

CRISIS IMPACT OVERVIEW

Since 27 April, the southern Brazilian states of Paraná, Rio Grande do Sul, and Santa Catarina have been affected by heavy rains. As at 12 May, at least 143 people had died, 806 were injured, 130 were still missing, and almost 54,000 had been displaced (GoB 10/05/2024; Agencia Brasil 09/05/2024 and 09/05/2024; ECHO 13/05/2024).

As at 10 May, the floods had affected all of Rio Grande do Sul's 446 municipalities and 235 municipalities in Paraná (GoB 10/05/2024; NYT 08/05/2024). Over 2.1 million people have been affected across Rio Grande do Sul alone; figures for Paraná and Santa Catarina states were unavailable as at 10 May. As at 9 May, at least 380,000 people were without electricity and, since 27 April, more than 1.4 million people in 48 cities have experienced electricity and communication interruptions (GZH 10/05/2024; NYT 08/05/2024; ECHO 13/05/2024). Porto Alegre city, the capital of Rio Grande do Sul state, received 258.6mm of rainfall in just three days, equivalent to more than two months of the rain expected for April (114.4mm) and May (112.8mm), according to the Climatological Normal (WMO 06/05/2024).

As at 8 May, at least 155,000 people had become homeless as a result of flooding, many remained stranded on rooftops, and some were sleeping along roads in the outskirts of Porto Alegre, putting them at risk of health and protection concerns (Agencia Brasil 09/05/2024; NYT 08/05/2024; Reuters 08/05/2024). There are not enough shelters to host the affected population, and stagnant water is likely to increase transmission of water and vector-borne disease, including dengue (Globo 07/05/2024).

At least 80 indigenous communities have been affected, primarily the Guarani Mbya communities of Lami and Ponta do Arado in Porto Alegre. Media outlets mention at least 8,020 indigenous households affected and around 466 families displaced in Rio Grande do Sul (Globo 06/05/2024; Brasildéfato 06/05/2024).

Anticipated scope and scale

As at 13 May, Brazil's National Institute of Meteorology had issued yellow heavy rainfall warnings (the lowest on the three-tier scale) for most of Rio Grande do Sul. Water levels remained critically high and authorities warned that further flooding and electricity outages were likely. There is also a risk of landslides in coming days (Crisis24 13/05/2024).

The Guaíba River's water level, which is currently ten times higher than normal, will not drop below flood level for at least ten days. The number of people affected and the risk of waterborne diseases are likely to increase (NYT 08/05/2024; France 24 11/05/2024). On 13 May, the Taquari and Cai rivers in Rio Grande do Sul burst their banks. Both rivers flow into the Guaíba, increasing its risk of overflow (BBC 13/05/2024).

Several dams (Blang, Dal Bo, and Santa Lucia) are at high risk of overflow and are currently being monitored by authorities (ECHO 08/05/2024).

Humanitarian constraints

The flooding has blocked roads into Porto Alegre and hampered the delivery of basic goods and humanitarian aid. Most roads are either partially or totally affected. Helicopters have also struggled to reach some areas because there is no safe place to land; some helicopters have even used winches to extract people stranded by the flooding (NYT 08/05/2024; Google Maps accessed 08/05/2024; BBC 03/05/2024). Dozens of people are still waiting to be evacuated by boat or helicopter from affected homes (Reuters 08/05/2024).

Porto Alegre is isolated as a result of flooded roads and flights at the city's main international airport – Salgado Filho International Airport – being suspended for an indefinite period (NYT 08/05/2024; ECHO 08/05/2024; Flight Global 08/05/2024; Crisis24 08/05/2024).

Floodwaters and debris flows could render some bridges, rail networks, and roadways impassable, affecting overland travel in affected areas. Internet and communications services have been intermittent and are likely to remain inconsistent (Crisis24 08/05/2024).

KEY PRIORITIES

2.1 million

AFFECTED PEOPLE
IN RIO GRANDE DO
SUL

155,000

PEOPLE ARE
HOMELESS

High Risk

OF DISEASE
OUTBREAK

5/10

INFORM CLIMATE
CHANGE RISK SCORE

FUNDING & RESPONSE CAPACITY

- National Government
- Red Cross of Brazil
- Local NGOs and volunteers have started
- initial response activities

CRISIS IMPACTS

Displacement

There are not enough temporary shelters to house affected people. Many people on the outskirts of Porto Alegre have been sleeping on roadsides, exposed to the cold front and at risk of respiratory diseases, other health issues, and protection concerns (Reuters 08/05/2024). As at 10 May, around 70,000 people were living in temporary shelters across the state, while others had taken refuge in the homes of family or friends. Some people were sleeping in their cars or on the streets in areas that remained dry (GoB 10/05/2024; NYT 08/05/2024). Looting fears have led some residents to refuse to abandon their homes, putting them at risk of landslides.

