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# CASE STUDY DRAFT

Climate Displacement and Internal Migration in Sri Lanka

A Case Study on Trincomalee District



Draft version Not for citation

Prepared by

SLYCAN Trust

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# **Key Information**

- The adverse impacts of climate change increasingly cause or contribute to internal migration in Sri Lanka.
- In many rural dry zone communities, prolonged droughts, soil depletion, and erratic rainfall patterns disrupt and threaten agricultural livelihoods and food security. These communities depend on the agriculture sector and offer few employment options outside of it.
- There is a strong link between climate change impacts and migration. During an agricultural survey in four villages in Trincomalee district, 97% of farmers had experienced droughts and shifting rainfall patterns; 84% of respondents in the migration survey named droughts as the main driver of migration.
- The majority of internal climate migrants in Sri Lanka are men. They move to cities like Colombo, Kandy, or Vavuniya to find work while their wives, children, and families stay behind.

- Much of this migration is unofficial, temporary, and cyclical. Many migrants return to their villages once a month or every two months, other stay away for even longer periods but come back for the harvest season.
- The main goal of this migration is providing a substitute income for the failing agriculture sector. It is not an adaptation strategy but instead borne out of economic necessity.
- If the resilience of these communities can be increased and their agricultural livelihoods supported through irrigation, water management, climate-smart agriculture, drought-resistant crops, and livelihood diversification, migration numbers are likely to decrease significantly.

# **1. Introduction**

As a developing tropical island nation in the Indian Ocean, Sri Lanka is highly vulnerable to the adverse impacts of climate change. Prolonged droughts, erratic rainfall patterns, floods, landslides, sea level rise, temperature increase, salinization, soil depletion, high winds, and storms are among the rapid- and slow-onset disasters that are brought on or worsened by anthropogenic global warming and the resulting climate change.<sup>1, 2</sup>

Climate change severely threatens the lives and livelihoods of Sri Lanka's population as well as the country's economy. The dry zone agriculture sector is especially at risk due to its high dependence on irrigation and the vulnerability of the rural population. In many cases, internal migration has become a last-resort response to the impacts of climate change in dry zone communities.

#### **1.1. Country Context**

A 2015 IDMC report identifies Sri Lanka as the country with the highest relative risk of being displaced by disaster in South Asia; even by absolute numbers, the small island nation is ranked 13th world-wide. For every million inhabitants, 15,000 are at risk of being displaced every year in Sri Lanka.<sup>3</sup>

In 2017 alone, the country experienced seven disaster events, mainly floods and landslides, and 135,000 new displacements due to disaster. Sri Lanka is also at risk from slowonset impacts like soil degradation, saltwater intrusion, water scarcity, and crop failure.<sup>4</sup>

Sri Lanka is one of the main countries of origin for migration within Asia. Like the Philippines, Sri Lanka has a robust framework for temporary labour migration, which was solidified with the start of the Colombo Process in 2003. Migrant worker remittances are a key source of income for Sri Lanka and amount to 8-9% of the total GDP.<sup>5</sup>

The majority of international Sri Lankan migrants are now women, and while their main driver for migration might be economic, it is undeniable that the changing climate adds pressure and makes other employment options in their home areas unviable.

The UN's Sustainable Development Goal 10 (Reduced Inequalities) includes the facilitation of "orderly, safe, regular and responsible migration and mobility of people" as one of its targets, but other SDGs are impacted by migration as well as their success depends on the successful handling of climate-induced displacement and migration.

