



# WOMEN'S EXPERIENCES OF CLIMATE CHANGE IMPACTS IN TIMOR-LESTE

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### AUTHORS:

JULIA SCHARINGER | GENDER, PEACE AND CONFLICT TRANSFORMATION SPECIALIST | TRANS: VERSE MILENA DA SILVA | GENDER TRANSFORMATION SPECIALIST | TRANS: VERSE DIRCIA SARMENTO BELO | ENVIRONMENTAL SPECIALIST | TRANS: VERSE

### CO-AUTHORS:

LUCIO SAVIO: CLIMATE FINANCE MANAGER I OXFAM IN TIMOR-LESTE TIM YOUNG: RESEARCH AND ANALYSIS ADVISOR I OXFAM IN TIMOR-LESTE

TEALL CROSSEN: CLIMATE CHANGE AND CLIMATE FINANCE ADVISOR I OXFAM IN TIMOR-LESTE

### FOR MORE INFORMATION

OXFAM IN TIMOR-LESTE

FACEBOOK: HTTPS://WWW.FACEBOOK.COM/OXFAMTIMORLESTE

WEB: HTTPS://ASIA.OXFAM.ORG/COUNTRIES/OXFAM-TIMOR-LESTE-EAST-TIMOR

### PHOTO COVER:

Jolcia Anita Cárceres dos Santos (APFTL)

### GRAPHIC DESIGN:

Spela Stergar (trans:verse)

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### **RESEARCH TEAM**

- 1. Genoveva Ferreira Soares-APFTL
- 2. Ana Berta da Cruz-APFTL
- 3. Jolcia Anita Cárceres dos Santos-APFTL
- 4. Rosalia Naz-APFTL
- 5. Milnócia Ribeiro-APFTL
- 6. Victoria Linajar Maria Bernadetha Taena-APFTL
- 7. Frangelina Alves da Crús-APFTL
- 8. Rosita Almeida-APFTL
- 9. Efigenia Maria Malik Makikit-APFTL
- 10. Remigia Aleixo Ximenes Belo-APFTL
- 11. Pedro de Deus Martins-CGT
- 12. Azenes Vieira-CGT
- 13. Jemicarter Moniz dos Reis-CGT
- 14. Laurentino Alves-CGT



The wall barrier along the river in Manatuto Municipality is at high risk of damage due to the intense pressure from the river's water flow. If it is destroyed, the nearby rice fields will be severely impacted.

Photo: Dircia Sarmento Belo (trans:verse)

### **ABBREVIATIONS**

AFoCO Asian Forest Cooperation Organization
APFTL Alumni Parlamentu Foinsa'e Timor-Leste

**CBO** Community Based Organization

**CGT** Core Group Transparency

**DV** Domestic Violence

ENSOF-FDTLFGDEl Niño Southern OscillationTimor-Leste Defence ForceFocus Group Discussion

**FPAR** Feminist Participatory Action Research

HKL Hamutuk Servi Komunidade IPV Intimate Partner Violence

**LGBTIQA+** Lesbian, Gay, Bisexual, Trans, Intersex, Queer, Asexual

MAF Ministry of Agriculture and Fisheries
SGBV Sexual and Gender Based Violence

**UKL** Uma Kbit Laet

TILOFE Timor-Leste Organic Fertilizer

### 1. EXECUTIVE SUMMARY

Timor-Leste, a small island nation in Southeast Asia, faces escalating climate change impacts, including droughts, floods, cyclones, and landslides, which threaten livelihoods, food security, and public health. Cyclone Seroja in 2021 exemplified these challenges, causing widespread destruction and displacement. Women, especially in rural areas, bear disproportionate burdens, juggling caregiving and food production while constrained by gender norms, limited resources, and heightened vulnerability to violence. Despite systemic barriers, women demonstrate resilience as farmers, water managers, and community leaders, although their contributions often go unrecognized. This report examines the gendered and intersectional impacts of climate change impacts in Dili, Ermera, and Manatuto, highlighting women's challenges, resilience, and leadership while offering recommendations to strengthen their roles and possibilities in building climate resilience.

### Key findings

### Women's experiences of climate change impacts

Women are disproportionately burdened by recurring climate disasters—such as Cyclone Seroja, floods, and droughts—assuming caregiving, economic recovery, and household management tasks with limited institutional support, thereby exacerbating existing gender inequalities.

### Compounded vulnerabilities and intersecting challenges

Structural barriers like insecure land tenure, gender-based violence, and socio-cultural norms compound women's climate vulnerabilities, especially among marginalized groups (e.g., women with disabilities, single mothers, widows), creating a cycle of heightened risk and limited recovery options.

### · Leadership and resilience

Despite systemic constraints, women exhibit remarkable leadership and adaptability—forming savings groups, managing agroforestry, and supporting disaster preparedness—yet face persistent obstacles in accessing decision-making spaces, climate finance and critical resources to scale their resilience efforts.

### Recommendations

### Government:

Adopt and implement gender-responsive policies (e.g., decouple subsidies from land ownership), strengthen gender-responsive disaster preparedness and recovery and improve gender-sensitive climate-resilient infrastructure through gender-disaggregated data collection and analysis, inclusive planning and strong accountability to ensure women's and marginalized groups' needs are met.

### Development partners

Invest in women's leadership, intersectional research, and inclusive infrastructure (e.g., shelters, irrigation) while supporting knowledge exchanges to reinforce equitable, evidence-based climate resilience.

### NGOs and CBOs

Promote women's leadership through co-created climate resilience initiatives, expand access to microfinance, community awareness and training, and foster partnerships with donors, governments, and research institutions to amplify grassroots success and local knowledge.

### 2. INTRODUCTION

Timor-Leste faces mounting challenges from human-induced climate change, which intensifies its vulnerability to extreme weather patterns driven by the Pacific monsoon and El Niño Southern Oscillation (ENSO). Frequent and severe droughts, floods, cyclones, and landslides undermine livelihoods, food and water security, infrastructure and health, particularly in agriculture, fishing and subsistence farming. Cyclone Seroja in April 2021 encapsulated these impacts by disrupting incomes, worsening resource scarcity and creating lasting fear. Women in rural areas shoulder the heaviest burdens—juggling caregiving and food production—while restrictive gender norms and limited access to resources, land, resources and information further compound their risks, including heightened vulnerability to sexual and gender-based violence (SGBV).

