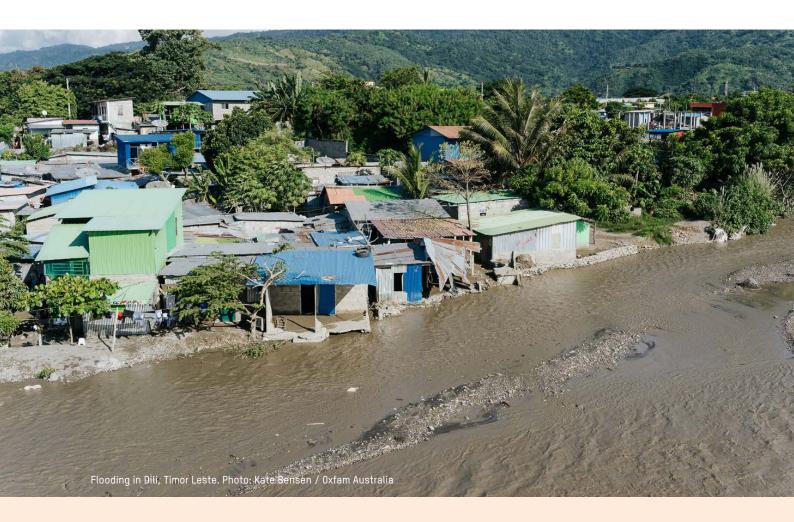


The climate crisis is causing devastating loss and damage around the world. The impacts of climate change are felt most acutely by marginalized groups and people living in vulnerable conditions in lower- and middle-income countries who are least responsible for the climate crisis.

Their lives and livelihoods depend on activities which are particularly vulnerable to more extreme and erratic weather. They often lack formal ownership of land and are more likely to live in marginal locations which have high exposure to climate hazards, making them extremely vulnerable. They have less protection, less resilience and therefore experience greater loss and damage, which accumulates over time.



There is no internationally agreed definition of 'loss and damage' under the United Nations Framework Convention on Climate Change (UNFCCC), but collectively the term refers to the consequences and harm caused by climate change where adaptation efforts are either overwhelmed or absent.¹

The climate crisis has caused economic loss and damage related to loss of lands, housing, property or livelihoods, as well as non-economic loss related to loss of life, cultural heritage, traditional knowledge, biodiversity and Indigenous territories.

Loss and damage to land can include permanent loss of lands such as to landslides, lands completely washed away due to floods or lost to the sea due to rising sea levels. There could also be longer-term loss and damage due to salination, land degradation or changing land use over time, or shorter-term impacts causing temporary changes in land use or limiting access to lands and forests.



The impacts of the climate crisis on land are immense. It causes the loss of land, erosion of soil, land degradation that forces changes in land use, threatens the land rights of communities, causes displacement, affects food security and

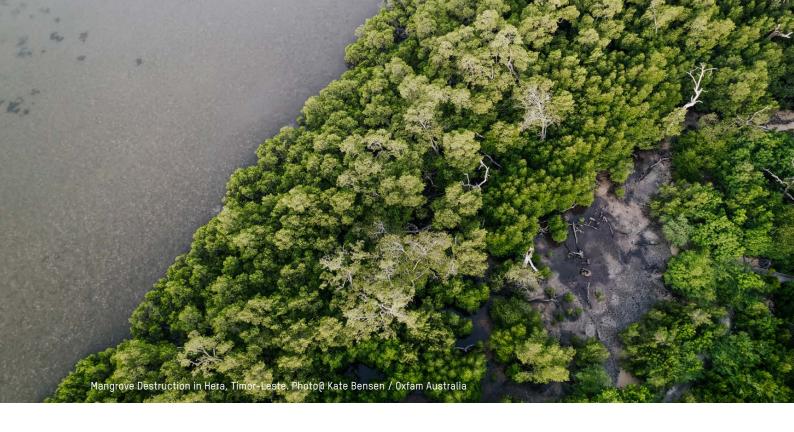
aggravates land inequality. These impacts have led to greater competition over land, which is a finite resource, and increased existing pressures on land use. Communities struggle to cope with loss and damage, unable to recover from them or improve their climate resilience.

