

SRI LANKA

Flooding in south and west

KEY FIGURES

118,000

PEOPLE AFFECTED IN
SOUTHERN, WESTERN,
AND NORTHERN DIS-
TRICTS, 1-11 JUNE

5,700

PARTIALLY DAMAGED
HOUSES IN SOUTHERN,
WESTERN, AND NORTH-
ERN DISTRICTS, 1-10
JUNE

High Risk

OF INCREASED DENGUE
TRANSMISSION

3.4

INFORM CLIMATE CHANGE
RISK SCORE

CRISIS IMPACT OVERVIEW

Heavy rainfall, floods, and landslides have affected districts across Sri Lanka since mid-May 2024. Rain and storms intensified from 1 June, with the most significant effects in the south and west of the country (ECHO 06/06/2024, 11/06/2024, and 30/05/2024; Save the Children 03/06/2024; DMC 09/06/2024). According to the Sri Lankan Disaster Management Centre (DMC), from 1–11 June alone, around 118,000 people were affected, including 23 killed, seven injured, and one missing. The most affected areas were in Ratnapura district in Sabaragamuwa province (nearly 60,000 affected); Kalutara district in Western province (nearly 32,000 affected); and Matara district in Southern province (nearly 21,700 affected) (DMC 11/06/2024).

Reporting on a longer period from 15 May to 11 June, and covering a wider array of districts (including in Eastern province), the National Disaster Relief Services Centre (NDRSC) reported over 235,000 people affected by the flooding, including 37 dead, nearly 50 injured, and three missing, with the worst effects in Colombo district in Western province (nearly 75,000 affected); Ratnapura district in Sabaragamuwa province (nearly 65,000 affected); Kalutara district in Western province (nearly 42,000 affected), and Gampaha district in Western province (nearly 27,000 affected) (Govt. Sri Lanka 11/06/2024).

The numbers of affected people, casualties, and breakdown by district reported by both the DMC and NDRSC differ significantly between daily updates, likely because of evolving access to affected communities and delayed reporting from some districts and provinces.

The DMC reported around 80 houses destroyed and around 6,350 partially damaged between 1–10 June (DMC 11/06/2024). The floods also damaged agricultural land, threatening livelihoods (UNOSAT 04/06/2024 and 05/06/2024). Priority needs include shelter, WASH, health, food security, and livelihood support.

Anticipated developments/impacts

Ongoing rain and storms were forecast from at least 12–13 June across northern, western, and southern districts (ECHO 12/06/2024).

Sri Lanka's southwest monsoon season affects southern and western districts (parts of Colombo, Galle, Gampaha, Kalutara, Kegalle, Matara, Nuwara Eliya, and Ratnapura) from May–September. These districts also receive the most cumulative annual rainfall (Department of Meteorology 20/06/2019; Logistics Cluster accessed 11/06/2024). In the past decade, the southwest monsoon has caused flooding and landslides throughout the season, indicating the potential for further flooding events in the coming months (IFRC accessed 10/06/2024; IOM 05/06/2017).

A World Meteorological Organisation seasonal forecast for June–August, issued in May, projected a 50–60% chance of above-normal rainfall in the southern half of Sri Lanka and a 60–70% chance in the northern half (WMO accessed 10/06/2024). Columbia University's International Research Institute predicted a 45–55% chance of above-normal rainfall across Sri Lanka during the same period (IRI accessed 10/06/2024). This indicates that the southwest monsoon season may be worse than normal because of cumulatively higher rainfall levels.

While no information is available on damage to WASH infrastructure from the May–June 2024 floods, past monsoons in Sri Lanka have contaminated clean water sources, raising the risk of water and vector-borne disease transmission (IOM 05/06/2017). In mid-May, prior to the intensification of rainfall and floods, several southern and western districts were already among the worst affected by dengue, which is endemic to Sri Lanka (Ministry of Health 24/05/2024).