Yet, women's experiences of climate change are far from uniform. Intersectional factors such as socio-economic status, age, disability, sexual orientation, gender identity and expression, and cultural norms play a significant role in shaping their exposure to risks and capacities to respond.

While women bear disproportionate burdens due to dominant gender norms, roles and relations which make them primary responsible for tasks, such as securing water, food and caregiving during climate-related crises, their work and capacity to act as agents of change receives little recognition. Instead, traditional gender norms and systemic inequalities limit women's access to land, financial resources and decision-making processes, including participation in climate finance initiatives. Yet, women's knowledge and contributions, particularly as skilled farmers, water managers, and community leaders, have significant potential to drive climate resilience.

This report examines the gendered and intersectional impacts of climate change on women in the municipalities of Manatuto, Ermera and Dili, providing a comprehensive analysis of their lived experiences, challenges, and resilience strategies. Set against the backdrop of global climate finance discussions and developments, it underscores the pressing need for equitable and inclusive mechanisms that directly address the diverse needs of women. By amplifying their voices and experiences, the report offers actionable recommendations for policymakers, donors, development actors and civil society emphasizing the importance of recognizing and supporting women as essential leaders and agents of change in building a climate-resilient Timor-Leste.

This report contributes to goals of the Kōtui Programme in Timor-Leste to increase women's rights in climate adaptation policy and the allocation of climate finance to initiatives that support women's resilience.

### Kōtui program at a glance

- Kōtui is a partnership between Oxfam Aotearoa and the New Zealand Ministry of Foreign Affairs and Trade.
- The overall purpose of the Kōtui programme is to increase the resilience, wellbeing and agency of women in the face of climate breakdown and disasters.
- The Kōtui programme focusses particularly on the lives of those women facing compounding marginalization such as disability, single parenthood, widowhood, or remoteness in the wider Pacific region.
- Kōtui is delivered by Oxfam Aotearoa, in conjunction with Oxfam in the Pacific, Oxfam in Timor-Leste, and in-country partners.
- Kōtui seeks two long-term outcomes:
  - ♦ Governance systems affecting resilience are more inclusive, accountable and gender responsive.
  - Women have more equitable access to resources and opportunities that matter to their resilience and well-being.
- For more information on the Kōtui Programme see: <a href="https://www.oxfam.org.nz/wp-content/uploads/2021/04/">https://www.oxfam.org.nz/wp-content/uploads/2021/04/</a>
  <a href="Kotui-Programme-Overview-country-projects.pdf">Kotui-Programme-Overview-country-projects.pdf</a>



A woman in Fatukeru, Ermera, is clearing weeds from the small corn plants to give them space to grow. Photo: Dircia Sarmento Belo (trans:verse)





### 3. METHODOLOGY

### 3.1. Research design and approach

This research adopts a strengths-based and intersectional approach rooted in Feminist Participatory Action Research (FPAR) principles to amplify the diverse voices and lived experiences of women in Timor-Leste. The methodology includes focus group discussions (FGDs), semi-structured interviews, and case studies. An FPAR workshop with Oxfam and partner organizations, including Alumni Parlamentu Foinsa'e Timor-Leste (APFTL) and Core Group Transparency (CGT), guided the research design. These partners, with support from trans:verse's consultant team, conducted the fieldwork.

### 3.2. Data collection and sampling

Data collection combined literature review and fieldwork across Dili, Ermera, and Manatuto to capture regional variations in the gendered impacts of climate change. Participants included women in agriculture, fishing, and governance, as well as women with disabilities, trans women and LGBTIQA+ activists, and survivors of natural disasters. Purposeful sampling ensured representation across diverse geographic, cultural and livelihood contexts. Most FGDs were women-only, supplemented by mixed and men-only groups to explore perspectives on women's experiences with climate change and power-sharing in decision-making. Interviews with two *lia na'in* <sup>1</sup> provided insights into cultural meaning-making and women's participation in decision-making processes.

### 3.3. Ethical considerations

The research adhered to Oxfam's Ethical Research Guidelines and the Do No Harm principle, prioritizing participants' safety, dignity, and confidentiality. A Risk Mitigation Plan mitigated potential challenges, such as distress during discussions of traumatic events, and ensured respectful engagement with cultural and social dynamics. Ethical practices were also applied in documenting case studies and visual content, with ongoing informed consent.

### 3.4. Limitations

While the study provides valuable insights, it does not serve as a comprehensive baseline but rather contributes to building an evidence base on the impacts of climate change on women's lives in Timor-Leste. Limitations included the constrained timeframe, seasonal accessibility issues, and the qualitative nature of data, which, while providing rich contextual insights, may limit broader applicability. Additionally, many NGO leadership positions were held by men, further limiting the availability of perspectives from women in decision-making roles.

<sup>&</sup>lt;sup>1</sup> Lia na'in refers to a traditional Timorese cultural custodian or elder who is responsible for upholding and interpreting customary laws rituals and practices. Lia na'ins play a significant role in community decision- making, conflict resolution, conservation efforts and the preservation of cultural heritage. Their guidance is often sought in matters related to land, social harmony, and spiritual well-being Although traditionally a male-dominated role, research participants from Manatuto reported that women are starting to step into this role

# kikit (APFTL)

## 4. WOMEN'S EXPERIENCES OF CLIMATE CHANGE IMPACTS

### 4.1. Impacts of Cyclone Seroja

Cyclone Seroja in April 2021 displaced over 178,000 people, destroyed homes and infrastructure and caused significant agricultural losses of 8,000 tons of rice (Government of Timor-Leste, United Nations & World Bank, 2021; OCHA, 2021)

Manuela Rosario Soares' story: farming amid climate disasters
Manuela Rosario Soares, a farmer from Fatukeru village in
Ermera, represents the compounded challenges faced by
women in agriculture when confronted with climate-induced
disasters. The devastating impacts of Cyclone Seroja in April
2021 washed away her family's crops, livestock, and fields,
which were essential for their daily sustenance and income.
As an elderly woman responsible for managing her household,
she bore the brunt of these losses while grappling with the
fear and anxiety of recurring floods. The river, once a distant
feature, has crept closer over the years, eroding land and
intensifying the threat to her family's livelihood. Despite her
family's efforts to mitigate the damage by planting erosionresistant grasses and reinforcing soil stability with rocks,

Manuela's challenges are aggravated by systemic gaps in support and resource allocation. Although she has submitted



Photo: Efigenia Maria Malik Makik

several proposals requesting government assistance to build protective embankments, she has received no response. The cultural attachment to inherited land prevents her family from relocating, leaving them vulnerable to future disasters. During heavy rains, they stay awake in fear, praying for safety while attempting to protect their belongings and livestock. Attempts to temporarily move to higher ground have led to further hardships, including theft of their remaining animals.

