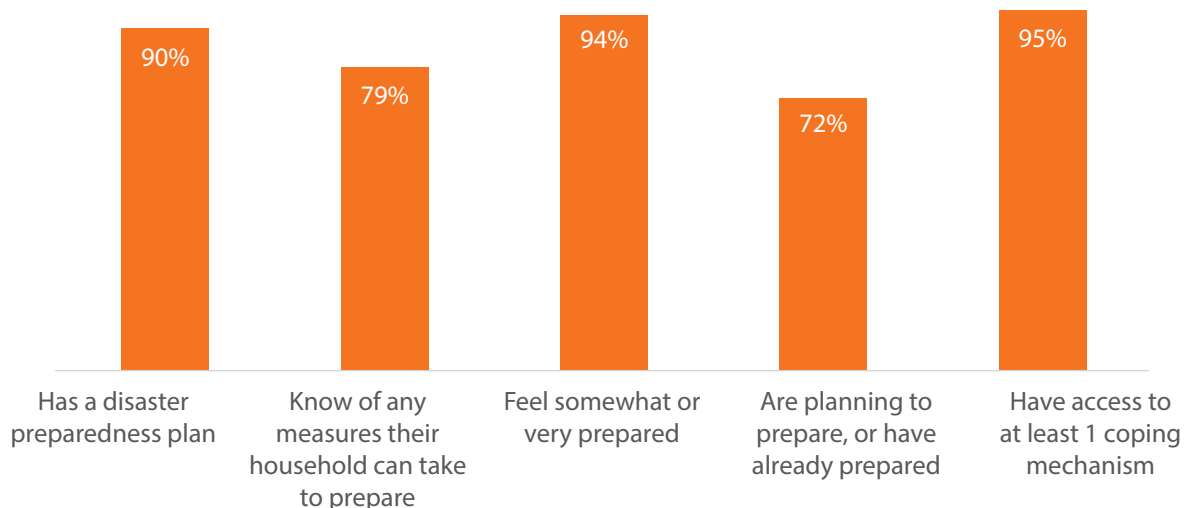
At endline, the following indicator - *Proportion of communities that know the early warning signs and know what to do in case of an emergency* - was measured, with 82% of surveyed households positively meeting the requirements for this. Positive results were also found for several of the project indicators under this outcome, which are summarised in the table overleaf.

The evidence under Outcome 1 shows that participation in CR4ALL's training gives community members confidence that their community is prepared and well-equipped to manage disasters, and to reduce their overall risk.

OUTCOME 2: HOUSEHOLDS PRACTICE IMPROVED CLIMATE-ADAPTIVE AND INCLUSIVE AGRICULTURE.

The endline found strong uptake in improved agricultural practices, for both men and women. The project has achieved not only knowledge change, but practice change in terms of improved climate-adaptive agriculture; 85% of farmers surveyed at endline reported practicing either FMNR, agroforestry, terracing or reforestation. The baseline – which measured only the percentage of farmers practising terracing techniques – found that on average only around 22% of farmers across the three municipalities were doing this; at endline, terracing practices had risen to 69%. For those farmers who have begun new climate-adaptive agriculture practices in the past four years, the majority say they have done this as a direct result of World Vision's work.

Most households have prepared for a future disaster in some way



Furthermore, 77% of farmers surveyed at endline were found to be using organic fertiliser, compared to only 27% at baseline. In addition, the endline found that 92% of farmers are practicing improved food storage techniques, which is an important component of ensuring long-term food security.

Overall, especially when compared with the baseline, there has been a clear uptake in adoption of improved climate-adaptive agriculture practices (even where people say they have always done this), with direct attribution to World Vision's assistance.

OUTCOME 3: HOUSEHOLDS HAVE DIVERSIFIED, CLIMATE-RESILIENT AND NUTRITION-SENSITIVE LIVELIHOODS, SUPPORTED BY MORE GENDER-EQUITABLE AND DISABILITY INCLUSIVE RELATIONS.

The endline found that 100% of surveyed households reported earning an income from at least one of the alternative livelihoods promoted by the project, with poultry production being the most popular of these. This is a strong sign of the diversification of local livelihoods.