The last severe flooding event in Sri Lanka occurred in June 2017, affecting nearly 685,000 people across the country, with the worst effects (in descending order) in Ratnapura, Kalutara, Matara, and Galle. Nearly 16,000 houses were damaged, along with WASH and other critical infrastructure (IOM 05/06/2017).

Map 1. Sri lankan provinces and districts



Source: OCHA (14/12/2018)

CRISIS IMPACTS (CURRENT AND ANTICIPATED)

Shelter

Rainfall and flooding have damaged and destroyed large numbers of homes, creating urgent shelter needs. The DMC reported around 80 houses destroyed and around 6,350 partially damaged between 1–9 June, with the most damage in Ratnapura district (nearly 25 destroyed, 3,650 damaged); Matara (around 20 destroyed, 945 damaged); Kalutara (around 20 destroyed, 890 damaged); and Galle (nearly 20 destroyed, 400 damaged) (DMC 11/06/2024). For a longer reporting period, between 15 May to 11 June, which covered a wider array of districts (including in Eastern province), the NDRSC reported around 245 houses destroyed and nearly 16,000 damaged (Govt. Sri Lanka 11/06/2024).

On 11 June, the NDRSC reported that over 8,000 affected people were sheltering in 122 safety centres (Govt. Sri Lanka 11/06/2024). This represents an increase from the 4,800 people in 98 safety centres reported on 10 June, but a decrease from the nearly 10,700 people in 188 safety centres reported on 5 June (DMC 10/06/2024 ; Govt. Sri Lanka 05/06/2024). It is unclear whether these figures are changing because people have returned to their homes or been moved to more permanent alternative accommodation. Information on the size and condition of safety shelters is not available (Govt. Sri Lanka 05/06/2024).

People who are not in safety centres have sought shelter in churches, temples, and other public buildings (SLRC 06/06/2024).

WASH and health

There is no information available on the impact of current flooding and rainfall on WASH infrastructure. Based on the impact of past floods, however, it is likely that floods and landslides have contaminated and blocked access to clean water and sanitation facilities (IOM 05/06/2017).

The most recent demographic and health survey in Sri Lanka, conducted in 2016 using a nationally representative sample of around 27,200 households, found that around 90% of households (99% urban, 91% rural) had access to an improved water source and toilet. Only 62% of urban households and 53% of rural households, however, used an appropriate water treatment method, when necessary, prior to drinking (Department of Census and Statistics/Health Sector Development Project 09/2017). This may lead to unsafe water consumption in the coming months if the monsoon damages more water infrastructure.

The consumption and accumulation of contaminated and untreated water can contribute to the spread of water and vector-borne diseases. Dengue is endemic to Sri Lanka and transmission typically increases during the monsoon season. The most recent Ministry of Health update, on 19 May 2024, reports nearly 24,000 cases since 1 January. Among the districts with the highest reported cases were flood-affected Colombo (around 5,115), Gampaha (around 2,235), Kalutara (around 1,255), and Ratnapura (around 1,180). These districts had all seen increases in cases from the previous week, despite a general decreasing trend across Sri Lanka since January and overall lower cases nationwide compared with the same period in 2023 (Ministry of Health 24/05/2024; Govt. Sri Lanka 05/06/2024; DMC 09/06/2024).

It is likely that the monsoon season will increase dengue transmission in the coming months by contaminating water sources and creating pools of stagnant water, which facilitate mosquito breeding. In 2023, the monsoon and flooding contributed to over 40,000 cases of dengue between 18 May and 22 September, with high numbers in Colombo, Galle, and Gampaha, all of which are affected by the May–June 2024 floods (WHO 04/10/2023).

