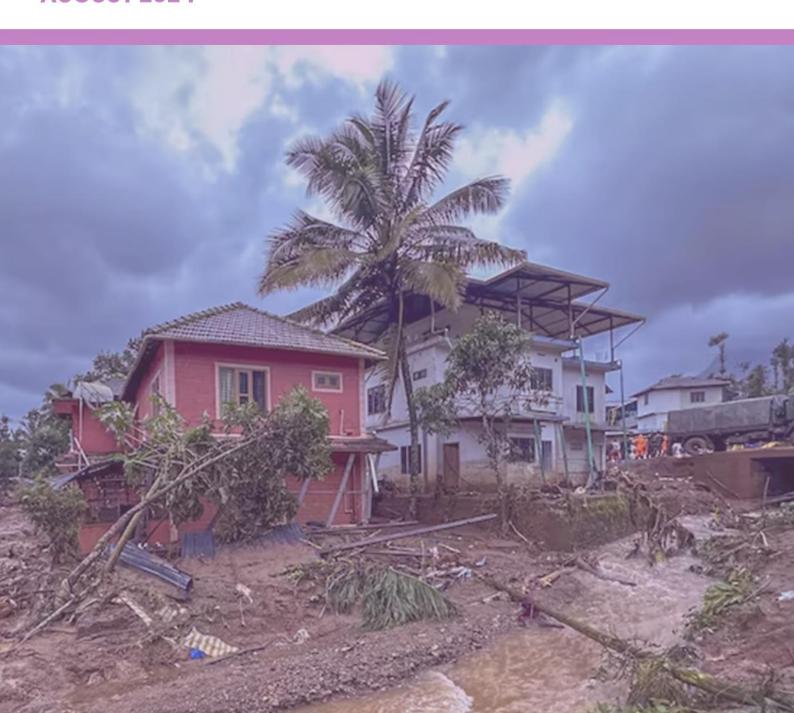




# PRELIMINARY ASSESSMENT REPORT

WAYANAD LANDSLIDES, KERALA AUGUST 2024



# **Table Of Contents**

1	Pre-	Incident Information	2
	1.1	State Overview: Kerala	2
	1.2	District Profile at Glance: Wayanad	3
	Haza	ard Profile of the District	3
2	Situa	ation Overview	5
3	Curr	ent Situation Scenario	7
	3.1	Wayanad Recue Operation Updates	8
4	Preli	minary Assessment Findings	9
5 Humanitarian Response		nanitarian Response	10
	4.1	Government Response	10
	4.2	Stakeholders Response	11
6	Eme	rging Needs and Recommendations	13
	6.1	Water and Sanitation hygiene	13
	6.2	HEALTH	13
	6.3	LIVELIHOOD	13
	6.4	SHELTER AND NON-FOOD ITEMS	13
	6.5	Connectivity and Infrastructure	14
7	Anne	exure	15

# 1 Pre-Incident Information

#### 1.1 State Overview: Kerala

Kerala, known as 'God's own Country', is a southwestern coastal state of India. It is a small state, constituting only about 1 percent of the total area of the country. Kerala stretches for about 360 miles (580 km) along the Malabar Coast, varying in width from roughly 20 to 75 miles (30 to 120 km). It is bordered by the states of Karnataka (formerly Mysore) to the north and Tamil Nadu to the east and by the Arabian Sea to the south and west; it also surrounds Mahe, a segment of the state of Puducherry, on the northwestern coast. The capital is Thiruvananthapuram (Trivandrum).

Geography and Topography: Kerala is bordered by Karnataka to the north and northeast, Tamil Nadu to the east and south, and the Arabian Sea to the west. The state has a total area of approximately 38,863 square kilometers. The topography of Kerala is characterized by its diverse landscapes, including coastal plains, the Western Ghats Mountain range, and rolling hills. The Western Ghats, a UNESCO World Heritage Site, runs parallel to the western coast and is home to several hill stations and wildlife sanctuaries. Kerala's coastline stretches for about 580 kilometers, dotted with beautiful beaches, lagoons, and estuaries. Kerala's topography and climatic conditions make it prone to natural disasters, particularly landslides and floods. The Western Ghats are especially susceptible to landslides during the monsoon season. These landslides often result in significant damage to infrastructure and loss of life.