Oxfam listened to women and men from Bangladesh, Nepal, Sri Lanka and Timor-Leste who shared their stories on how the climate crisis caused loss and damage to their lands and impacted their lives.

Some had lost their lands totally to floods or landslides, while others suffered damage to their lands due to flooding, salination or drought. Farmers had to change the crops they used to cultivate because their land was no longer suitable to grow the crops that they and their families had produced for many years and generations. Farmers who had decision-making power over their lands made investments to protect the land from flooding or to secure a continuous water supply during droughts. They could change from seasonal crops to perennial crops because they had secure tenure.

But those who did not have the security of tenure are afraid to invest because they fear losing these investments if they have to leave their lands or face evictions. Loss and damage to land not only affects the land rights of the affected communities but





has ripple effects on many other aspects of their lives such as livelihoods, education and exposure to gender-based violence. It induces urban-rural migration, contributes to conflicts and reinforces colonial legacies and other inequalities related to income, gender and power.

The stories demonstrate that land ownership is a key factor in determining people's eligibility to receive assistance to overcome loss and damage. Those who can prove land ownership receive compensation, alternative land or relocation benefits, while it proves challenging to access these benefits for those who do not own land and hold proof of their rightful ownership and tenure. Similarly, land ownership gives access to membership of farmer societies through which government extension services relating to climate adaptation and mitigation as well as climate finance are channelled.

These stories show the importance of secure land tenure to avoid, minimize and address loss and damage, particularly for the most vulnerable, and to increase their climate resilience.

Lack of decision-making power over land, coupled with power imbalances and intersectionality of inequalities, increases the climate vulnerability of farmers and prevents them from taking steps to avoid loss and damage



In Sri Lanka, 80% of land belongs to the state² and are distributed to people under two main laws. However, their implementation has been slow and involves prolonged administrative processes. Even where state lands have been distributed, much of the control and decision-making power related to these lands is still retained by the state.

KP Somalatha is a paddy farmer from the drought stricken Monaragala District in Sri Lanka. She occupies state land that was given to her through a land grant by the government. Even though she has rights to her land, Somalatha explains how the state still retains control over the land, seriously affecting the farmers' ability to adapt to climate change and forcing them to move away from agriculture.

'We used to cultivate paddy in two seasons but with the unpredictability of rain we have reduced it to one. Rice farmers struggle to earn a profit with low-yielding harvests, [and also] only once a year because we don't have enough water.'

Even though state lands have been allocated to people by the government, crucial decisions such

as water allocation, use of chemical fertilizer and pesticides, and use of hybrid paddy seeds are taken by the government agriculture officials, leaving little or no decision-making power to the farmers with paddy lands located under irrigation systems.

'Our Jayabhoomi land grant [land certificate issued by the state] is just for namesake. We can't really make any decisions about our land. We want to cultivate indigenous paddy varieties which require less water and give a higher yield and use fewer agrochemicals. But state officials push corporate profits forward. We very rarely get any compensation for droughts. It does not cover even 10% of the loss we suffer.'

Prolonged droughts in Somalatha's village have diminished groundwater levels and the land is no longer arable. Rural farmers struggle to cope with these losses and damages and often get into debt or completely abandon agriculture. The domino effect of having limited to no control of one's land has severe economic and non-economic implications which go beyond the absence of climate resilience.



Land ownership is a key criterion for membership in farmer societies through which agriculture extension services, including crop insurance and drought relief, are provided

In Sri Lanka, farmer and irrigation societies are some of the main mechanisms through which government-led support is channelled to agricultural communities. As land ownership is a pre-requisite for membership of these societies, farmers without formal ownership of lands cannot access agriculture extension services, support on adaptation and mitigation measures, crop insurance or drought and flood relief provided by the government.

Namal Sanjeewa is a fourth-generation farmer from Badulla District in Sri Lanka. Namal cannot access drought relief because he does not own his farmland.