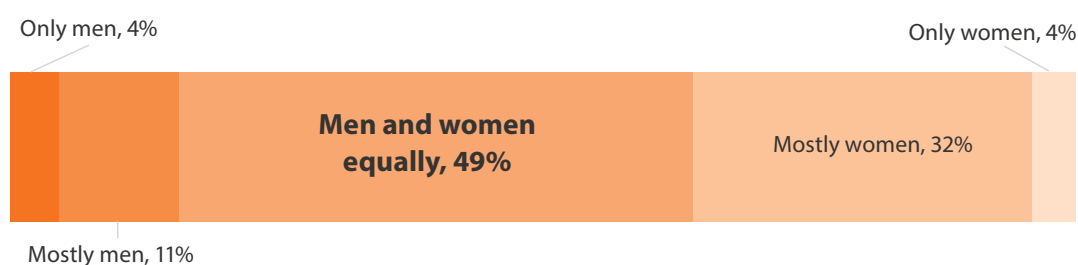
At endline, the percentage of households with sufficient diet diversity (i.e. household members consuming food from at

least four different food groups) was found to be 91%, which is a positive sign of good household nutrition.

57% of individuals surveyed at endline stated they had improved their skills to operate a small business at endline and confirmed they had received livelihoods/business/finance training directly from World Vision. At baseline, only 26% of project participants had access to savings, compared to 44% at endline. For people with a disability, access to savings increased from 32% at baseline to 57% at endline. Finally, regarding participant's access to financial services, this rose from 69% at baseline to 76% at endline. The establishment of savings groups using the S4T model has been a clear success for the project.

When given the following statement – *Persons with disabilities are valued contributors to community affairs and planning* – 91% of endline respondents strongly agreed or agreed with this. In addition, 91% also agreed with a statement saying that people with disabilities have more or less the same access to community services as anybody else. Statements on gender equality and women's participation in community decision making were also found to have positive reactions in the endline data; for example, almost half of respondents felt that men and women participate equally in community meetings, with a third responding that it is 'mostly women' who participate. This is visualised in the graph below:

Who takes part in community meetings?



"In the last five years, I have been raising animals as a farmer. Now, there is change. There's an increase in our family income, and I support my children's education. In terms of food security, it's not really difficult because I have corn, maize, cassava, and other crops to sustain my family"

– Key Informant Interview with a person with disability in Aileu

"My husband is now selling fruit, and we are better able to cover our household needs... we are able to buy rice, cooking oil, and our basic household needs are now sufficient. We have been able to grow more vegetables, and we eat a lot of these"

- Key Informant Interview with a caregiver of a person with disability

"We feel that we are prepared to face any disaster... we are prepared because we have received training..."

– Focus Group Discussion with women in Baucau

"The savings and loan group that was established has been transformed into a cooperative group. This is one of the biggest changes... with 25 members, they managed to raise a total of \$24,000 USD. Many members took money from the group to do business, and some helped support their children's school until graduation"

- Key Informant Interview with a person with disability in Baucau

MARIA'S STORY

Maria lives with her husband in Aileu, Timor-Leste where she is both a farmer and the leader of a local savings and loans group supported by CR4ALL. Before the project began, Maria's community faced multiple challenges: poor access to markets, low crop yields, and limited opportunities to save money. The sloped terrain made horticulture difficult, especially during the rainy season when landslides were frequent. Vegetables were grown with little knowledge of composting or pest control.

"Before the project started... the quality of vegetables that we grew was not very good; we now learn about pesticides and how to apply them correctly."

World Vision delivered practical training on farming techniques like composting, terracing, and plant spacing. Maria's group members now grow bok choy, lettuce and other vegetables and have noticed an increase in yield quantity and quality.

Maria's savings group began with 18 members and has now grown to 104 members, with savings exceeding USD \$28,000. Most of the group's members are women, and the group has become a reliable financial safety net, especially during annual periods of drought or flooding.

"The hungry season is November to February because it rains a lot... People come and loan money from the group, so I feel this helps people to be more resilient for disasters"



The financial training has also changed the way community members think about and spend their money.

"Before WV came, men liked to spend money everywhere — on ceremonies and culture (like wedding ceremonies) ... One of the criteria for loans is it must be for business, not culture."

Looking to the future, Maria feels more confident—not just in her own abilities, but in the community's ability to adapt and thrive.

"Personally, I feel I will be more resilient."

SUSTAINABILITY

The CR4ALL project demonstrates a strong likelihood of sustainability across several key interventions. Reductions in crop losses during adverse conditions are likely to persist due to strong uptake of improved techniques and seed storage, enabling farmers to continue independently. Increased access to assets and financial services is also sustainable, with the endline finding several instances of S4T groups transitioning to SECOP (the national government's 'Secretário de Estado de Cooperativas'). Household resilience has been bolstered by improved financial security and environmental practices like landslide reduction, while community capacity to respond to disasters shows sustained knowledge and behaviour change.