**Agriculture**: Agriculture plays a vital role in Kerala's economy. The state is known for its extensive cultivation of cash crops like rubber, tea, coffee, and spices such as cardamom, pepper, and vanilla. Rice is the staple food crop, grown mainly in the coastal plains and river valleys.

Flora and Fauna: Kerala boasts a rich biodiversity, with its forests housing a wide variety of flora and fauna. The Western Ghats are one of the world's biodiversity hotspots, home to many endemic species. The state's forests are classified into tropical rainforests, deciduous forests, and evergreen forests. Kerala is home to several wildlife sanctuaries and national parks. These protected areas shelter a diverse array of wildlife, including elephants, tigers, leopards, and numerous bird species.

Climate and Weather Patterns: Kerala has a tropical climate, with a distinct monsoon season. The state experiences heavy rainfall from June to September during the southwest monsoon, followed by the northeast monsoon from October to November. The coastal areas are hot and humid, while the highlands enjoy a cooler climate.

Features	Description
Area	38,863 sq.km
Borders	North: China, South: West Bengal, East: China and Bhutan, West: Nepal
Major Rivers	Periyar River, Bharathappuzha, Chaliyar, Pampa
Population	34,630,192 (Census 2011)
Districts (14)	Kasargod, Kannur, Wayanad, Kozhikode, Malappuram, Palakkad, Thrissur, Kakkanad, Painav, Kottayam, Kollam, Thiruvananthapuram, Pathanamthitta
Sex Ratio	1084 females per 1,000 males (Census 2011)
Population Density	860 persons per sq. km (Census 2011)

# 1.2 District Profile at Glance: Wayanad

Wayanad is a landlocked district in Kerala and part of the Western Ghats. To the north, it is bordered by the state of Karnataka and the Kannur district. The eastern boundary is shared with the states of Tamil Nadu and Karnataka. The southern boundary is shared with the Kozhikode and Malappuram districts and the state of Tamil Nadu. The western boundary is shared with the Kozhikode and Kannur districts.

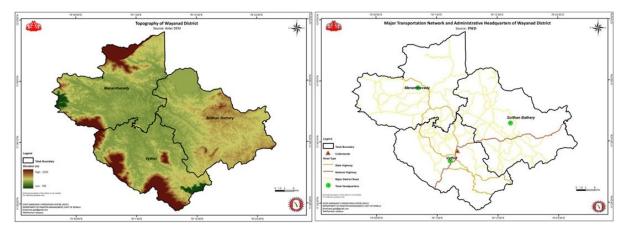


Figure 1: Topography of Wayanad (Left); Major Transportation Network of Wayanad (Right)

Head Quarters	Wayanad – Collectrate
Location (HQ)	Wayanad – Civil Stations
Total Area (District)	2,132 sq. km
District Boundaries	Malappuram, Kannur, Kozhikode, Karnataka State and Tamil Nadu State
Population (2011)	7,80,619
Male	3,91,273
Female	3,89,346
Sex Ration	995:1000
Population Density	366 people per sq. km

#### Hazard Profile of the District

Wayanad district is situated at the southern tip of the Deccan Plateau and is part of the Western Ghats. The district is prone to various kinds of disasters and is classified under Zone III, a Moderate Risk Damage Zone concerning earthquakes. The district's topography is predominantly plateau, marked by ridges of the Western Ghats, valleys, peaks, and hillocks. The Landslide Susceptibility Map of Wayanad district was included in the District Disaster Management Plan (DDMP) of 2014 and is also included in this revised plan. The hill ranges bordering Wayanad, Malappuram, and Kozhikode districts are particularly prone to landslides. Special care must be taken when implementing projects involving land manipulation or disturbance, both in these specific areas and the district in general.