The majority of research-participants identified Cyclone Seroja as the most significant climatic event in recent memory, with far-reaching and ongoing impacts including the loss of farmland, heightened food insecurity and protracted displacement. Agricultural losses were particularly severe with crops, livestock, and food storage facilities destroyed. In regions such as Manatuto and Ermera, damaged irrigation systems and land erosion delayed farming. This forced women to repeatedly rebuild and plant in unsafe areas, intensifying economic hardship and physical exhaustion in an already challenging situation.

These disruptions did not only undermine food security, but also long-term livelihood stability for families dependent on agriculture with many recounting that they had to abandon farmland or could only resume farming three years later. Furthermore, women's caregiving roles placed them at the center of recovery efforts, intensifying their physical and emotional labor. For example, many mothers reported their children experiencing heightened fear and trauma, particularly during rainfall.

### Lurdes Soares Ximenes Pinto's story: navigating safety as a woman with disabilities

The experiences of Lurdes Soares Martins Ximenes Pinto, a visually impaired woman from Timor-Leste, highlight the compounded vulnerabilities faced by disabled women during crisis events. During a flood due to Cyclone Seroja, Lurdes, home alone with three children, was unable to evacuate due to her visual impairment and the fear of landslides. Her quick decision to keep the family together in a secure spot in the house and approach her siblings for support ultimately saved their lives. Following the event, her siblings repaired the damaged kitchen and provided the support she needed to rebuild.

As an active member of the East Timor Blind Union (ETBU), Lurdes calls for greater inclusivity in disaster response. Her experience highlights the systemic barriers disabled individuals face, including inaccessible infrastructure and a lack of tailored support during crises. She calls for policies that priorize the needs of people with disabilities.

hoto: Jolcia Anita Carceres dos Santos (APFIL)

from inclusive evacuation plans to community awareness initiatives. In Lurdes' case she was lucky enough to have a supportive and close-by family. However, this is neither the case for every women, or people with disabilities.

Many women, as well as representatives from LGBTIQA+ and disability organizations emphasised that, disaster response mechanisms in Timor-Leste are not yet sufficient to address the diverse needs and risks faced by its population. Instead, family systems, neighbors, community-based organizations, and self-help groups are stepping in as primary sources of support. While mutual aid and community solidarity can provide invaluable assistance, the lack of comprehensive and long-term state support creates significant challenges. This becomes particularly problematic in contexts where families or communities do not function cohesively, leading to heightened tensions, conflicts, and — in some cases — increased violence. Women, in particular, bear the brunt of these dynamics, as they are often expected to manage caregiving responsibilities while navigating the compounded risks of social and economic instability. When mutual aid systems break down, women may face intensified domestic violence (DV) and/or intimate partner violence (IPV), reduced access to critical resources, and exclusion from decision-making processes, which further exacerbates their vulnerability during crises.

### 4.2. Impacts of annual flooding and flash floods

Recurring floods and flash floods, intensified by deforestation, unregulated construction and poor urban planning, severely affect both urban and rural communities in Timor-Leste. In urban areas like Dili, clogged drainage systems and unplanned settlements exacerbate flooding, forcing women to salvage belongings, manage cleanup and navigate disrupted livelihoods:

When the river floods during the rainy season, we gather our clothes and hang them in the ceiling area to keep them safe. But when the flood finally comes, it is already too late. During Seroja, many people tried to flee, but some couldn't make it. The heavy rain meant we couldn't save our belongings—we only managed to take the children. – FGD participant, Bidau

In communities like Bidau, annual floods create ongoing emotional and financial strain, with families often unable to afford relocation to safer areas.

### Teresa Pereira's story: Living with floods in Bidau

Teresa Pereira, a 32-year-old married mother of four, lives with her family in Bidau, where four households share a small area just 15 meters from two large rivers prone to frequent flooding. With her family having been forcefully resettled there in 1982, the area has become their home due to a lack of alternative housing options. While in the past the rivers occasionally overflowed during the rainy season without causing significant harm, recent years have seen heavy rains and recurring floods inflict severe physica damage to their home and belongings, while also fostering constant fear for their safety. One particularly jarring even occurred during Cyclone Seroja, when her daughter slipped into the fast-moving floodwaters. Although he was rescued the experience left the children terrified whenever the rive levels rise. This fear extends to the entire area, with many



Photo: Jolcia Anita Cárceres dos Santos (API

families opting to temporarily leave their homes when they suspect the riverbanks might collapse. Similie - a combany based in Timor-Leste focusing on creating technical solutions, particularly in climate resilience and water management - and the government have installed early warning systems aiding in their escape.

Despite these challenges, the family continues to persevere. Her husband, with the help of neighbours and relatives, has managed minor repairs and land leveling to make their home marginally safer. Unfortunately, the family remains ineligible for government assistance due to outdated family records listing a previous address and their current residence being in a prohibited area. However, relocation is not feasible as they lack the resources to build a new home. Teresa emphasizes the physical and mental toll of flooding and calls on the government to provide equal support to all affected families, ensuring they have the resources needed to rebuild or relocate to safer areas and escape the recurring impacts of climate change.

Rural areas face similar challenges, with floods destroying crops, eroding soil and damaging infrastructure, isolating communities from essential services. Women in Ermera and Manatuto report losing farmland, livestock, and irrigation systems, forcing them to engage in labor-intensive recovery activities like collecting stones or adopting vegetable farming, which yields less, respectively delayed income.

Gender roles further shape responses to floods, with women bearing the emotional and logistical burden of managing families and recovery efforts, while men focus on physical tasks like evacuation. In Manatuto, men supported women taking leadership roles during crises, appreciating their oversight of household needs. However, this risks reinforcing unequal burdens, as women are expected to handle both planning and execution. Poorly designed infrastructure, such as ineffective retaining walls, adds to these challenges, leaving communities vulnerable to repeated disasters.

