



**WALKING INTO THE
EYE OF THE STORM:
HOW THE CLIMATE CRISIS IS
DRIVING CHILD MIGRATION
AND DISPLACEMENT**



Save the Children

PERU CASE STUDY



PERU

MOUNTAINOUS LOW-LYING COASTAL AREAS



Teresa (13) in Santa Ana de Pacollán,
Region of Pasco
Save the Children Peru

Summary

Peru has multiple climate zones. In this study, we focus on high-risk coastal and mountainous settings. In some instances, mountainous and highland areas may be located in areas of rainforest. Although rainforests alone are not considered 'high-risk' settings in this study.

5.6 million children live in Peru's low-lying coastal areas and 2.7 million children live in its mountainous regions or Amazonian communities. These children are highly exposed to flooding and droughts – with devastating impacts on their health, food and water security and infrastructure loss and damage. Climate change projections suggest this crisis will only get worse.

This case study forms part of a wider Save the Children report¹ to provide a deeper understanding of the relationship between climate change and child migration and displacement. We consulted 50 children in Peru as well as national, regional and global experts and existing research studies, to understand the current and future impact of climate change on children in Peru, how it is driving displacement and migration, and the actions that must be taken to address this crisis.

Circular, seasonal migration is a long-established strategy in mountainous areas but is becoming increasingly permanent due to loss of crops and bad harvests. Children resort to child labour, street begging, or sex work to raise money for their families or may be sent to other more affluent relatives to live and work. Unmarried girls, in particular, may move from rural to urban settings to seek out educational opportunities.

The Peruvian government is starting to develop a strategy for managing migration and displacement prompted by climate changes. Its current response focuses on disaster preparedness, humanitarian assistance, empowering children's voices, revaluing ancestral knowledge and raising awareness of the risks of migration.



"In my community there are disasters as a result of climate change, strong winds, storms, floods. There is a lot of suffering for indigenous peoples."

Child, aged 13–17
Pasco, mountainous
rainforest setting



“Not all are able to eat well, they do not have food for three meals a day, plus water is not very good. Plus, many children have asthma and will get chilled very often.”

Child, aged 12–17
Callao, coastal setting

“Our lives change, frosts and excessive rains cause animals and crops to be lost, babies can die from the cold.”

Child, aged 14–17
Cusco, mountainous setting

“We know that those children with disabilities have the worst part, many have hearing disabilities, from bad colds, but some that are healthy are not well treated. Children from other highland communities are seen as plagued, there is a lot of discrimination.”

Child, aged 14–17
Cusco, mountainous setting

There is an urgent need for the Peruvian government and development partners to develop longer-term solutions after climate-related disasters and invest in more community adaptation and awareness campaigns on climate change and its impacts.

Multi-level government strategies (national, regional and local) must be established with a child lens and child rights’ perspectives. Financial support for municipalities, in particular, is required to improve climate related planning, policies and programmes.

Climate threats in Peru

Peru’s varied climate and traditional weather patterns are increasingly being disrupted. Peru is already experiencing climate-related changes. Peru’s mountainous areas are vulnerable to both sudden-onset weather events – notably **extreme precipitation** and **flood events** – and slow-onset processes such as increases in **extreme temperatures** and **shifting precipitation patterns**^{2,3}. Coastal regions in Peru are generally much drier. The region has experienced severe droughts, but also flooding linked to more frequent El Niño events⁴.

28% of the population lives in mountainous regions (e.g. Andean highlands or sierra), including 2.7 million children. More than half (58%) live in low-lying coastal areas, including 5.6 million children (Peruvian Times 2018). At least 30% of Peru’s population lives in flood-prone areas and over 50% of Peru’s land area is considered at high flooding risk⁵. Such flooding is particularly exacerbated during El Niño oscillations.

Children living in mountainous regions and coastal settings are on the frontline of climate changes.