'We have been occupying these lands for over three generations, but the state refuses to give us land permits, saying that we are living on encroached state land. They refuse to release irrigated water from reservoirs to our lands because they want us to vacate the area and give our lands to a private company for sugar cane plantation. We don't receive any agriculture extension services or technical support for climate mitigation or adaption from the Agrarian Services Department. This is because they don't recognize us as farmers as we don't own this land.

'We are unable to register for crop insurance or drought relief for the same reason. So we can't get any relief when our crops fail during droughts. We can't build water storage facilities or a small reservoir because we don't own this land. We have reduced cultivating crops according to seasons and some farmers have shifted to growing perennial crops like mango and coconut. These crops take time to generate an income, but it is an alternative we are willing to take because seasonal cultivation has become futile. But we fear that we will lose the money we invest to change our crops or farming practices, if the government evicts us.

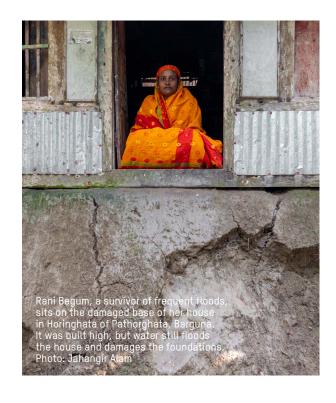
High temperatures, irregular rainfall patterns and prolonged droughts have degraded their lands and the soil is becoming more infertile. Harvests are significantly reducing. Without assistance from the government and without secure land tenure, farmers like Namal are unable to make investments to adapt to these climatic changes and continue to suffer loss and damage year after year.



'We carry these losses to our next cultivating season. It affects our families, children's education, household food security, health and all aspects of our lives. Recovery after a drought seems next to impossible to us at this state. The state is refusing to formalize our ownership and to watch our farming communities deteriorate in the face of extreme drought is now a question of our dignity and worth as small-scale food producers.'

There are around 163 farming families in Namal's village facing a similar predicament. Unable to bear the continued losses and increasing debt, many of these farmers are gradually moving away from agriculture to daily wage labour or have migrated to cities to find jobs.

Loss and damage to land exacerbates existing gender inequalities and triggers a chain reaction of socioeconomic consequences for women and girls Land degradation caused by lack of water and prolonged droughts has reduced yields and had a significant impact on farming communities in Bangladesh. It has affected not only farmers but also agricultural workers, creating a ripple effect within agricultural communities.





Shaheena Akter is a daily-paid agricultural worker from Nowapara, a village in Cox's Bazar, Bangladesh.

'Because of lack of water, the harvest is low. I am not paid properly by the landowner when the income from the crops is low. We have to travel far to bring water to irrigate the land because water is scarce here. It takes a lot more time, but I am not paid for the extra hours I work. Although we work in the same field, men are paid more than us.'

The consequences of reduced household income disproportionately affect women and girls.

'I am a single mother. I live in a rented house. If I don't get paid, I can't pay rent, buy food or send my daughter to school. If women don't bring in enough money from their farming work, they will get beaten by their husbands. This is very common in my village. Because families don't have enough money, girls discontinue their education or they are married off early. Early marriage is quite common in my village among farming communities.'

The intricate chain reaction of socioeconomic consequences that starts with the loss of land productivity or the degradation of soil leads to generational inequalities, especially for women.

Climate-induced migration increases the care burden on women and exposes them to harassment and violence

Shamsun Nahar is a farmer from Hajrakhali, a village in Satkhira, Bangladesh. Her region is affected by salinity intrusion due to waterlogging and river



erosion. This has lowered the productivity of the farmland. She explains how reduced household income due to loss and damage to land has forced men in rural Bangladesh to migrate to cities in search of employment, leaving women behind with increased responsibilities and exposure to vulnerabilities.

'Our household income is affected when our farmlands produce low yields. It affects the food we eat, our children's education and even our dignity. We can't depend on our farmlands as the sole source of income. It is very common for men to move away to [distant] regions to earn money to support their families.'

This increases the burden on the women who are left behind in the village.

'Women have to walk long distances to collect water. When a family's income is impacted or reduced, it creates a lot of pressure on the women and leads to domestic violence.'