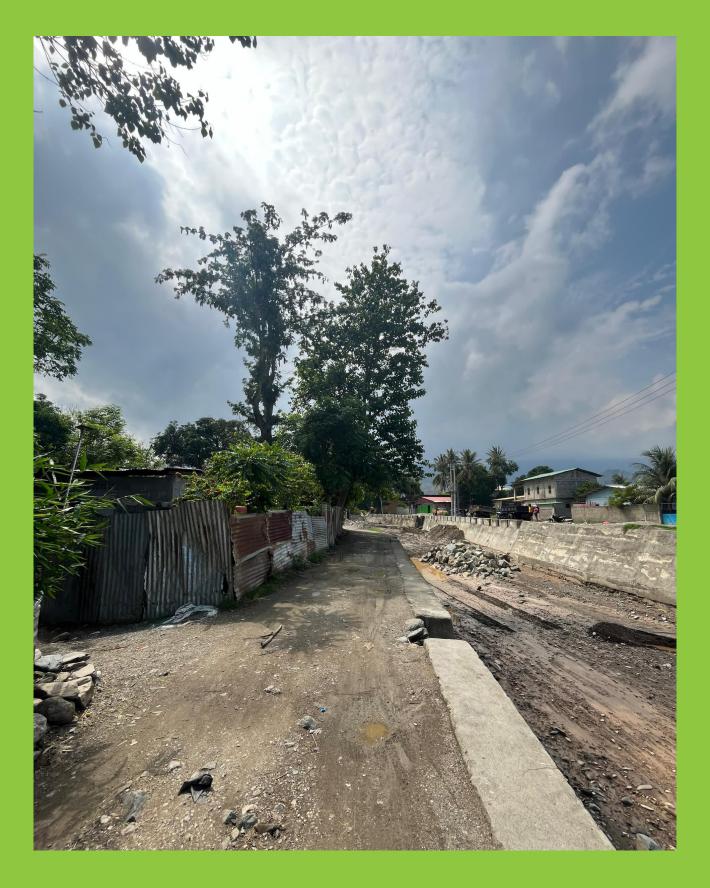
### 4.3. Impacts of droughts and prolonged dry seasons

Prolonged droughts in Timor-Leste have significantly intensified water scarcity and agricultural challenges, disproportionately impacting women, who are primarily responsible for fetching water, managing household needs and sustaining farming activities. Dry wells and springs force women and children in regions like Ermera and Manatuto to walk long distances, sometimes up to an hour, to access water. This daily burden reduces the time available for other essential tasks and potential leisure-time, while exposing them to conflicts over scarce resources. In some cases, men have started assisting with water collection, easing the strain on women slightly. Nevrtheless, the overall impacts of water scarcity – reduced hygiene, health risks and restricted agricultural output – continue to undermine family well-being and exacerbate economic vulnerabilities.

Women in Manatuto report that they have faced increasingly prolonged dry seasons in recent years. Crop failures, livestock deaths and contaminated water supplies have left families struggling to maintain their livelihoods. Livestock owners were devastated by the loss of animals due to a lack of water and grass, with some communities taking collective action to save their livestock by sharing water resources. Others faced compounded difficulties due to damaged or contaminated water storage systems from previous floods. Families in the hardest- hit areas survived on as little as four liters of water per day for drinking and cooking, far below international health standards of 50-100 litres per person/day.

### 4.4. Impacts of other climate change events

In addition to Cyclone Seroja, flooding, and droughts, research-participants highlight other climate-related challenges, such as coastal erosion and unpredictable weather patterns. Rising sea levels together with the impacts of sand mining, and mangrove destruction are eroding arable land and housing in coastal areas, threatening the livelihoods of women in fishing and aquaculture. Erratic weather patterns, including unseasonal rains and heatwaves, disrupt traditional farming calendars, making it difficult for communities to rely on ancestral knowledge for planting and harvesting. This unpredictability exacerbates resource allocation challenges, compounding vulnerabilities for women who depend on agriculture and coastal ecosystems. In addition, Zizi Belo - a community counsellor and LGBTIQA+ rights activist in Dili - points out that heatwaves isolate people in their homes disrupting social and communal bonds.



The Bidau Masau River in Dili is 15 m away from people's homes and prone to annual flooding. Photo: Victoria Linaiar Maria Bernadetha Taena (APFTL)

### Fisherwomen's stories in Aiteas, Manatuto: adapting to climate change through diversifying livelihoods

Fishing and farming are intertwined livelihoods for many families in Timor-Leste, but both are increasingly threatened by the impacts of climate change. During the fishing season, families rely on selling fresh fish, earning between \$200-300 per day when catches are plentiful. Women play an additional vital role in collecting and selling seaweed (budu tasi) during low tide, often earning around \$1 per day or bartering seaweed for essentia items like salt. But rising sea levels, coastal erosion, and unpredictable weather patterns disrupt traditional fishing practices and reduce marine resources.

Women's fishing groups face additional challenges, including the lack of formal organization and proper market infrastructure, which hampers their ability to store and sell seaweed and other products effectively Past initiatives, such as a women's group in 2008 focused on processing fish into dried products or fish balls, but dissolved due to poor management. Current efforts struggle with similar issues like storage disputes and market access. During off-seasons or when fishing is impossible due to climate impacts, women shift to farming, where they take primary responsibility for planting and nurturing crops while men handle tool preparation and repairs. Yet, droughts, unpredictable rainfall, and flooding caused by climate change have significantly impacted crop yields and household food security. To adapt, women also engage in small businesses, selling snacks like crackers and dried mangoes to support their families, showcasing their adaptability in navigating the growing challenges posed by environmental changes.

Across all three researched regions, women are central to household and community survival during climate-induced crises, taking on roles as caregivers, economic contributors, and informal leaders. From evacuating children during floods in Dili to stabilizing soil in Ermera and rationing resources in drought-stricken Manatuto, they bear the brunt of climate impacts while facing systemic barriers such as exclusion from decision-making, limited property rights and inadequate institutional support. Marginalized groups, including women with disabilities, widows, single mothers, and LGBTIQA+ individuals, experience heightened vulnerabilities due to stigma and discrimination.

# 5. COMPOUNDED VULNERABILITIES AND INTERSECTING CHALLENGES

### 5.1. Displacement, housing insecurity and economic impacts on livelihoods

Displacement and housing insecurity are recurring challenges in Dili, Ermera and Manatuto, where climate change pushes women into precarious living conditions. Frequent floods in Dili force families to relocate quickly, often to relatives' homes or makeshift shelters, leaving women scrambling to protect essential items. Some eventually return to damaged homes, while others face prolonged displacement due to destroyed or unsafe housing. Bureaucratic barriers, such as outdated family records and insufficient financial support, hinder recovery further, leaving women in limbo.