A significant proportion of farmers using climate-sensitive/adaptive agriculture plan to continue, citing better yields and improved storage techniques. Low-cost agricultural methods

were widely adopted among women and people with disabilities and are likely to endure. However, sustainability remains indeterminate for increased income from alternative livelihoods (primarily due to lack of further data/lack of time to have seen proven success), and for small business capacity, as improved skills like bookkeeping may not translate into sustained business ownership without further application.

“Regarding the activities already in place, I believe that they will continue, especially in savings and loans, because in the groups I see the income increasing, and the agricultural production is also increasing.”

– Key Informant Interview with a Youth Leader in Baucau



Terracing on sloping land in Timor-Leste reduces erosion, helping crops to thrive.

CROSS-CUTTING THEMES

Gender Equality: The evaluation found the project had demonstrated strong gender inclusion, with women playing key roles in S4T groups and agricultural activities and were engaging in more equitable household financial management. Women were noted to be more involved in project activities than men, as men were often out working and women were seeking to secure additional income for their household in their free time. Engaging women in S4T groups and income generating activities helps to elevate their status within the household and community as key financial contributors and managers.

Disability and Social Inclusion: The proportion of people with a disability participating in the CR4ALL project reflected national disability prevalence statistics. People with disabilities were noted participating in agricultural activities (although this often depended on their impairment type), cookstove production, and savings groups. It was often reported that S4T group members with a disability were able to save their government pension in the group, thus benefiting from the additional interest.

During the endline, a strong majority of surveyed community members agreed that their community is fair and inclusive of

people with disabilities. It was also widely reported that there was greater respect for people with disabilities expressed, and a reduction in the use of derogatory or dehumanising terms. World Vision Timor-Leste's longstanding partnership with disability rights holder organisation, Raes Hadomi Timor Oan (RHTO), which facilitated suco-level trainings for community members, likely played a key role in driving and sustaining this positive change.

Environment: The evaluation found that more than 131 hectares have been restored under the CR4ALL project across the three target municipalities. Approaches such as FMNR, agroforestry, terracing and reforestation have clearly been well received and are likely to continue to be utilised long after the project ends. The increase in the use of organic pesticides from 27% to 77% at endline is a great achievement for the ongoing protection and management of local farming lands. Farmers were found to be increasingly adopting a wide range of different practices that seek to protect and restore the natural environment. For example, at baseline, only 2% of farmers were found to be using the SALT approach; at endline this had increased to 72%.



Semi-circular basins (referred to in Tetun as *teras hamnasa*) capture rainwater and sustain crops during dry periods in Timor-Leste.

CONCLUSION AND RECOMMENDATIONS

The project has been effective in increasing disaster preparedness and response capacities at the community level, particularly through training and awareness raising. Reductions in crop losses, increased access to disaster preparedness resources, and increased confidence of beneficiaries in their community's ability to prepare for and manage disasters helps contribute towards feelings of greater resilience.

There has been strong uptake and adoption of climate-adaptive agriculture practices amongst farmers, which has improved their resilience to climate impacts. Long-term,

these practices should significantly improve food security.

The project had excellent participation from women and youth, and relatively good engagement of people with disabilities. The introduction of savings groups has been a successful strategy for building household-level financial resilience and coping mechanisms, particularly for women, and people with disability. Participants recognise the ability of savings groups to provide critical financial support to households during emergencies, and many have seen the benefits they provide to the broader community.



G-SIG, a youth-based GIS organisation helped CR4ALL map tree coverage using drone technology.

Key recommendations:

- **Transition S4T groups earlier.** Look at transitioning S4T groups to cooperatives with SECOP in the second last year of projects, rather than the last, to maintain support from World Vision while building self-confidence in groups.
- **Encourage further agriculture investments.** Think of ways to encourage farmers, especially those part of savings groups, to keep investing in their agricultural inputs (e.g. purchasing their own plastic tubing). This could be piloted through subsidy methods.
- **Address water alongside, or before, agricultural programming.** Water scarcity for agriculture was frequently mentioned, and while it is well beyond the scope of CR4ALL, addressing the immediate issue of water conservation would help strengthen gains in improving agricultural practices.
- **Use integrated programming.** Having complementary projects running alongside each other shows the best results, as staff are not spread across multiple models, and programming can be staggered according to community interests. This does mean reaching a smaller number of people overall but provides a more holistic set of community interventions.



Community members, Basilio and Teodosia from Baucau, tend to their family garden to grow vegetables and support their family.

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