Land degradation due to the impacts of climate change has significantly reduced the productivity of their farmlands, resulting in reduced income. The economic hardships and pressures created by diminished household income have led to increased domestic violence among farming communities in Bangladesh.

The loss of land has many consequences, including lowering one's status and position in society

HM Morshed lives at the banks of the Bishkhali river in Dhaalbhanga village in Barguna, Bangladesh, where floods due to cyclones, tidal upsurges and riverbank erosion are common. His house was destroyed by cyclones Aila and Sidr and he lost almost 80% of his family's land to river erosion.



'When the Bishkahli river had a solid embankment, my land was still protected and I could cultivate there, but after the floods broke the embankment, further erosion took the lands away, and now the banks of the river are very close to my house. We only see an increasing risk of losing the little bit of land we have to live and make a living from.'

Changing climate patterns have forced Morshed to change his farming practices: 'During the rainy seasons, the floods destroy our crops and cultivated lands. During the dry season, water is so scarce that it dries up all our crops'. Morshed used to cultivate rice paddy on his land during both seasons, but the scarcity of water in the dry season has forced him to give up paddy and switch to pulses.

Morshed received support from the Bangladesh Red Crescent Society to rebuild his house after the cyclones. He believes that he would not have received this support had he not owned his land.

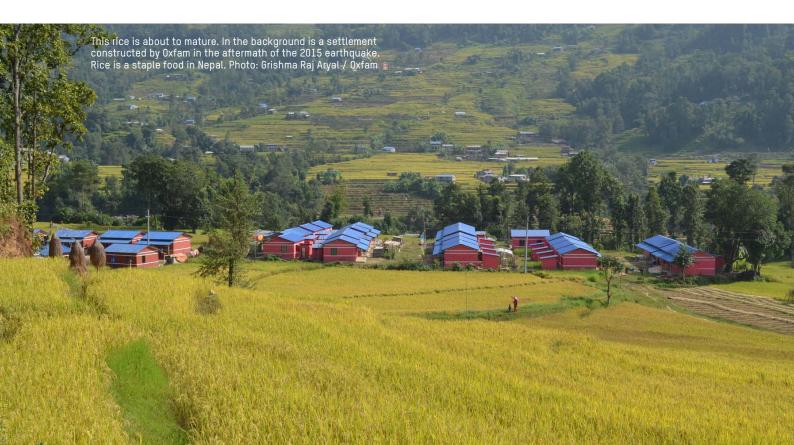


'Since I also engage in fishing, I have a fisher identity card which entitles me to 25kg of rice during the periods when fishing is banned. I also got paddy and pulse seeds from the government. That is the only support I have received for all the losses I have suffered.'

For Morshed, the biggest loss suffered is his position in society after he lost his lands.

'When I had my land, my status in my community was high. After the river took my land, it lowered my position in society. I would not be facing these economic hardships if I had my land. People who own land can recover fast in a disaster.'

Land ownership is one of the factors that influences a person's recognition, status or position in society. Loss of land due to the climate crisis not only has



economic consequences but also non-economic losses related to a person's status in their community.

Land ownership entitles farmers to receive government-led support to address loss and damage and to take decisions to invest in their lands to make them more climate resilient



Approximately 66% of Nepal's population is employed in agriculture-based livelihoods,³ but over 50% of farmers in Nepal have access to less than 0.5 hectares of land.⁴ Ram Chandra Mukhiya Bin is a farmer from Brindawan Municipality in Nepal whose land and crops were destroyed by floods.

Ram had inherited his land from his father. This inheritance received no formal recognition and documentation from the government of Nepal. Despite having lived and cultivated on their lands, Ram did not possess a land ownership registration certificate from the government, though he was expected to pay land taxes to the government.

'After my land was taken over by the flood, I did not pay land taxes to the government. The state authorities never wanted to acknowledge my ownership of this inherited land through any documents. If I had formal ownership, a land ownership registration certificate, I definitely would have received support to cope with the losses I have had to face from the floods.'

Ram added that the aftermath of a natural disaster has a significant impact on women in his community:

'Most women in our village work in agriculture. When these lands are destroyed by floods, they are left with no option but to work as labourers or domestic workers to secure a source of income'.