Peruvian farmers living in mountainous regions are reliant on rain-fed agriculture for food production. Erratic rainfall and increased temperatures can result in crop failure. The introduction of pests has also led farmers to relocate higher up, exposing crops to shorter seasons and more snowstorms, floods and droughts.

Climate change projections for Peru⁶ suggest the situation will only get worse. Projections include:

- Extreme temperatures: 2–3°C increase in average maximum temperatures and 4–6°C in average minimum temperatures by 2065
- More frequent and intense rainfall events, floods and droughts
- Glaciers reduce by 78–94% (reducing freshwater supply)
- Up to 50cm rise in sea levels by 2100
- Extreme heat stress in the Amazon basin

These changes are predicted to lead to glacial melt associated with rising temperatures. Glacial melt also increases risks of flash flooding and flooding. Other changes include accelerated soil degradation, soil erosion, decline in renewable surface and groundwater, reduced water quality, reduced forest density, and wildfires.⁷ Extreme precipitation also increases the risks of mudslides.

KEY CLIMATE FACTS IN PERU⁸

Climate	<p>Climate threats: extreme temperatures, rising temperatures, extreme precipitation, glacial melt, flooding, drought, mudslides, wind leading to water scarcity, food insecurity, infrastructure loss and damage, health risks</p> <p>More than 2.6 million children are exposed to heavy rains, floods, flash floods and mudslides, and almost 1 million children to drought.</p>
People	<p>Human Development Index:⁹ middle-high (79 out of 189)</p> <p>Population: 33.3 million, with approximately 29% of children (9.7 million) under 18 years' old</p> <p>Urbanisation: 78% of the population live in urban areas</p>
Migration & displacement	<p>Future displacement risk per year from sudden-onset threats is 72,000 (20,880 children), 28% linked to flood threats.</p> <p>In 2020 there were 66,800 internally displaced persons (IDP), including an estimated 19,372 children, primarily due to conflict. (Dec 2020)¹⁰</p> <p>In 2017, unseasonably high rainfall and flooding resulted in 295,000 disaster related displacements.</p>
Economy	<p>Service: 55% of GDP and employs 58% of the workforce (tourism, financial services, telecommunication and construction)</p> <p>Industry: 30% of GDP and employs 15% of the workforce, particularly mining (copper, gold, and silver).</p> <p>Agriculture: though only 1.7% land is arable, agriculture contributes to 7% of GDP and employs 27% of the workforce</p>
Covid-19	<p>Rates: Peru has the highest per capita COVID-19 death toll in the world, and is fifth on the list of countries with the highest absolute number of COVID-19 deaths.</p> <p>Cases: 2 million confirmed cases and 193,909 deaths (July 2021)</p> <p>Economy: Strict quarantine measures led to an 11% decline in GDP in 2020</p> <p>Poverty: Poverty rates increased by 6% to 27% in 2020, pushing almost two million people into poverty</p>

Impact of climate change on children in Peru

The occurrence of extreme temperatures and precipitation, flooding, drought, glacial melt and mudslides are exacerbating water scarcity, food insecurity, infrastructure loss and damage, and health risks such as gastrointestinal and respiratory issues.¹¹

Floods and mudslides can weaken transportation infrastructure and can devastate the urban poor's housing, which is constructed on unstable slopes.¹² Children interviewed shared how climate-related disasters had destroyed the roads to their villages, rendering access to assistance, goods, and services difficult.

Children living in remote locations can be physically hard to access during an emergency. *"There are families that live very far from basic services, so some will not be able to get to school without walking more than 2 hours."*¹³



“We worked since we were children, as tour guides and as interpreters for tourists. With that [income] we help our families for a certain time.”

Child, aged 14–17

Cusco, mountainous setting

“Despite [not having enough food and water] the children to clean car windows, sell cigarettes and sweets, or beg.”

Child, aged 12–17

Callao, coastal setting

“Our lives change, frosts and excessive rains cause animals and crops to be lost, ... older children go to look for work to support the family, meanwhile, we return to our school, to the farm, to our community, like working taking care of our animals cleaning the farm, curing the land to plant again, on vacation going to Paucartambo to work.”