<sup>&</sup>lt;sup>1</sup> (Ministry of Mahaweli Development and Environment, 2015)

<sup>&</sup>lt;sup>2</sup> (Ministry of Mahaweli Development and Environment, 2016)

<sup>&</sup>lt;sup>3</sup> (Internal Displacement Monitoring Centre, 2015)

<sup>&</sup>lt;sup>4</sup> (Internal Displacement Monitoring Centre, 2018)

<sup>&</sup>lt;sup>5</sup> (Department of Census & Statistics, 2018)

Province	<b>Outward Migration</b>	Inward Migration	Net Migration
Central	665,786	407,911	-257,875
Eastern	169,153	196,769	27,616
North Central	203,311	308,281	104,970
Northern	480,653	431,420	-49,233
North Western	359,382	365,817	6,435
Sabaragamuwa	385,014	252,736	-132,278
Southern	607,485	306,709	-300,776
Uva	266,215	203,400	-62,815
Western	<u>817,685</u>	<u>1,481,281</u>	663,596
Total <sup>6</sup>	3,954,684	3,954,324	

Table 1: Migration by Province

The 2012 census found that one in five Sri Lankans is an inter-district migrant, and one in seven an inter-province migrant, 40% of which are living in the Western Province. This means that they reported a different place of usual residence than their place of previous residence.<sup>7</sup>

Nationwide, marriage is the most common reason for migration (31.7%), followed by employment (20.4%), requirement of a family member (18.8%), and resettlement after displacement (8.9%).

However, it is worth breaking this down by province and district (Table 1).

In Colombo, most migrants (42.8%) have come for work, just as in Gampaha (30.6%). The majority of people in the Northern Province moved there due to resettlement after displacement (Kilinochchi 95.6%, Mullaitivu 88.3%, Jaffna 70.1%, Mannar 66.0%), while marriage and family are the predominant reasons for most of the rest of the country. Roughly said, people move to the Central, Eastern, North Central, North Western, Sabaragamuwa, and Uva provinces for marriage or because of the requirements of a family member; they move to the Northern Province due to Resettlement and Displacement; and they move to the Western Province to find employment.

However, these numbers do not account for temporary migrants.

#### **1.2. Trincomalee District**

Sri Lanka is divided into nine provinces and twenty-five districts. Together with Ampara and Batticaloa, Trincomalee is one of the three districts forming Sri Lanka's Eastern Province. With 2,727 km<sup>2</sup>, it is Sri Lanka's tenth largest district but only number twenty-one in terms of population.

The Eastern Province is sometimes called the "Granary of Sri Lanka," as it is responsible for roughly one quarter of the country's entire paddy output,<sup>8</sup> and Trincomalee fits into this picture.

<sup>&</sup>lt;sup>6</sup> (Department of Census and Statistics, 2012)

<sup>&</sup>lt;sup>7</sup> (Department of Census and Statistics, 2012)

<sup>&</sup>lt;sup>8</sup> (The Economist, 2016)

	Land Area in square knometres						
Trincomoloo	Paddy	OFC	Perennial	Garden	Abandoned	Not Cultivated	Forest
micomalee	361.67	498.32	24.20	188.30	119.51	520.30	817.10

#### Land Area in square kilometres<sup>9</sup>

Table 2: Land use in Trincomalee district

The district is largely agrarian-oriented, with almost half the land area (47.13%) used for cultivation.

Trincomalee district has a net migration mostly due to resettlement (33.2%), marriage (19.7%), and requirements of a family member (17.3%). The net migration has reduced from 1981 to 2012, just like in the other districts of the Eastern Province.<sup>10</sup>

Trincomalee District				
Dopulation	Total	Born here		
Population	379,541	325,769		
Migration	Inward	Outward	Net	
wigration	52 <i>,</i> 123	77,093	24,970	
Longth of Stay	< 5 y	5-9 y	> 10 y	
Length of Stay	35,006	7,917	34,170	
	55,000	7,517	54,170	

#### \_ . \_...

Table 3: Population of Trincomalee district

Due to the impacts of climate change, droughts have become more common. After floods, droughts are the second most common disaster in Sri Lanka affecting people and economy.<sup>11</sup>

Trincomalee, along with the rest of the Eastern Province, is in an area with a very high drought hazard. According to the National Disaster Relief Services Centre (NDRSC), 178,800 people were affected by drought in 2017 and 20,120 people in 2016.12 Trincomalee was the worst affected district in the Eastern Province during the 2016/2017

drought, which was the worst drought in 40 years, but far from the only one. Other severe drought events happened in 2014, 2012, 2004, and 2001, and scarcity of drinking water is an annual problem.<sup>13</sup>

People without their own well have to walk to access clean water, sometimes 150 meters, 800 meters, even to the next village.