Livelihoods and food security

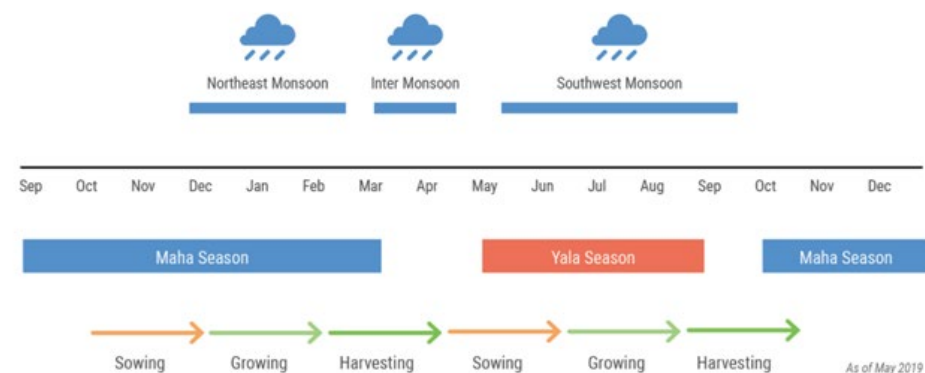
On 11 June, the DMC reported that the floods, rain, and landslides had damaged over 1,250 medium and small businesses (DMC 11/06/2024). This damage will affect people's access to basic goods, including food, in the coming weeks.

On 4–5 June, UNOSAT imaging detected damage to agricultural land in Colombo, Galle, Gampaha, and Kalutara districts (UNOSAT 04/06/2024 and 05/06/2024). Monsoon rains in June–September will occur during the second (Yala) maize and rice growing seasons, potentially compounding this damage by disrupting the growing process (FAO 16/06/2023).

This agricultural damage will likely aggravate food insecurity, particularly for the estimated 40% of the population engaged in agriculture or livestock farming (according to data from 2017) (EconomyNext 09/12/2019). In March–September 2023, the WFP completed its most recent food security assessment based on a sample of around 15,000 Sri Lankan households. Rates of moderate food security (on a scale of marginal–moderate–severe) worsened across the country, from an estimated 17% in March to an estimated 24% in September. Female-headed households were consistently more likely to experience food insecurity (WFP 22/05/2024). In April 2024, the WFP published data indicating that flood-affected Galle and Ratnapura were among districts experiencing higher rates of food insecurity (WFP 16/04/2024).

Food insecurity in agricultural households typically increases outside the February–March primary harvest season, raising the likelihood that floods will aggravate food insecurity in the coming months (WFP 22/05/2024; FAO 16/06/2023).

Figure 1. Seasonal farming calendar, Sri Lanka



Source: OCHA (09/06/2022)

COMPOUNDING/AGGRAVATING FACTORS

Climate, natural hazards, and El Niño

Sri Lanka has an INFORM Climate Change risk score of 3.4/10 and a score of 4/10 for lack of coping capacity (EC accessed 10/06/2024). The World Bank, however, describes Sri Lanka as 'highly vulnerable to climate change' because of high temperatures and complex hydrological circumstances (WB accessed 10/06/2024). Flooding is one of the most frequent and fatal hazards in Sri Lanka, which faces a particularly high risk of river and urban floods. Landslides also commonly occur during monsoon season (Think Hazard accessed 10/06/2024; Logistics Cluster accessed 11/06/2024).

Recurrent flooding events in Sri Lanka have decreased community coping capacities and potentially constrained state capacity to provide assistance. This includes the January 2024 floods, which affected over 175,000 people across the country, including in southwestern Ratnapura district, which is also affected by the May–June 2024 floods (Crisis24 12/01/2024; ECHO 11/01/2024; WFP 16/04/2024). In August 2022, the southwest monsoon affected over 15,000 people in one week, particularly in Kandy, Nuwara Eliya, and Ratnapura districts, where homes and infrastructure were destroyed (IFRC accessed 10/06/2024).

By contrast, in 2023, El Niño contributed to low precipitation during the southwest monsoon, causing drought and negatively affecting harvests (AJ 31/08/2023). This has likely reduced

community food stocks, savings, and other resources that would enable them to cope with flooding and associated shocks during the 2024 monsoon season.