Child, aged 14–17

Cusco, mountainous setting.

“It is known that children leave the community for the city to look for work during our school holidays. We do it because there is desolation and hunger and then we have to go back to planting, taking care of our animals, as well as go back to school.”

Child, aged 13–17

Ayacucho, mountainous setting

Children’s vulnerability to climate risks

An estimated 2 million children¹⁴ are exposed to flooding, particularly in the north of the country. In Lambayeque, 150 districts are exposed to floods, landslides and mudslides; a population of about 0.7 million, including 203,000 children¹⁵. Over 320,000 people live downstream of glacial lakes¹⁶, including an estimated 92,800, where exposure to glacial lake outburst floods is also extremely high.

Children living in Andean mountainous areas (i.e. Cusco, Ayacucho, Pasco) highlighted exposure to storms, heavy rains, strong winds, drought and intense cold fronts. They also mentioned increasingly heavy rains, which had caused flooding and affected their harvest yields. In coastal regions (i.e. Callao, Lambayeque), children are exposed to slow-onset changes including drought and sea level rise, which has also been linked to the increasing frequency of extreme El Niño events.

Water insecurity is a key problem for children living in mountainous regions dependent upon glacial melt for their water. There is too much water released during the rainy season which causes flooding and not enough during the dry season. *“When we say that climate change is exacerbating existing economic instability, and even though we all have the same rights on paper, in practice we see that not all of us have equal conditions to develop and exercise them, particularly children. There the differences begin and surely the conflicts”¹⁷.*

Children are more sensitive to under-nutrition and malnourishment given physiological and metabolic differences¹⁸. Children are also at risk of death or injury from extreme weather events as well as disease, water insecurity, respiratory problems, (such as asthma) and are less able to regulate body temperatures.

Children are at greater risk from gastrointestinal problems and respiratory diseases (from lack of quantity and quality drinking water¹⁹), malnutrition from food insecurity, and death from drowning and exposure to the cold, particularly younger children.

Children interviewed noted that indigenous children and those living with disabilities were the most vulnerable to these risks.

Capacity to cope is low as a result of poverty and climate events. Children living in mountainous and coastal communities resort to child labour including gold mining, street begging, or sex work²⁰ to raise money for their families. Working as tour guides or learning a trade (technical or craft) were also examples given by children interviewed as well as being sent to other more affluent relatives/community members to live and work.

Children interviewed also tried to adapt to climate change in their communities in the short-term by building retaining walls (to stop mudslides) and digging water reservoirs to store water.

VULNERABILITY OF CHILDREN IN PERU

Poverty²¹	<p>32% of children live below the poverty line (2014)</p> <p>Rural populations are poorer than urban ones. In 2014, 46% of the rural population was poor compared to 3% of the urban population</p> <p>Peru's highlands have the highest proportion of citizens living in poverty (82%) and extreme poverty (58%) (2020)</p> <p>Four out of ten Peruvians are at risk of falling into poverty if hit by a negative shock (2017)</p> <p>1.2 million children fell into poverty in 2020 due to the Covid-19 crisis</p>
Health and nutrition	<p>High rates of malnutrition and anaemia in remote mountain and jungle regions</p> <p>44% of children aged 3–6 years suffer from anaemia; in some Andean zones, the rate reached 76% (2016)</p> <p>12% of children under 5 are chronically malnourished (2019)</p> <p>13 out of every 1,000 children die before age 5</p> <p>An estimated 730,000 children lack access to safe water</p> <p>27% of households lack access to public water systems and 36% lack access to public sanitation</p>
Education	<p>383,000 children under age 12 are out of school and more than 643,000 are at risk of dropping out</p> <p>71% of teenagers completed secondary education (2016)</p>
Protection	<p>22% of children aged 5–14 are working, 37% 14–17-year-olds are working more than 36 hours a week (2015)</p> <p>1.25 million children aged 5–17 engage in child labour including gold mining, street begging or sex work (2015)</p> <p>74% of children aged 9–11 and 81% of adolescents aged 12–17 reported psychological or physical violence (2015) in the workforce</p>
Disability	<p>2 million (6% of the population) are living with a type of disability (2019)</p> <p>Unemployment rate is almost three times higher for those with disabilities than the overall population (2019)</p>
Gender	<p>Almost one in five girls marry before age 18</p> <p>13% of girls aged 15 to 19 give birth (2017)</p> <p>40% of trafficking victims were children and adolescents, primarily girls (2014)</p>