Landslides have repeatedly caused problems in Wayanad. The Wayanad-Kozhikode border has been identified by the Centre for Earth Science Studies (CESS) as one of the most landslide-prone areas in the state. Notable landslides include the Mundakkai debris flow in 1984, which claimed 14 lives and destroyed prime agricultural land; the Kappikkalam landslide near Padinjarethara in 1992, which claimed 11 lives; and the Valamthode landslide on June 23, 2007, which claimed 4 lives. Other significant landslides have occurred on the Ambalavayal-Kumbaleri road near

Arattupara and Phantom Rock, and the landslides at Puthumala and Mundakai in consecutive years left many homeless and rendered the land unusable for farming.

Floods have also frequently impacted the district, disrupting normal life during the monsoon season. Special care must be exercised in managing these floods. Several tribal colonies need to be relocated to safer locations to avoid mishaps during the monsoon. A detailed field study has been completed by a team from the Geological Survey of India and district experts to identify the geographical peculiarities of areas requiring relocation as a mitigation effort. Based on the expert team's report, a few hundred families are in the process of being relocated from vulnerable areas. The concerned Tahsildars are tasked with identifying suitable land for these families and providing assistance support from the State Disaster Response Fund (SDRF).

Drought is another serious disaster that has affected the district multiple times in the past. During 2016-17, the recorded rainfall was minimal, creating an alarming situation with the potential for a catastrophic drought. Adequate measures must be taken to address urgent situations and implement long-term projects to prevent drought and mitigate its effects.

Another serious disaster that affected the district recently was the Kyasanur Forest Disease (KFD), also known as Monkey Fever, which claimed 11 lives in 2014-15. With careful preventive steps and meticulous intervention, the disease was brought under control in 2015-16, resulting in zero fatalities. However, continuous preventive measures are essential to avoid future outbreaks. Areas such as Poothadi, Noolpuzha, Pulpally, Mullankolly Grama Panchayats, and Sulthan Bathery Municipality were the worst hit by KFD. If any monkey carcass is found outside the forest area, it should be burned on the spot after sanitizing the surrounding area up to a radial distance of 50 meters with Malathion Dust. If found inside the forest, proper sanitization must be done to prevent the disease's spread. Everyone working inside the forest must be vaccinated against KFD, and those living in or near the forest should also be vaccinated. The District Medical Officer (Health) should procure sufficient vaccines and Malathion dust in consultation with the concerned Local Self-Government Institutions (LSGIs). Proper treatment for affected patients must be ensured. Domestic animals grazing in the forest should be treated with preventive lotions to keep KFD-spreading ticks away.

# 2 Situation Overview



Figure 2: Wayanad Land Slide aerial image (Left); Wayanad Landslide 3D View from NRSC (Right)

On July 30th, 2024, Wayanad, a hilly district in the Western Ghats Mountain range of Kerala, India, was struck by devastating landslides following incessant heavy rains. A significant landslide occurred in the early hours of Tuesday, followed by multiple additional incidents throughout the day, including in the afternoon. The landslide started at Mundakkai, followed by three subsequent landslides within three hours. Most of the victims were asleep when the landslides struck between 1:30 a.m. and 4 a.m. Huge boulders and uprooted trees rushed down from Mundakkai to Chooralmala, causing severe damage. The heavy water surge from the hilltop altered the small Iruvazhinji river, flooding everything along its banks. Several houses were destroyed, a temple and a mosque were submerged, and a school building was severely damaged.

The National Remote Sensing Centre and ISRO have reported a significant debris flow triggered by heavy rainfall in and around Chooralmala town in the Wayanad District of Kerala, India. The landslide spans an area of 86,000 square meters, with the crown located at approximately 1,550 meters above Mean Sea Level (MSL). The flow extends for about 8 kilometers. The crown zone represents a reactivation of an older landslide. The debris flow has widened the Iruvaniphuza River's course, causing the river to breach its banks. This has resulted in damage to houses and other infrastructure along the riverbanks.