Topography and urbanisation

Outside mountainous central areas, most of Sri Lanka is near sea-level. The rivers running through its plains overflow easily during heavy rainfall incidents. Rapid urbanisation, land reclamation, and illegal dumping of rubbish in Colombo and other urban coastal centres has led to the destruction of wetlands that can mitigate this flooding (Bulletin of Atomic Scientists 07/06/2024).

Economic situation

In 2022, Sri Lanka experienced its worst economic crisis since independence, with high inflation, currency depreciation, and an economic contraction of 7.3%, partially as a result of years of fiscal deficits, risky commercial borrowing, COVID-19, and recent, ineffective tax and agricultural policies (OCHA 09/06/2022; WB 02/04/2024). While the economy has continued to recover in 2024, with projected moderate growth of 2.2% and decreasing inflation, poverty rates have increased to over 25%, continuing a trend of rising poverty since 2019 (WB 02/04/2024).

HUMANITARIAN RESPONSE

Humanitarian constraints

On 4 June, UNOSAT imaging detected damage, including a damaged road, around Bandaranaike International Airport, Gampaha district (UNOSAT 04/06/2024). It is unclear whether this damage affects access to the airport, which provides primary air access to the capital, Colombo.

By 3 June, the Government had cut off electricity to prevent electric shocks from floodwaters in five unspecified districts (Save the Children 03/06/2024). By 11 June, it was still unknown whether electricity had been restored. Telecommunications cover in Sri Lanka is generally good (Logistics Cluster accessed 11/06/2024).

Sri Lanka has a dense road network, with good conditions on expressways and long-distance routes between major cities and towns, and worse conditions on more local roads. Precipitation, floods, and landslides present the main hazard on Sri Lankan roads,

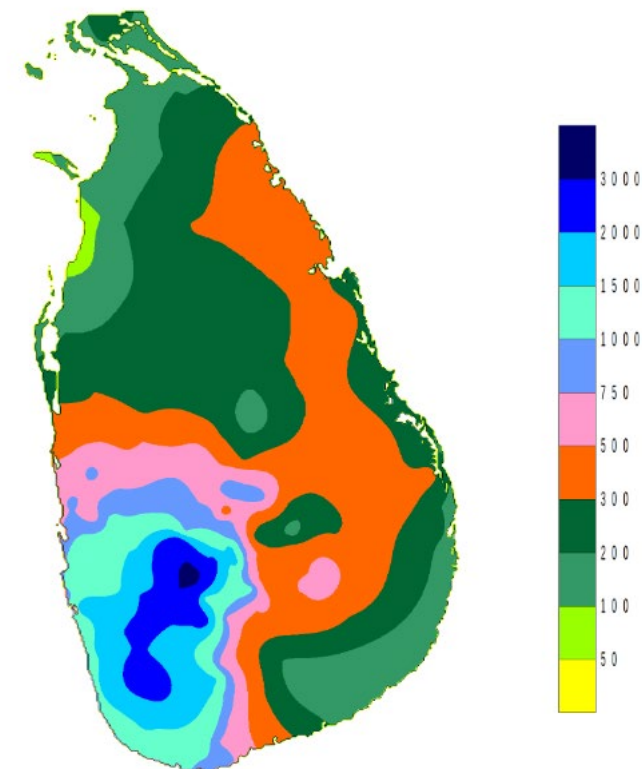
contributing to accidents, road damage, and blockages that can significantly increase travel time (Logistics Cluster accessed 11/06/2024).

Response capacity

By 6 June, district and divisional secretaries, security forces, and Civil Security Department officials were collaborating with UN organisations, including WHO and UNICEF, and INGOs – including World Vision and Save the Children – to provide assistance (Govt. Sri Lanka 06/06/2024; Save the Children 03/06/2024).

By 6 June, the Sri Lanka Red Cross Society had deployed teams in all affected districts to provide first-aid, evacuation assistance, and other urgent aid (SLRC 06/06/2024).

Map 2. Total rainfall typically received during the May–september monsoon season



Source: Department of Meteorology (20/06/2019)