As climate change alters long-term weather patterns and leads to increasing droughts, floods, and storms, more and more people are turned into climate migrants and refugees.



Table 4: Sources of drinking water in Trincomalee district

<sup>&</sup>lt;sup>9</sup> (Department of Census and Statistics, 2018)

<sup>&</sup>lt;sup>10</sup> (Department of Census and Statistics, 2012)

<sup>&</sup>lt;sup>11</sup> (The Consortium of Humanitarian Agencies, 2017)

<sup>&</sup>lt;sup>12</sup> (National Disaster Relief Services Centre, 2018)

<sup>&</sup>lt;sup>13</sup> (The Consortium of Humanitarian Agencies, 2017)



Table 5: Rainfall patterns Trincomalee 2015-2017

Not even half of all households in Trincomalee district receive their drinking water from the tab. Over 40% of households have access to a protected well instead while the rest relies on bottled water, unprotected wells, and other means of collecting drinking water.

These rural communities depend on rains not just for agriculture but for all areas of life: from drinking to washing to laundry. If no clean and safe sources of water are available, kidney disease and other illnesses become widespread and the quality of life lowers. Without reliable rainfall, even home gardening or small-scale cultivation of other crops becomes difficult, leading to strong economic pressure on farmers and their families.

# 2. Methodology

This case study is informed by an extensive, in-depth literature review of studies, information notes, and research papers to establish a comprehensive national, regional, and global context.

Ground-level data has been gathered through a migration-focused survey of fifty people in four villages in Trincomalee district as well as interviews with farmers, housewives, and migrant workers. The data was complemented by additional surveys of a total of 118 people in four villages in Trincomalee district which focused on climate change impacts on agriculture and farmers' adaptation measures to these impacts.

Furthermore, consultations and interviews took place with stakeholders and experts

from government entities such as the Climate Change Secretariat and the Disaster Management Centre, various UN agencies, and NGOs, CSOs, and the private sector.

Trincomalee has been chosen because it is part of the dry zone, has a high dependence on agriculture, and is heavily affected by climate change impacts in general and droughts in particular.

The case study aims to give a detailed picture of the ground-level situation in rural villages in Trincomalee district and the effects of climate change as a driver for internal migration and displacement. It then connects the specific situation in Trincomalee to the wider context in Sri Lanka's dry zone and the repercussions of in- and out-migration across the whole island.

# **3. Displacement and Migration**

The International Organization for Migration (IOM) defines displacement as "the movement of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters."<sup>14</sup>

Migration, on the other hand, is more loosely defined as "the movement of persons away from their place of usual residence, either across an international border or within a State."<sup>15</sup>

To distil the difference, people are displaced as the direct result of some kind of event or situation that poses a serious threat and forces them to flee; migrants, on the other hand, are not threatened by persecution, death or imprisonment if they return to their home countries. If they move across borders, they are subject to national immigration procedures and laws: but the majority is migrating from rural to urban areas within their countries. They move for temporary work opportunities, the reunited with their families or as part of cyclical rural-urban exchange patterns. Migration can even be an adaptation strategy itself, for example in pacific island communities that relocate their village farther away from the shoreline.

Both displaced persons and migrants are different from refugees, which is a specific

legal status awarded under the 1951 Refugee Convention as well as subsequent protocols and conventions. They are able to seek asylum, and countries have a responsibility to ensure their safety.

Displacement and migration can be permanent or temporary, both can happen within a country or across borders. Displacement can be directly caused by climate disasters such as floods or storms, but this is rarely the case for migration. There are social, political, economic, demographic, and environmental drivers for migration, and a combination of them usually leads to the decision to move. Environmental degradation adds to other migration drivers and can tip the scales, and climate change can aggravate existing tensions or even lead to conflicts itself when water and other resources become scarce.