This disaster adds to the region's history of landslides and floods, including the severe events of 2018 and 2019 that resulted in significant loss of life and property. The rugged terrain and deforestation have compounded the vulnerability of Wayanad during the monsoon season, making it prone to such natural calamities. The recent landslides have once again highlighted the urgent need for comprehensive disaster management and climate adaptation strategies in the region.

#### Landslide Response as per District Disaster Management Plan

The hill ranges bordering Wayanad with Malappuram and Kozhikode districts are also landslideprone areas. Special care is to be taken while implementing projects involving land manipulation or disturbance in these areas, in particular, and the district as a whole. Landslides have caused problems in Wayanad many times in the past. The Wayanad-Kozhikode border has been identified by the Centre for Earth Science Studies (CESS) as one of the most landslide-prone areas in the state. Notable landslides include the Mundakkai, Kappikkalam, and Valamthode landslides/debris flows. The Mundakkai debris flow occurred in 1984, claiming 14 lives and resulting in the loss of prime agricultural land. The Kappikkalam landslide near Padinjarethara occurred in 1992, claiming 11 lives. Another catastrophic landslide occurred on June 23, 2007, at Valamthode, claiming 4 lives. Apart from these, many other landslides of similar nature and varying magnitudes have occurred in Wayanad in the past. One such landslide occurred on the Ambalavayal-Kumbaleri road, near Arattupara and Phantom Rock.

Source of information – SEOC: <u>www.disasterlesskerala.org</u> Criteria:

- 1 When IMD issued very heavy rainfall warning
- When two days of cumulative rainfall exceeds 8cm in a rain station, landslide warning is issued to the respective district

#### Landslide

Be prepared – Actions to be taken and sustained till warning time limit expires/ until 2 days cumulative rainfall is below 8 cm

- SEOC-Telephonically verify the warning from INCOIS
- SEOC & DEOC-Emergency time functions activated
- State-District –Taluk Control Rooms of Revenue & Police-24 hours functioning
- SDRF ,Fire and Rescue and Police-deployed to the area
- Army, Navy, Air Force & other Central Forces in the state- on high alert and standby
- BSNL & Police-deploy emergency communication systems
- Hospitals and PHCs in the districts functions at full strength 24hrs
- Fire and Rescue Services to be on alert and on operation
- · Rescue operations shall start as soon as the disaster strikes
- Relief centres shall be opened and managed by the Tahsildars
- The DDMA shall identify locations where Quarrying/ Mining/ Crusher Unit activities shall be prohibited so as to prevent Landslide
- Soil Conservation Department shall identify locations where sustainable land development solutions shall be provided to prevent Landslide
- DDMA shall coordinate with Karapuzha and BanasuraSagar Dam Authorities to ensure safety of the Dams during landslide
- DDMA shall take measures for regulating the height of buildings, which will be constructed in the district, so as to prevent landslide disaster
- Tahsildar- Take control of the identified relief shelters. Quarry blasting
  to be banned until 24 hrs of rain free situation arises in the quarry
  locality. Ensure that no quarrying / mining/ crusher unit activities occur
  at those areas where the DDMA has banned such operations, if any- this
  shall be done throughout the year, irrespective of alert warning.
- Local Self Governments: Alert public living close to small rivulets and in hilly segments with greater than 20-degree slope. Ensure that no quarrying / mining/ crusher unit activities occur at those areas where the DDMA has banned such operations, if any- this shall be done throughout the year, irrespective of alert warning. Ensure that all provisions of Kerala Municipal Building Rules and Kerala Panchayat Building Rules are scrupulously followed while taking up. land development activities. Ensure compliance of DDMA orders/ regulations/directives/guidelines while issuing building permits and during construction of buildings. Recommend to DDMA about further restrictions, if any, are to be imposed in the area, in addition to the ones imposed by the DDMA