### Women, climate resilience and land rights in Hera, Dili

In Hera's aldeia Ailok Laran, Cyclone Seroja devastated 64 households, damaging homes, belongings and farmland, with some families enduring the tragic loss of loved ones, including newborns. Displacement forced 32 families into temporary shelters like the Haburas Foundation Center, while at least 21 remain unable to return home due to insecure land tenure and the appropriation of communal land by the Timorese defence force F-FDTL formilitary use. Women in these shelters face heightened safety risks, increased caregiving burdens and limited opportunities to rebuild livelihoods, amplifying their vulnerability and dependence on external aid. This precarious situation highlights the critical role of secure land rights in fostering climate resilience.

Timor-Leste's land registration system, influenced by the legacies of Portuguese colonialism, Indonesian occupation and gender-blind land registration efforts in post-conflict periods, has historically marginalized women with just 22% of claims from women only, in comparison to 64% of claims by men only (Rede ba Rai, 2019, p. 7). Without secure tenure, women are excluded from essential recovery subsidies, loans and agricultura inputs, leaving them trapped in a cycle of poverty and displacement. Addressing these systemic barriers is not only vital for equitable recovery but also essential for women to rebuild livelihoods, access resources and actively participate in recovery planning. Secure land rights provide the stability and agency needed to break this cycle and build long-term resilience against future climate impacts.

Policies such as Decree Law No. 7/2021, introduced to support disaster victims after Cyclone Seroja, are designed to provide recovery subsidies primarily to landowners. However, in Timor- Leste, customary practices often prioritize male land ownership, creating systemic barriers that prevent women from accessing these subsidies. In addition, as a previous Oxfam report (2023) noted, women face significant challenges in purchasing land, often being forced to settle in high- risk areas due to limited options. This combination of structural barriers and limited choices leaves women with difficult decisions: rebuilding on insecure ancestral or affordable land, which remains vulnerable to future disasters, or saving for relocation to safer areas which may never be affordable – both of which result in continued exposure to physical risks and emotional strain.

In rural areas, issues like eroded embankments in Ermera and coastal degradation in Manatuto create cyclical crises for women reliant on agriculture. Temporary fixes, such as piling rocks for soil stabilization, rarely last, while limited infrastructure and market access constrain alternative livelihoods like seaweed farming or small-scale fish selling. Economic losses from climate events intensify housing insecurity, with women often bearing the blame for household financial struggles accelerating risks of DV and/or IPV.

### 5.2. Increased workloads and triple burdens

Women's care responsibilities, income-generating efforts and involvement in disaster response converge to form what many refer to as a "triple burden." Under normal conditions, Timorese women already handle substantial caregiving and domestic tasks; during climate events and their aftermath, these responsibilities amplify. While men might focus on certain physical tasks or external decision-making, women remain at the center of multiple, overlapping demands. They collect water, feed livestock, manage household finances, and care for children and elders displaced by disasters.

In Manatuto, respondents highlight the physical strain of traveling to distant water sources during droughts, only to return home and maintain farming plots. Urban women in Dili face different but equally daunting workloads, especially when floods inundate their homes and destroy goods they rely on for informal trade. This triple burden extends to women's psychological well-being, as they juggle daily survival with the emotional labor of reassuring family members, particularly affected children. Because formal relief programs seldom recognize or support this array of responsibilities, women find themselves with little respite, navigating an endless cycle of caretaking and livelihood-responsibilities.

### 5.3. Health risks and psychological burdens

Climate-induced disasters significantly heighten women's health risks, exacerbated by caregiving responsibilities and cultural norms. In Dili's flood-prone areas, women often wade through contaminated waters to salvage belongings, exposing themselves to waterborne illnesses. The psychological toll of ensuring family safety while witnessing repeated destruction creates chronic stress, with many women describing sleepless nights and concerns for children's safety during heavy rains:

"Over the years, it has rained, but the flooding was never as severe as this. Now, with the recent storm, even the cloudy skies disturb us again. When it starts raining, we gather and move our belongings to higher ground, tidy things up, and remind the children not to play near the riverbank. We give our children special attention during these times." (FGD participant, Bidau)

Prolonged droughts intensify water scarcity, forcing women to walk long distances in extreme heat, posing health risks, particularly for pregnant, elderly, or disabled women. Similarly, landslides and floods burden women with physically demanding recovery tasks, alongside managing the trauma experienced by children or elders, further compounding their stress. Limited access to medical services worsens these challenges, as extreme weather often isolates communities by damaging roads and transport systems. Women needing urgent care for pregnancy, injuries, or illness face significant barriers, prolonging recovery and increasing their vulnerability. The emotional and psychological strains from caregiving, resource scarcity and recurring disasters often go unrecognized in formal assessments, yet pose profound challenges on women's recovery.

### 5.4. Violence, discrimination and social fragmentation

The prevalence of violence against women in Timor-Leste, both at home and in public spaces, remains alarmingly high and escalates during crises. UN Women (2020) highlights how climate hazards like droughts and extreme weather amplify SGBV, while the community-based organisation (CBO) Timor-Leste Organic Fertilizer (TILOFE) in Ermera observed in an interview that income loss due to climate impacts strains family dynamics, increasing domestic and intimate partner violence (DV/IPV). These challenges worsen when governments deprioritize women's safety and defund essential services, as seen in Aiteas, where many husbands have abandoned their families and where the closure of the *Uma Kbit Laek* (UKL, House for the Needy) program has left many women in flood-prone homes without dignified living conditions. In the context of Cyclone Seroja, the International Organization for Migration (IOM) reported increased rates of SGBV and human trafficking (IOM, 2023), which could have been mitigated through robust support systems and operationalized protection mechanisms.