Different organisations use different terminologies, from climate refugees to environmental migrants, from environmentally displaced persons to forced environmental migrants: but it is clear that climate change is not a choice, and that its impacts can be just as life-threatening and forceful as war or persecution.

<sup>&</sup>lt;sup>14</sup> (International Organization for Migration, 2019)

<sup>&</sup>lt;sup>15</sup> (International Organization for Migration, 2019)

#### 3.1. Climate-Induced Migration

Climate change is usually not the sole driver for migration. Usually, it is part of a complex multitude of factors or exacerbates other migration drivers such as poverty.

The number of climate migrants is predicted to increase dramatically by 2050, with estimates ranging from 25 million to one billion climate migrants and 200 million being a widely cited figure.<sup>16</sup>

Around a quarter of the world's population lives in South Asia, and the region is predicted to experience the strongest climate change impacts and disasters. Almost half the region's population lives in areas that will become moderate to severe climate hotspots by 2050, and most of them are already characterised by poverty and poor infrastructure.<sup>17</sup>

South Asian countries have a high dependency on rain-fed agriculture, a large rural population, and high population density, especially along the coasts. There is already sizeable internal and international migration, in part because increasing development has increased mobility (and mobility for women in particular).

Rising temperatures and sea levels, changing rainfall and monsoon patterns, and tropical storms will lead to great numbers of climate migrants in South Asia. The direction of internal and international migration goes toward cities and will continue to do so. Emerging and existent urban regions, most of them coastal, struggle with infrastructural

<sup>16</sup> (International Organization for Migration, 2008)

challenges and have large populations living in unprotected, densely populated slums that are vulnerable to flooding and sanitary issues.

Tens of millions of people in South Asia will be forced to move internally due to slowonset impacts of climate change, leaving their homes when the rains become unreliable, the soil is no longer fertile or floods and storm surges threaten their lives.

#### 3.2. Laws and Policies

At the moment, climate-induced migration and climate displacement are not categories of international law: only refugees are protected 1951 Refugee Convention, to which Sri Lanka is not signatory. This means that especially for internal migrants and internally displaced persons, the primary responsibility lies with the country and its government.

UNHCR published its first policy paper on climate change and displacement in 2008 and identified three areas of engagement: operations management, protection strategies, and advocacy.

The 2016 New York Declaration for Refugees and Migrants mentions climate change and acknowledges that "poverty, underdevelopment, lack of opportunities, poor governance and environmental factors are among the drivers of migration."<sup>18</sup>

In a resolution adopted in December 2017, the UN General Assembly has expressed

<sup>&</sup>lt;sup>17</sup> (International Organization for Migration, 2016)

<sup>&</sup>lt;sup>18</sup> (United Nations General Assembly, 2016)

concern about the challenges of climate change and environmental degradation for internally displaced persons. UNHCR published its first police

In 2018, the global compact on refugees recognized the increasing interaction between the drivers of refugee movements and environmental degradation and natural disasters. The Global Compact for Safe, Ordinary and Regular Migration went one step further and formulated the goal to analyse and map migration movements caused by natural disasters, climate change impacts, and environmental degradation and develop adaptation and resilience strategies that take them into account.

# 4. Case Study on Trincomalee District

The core of the case study's data has been gathered from a 50-person survey and interviews in four villages in Trincomalee district in August 2018: Bakmeegama, Dekapiyawara mahadiwulwewa, Medawachchiya, and Pulikandikulama.

#### 4.1. Outward Migration

Compared to official migration figures, the survey results paint a different picture. According to the 2012 census, Trincomalee has a positive net migration, with more people moving into than out of the district and Gampaha, Anuradhapura, and Colombo as the main destinations.



Table 7: Migrating family members

Out of fifty interviewees in the survey, forty (80%) had a family member who had migrated, almost always the husband (72%), almost always to Colombo (87%).