#### 3 CURRENT SITUATION SCENARIO

- In the early hours of July 30, massive landslides devastated Wayanad, Kerala, causing significant loss of life and property. The landslides, triggered by unprecedented rainfall, have claimed approx. 300 lives (officially 189) so far, with around 395 people still missing. Additionally, 131 bodies have been recovered out of which 109 are unidentified. 225 people are hospitalised.
- Currently, 92 relief camps have been set up in the district, housing 9,428 people, including 2,241 in Chooralmala alone across 9-15 camps.
- Tea-plantation workers who lived in the estate lanes of Chooralmala and Mundakkai have been the worstaffected by the disaster.
- The state Health Department has also opened a control room. Those in need of emergency assistance can contact authorities on helpline numbers 96569 38689 and 80860 10833.
- Food materials including drinking water (Around 250 Kgs

   100 packets) provided by the Kozhikode Dist Admin
   distributed in the affected areas of Chooralmala and
   Mundakkai by Indian Air Force Helicopters.
- The Commandant of the Para Regimental Training Centre, said that 2100+ personnel from the NDRF, Army/DSC, State Police, Forest officials, Fire Fighters,

Coast Guards, Naval officers and volunteers have been carrying out the rescue operations.

 The Madras Engineering Group of the Indian Army on Thursday completed the construction of the 190-ft-long Bailey bridge that will help c onnect the worst-affected areas of Mundakkai and Chooralmala in Wayanad district.



- Three kilometers of high-tension lines and eight kilometers of low-tension lines were damaged, with two transformers washed away and three transformers damaged. Currently, 350 families are without power in the area.
- A sum of ₹145 crore has been disbursed from the State Disaster Response Fund (SDRF) to the Kerala government and there is a balance sum of Rs 394 crore in the SDRF.
- Locals join rescue efforts as difficult terrain hinders access to landslide sites.

## **Statistical Info**



Worst Affected Areas: Mundakkai, Chooralmala, Attamala, and Noolpuzha villages



Number of Causalities: 215



Hospitalised people: 82



Landslide affected Relief Camps: 17



Inmates in Relief Camp: 2,596



Total no. of Relief Camps:



Total Inmates in Relief Camp: 10,042



Missing people: 395



Electricity damage: 03 KM High tension line, 08 KM low tension line



Houses Washed away: More than 300

# 3.1 Wayanad Rescue Operation Updates

- A joint team comprising the Indian Army, NDRF, Coast Guard and the Indian Navy were conducting the searches in the affected areas. Each team will have three locals and one forest department employee.
- Forty teams of rescue personnel will divide the search areas into six zones to carry out the rescue operations. The first zone consists of Attamala and



- Aaranmala. Mundakkai is the second zone, Punjirimattam is the third zone, Vellarmala Village Road is the fourth zone, GVHSS Vellarmala is the fifth zone and downstream of the river Chaliyar is the sixth zone.
- The Wayanad District Collector, Meghashree D R, announced that GPS coordinates from drone images and cell phone data, including the last known locations of residents, are being used to guide search and rescue operations in landslide-hit areas.
- The Coast Guard, Navy and Forest Department officials will conduct a search along the banks of the river Chaliyar and those places where the bodies are likely to have washed up.
- Police personnel from eight police stations surrounding the river and locals who are experts in swimming will also participate in the searches.
- Four more dogs from Tamil Nadu will be brought to Wayanad today to join the six other canines who are already involved in the rescue operations.
- The Indian Air Force will deploy its C-130 aircraft from Hindon airbase in Ghaziabad for the rescue operations and will carry specialised drone systems along with a team of experts to Wayanad for sub-soil evacuation monitoring and searching for survivors.

# 4 Preliminary Assessment Findings

The current disaster response is covering the immediate basic needs of the affected population through a well-coordinated government and civil society organisations' relief efforts. Distribution of relief materials is efficiently managed via the district administration, ensuring regular supply to the relief camps. However there have been some reported instances of time lag in the registry of requests and provision of materials to the camps. However, mechanisms have been established to address these gaps through continuous stocktaking and coordination. A website has been developed to update the stock status of the district relief distribution center, providing real-time information about required items to potential responders.