WASH and health

There is no drinking water available in several areas of Porto Alegre. According to the city's Municipal Department of Water and Sewage, only two of the six treatment plants continue to operate (O Globo 07/05/2024). Authorities have warned residents to avoid contact with floodwaters, which puts them at risk of diseases – including dengue and Leptospirosis – transmitted by bacteria, which can lead to kidney damage, meningitis (inflammation of the membrane around the brain and spinal cord), liver failure, and respiratory distress (Crisis24 08/05/2024). The federal Government has provided at least 200 water purifiers to mitigate the lack of safe drinking water (Agencia Brasil 08/05/2024).

Livelihoods and food security

Floods have damaged the production of rice and beans, affecting the livelihoods of thousands of people and causing a loss of over USD 800,000 in agriculture production (UOL 07/05/2024). Many companies, particularly agricultural companies, have experienced hefty financial losses, with some having to let go of employees or suspend contracts (Forbes 10/05/2024; Correio do Povo 08/05/2024).

As at 10 May, however, there was still no assistance or clear support for those reliant on agriculture and cattle for their income. Rio Grande do Sul produces around 60% of the country's rice, a staple food. As a result of the floods, Brazil will likely have to import rice

and soybeans from other countries (UOL 07/05/2024; Insurance Journal 09/05/2024). It is likely that rice prices will increase, contributing to livelihood pressures and food insecurity (Brasil de Fato 07/05/2024). It is also estimated that the floods may have damaged up to five million tons of soybean crops, of which Brazil is the world's largest producer and exporter. This damage will have national and global economic consequences (Reuters 07/05/2024 and 03/05/2024).

Impact on critical infrastructure

Essential infrastructure has been partially or completely damaged. Flooded roads and bridges have isolated several towns. Almost 140 sections across 60 highways are totally or partially closed. Extensive power and water outages are affecting more than 1.4 million people across the region. Around 48 cities do not have telecommunications or internet services (Crisis24 08/05/2024).

DRIVERS OF THE CRISIS

El Niño and climate

Since January 2024, El Niño has caused heavy rains and floods across Brazil and is expected to continue influencing the country's climate through May, warming the waters of the Pacific and concentrating systems of instability over Rio Grande do Sul. High temperatures in the South Atlantic, humidity from the Amazon, and the thermal contrast with warmer and cooler air to the north and south of the state have also strengthened recent storms (WMO 06/05/2024; INMET 07/05/2024).

COMPOUNDING/AGGRAVATING FACTORS

Political tension

Recent flooding has caused disputes among politicians and local government. An investigation carried out by the Brazilian press revealed that, in all of 2023, the City Hall of Porto Alegre made no investment in flood prevention, despite the fact that the department responsible had a budget of USD 84.5 million, according to the Transparency Portal (France 24 11/05/2024). Political disputes surrounding this failed prevention may hamper flood response.

Climate and natural hazards

Brazil has an INFORM Climate Change Risk score of 5/10 (high) and a score of 4.3/10 for lack of coping capacity, indicating some limitations in the state's response to climate-related hazards (EC accessed 09/05/2024).

Rio Grande do Sul state is at particularly high risk of river, urban, and coastal floods, as well as wildfires (ThinkHazard accessed 09/05/2024). In September 2023, a cyclone killed 30 people and left an estimated 1,600 homeless in 60 cities across the state (The Guardian 06/09/2023; BBC 03/05/2024). These repeated hazards have decreased communities' resources and coping capacities.

Economic situation

While Brazil's economy experienced growth in 2023 and is expected to continue growing in 2024, driven by a strong labour market and consumption, poverty and inequality remain high, particularly among Afro-Brazilians and indigenous people (WB accessed 09/05/2024). As at 2021, however, Rio Grande do Sul had the second-lowest poverty rate in Brazil, suggesting a higher capacity to cope with hazards than other Brazilian states (FGV Social 06/2022).