Lack of land ownership increases the vulnerability of communities and decreases their ability to recover from loss and damage

Chanahari Chaudhary is a farmer from Chandrapur Municipality in Nepal, an area prone to floods, drought, river erosion and heavy rainfall.

Chanahari's family used to cultivate paddy, vegetables and maize on his land, which has now been converted to a riverbank.

'My land was destroyed by floods.
Our main source of income was farming. I used to earn 150,000
Nepalese rupees (€1,103) a year.
After our land was destroyed, me and my family members were forced to take on daily-paid labour work to make ends meet. We barely had any means to buy food or educate our children after the floods destroyed everything. Later on, we leased some land and started cultivating mangoes and vegetables.'



Chanahari affirms that he received little to no support from the government to rebuild his life and livelihood after the disaster. His story reflects how loss and damage to land and its consequences are often irreversible.

Farmers without formal ownership of their land

are extremely vulnerable in the context of natural disasters. In the absence of evidence of their right to the land, they face potentially losing it. In fear of losing their lands, some rural farming communities even prefer to stay in hazardous situations rather than migrating or relocating, which could trap them in highly vulnerable environments.





The impacts of Cylone Seroja in Timor-Leste

Timor-Leste suffered heavy loss and damage due to Cyclone Seroja in April 2021, which included the loss of lands and homes of communities living in flood-prone, high-risk zones in the capital Dili and other municipalities.

The humanitarian response, led by the government, provided temporary accommodation and assistance for repairing damaged property. The government put measures in place to prevent Dili communities from returning to their homes in risk-prone areas. There is also an unrealized proposal to build a new village on government land to house people moved from unsafe areas. Without appropriate consultation on the location for access and children's schooling, and with limited consideration of community livelihoods, there has been little progress on the plan.

The scale of the impact caused by Cyclone Seroja led the government to introduce Decree Law No. 7/2021, allowing the state to provide assistance to victims of serious accidents or disasters. The law enabled those who were landowners to leave Dili to rebuild their lives with government assistance.

Affected Dili households that returned to their home villages received housing construction materials and US\$1,000 for labour costs.

However, for people without land, there are few viable solutions. Too many households returned to rebuild houses in unsafe, government-owned areas where they face the threat of eviction. Others remained in temporary accommodation, with limited access to clean water. As their main activity was farming, these people experienced income disruption, exacerbated by the high cost of renting agricultural land, and they could not afford to buy land in Dili.





Felismina da Costa Hornai lost her land and house during Cyclone Seroja. She lives in Dili and comes from a family of fisherfolk from a remote village in Baucau Municipality. In 1982, she moved to Dili to live with her aunt who had bought land there. But in 2006 the former landowner took advantage of the political crisis and reoccupied her aunt's land, forcing them to live in a camp for internally displaced people. A legal case against the former landowner is still pending before the courts.

'We began looking for new land to buy. It was difficult to find affordable land in Dili. Even small pieces of land cost between US\$5,000 and US\$10,000, and we could not afford to pay that much. Eventually, in 2010 we bought land in an area called Kuluhun that is very close to the river. We knew it was a risk, but we didn't have enough money to buy land in a safer area. We built a small house and I sell satay to make a living. We were making ends meet but the floods of April 2021 changed everything.'

Felismina lost her land, house, motorbike, satay grill and all other belongings to the floods. She managed

only to save a few documents and clothes before moving to an evacuation centre.

'I feel so vulnerable, our house was a safe space where we felt peaceful. We no longer have a place to feel secure. Life at the evacuation centre is difficult. We can't make a living there. I feel terrible for my mother who is old, it is very difficult for her. We don't always have access to water for cooking and drinking, and we need to carry water every day. We have to travel further for my daughter to get to school. Every morning and every afternoon I must get two buses to bring my daughter to school. We do have land back in our village, but we have lived in the city for a long time and would find it hard to move back there. Our village is far from schools and health facilities and there are fewer livelihood options. We depend heavily on the government to support us because we have no savings to buy new land in a safe place.'