“Many young people leave for work reasons. Because river flooding and the torrential rains prevent work in agriculture, the youngest go to work in the factories and the oldest to places where agriculture is vital to their economy.”

Child, aged 12–17

San Martin, mountainous rainforest setting

“The frost or drought always makes the heads of the family leave to look for a livelihood, there is no alternative. How can children go to school if they do not have enough to eat? If they get sick they are treated but there is no medicine, shopping in [town] is expensive.”

Child, aged 12–17

Cusco, mountainous setting

“[I would not consider moving from here] because my parents do not have any money, though I would like to live in a less dangerous area that is less cold.”

Child, aged 12–17

Cusco, coastal setting

How climate change is driving child migration and displacement

Historically, migration has long been a way of life in many Andean settings. However, households are increasingly adapting to a changing climate by living in multiple locations: *“Many households are organized trans-locally (across multiple locations) and membership is fluid, as individuals move in and out in response to household shocks, and the exigencies of schooling and work.”*²²

Many child focus group participants noted that they migrate to find work to help support their families during their school holidays, and return to their communities once school is back in session.

Circular seasonal migration is an established livelihood strategy in the Andes that is becoming increasingly permanent due to climate change as children move away from dwindling opportunities in rural areas. Displacement is generally temporary, with children usually staying with relatives or in shelters in urban areas for temporary protection. Parents and children will move between locations and ecological settings, looking for economic and educational opportunities: *“livelihood strategies depend on family members’ mobility, thus creating links between and within rural and urban locations and between ecological zones.”*²³

Social networks play an important role in where children move²⁴.

Adolescents and youth may sometimes take the first step, and younger siblings and adult family members may choose to follow. Increasingly, unmarried girls are relocating from poorer rural areas to wealthier urban areas, often through kinship ties. They will move for better education opportunities, whilst paying for this by providing domestic help.

Climate-related displacement can be exacerbated by sudden events (El Niño/La Niña). In late 2016-early 2017, 293,000 people were internally displaced due to El Niño²⁵. It is estimated that 6,090 children²⁶ are expected to be displaced each year due to floods²⁷. Repeated flooding, strong winds, cold fronts and frosts are damaging crops and killing livestock, leading many families to seek income elsewhere.

“We found the strongest link between threats and mobility in the Peruvian highlands. People are already migrating within the country due to climate impacts. More than nine million people are exposed to heavy rains, floods, flash floods and landslides, and almost 3.5 million to droughts. Worsening climate impacts will make it harder for Peruvians to adapt where they live; simultaneously, migration in dignity that preserves people’s well-being will become more difficult to achieve.”

PIK and IOM, 2021

Children choose to migrate for better livelihoods and employment opportunities, access to regular food and water; better access to essential services such as education.

Melting glaciers are also increasing labour migration²⁸. Children interviewed identified loss of crops due to flooding and bad harvests from drought as key drivers that would cause them (and their parents) to leave their communities to find work. They also noted other reasons for migrating, including for better access to services such as education and healthcare, given the poor facilities in remote mountain locations.

Other children remain trapped in high risk locations, due to lack of funds or having a disability *“as a consequence of this situation, many people also had to migrate to other places, but there are also people who find it difficult to leave everything behind and therefore wait for aid to rebuild their homes or roofs if that what is needed”*²⁹.