These issues also extend to marginalized groups like the LGBTIQA+ community, who face compounded vulnerabilities. Through her volunteer work with Bin-Alin Hakbiit Malu, funded by The Asia Foundation, Zizi Belo supported women and girls in Hera and Tasi Tolu, providing critical aid and counselling. She found that LGBTIQA+ individuals often concealed their identities due to fear of stigma and discrimination. Key challenges included the lack of inclusive disaster relief that recognizes diverse family structures and significant information gaps, leaving many unaware of early warnings. Sr. Jacinto Perreira, the Executive Director of the East Timor Blind Union (ETBU) further notes, that discrimination by local authorities poses significant challenges to their efforts in supporting their members:

We see that people with disabilities face the most severe challenges during calamities, making it very difficult for them to protect themselves. One example involves a visually impaired mother and her child, who also has the same condition. After the daughter married and left home, the mother was left in an unsafe and unfavourable environment. Our association reported this issue to civil protection authorities, but when they reached the location, local authorities blocked further action, insisting that only they had the authority to report such problems. This is not an isolated incident; we often encounter similar barriers when trying to address the needs of people with disabilities. When local authorities fail to respond, we have to step in to find solutions. These obstacles make it even harder for us to support our visually impaired members. For instance, we have identified many visually impaired individuals whose homes were flooded, and they lost belongings they could not save due to their condition.

Women's safety is further compromised when they must travel to distant or contested areas to fetch water, increasing the risk of violence and conflict. Research participants reported significant threats associated with traveling to other communities' water sources, highlighting how climate-driven resource scarcity disproportionately impacts women, their safety and security. This vulnerability is exacerbated by Timor-Leste's ongoing recovery from centuries of violence, oppression, recurring violence and social fragmentation, where trust and social cohesion across communities remain fragile.

## 6. WOMEN BUILDING CLIMATE RESILIENCE

### 6.1. Women as key actors in resilience building and recovery

Women in Timor-Leste demonstrate remarkable resilience in navigating climate-induced challenges. Across rural and urban areas, they lead recovery efforts by mobilizing informal networks, integrating traditional knowledge with innovative practices and taking proactive roles in disaster response. Women in Manatuto, for example, engage in agroforestry initiatives through projects, which combine reforestation efforts with income generation. These projects enable women to plant tree seedlings, earn income and strengthen environmental recovery efforts. Similarly, in Ermera, women engage in planting bamboo and vetiver grass to combat soil erosion, showcasing their leadership in addressing localized climate impacts.

### Roselia Ximenes da Silva' Story: A story of adaptation and solidarity

Roselia Ximenes da Silva, a 19-year-old horticulturalist from Ermera, demonstrates resilience and leadership in overcoming climate challenges. Starting her horticulture journey in 2018, Roselia balanced farming with school, using her earnings to support her education. With her family's encouragement, she founded HIDSAGRI, a sustainable agriculture group of 15 members, including women with disabilities. Supported by USAID, the group cultivated high-value crops and secured a reliable market through a local retailer.



noto: HIDSAGF

When floods destroyed her initial farming site, Roselia relocated to safer land, facing new challenges such as limited transportation and market access. She adapted by implementing innovative techniques like river irrigation, protective tunnels, and drought-resistant crops, ensuring continued productivity. External support from NGOs and USAID provided tools, seeds, and training, although gaps remain in transportation infrastructure, financia services, and climate financing access.

Roselia's leadership underscores the importance of coordination with families and communities in building sustainable initiatives. She emphasizes the need for support systems, training in leadership and financia management, as well as accessible infrastructure to ensure resilience- building efforts are effective. Her advocacy for women's involvement in decision-making and equitable opportunities reflects her belief that empowering women strengthens entire communities.

Roselia's story illustrates how resourceful leadership, external support, and a commitment to inclusivity car enable resilience and inspire transformative change in the face of climate challenges.

Community collaboration is central to women's recovery efforts. Informal savings and loans groups, facilitated by organizations like Mercy Corps, allow women to pool resources, rebuild livelihoods, and invest in climate-resilient practices. Women-led agricultural cooperatives in Manatuto secure food and income during droughts, while in flood-affected areas like Bidau, women provide emotional and psychological support to each other via prayer and other social groups. These initiatives highlight women's adaptability and leadership in sustaining community well-being, even amidst systemic barriers such as exclusion from formal recovery programs.

Women's resilience extends beyond economic and environmental contributions. Their emotional labor—consoling children, supporting neighbors, and maintaining household stability—is a vital yet underrecognized aspect of recovery. Although these efforts highlight women's remarkable ability to respond to adversity, they often come at a personal cost. Balancing household responsibilities, income generation and community organizing leaves women with little time for rest, skill development, or self-care. Their resilience is thus both a source of empowerment and a sign of systemic inequities, as they step into gaps created by inadequate institutional support. Women's resilience does not diminish the obligation of local governments to establish robust, gender-responsive interventions. Instead, it highlights the need for more comprehensive and inclusive policies and resources that bolster, rather than exploit, women's capacity to lead their communities.

### 6.2. Women as decision-makers for climate resilience

Although women are pivotal to climate adaptation, their participation in decision-making processes remains limited. In rural areas like Ermera, cultural norms often restrict women's involvement in public decision-making, relegating them to supportive roles. In Manatuto, on the other hand, matrilineal traditions grant women land rights, enabling them to influence agricultural decisions and household resource allocation. Nevertheless, the local lia na'in also critically notes that these rights are often nominal and men are still key decision-makers. Nevertherless, there is change, as particulaly Manatuto witnesses emerging women leaders who combine their efforts to advocate for gender-sensitive policies, integrating women's perspectives and needs into climate change adaptation and mitigation. This research provides anecdotal evidence of a striking difference in gendersensitivity and inclusivity between interviewed male and female leadersthat is worth investigating. For example, women leaders in Ermera and Manatuto adopted more inclusive and participatory approaches, prioritizing advocacy for vulnerable groups and practical community-level solutions. They emphasized capacity-building, women's participation in community programmes and strategies that address the distinct needs of women and children. In contrast, male leaders acknowledged the disproportionate impacts of climate change on women, but showed less abilities to articulate responsive strategies. Instead, they tended to focus on structural and infrastrutural solutions, such as building protection against flooding, relocating communities and regulating environmental practices through customarcy governance.

Bernarda Soares Gomes' story: championing women's leadership Bernarda Soares Gomes, the *Xefe de Suku* or village chief of Aiteas in Manatuto Municipality, exemplifies women's leadership in climate resilience and community adaptation. Recognizing the economic and social challenges faced by women, particularly single mothers with limited income opportunities, Bernarda advocates for government programs like the discontinued *Uma Kbit Laek*, which once provided housing for vulnerable women. Following the 2021 floods, she led efforts to secure aid for affected families and emphasized community- driven initiatives, such as reforestation and seaweed farming, to enhance local livelihoods

However, cultural norms and limited institutional support pose significant barriers to women's leadership. The traditional *lulik* belief system and gendered expectations often confine womer to subordinate roles, leaving many hesitant to engage in public decision-making and facing severe resistance from male peers



Despite these obstacles, Bernarda continues to advocate for gender equality and climate resilience. She ensures women participate in capacity-building programs, such as training sessions on climate change and domestic violence. She also encourages women to form cooperative groups and to transition from unproductive activities to sustainable practices.