- Coordination: The government system is handling the distribution effectively, reducing
  gaps in supply. However, some humanitarian agencies are distributing relief materials
  directly to the camps, leading to duplication of efforts and potential inefficiencies.
- **Availability:** Groceries and dry ration items are currently sufficient to meet the needs of the affected population. However, additional stocks are accepted in view of future needs.
- Clothing: There is an increasing demand for clothes, specifically for girls and boys, as well
  as large-sized clothing for men. Additionally, slippers of all sizes are needed for the camp
  inmates.
- Specific Vulnerable Groups: A deeper assessment is required to ensure that the specific needs of people with disabilities, children with special needs, and the nutritional requirements of babies, pregnant, and lactating mothers are adequately met.
- Psychosocial Support: Psychosocial support counsellors are stationed at all the camps.
   Continued support and expert care are essential, especially through a referral system.
   Considering the possibility of long-term trauma among the affected population, regular follow-up and building capacities for sustained psychosocial support are necessary.
- **Cleaning Supplies**: There is an ongoing requirement for cleaning supplies to maintain hygiene and sanitation in the camps.
- Access to Camp-level data: While there is regularly updated information available on gender and age disaggregated data for each camp, further details on children below 6 years, older persons, etc. are required for needs assessment.
- Animal Husbandry: Stranded animals have been reported. One farm has been completely isolated, with 20 cattle currently receiving support from the rescue team. According to the data provided by the Animal Husbandry Department, 375 large animals and over 600 animals, both large and small, have been affected.

# 5 Humanitarian Response

### 4.1 Government Response

- The Kerala government has declared a state of mourning on July 30 and 31 due to the loss of life and property in Wayanad.
- There are 16 relief camps setup in Chooralmala after Landslides having 2,259 inmates and 94 total relief camps having 9,737 inmates in Wayanad.
- In response to the landslides and other rainrelated disasters in Wayanad district, the Health Department – National Health Mission has established a control room in Wayanad.
- A special control room is operational at Police HQ in Thiruvananthpuram to coordinate rescue operation in Wayanad.
- The Food and Civil Supplies Department has launched steps to supply food grains and other essential supplies to relief camps for those displaced by the devastating landslides in Wayanad.
- Prime Minister Narendra Modi announced ex-gratia of ₹2 lakh for the next of kin of the deceased in the landslides.
- Chief Minister of Karnataka Siddaramaiah on Wednesday announced compensation of Rs 5 lakh each to the bereaved families of those who died in the landslide in Wayanad in neighbouring Kerala.
- Kerala Chief Minister Pinarayi Vijayan held a high-level meeting in Wayanad to take stock of the situation and has said that rescue will be the main priority and that rehabilitation will be done at the earliest.
- The NHM state mission director has been deployed in the district to coordinate local health activities. Temporary clinics have been set up in mosques and madrassas in Chooralmala, and a temporary hospital has been established in a polytechnic college.
- The Wayanad District Collector, Meghashree D R, announced that GPS coordinates from drone images and cell phone data, including the last known locations of residents, are being used to guide search and rescue operations in landslide-hit areas.
- Doctors from various specialties, including surgery, orthopedics, and forensic departments, have been deployed from Kozhikode, Kannur, and Thrissur districts. A team of private hospital doctors is also on-site.
- KSDMA assigned an officer in DEOC wayanad for better coordination between government and NGOs.
- Government of Kerala issued a unified emergency contact (**8589001117**) for emergencies related to the Wayanad Mundakai disaster.
- The Youth Commission invited applications from qualified, experienced volunteers for their Counseling Scheme. This initiative aims to provide psychological support through scientific counseling, therapy, and medication to in dividuals who have lost loved ones and are experiencing mental difficulties in disaster areas.
- Govt of Kerala also issued advisory for Recue workers of have 'Doxycycline' tablets to prevent communicable diseases like leptospirosis.