FUNDING AND RESPONSE CAPACITY

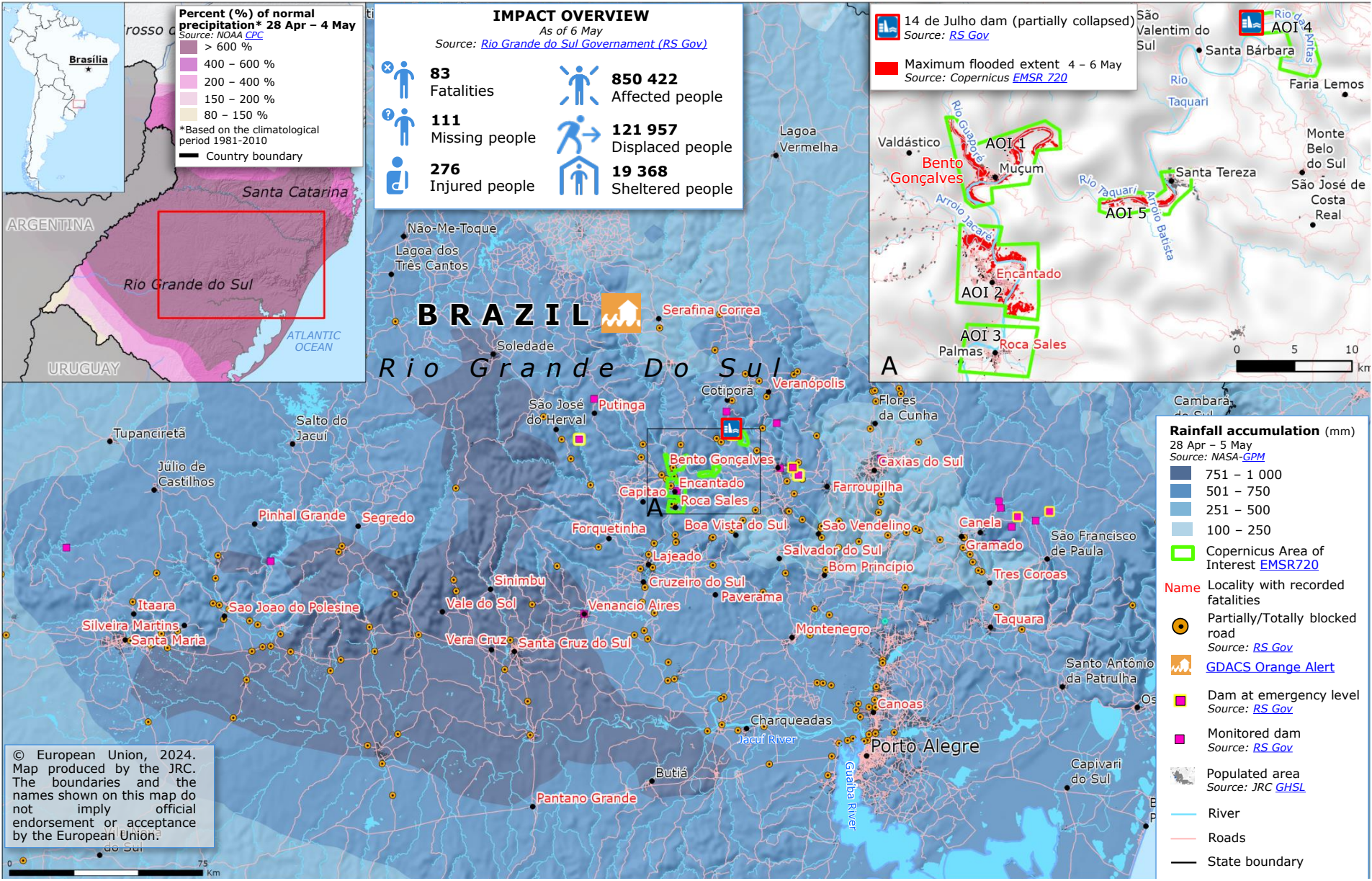
The Brazilian Government has led the humanitarian response and volunteers have contributed to rescuing people.

On 3 May, the EU's Copernicus Emergency Management Service was activated in rapid mapping mode to provide flood extent and damage assessment (ECHO 08/05/2024).

The governor of Rio Grande do Sul, Eduardo Leite, has declared a state of calamity for 180 days, potentially accelerating bureaucratic processes to enable a more efficient governmental response (Crisis24 08/05/2024).

The state government, through the Secretariat of Labor and Professional Development, has prepared a restructuring plan to address these livelihood impacts, which includes providing additional unemployment payments and guaranteeing contracts and continued payments to workers in businesses that have suspended activities (Correio do Povo 08/05/2024).

IMPACT OF FLOODING IN BRAZIL AS AT 5 MAY



Source: ECHO (06/05/2024)