Through her leadership, Bernarda exemplifies how women leaders can amplify the voices of vulnerable populations and integrate gender-sensitive approaches into climate resilience strategies. Her efforts underscore the need and benefits of sustained institutional support, community education and the revival of programs that provide safety and assist women to overcome systemic barriers and build a more equitable and resilient future.

Organizations like Mercy Corps and the Alola Foundation have facilitated training sessions to support women in leadership roles, focusing on topics like climate change, gender equality and disaster risk management. These initiatives equip women with the skills and confidence to participate in decision-making. Yet, barriers persist, such as male-dominated governance structures and the lack of recognition of women's expertise. In many cases, women's decision-making power often remains symbolic rather than substantive, with their voices marginalized in policy discussions (see for example Niner, Nguyen, Morrison, Iman, 2024).

Collaborative approaches to governance, where men and women share decision-making responsibilities, offer promising pathways for enhancing resilience. As noted by a community leader in Ermera: "Women and men now coordinate decisions, ensuring both perspectives are considered."

### 6.3. Barriers to building and leading climate resilience

Women in Timor-Leste face multifaceted barriers that hinder their ability to build and lead climate resilience. Socio-cultural norms rooted in the *lulik* belief system reinforce traditional gender roles, limiting women's mobility and participation in public decision-making. Women are often confined to subsistence-focused activities, such as managing small livestock and food crops, which restrict their economic opportunities and adaptive capacity. Economic constraints further limit women's resilience, with many lacking access to microfinance, agricultural technologies, and market opportunities. Even when programs or projects aim to include women, prevailing gender norms and roles often act as barriers, particularly in perceptions of the types of labor women can perform or who should be prioritized in cash-for-work initiatives.



Dilva Emeliana R. Filipe's story: challenging social norms and barriers for recovery

Dilva Emeliana R. Filipe, a 28-year-old mother and horticulturist from Hera, Timor-Leste, faced life-altering challenges when Cyclone Seroja caused devastating floods in 2021. Living near vulnerable waterways, she and her community experienced severe displacement, loss of livelihoods and trauma. The floods not only destroyed homes but also disrupted traditional roles, presenting a critical opportunity for Dilva to step into non-traditional work and leadership.

n the aftermath of the cyclone, Dilva sought to participate n the *Hamutuk Servi Komunidade* (HSK, Together Serve Community) program, a cash-for-work initiative launched by UNDP. Yet, social norms in her community dictated that by by sically demanding labor was unsuitable for women. Facing

resistance from male peers and skepticism about her capabilities, Dilva advocated for inclusion. By challenging these assumptions and raising her concerns with program organizers, she secured a place for herself and other women. Her group worked on flood recovery efforts, earning vital income and demonstrating that women could effectively contribute to rebuilding their community.

Over one month, Dilva earned \$150, which she used to purchase a phone for communication, support her family's needs, and invest in fish for resale. Her participation not only provided immediate financial relief but also empowered her and other women to break gendered barriers to economic opportunities. Dilva's journey highlights the need for gender-transformative and flexible recovery programs that address systemic biases, promote women's participation, and equip them to adapt to new challenges. Her courage and determination serve as an inspiring example of resilience in the face of adversity.

to. Milena da Silva (trans.verse)

Institutional barriers exacerbate these challenges. Insecure land tenure, for instance, excludes many women from accessing agricultural loans or government recovery programs tied to land ownership. Policies like Decree Law No. 7/2021 disproportionately favor male landowners, leaving women without support for reconstruction after climate disasters. This challenge is further exacerbated by the practice of local authorities being responsible for assessing and reporting recovery and rebuilding needs within their communities. When these authorities are unsupportive or insensitive to the needs of women, people with disabilities, LGBTIQA+ individuals, and other marginalized groups, it creates a significant barrier to inclusive recovery efforts. Cultural norms, mobility restrictions and unpaid care responsibilities further prevent women from fully benefiting from available resources. For example, women frequently lack the time and means to attend training sessions or participate in community planning. Addressing these barriers requires scaling up inclusive programs, tailoring interventions to women's schedules and accessibility issues and fostering supportive cultural norms. This includes challenging cultural stigma, which undermines women's leadership potential. In rural areas, societal perceptions discourage women from pursuing leadership roles or challenging traditional norms. Even when women are included in governance structures, their contributions are often overlooked, undervalued or even undermined.

### 6.4. Resource gaps, needs, and identified support

Women in Timor-Leste face significant resource gaps that hinder their ability to adapt to and mitigate the impacts of climate change. These challenges stem from structural and cultural barriers, compounded by inadequate access to climate finance, land rights and infrastructure. To address these gaps effectively, a multi-dimensional approach that combines tailored programs, inclusive policies, and both structural, and cultural transformation is essential.

### Limited funds and knowledge

The majority of farmers in Timor-Leste do not engage in climate resilient agriculture practices due to a lack of funds needed, as well as a lack of awareness and information (Landicho, et.al., 2023). This research underscores these findings and notes a high dependency on exernal financial resources or materials that are needed to support people in the absence of their own funds. Yet, especially within younger generations and access to the internet there is a notable shift in resourcefulness and innovation, for example by learning through youtube.

### Limited access to climate finance and technology

One critical gap is women's limited awareness and understanding of climate finance. Without this knowledge, women are unable to participate in community consultations for climate resilience projects, to secure funding for critical interventions like water-saving technologies or implement sustainable agricultural practices.

Additionally, financial constraints, insecure land tenure, and limited access to climate-resilient technologies exacerbate vulnerabilities. Cultural norms often deny women land ownership, excluding them from agricultural loans or grants tied to land tenure. Programs such as the Ministry of Agriculture and Fisheries (MAF)'s seed distribution initiatives are valuable but frequently fail to reach women due to these structural barriers. Further, a lack of affordable and locally available technologies, such as solar-powered irrigation systems, limits women's capacity to adapt to climate change effectively.