- A sum of ₹145 crore has been disbursed from the State Disaster Response Fund (SDRF) to the Kerala government and there is a balance sum of Rs 394 crore in the SDRF.
- Food materials including drinking water (Around 250 Kgs -100 packets) provided by the Kozhikode Dist Admin distributed in the affected areas of Chooralmala and Mundakkai by Indian Air Force Helicopters.
- Revenue Department initiated assessment of damages to properties and infrastructure



- and deployed officials to conduct surveys and document losses, ensuring timely compensation and support to the affected families.
- PWD addressed damage to roads and bridges and mobilized resources for the immediate repair of critical infrastructure to restore connectivity and support rescue operations.
- Indian Metorological Department provided regular weather updates and issued alerts about potential landslides and heavy rainfall, helping in the preemptive evacuation of vulnerable areas.

# 4.2 Stakeholders Response

 In response to the landslides in Wayanad, IAG Wayanad organised a meeting on 01<sup>st</sup> August 2024 of all responding organizations who are currently working in Wayanad, as well as those planning to respond.



- Measures taken by Telecom Providers: After devastating landslides in Wayanad, telecom providers BSNL, Airtel, Reliance Jio, and Vodafone Idea are rapidly restoring connectivity
  - to support rescue operations and aid the affected communities. Measures include deploying additional towers, providing free data and calling services, extending bill payment deadlines, and converting stores into relief collection points. These efforts ensure continuous communication between residents, rescue teams, and government officials during the crisis.



- Local Community groups assisted in rescue and relief efforts. They volunteered in search and rescue operations, helped in setting up shelters, and facilitated the distribution of relief supplies.
- A coordination desk at the District Emergency Operations Center (DEOC) has been established to manage requests and ensure timely updates and needs assessments. The focus is on preventing duplication of efforts among the 1,300 registered NGOs in Wayanad IAG, and other responding agencies.

- Sphere India deployed two technical staffs to Wayanad to support state and DDMAs. The IAC Committee also met on 31st July morning and activated the URS. Link to URS 5W Matrix: <a href="http://tiny.cc/URSMapping\_Wayanad">http://tiny.cc/URSMapping\_Wayanad</a>
- Various organizations are responding to the Wayanad landslides with diverse actions. Humanitarian Aid International (HAI) is collaborating with Cosmic Community Centre for community-led responses and will provide WASH support. Bal Raksha Bharat, working with Kudumbshri, is assessing needs and plans to distribute hygiene and shelter kits. The monday.com Emergency Response Team is offering technical support through digital disaster management tools. EFICOR, in coordination with local volunteers, provides nonfood items and hygiene kits. Humane Society International/India is focusing on aiding stray animals affected by the disaster. Additionally, an unnamed organization with the local partner CCC/Suchitwa Mission is distributing steel plates and glasses. Overall, these efforts encompass needs assessment, distribution of essentials, technical support, and community engagement to address the immediate aftermath of the landslides.
- Adani Group announced a contribution of ₹5 crore to the Kerala Chief Minister's Distress
  Relief Fund to help the state whose hilly region on Wayanad was hit by devastating
  landslides triggered by incessant rains.
- Trained professionals affiliated to the Kerala wing of the Indian Association of Clinical Psychologists (IACP) are extending a helping hand to the survivors of the devastating landslides. The Kerala wing of the Indian Association of Clinical Psychologists has initiated a two-way approach by offering counselling services over phone and conducting one-to-one sessions at relief camps.
- Mobilization of humanitarian aid is in full swing for victims of landslides that hit Wayanad district in Kerala with the support of various district administrations and socio-cultural organizations in the State.
- Collection centers have been opened at several places to receive packaged food items, emergency medicines, clothes and sanitation accessories for speedy delivery.
- Social media groups are also actively engaged in coordinating the collection of essential items with the support of their volunteers in various districts.
- Students from a Government Higher Secondary School at Meppadi here are tirelessly volunteering in the relief camps, working diligently to assist survivors of the massive landslides that hit the high-range district with food and supplies.
- School teachers are also playing a crucial role, motivating and supporting the students, many of whom are part of the NSS and NCC programmes, in their efforts.
- For effective delivery, most of the district administrations have called upon the volunteers to make use of the delivery support of the district-level cells constituted for the purpose.