“We miss our parents and in some cases they send us to the people who will take care of us and not to school, and we must work for them.”

Child, aged 14–17

Cusco, mountainous setting

“Money makes you have more clothes, a more modern tablet, but if there is no security they can rob us, it is a problem as we are more exposed.”

Child, aged 12–17

Callao, coastal setting

Impacts of climate-related child migration and displacement

Children who become displaced or choose to migrate experience reduced access to basic services (despite often moving in order to improve access). Experts highlighted that child migration and displacement has resulted in reduced or disrupted access to education, health services and safety³⁰.

As urban areas become increasingly overcrowded and measures are not taken to improve urban planning, many children and their families are reported to find themselves in precarious living conditions far from the services they need. This also creates conditions of conflict as urban areas are increasingly pressured.³¹

The economic instability, the malnutrition of families, the lack of income and basic services, all become a breeding ground for conflict because it supports a total discontent in the family. Youths have gone through these conditions of suffering, come to the city and face the lack of work and lack of opportunity. This makes the boys join with other boys and initiates coping mechanisms like the consumption of alcohol and other vices, even crime, because they have been personally frustrated”

Ucayali ag, KII

Children can experience psychological stress when their new reality does not align with their aspirations, One KII found during their research with mountain communities that children experienced severe trauma from witnessing disaster events with long-term implications on behaviour.³²

Children living with disabilities were repeatedly identified as frequently bullied and discriminated against. Temporary shelters used during displacements are rarely equipped with specialised equipment to facilitate access for children with motor disabilities³³.

Children left behind struggled with their education, underperforming in schools and in some cases dropped out altogether although children interviewed acknowledged the material benefits they received such as clothes, food, and electronics.

Current responses to climate-related child migration and displacement

The Peruvian government is starting to develop a strategy for managing migration and displacement prompted by climate changes.

In 2018, Peru published the Climate Change Framework Law, which aimed to avoid the negative effects of migration for receiving areas (infrastructure pressure and social conflict) and avert negative consequences for the socio-economic wellbeing of migrants. The government is currently preparing an Action Plan to Avert and Address Forced Migration due to the Effects of Climate Change and a National Action Plan (NAP)³⁴.



“I have participated in discussions on environmental issues with those who make decisions, for example, in the Callao Region we are summoned to participate on behalf of our school”

Girl, aged 17

Callao, coastal setting

[To stay in the community and face climate change head on we need to] be informed more about climate change and teach other adolescent children environmental education to teach their parents. At school they teach us that trees should not be cut down and yet trees are cut down and not replaced.”

Child, aged 12–16

Ucayali, mountainous rainforest setting

“To face climate change, we community members need water wells, sheds for livestock, and ensiled pastures (it is a traditional method of conserving pastures, where they are chopped up and buried, adding a mixture of salt or molasses).”

Girl, 13

Pasco, mountainous setting

Peru has a policy on planned relocation to support areas at recurrent risk of mudslides, huaycos³⁵ and river overflows (although does not include other areas such as those at risk of glacial lake outburst). However, inhabitants who have lived less than ten years in the village are excluded from relocation and not all local governments have the same funds to allocate to relocations³⁶.

There remains no national policy that effectively prevents forced migration, supports migration as an adaptation strategy, governs the destination side of migration, assists migrants and displaced people or searches for durable solutions.³⁷

DDR planning and strategies are not sufficiently developed in local and regional government. Similarly, policies and strategies to supporting domestic migration are not prioritised.

“The biggest challenge is yet to come – communicating the risk [of glacial lake outburst floods] and risk reduction measures to local communities and making them trust and accept this.”

Emmerg cited in Vallangi, 2021

Proposed priority responses in Peru

Current support focuses on disaster preparedness, humanitarian assistance (e.g. providing food, clothing and shelter), empowering children’s voices, revaluing ancestral knowledge and raising awareness of the risks of migration (e.g. trafficking).