Felismina's family found new land in Dili, but in a location close to the mountains. With government subsidies, they have started to build a house. Felismina's story demonstrates the stability, security and peaceful surroundings that a family can enjoy when they have a secure land or house and the disruption caused to families due its loss. These are key factors that could inform successful relocation processes.

Dilva Coreira lives close to the Timorese naval base in Hera with her husband and five children. She moved there as a young girl when her father, who was a fisherman, was relocated from Bidau-Mota-Klaran to Hera in 1991, along with 200 other fisher families, by the Indonesian Department of Fisheries Her village is surrounded by the sea on one side and large fish ponds on the other.

Not long after the floods caused by Cyclone Seroja, the government classified the area as high risk and put up signs prohibiting people to live there. People were moved to temporary accommodation in November 2021.



'We have lived there for 30 years and are very worried about our rights to the land. When the government registered this land, they did not write down our names or give us any documents, so we are worried that they did not register the land in our names. We have asked for information, but the government has not explained our rights to us. We have heard that the government will relocate us to a new area in Dili or to a rural area, but they have not explained the real benefits and risks of these options to us.

'We have lost not only our homes but also our income from agriculture. We don't know how we will be supported to re-establish our livelihoods as farmers and fisherfolk or what will happen to our land. We should be given clear information on these options and the government should consult us on what needs to happen. Civil Protection staff promised that we could stay here for six months, but in reality it is January 2023 and we are still here. After we moved here, the government did not come to talk with us about how long we will stay here and about the new village for us. If the government cannot build the new village, we ask it to rebuild the dam where we used to live and then we can go home.

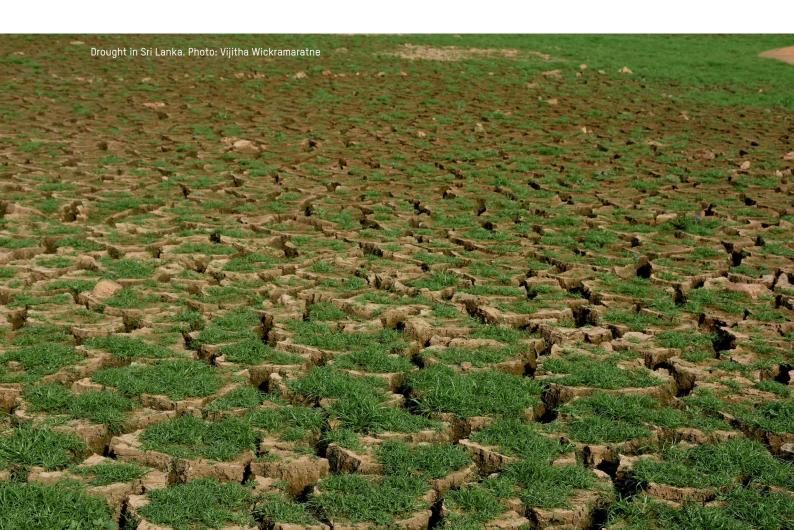
Dilva fears that the government's interest in finding alternative lands for them will diminish after the parliamentary elections in 2023.

'We are staying in this temporary accommodation and facing many problems. Most of us are farmers and now we have no alternative agricultural land. Even though we are renting some community land for agricultural activities, it is not as big as our previous land before Cyclone Seroja happened. This has affected our income: it is much lower because we need to pay the land rent and for the loan we had from a private bank – we cannot afford to pay the debt. We are tired of trying to solve this situation.'

Through cracks and crevices, land matters ...

These stories demonstrate the devastating impacts that the climate crisis has on land and on the people who live and work on it. Loss and damage to lands not only affect the land rights of communities; it has an impact on all aspects of their lives. These experiences also demonstrate that secure land tenure is a significant factor that better enables communities to respond to the climate crisis by making decisions and investments to improve their climate resilience. Land ownership enables communities to receive assistance and climate finance to address and overcome loss and damage. Oxfam advocates for strengthened land tenure rights as a pathway to addressing this area of the climate crisis.

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Cover image: Taslima, a victim of river erosion, stands at the ruins of her house beside this coconut tree in 2022. She lived near to Jintola Bazar, Haringhata, Patharghata, Barguna. Photo: Jahangir Alam.

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