### Social and cultural barriers

Cultural norms rooted in patriarchal traditions and the *lulik* belief system often restrict women's participation in decision-making processes. Men are typically positioned as public decision-makers, relegating women to domestic and subsistence roles. These deeply entrenched norms limit women's engagement in community planning and their access to resources distributed through male-dominated channels. Programs like Mercy Corps' horticulture training and the Asia Forest Cooperation Organization (AFoCO)'s reforestation initiatives attempt to address these barriers by tailoring their approaches to women's schedules and contexts. Sscaling these efforts is necessary for systemic change.

Marginalized groups such as women without formal land rights, people with disabilities, and the LGBTIQA+ community often remain excluded from government subsidies and support programs. Barriers to accessing climate finance and decision-making spaces also limit their participation in adaptation strategies.

### Infrastructural deficits

Inadequate infrastructure poses another significant challenge. Damaged irrigation systems, poor road connectivity, and limited market access prevent women from maximizing their agricultural and economic potential. Post-disaster responses often overlook gender-specific needs, such as protection from SGBV in evacuation centers or safe and inclusive shelters for people with disabilities and members of the LGBTIQA+ community.

### Identified support and initiatives

Women participating in this research identify key actors and initiatives essential for addressing resource gaps and building climate resilience. These include government programs promoting climate-resilient agriculture, improved water infrastructure, and enhanced early warning systems. International and national organizations contribute through initiatives in horticulture, disaster preparedness, reforestation, agroforestry, water conservation, coastal preservation, adaptive farming, and leadership training. Community-based networks, such as women-led savings groups, cooperatives, prayer groups and support from family and neighbors, are also recognized as critical to recovery.

While women often prioritize the well-being of their families and communities over gender- specific needs, they report persistent barriers to accessing projects and programs due to their gender. This highlights the need for targeted interventions, such as support against violence, alongside mainstreaming gender-inclusive approaches into broader initiatives and infrastructure. Such efforts can address women's unique challenges while fostering holistic, community-wide resilience.

### Gender-sensitive approaches in permaculture – Permatil in Timor-Leste

Permatil, a Timorese organization dedicated to making permaculture tools and knowledge globally accessible, integrates gender-sensitive strategies to support women as agents of climate resilience in Timor-Leste. Through sustainable practices like household gardens, women grow food near their homes, meeting nutritional needs while reducing the burden of water collection by introducing techniques such as mulching. Permatil adapts programs to address barriers to women's participation, including introducing Cash-for-Work instead of Food-for-Work, providing financial incentives that enhance women's autonomy and balance household responsibilities. Flexible scheduling and child-friendly provisions, such as on-site meals and transportation, further support women's involvement. In the Meti-Aut water conservation project, for example, women's participation reached 90%, showcasing the effectiveness of tailored approaches. Initiatives like rainwater harvesting systems save time and replenish groundwater, while community dialogues ensure women's voices are central to decision-making. Permatil's holistic model demonstrates how addressing structural barriers and fostering inclusive participation can enhance women's leadership and resilience in sustainable development.



The TILOFE team in Ermera established a catfish pond to support local food security and boost income generation. Photo: Jolcia Anita Cárceres dos Santos (APFTL)

### 7. RECOMMENDATIONS

The following recommendations amplify research-participants' feedback, messages and recommendations for different actors, and are complemented through further analysis.

### 7.1. Government

**Enhance accessibility and inclusivity of climate policies:** Translate climate policies and information on climate finance projects into Tetun, simplify technical content, and ensure inclusive dissemination. Mandate gender-disaggregated data collection and analysis across sectors to track women's participation and policy impacts.

**Strengthen gender-responsive disaster preparedness and recovery:** Decouple recovery subsidies from land ownership and design gender-responsive targeting mechanisms, including shelters, sexual health support, and mental health services. Address local authority biases in damage assessments, create accessible evacuation sites, and provide targeted outreach on disaster preparedness.

**Improve climate-resilient infrastructure:** Prioritize investments in climate-resilient agriculture, irrigation systems, flood-resistant housing, and accessible water supplies for marginalized groups, including women, people with disabilities, and LGBTIQA+ individuals. Engage communities in the design and location of climate-resilient infrastructure to address specific needs relevant to the local area, including access needs. Expand access to renewable energy, and strengthen early warning systems and tailored climate information for women.

### 7.2. Development partners

**Support women-led initiatives and grassroots action:** Provide microgrants, flexible funding and access to climate-adaptive technologies (e.g., drought-resistant seeds, solar irrigation) for women's cooperatives and community-based organizations. This grassroots-level investment bolsters local resilience and ensures women's projects thrive.

**Expand climate-resilient infrastructure and mental health support:** Partner with government, NGOs, and the private sector to build gender-responsive infrastructure such as accessible early warning mechanisms, disaster shelters and irrigation systems. Incorporate psychosocial services into resilience programs to address the mental health needs of women and families in disaster-prone areas, ensuring long-term sustainability.

**Strengthen women's leadership and coalition building:** Invest in women's leadership through flexible and core funding, targeted skills training (e.g., financial literacy, climate adaptation) and long-term mentorship. Support national and international alliance-building, including women's groups, youth, disability and LGBTIQA+ groups, and create avenues for them to share best practices to amplify climate resilience efforts.

### 7.3. NGOs and CBOs

**Strengthen women's leadership and economic justice:** Increase and expand co-designed community- based climate resilience initiatives—such as reforestation, disaster preparedness, and renewable energy adoption—in collaboration with women leaders, and provide tailored training and mentorship to ensure their meaningful

participation in decision-making. Increase support for women's organizations and cooperatives through microfinance schemes and cash-for-work programs that enable drought-resistant farming and renewable energy solutions, equitable access to resources and secure land tenure. Strengthen dialogue between marginalized groups, traditional leaders, and government representatives to address cultural barriers and promote inclusive governance.

**Foster strategic partnerships:** Partner with governments, donors, and research institutions to scale equitable grassroots initiatives and integrate traditional knowledge. Advocate for climate finance budgets to reflect women's needs by investing in climate-adaptive technology (e.g., solar irrigation systems) and supportive infrastructure (e.g., disaster shelters). Emphasize co-created solutions that uphold women's agency in resilience planning.

**Strengthen community awareness and education:** Provide accessible climate information so women and marginalized groups can understand risks and leverage opportunities. Conduct gender-sensitive disaster preparedness training and promote sustainable practices at the community level, ensuring everyone has the knowledge and tools to build resilience.

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Once devastated by flash floods and abandoned for two years, Sau Village rice fields are now restored and thriving. Photo: Dircia Sarmento Belo (trans:verse)