Children felt supported in the short-term after climate-related disasters but this was only temporary. Churches, INDECI and the regional and municipal governments provided canned food, water, blankets, clothes, mosquito repellent, bottled water, games, medicine, and prefabricated schools. Local government and development partners also helped clear, reconstruct and improve the roads ensuring the movement of people and goods post disaster, and supported the reconstruction of schools.

Experts call for more community adaptation and awareness raising on climate change and its impacts. Experts want improved **public policies to reduce migration to cities** including supporting productive livelihood diversification, promoting opportunities for organised local production and for larger-scale production³⁸ and **more funding** to account for the increasing number of climate events occurring.³⁹ Better data is also needed to track movement and improve decision making and planning.⁴⁰

There are limited programmes which prevent displacement or facilitate and support migrants or displaced individuals. Peru should prioritise bridging the knowledge gap, preventing forced displacement, assisting those who have been displaced and supporting skills development for migrants.⁴¹

Children and key informants identify the responses required by government and partners to respond to this issue. **Children in both mountainous and coastal regions prioritised** resilience building in origin and destination communities through access to services and utilities (e.g. schools and water) and awareness raising of the impact of climate change.

The children and experts that we consulted for this study recommend the following responses are prioritised by the Peruvian government and development partners:

Before migration and displacement	During and after migration and displacement
<p>Empower and support children as agents of change to protect the environment (e.g., training communities, dialogue to engage children, information dissemination in their communities).</p> <p>Help families adopt eco-friendly measures (e.g. solid waste segregation system, creating a compost bin, use of eco-bricks) to reduce carbon emissions.</p> <p>Ensure access to electricity, water, schools, public health, education (and scholarships), and internet</p> <p>Provide Technical and Vocational Education and Training (TVET) particularly girls.</p> <p>Strengthen food security via seeds and fertiliser to farmers.</p> <p>Promote prevention planning and risk management (e.g. for sea level rise) including planning and mapping of settlements; and disaster risk reduction measures (e.g. the formation and training of child defence brigades).</p> <p>Promoting social inclusion policies and intercultural education to facilitate future migration, including language support and support vulnerable children, particularly those with disabilities.</p> <p>Improve housing and community infrastructure such as schools and sports fields, using quality materials and sustainable building practices.</p> <p>Improve drinking water availability and quality by building water reservoirs</p> <p>Raise awareness and disseminate information to children and parents about climate change and its impacts</p>	<p>Prepare safe spaces for children including the most vulnerable</p> <p>Integrate the needs of vulnerable groups into programming to ensure that current shelters (used for displaced individuals) respond to the needs of all vulnerable groups, such as those with disabilities.</p> <p>Promote nature-based solutions to support returnees through initiatives such as reforestation (e.g. to reduce future mudslide risks).</p> <p>Ensure policies and development plans reflect the needs of migrant children and their families taking into account their customs and culture.</p> <p>Provide psychosocial support for children, including those whose self-esteem and identity have been damaged from migration.</p>

Research approach

For this case study, we held 7 focus group discussions with 50 children:

- 5 mountainous areas
- 7 children in Ayacucho aged 13–17 (6 girls/1 boy)
- 8 children in Paucartambo aged 14–17 (6 girls /2 boys)
- 7 children in San Martín aged 12–17 (4 girls/3 boys)
- 7 children in Puerto Bermúdez and Simón Bolívar aged 13–17 (4 girls/3 boys)
- 7 children in Ucayali aged 12–16 (6 girls/1 boy)
- 2 coastal areas
- 7 children in Callao aged 12–17 (4 girls/3 boys)
- 7 children in Lambayeque 12–17 (5 girls/2 boys)

We also interviewed child rights, migration and climate change experts from the Instituto Geofísico del Perú (IGP), the regional governments of Piura and Ucayali; Asociación para la Niñez y su Ambiente (ANIA) and Institución Familia y Bienestar Social, and Red Ambiental in Lima.

Secondary data was sourced from policies, articles, research and reports (see references).

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*The names in this report have been changed to protect identities