### KERALA DISASTER 2018

In late July 2018, severe flooding affected the Indian state of Kerala due to unusually high rainfall during the monsoon season. It was the worst flooding in Kerala in nearly a century.[2] Over 373 people died[3] within a fortnight, while at least 280,679[3][4] people were evacuated, mainly from Chengannur,[5]Pandanad,[6] Aranmula, Aluva, Chalakudy, Kuttanad and Pandalam. All 14 districts of the state were placed on high alert.[7][8] According to the Kerala government, one-sixth of the total population of Kerala had been directly affected by the floods and related incidents.[9]

Thirty-five out of the forty-two dams within the state were opened for the first time in history. All five overflow gates of the Idukki Dam were opened at the same time, for the first time in 26 years.[10] Heavy rains in Wayanad and Idukki have caused severe landslides and have left the hilly districts isolated.[11][9] The situation was regularly monitored by the Prime Minister and the National Crisis Management Committee coordinated the rescue and relief operations.[12]

There was a controversy following the Ministry of External Affairs' refusal to allow the Kerala Government to accept help from the Government of the UAE. The MEA position is that as per the existing foreign policy, assistance cannot be sought from foreign governments,[13] but that NGOs and PIOs world wide may donate.[14][15] Kerala Chief Minister Pinarayi Vijayan argued that the existing policy did not require India to reject aid from a foreign government

#### Causes

Kerala received heavy monsoon rainfall on the mid evening of August 8 resulting in dams filling to capacity; in the first 24 hours of rainfall the state received 310 mm (12 in) of rain.[17] Almost all dams have been opened since the water level has risen close to overflow level due to heavy rainfall, flooding local low-lying areas.[18] For the first time in the state's history, 35 of its 42 dams have been opened.[19]

Most of the regions affected by this monsoon were classified as ecologically-sensitive zones (ESZs) by the the Western Ghats Ecology Expert Panel, the Gadgil Committee. Most of the recommendations and directions by the committee was either neglected or rejected. Chairman of the

committee Madhav Gadgil accused the state government and its irresponsible environmental policy for the recent landslides and floods. He called it a "man-made calamity".[20][21][22]

The state government of Kerala argued in the Supreme Court that the sudden release of water from the Mullaperiyar Dam by the Tamil Nadu government was one of the reasons for the devastating flood in Kerala.[9]

### **Impact**



A state official told AFP that 370 people have died, while the *The Economic Times* has reported that 33,000 people have been rescued. [7][23][24] The Kerala State Disaster Management Authority has placed the state in a red alert as a result of the intense flooding. [25] A number of water treatment plants were forced to cease pumping water, resulting in poor access to clean water, especially in northern districts of the state. [26] Over 5,645 relief camps [3] have been opened at various locations to accommodate the flood victims. It is estimated that 1,247,496 people [3] have found shelter in such camps. [27][28] The flooding has affected hundreds of villages, destroyed an estimated 10,000 km (6,200 mi) of roads and thousands of homes have been damaged or destroyed. [25] The Government has cancelled Onam celebrations, whose allocated funds have been reallocated to relief efforts. [29]

## RESCUE

Being instructed by the Cabinet Secretary, Senior officers of Defence Services, NDRF, NDMA and Secretaries of Civilian Ministries conducted meetings with Kerala Chief Secretary. Following the decisions taken during these meetings, the Centre launched massive rescue and relief operations. In one of the largest rescue operations, 40 helicopters, 31 aircraft, 182 teams for rescue, 18 medical teams of defense forces, 58 teams of NDRF and 7 companies of Central

Armed Police Forceswere pressed into service along with over 500 boats and necessary rescue equipments.[12] Totally, 60,000 people are rescued from marooned areas and was shifted to relief camps.

Additionally, 52 rescue teams of central forces including units of the Indian Army and the Indian Navy and state governed forces like Kerala Police and Kerala Fire and Rescue Services assisted the civilian administration in rescue work and restoration.[7]In addition to the 10 teams of the National Disaster Response Force, four additional teams were airlifted from Guntur and Arakkonam to assist the Ernakulam districtadministration. Union Minister for Home Affairs Rajnath Singh conducted an aerial survey of Idukki and Ernakulam districts along with Chief Minister Pinarayi Vijayan.[34][35]

Fisherman from Thiruvananthapuram and Kollam districts took part in the rescue operations with their boats and rescued several who were trapped in their homes by rising waters. The Kerala Government announced financial aid in return for their support and effort in the rescue mission.[36]

Mananthavady and Vythiri in the hilly Wayanad district have been totally cut-off, with roads washed away.[37]

According to the latest official figures, more than 800,000 people have been lodged in over 4,000 relief camps across 14 districts.[34][38] On August 19, the state's Chief Minister Pinarayi Vijayan vowed "to save even the last person stranded."[39]

#### Animals

The Sally Varma of Humane Society International arranged for animals to be rescued and transported to special shelters that housed affected animals. Social media has been used to highlight the rescue of multiple animals – dogs, cats, goats, cows, cattle, ducks and snakes, with animal feed and medicine transported to affected areas.[40]

A worker with the Humane Society International spoke out against the tethering and leaving of pets that occurred. "That became a problem. So many tethered animals just drowned. These animals are natural swimmers, and it is better to keep them free so they can swim to higher ground." According to government records more than 8,000 cattle, calves and buffaloes, 3,297 goats, and 47 dogs have died due to the flooding.[40]

The District Collector of Malappuram, and its Chief of Police have instructed the police force to save any animal that they encounter during rescue operations.[41]

# Relief and monetary aid

#### Governments

- The Government of Kerala started a donation website for flood victims.[42] As of 24 August 2018, ₹552 crore(US\$80 million) was collected from the public.[43] Google, Facebook and e-commerce websites Amazon, Flipkart, BigBasket, Airtel Payments Bank, Paytm and Tez have also provided an option for donation for relief efforts on their respective platforms.[44]
- Prime Minister of India, Narendra Modi announced a sum of ₹500 crore (US\$73 million) as interim relief for Kerala on 18 August 2018. This is in addition to ₹100 crore (US\$15 million) announced by the Home Minister on 12 August 2018.[45]The central government also said that this ₹600 crore (US\$87 million) is only the advance assistance and that additional funds will be released by the NDRF when an inter-ministerial team visits again and assesses the damage.[12]
- Chief Minister Pinarayi Vijayan announced that Vice-President and Prime Minister of the United Arab Emirates HH Sheikh Mohammed bin Rashid Al Maktoum and Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE's Armed Forces HH Sheikh Mohammed bin Zayed Al Nahyan offered an amount of ₹700 crore (US\$100 million) for assistance towards relief works.[46] However, this has been put on hold following the Central Government's refusal to allow Kerala to accept aid from a foreign government.[13][15][16]
- Besides the UAE, Pakistan, Qatar, Maldives and Thailand have also offered aid.[47][13] These have also been put on hold due to the MEA's objection.
- Chief Ministers of almost all the states and Union Territories have pledged monetary aid from their respective state funds in addition to dispatch of various relief materials such as potable water, blankets, packed food, rice, water-purifying machines, daily-use and healthcare products