# **6 Emerging Needs and Recommendations**

# 6.1 Water and Sanitation hygiene

#### **Emerging Needs:**

- Adequate sanitation facilities to prevent overcrowding and maintain hygiene in camps.
- Distribution of hygiene kits to camp residents.
- Distribution of dignity kits to camp residents.

#### **Recommendations:**

- Install sufficient temporary latrines and sanitation facilities within the camps.
- Distribute hygiene kits, including soap, sanitizers, and menstrual hygiene products to all camp residents.

#### 6.2 Health

#### **Emerging Needs:**

- Medical care for injuries and illnesses among camp residents.
- Access to essential medicines and medical supplies within the camps.
- Mental health support to address trauma experienced by residents.

#### **Recommendations:**

- Set up mobile dialysis units or dialysis services upon referral.
- Establish temporary medical camps within the relief areas and ensure a steady supply of essential drugs.
- Provide psychological first aid and set up counseling services within the camps.

#### 6.3 Livelihood

#### **Emerging Needs:**

- Immediate livelihood support for families whose sources of income have been disrupted.
- Assistance for agricultural and small business recovery especially to tea plantation farmers and workers.

#### **Recommendations:**

- Implement cash assistance and food security programs for camp residents.
- Offer grants and microloans to help camp residents rebuild small businesses and farms.
- Provide vocational training and alternative livelihood options within the camps.

#### 6.4 Shelter and Non-Food Items

#### **Emerging Needs:**

- Set up of transitional or alternate inclusive shelters (especially for person with diabilities, women, children, elderly) for those who have lost their houses
- Safe and accessible temporary shelters within the relief camps.
- Repair and reconstruction of damaged homes for future resettlement.

- Essential items for daily living, including clothing, bedding, and cooking utensils for camp residents.
- Personal protective equipment and items for warmth within the camps.

#### **Recommendations:**

- Ensure all camp shelters are equipped with basic amenities and are weatherproof.
- Initiate programs for housing repairs and reconstruction to enable future resettlement.
- Make shelters inclusive, particularly for vulnerable groups like the elderly, PwD, women, and children.
- Distribute essential NFIs such as blankets, mattresses, clothing, and kitchen sets to camp residents.

# 6.5 Connectivity and Infrastructure

#### **Emerging Needs:**

- Repair of damaged power lines and telecommunications infrastructure serving the camps.
- Reconstruction of critical infrastructure like schools, hospitals, and community centers for long-term recovery.

#### **Recommendations:**

- Clear debris and restore key roads and bridges to facilitate relief efforts and access to camps.
- Repair and restore power lines and telecommunications to ensure communication and electricity in the camps.
- Prioritize the reconstruction of essential infrastructure to support community recovery and resilience once residents leave the camps.

# 7 Annexure

- For emergencies related to the Wayanad Mundakai disaster, the health department's emergency services in the district have been unified under a single number. This service is available 24/7. For assistance, please contact: 8589001117.
- Chamarajanagar DC office helpline numbers
  - 08226-223163
  - 08226-223161
  - 08226-223160
  - o WhatsApp number: 9740942901
- Mysuru District Administration Helpline Number: 0821-24223800
- PWD: 08226-223161, 223163, 223160 or WhatsApp number 9740942902



- In response to the Wayanad Landslide, an Inter-Agency Coordination (IAC) Committee meeting was held on December 31st, 2023, via Zoom. During this meeting, the committee decided to activate the Unified Response Strategy (URS) for Wayanad. <a href="http://tiny.cc/URSMapping\_Wayanad">http://tiny.cc/URSMapping\_Wayanad</a> The URS Matrix has been activated to establish a common understanding among agencies that are planning to respond or are already responding to the crisis.
- Based on suggestions from the field, the Joint Rapid Needs Assessment (JRNA) has been
  initiated by IAG Wayanad in collaboration with UNICEF India and Sphere India. The
  timeline for the assessment can be accessed here: <a href="http://tiny.cc/JRNA\_timeline">http://tiny.cc/JRNA\_timeline</a>
- For emerging needs in Wayanad, visit DEOC Website: https://inventory.wyd.faircode.co/stock inventory
- Kerala State Minimum Standards of Relief