The reason for this temporary migration is work-related in most cases, and 42 out of 50 interviewees named droughts as the main reason for their economic problems. Much of this migration is unofficial and difficult to count because the migrants maintain a strong connection to their home village and frequently return for harvest season.



Table 6: Migration destinations

Out of forty respondents with a member of their family migrating, twenty-five reported that they would come back once per month or at least every two months to stay for a few days or a week.

### 4.2. Left Behind

From fifty families, thirty-six reported the husband migrating away, at least on a temporary basis.





Even if those men frequently return and even if they are able to send money, this means that in many families in Trincomalee, the women and children are left to fend for themselves for much of the year.

Among those that remain in the villages, home gardening was by far the most common occupation, followed by paddy farming and small-scale businesses (selling wades, bites, sesame balls). However, the majority of respondents named either housewife or unemployed as their occupation, meaning that they have no way of earning money themselves and have to rely on their husband's income, family, and government relief programmes like Samurdhi.

Everyone involved in home gardening or paddy farming reported climate impacts related to drought (90%) or floods (10%). Around two thirds reported financial problems and no proper income. Some survive on very low amounts of below LKR 10,000 per month. The most common occupations were home gardening, paddy farming, and small-scale businesses (mostly selling food)

Half of the families with a migrating family member (21) named the migration to find labour as a response measure to deal with the climate-related impacts

# 4.3. Climate Change Impacts

The primary migration survey was supplemented with data from an additional survey of 118 people in four villages in Trincomalee district (Bakmeegama, Athabandhiwewa, Mahadullewa, and Kinniya) who named agriculture as their primary (and often only) profession.

If asked if they experienced climate change impacts within the past ten years without explaining climate change, only 13% answered that they had not: if asked for specific impacts, that number dwindled even further. 97% of farmers had experienced droughts and shifts in rainfall patterns, 93% a change in the annual amount of rain, 90% a temperature increase and reduction of water retention in cultivation soil, and still 83% reported an increase in underground water scarcity and more diseases and pests (insects) in cultivations. Water scarcity, high salinity, and increases in pests and diseases were also overwhelmingly named when asked about climate threats within the timespan from 2014 to 2019.

Their main methods to deal with climate change impacts were crop insurance (60%) and adopting a secondary income-generating activity (60%), although many also reported problems with existing crop insurance schemes, an issue backed up by research.

Around 33-40% already adopted some climate-smart agriculture (CSA) activities such as shifting harvesting period/early harvest (40%), shifting planting cycles and planting improved varieties (37%) or seeking early warning information on climate change and following instructions given by agricultural instructors or extension officers (33%). One in six farmers named abandoning agriculture as a solution.

# **5.** Conclusion

Climate change already impacts Sri Lanka in severe and deep-reaching ways and is slated to worsen significantly in the coming decades. For many rural communities in the dry zone of Sri Lanka, agriculture and especially paddy cultivation are less and less reliable as the main source of income and food security, with grave implications for the country at large.

Trincomalee is a good example of a dry zone district with heavy reliance on agriculture and a large rural population.

People are unwilling to move, but without sufficient rainfall, they are left with no other choice. The rural economy depends on agriculture, and if there is no rain, there are no jobs. People's need for sustainable livelihoods clashes with the desire to keep their roots intact and stay in their villages. This leads to temporary, cyclical migration between rural and urban areas, with men going to Colombo and other cities to work as drivers, in construction, or in factories, and women and children staying behind.

Lack of development and education, poverty, and insufficient diversification of livelihoods

are key drivers for migration: but climate change is what makes agriculture increasingly difficult and forces farmers to move to the cities for weeks, months, or even years at a time.

This migration is not an adaptation strategy, it is a last resort. If given the choice, the majority of people would stay back in their villages with their families. If the resilience of these communities can be increased and their agricultural livelihoods supported through better irrigation, water storage and drainage facilities, drought-resistant crop varieties, climate-smart cultivation methods, diversified livelihoods, improved resilience through risk transfer and disaster risk reduction and recovery, migration numbers are likely to decrease significantly.

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