

Orientation Programme

On

'Extreme Heat Awareness & Preparedness'

Mode: SATCOM Programme

Target Participants: ASHA Workers, Paramedic Staff (Health & Family Welfare Department)

Dates: 16th March 2026

1. Background:

Climate change is sharply intensifying extreme heat events across the globe, and India is among the most deeply affected regions. Rising temperatures now stretch longer, hit harder, and spread across wider geographies — placing human health, agriculture, and entire ecosystems under growing strain.

In India, summer temperatures routinely cross 45°C, especially in northern, western, and central states. According to the India Meteorological Department, the last few years have been among the hottest ever recorded:

- 2022 witnessed unusually early and severe heatwaves.
- In May 2022, Delhi recorded 47.1°C, one of its hottest days in recent history.
- Churu touched an extreme 50.8°C, among the highest temperatures ever documented in India.
- 2023 continued this alarming trend, with prolonged heatwaves affecting large parts of western, central, and eastern India.
- In June 2023, Chandrapur hit 48.9°C.
- Titlagarh recorded 48.5°C, reflecting the expanding footprint of heatwave conditions.

Behind these rising temperatures lies a clear and interlinked pattern: global warming is steadily pushing baseline temperatures upward, creating a hotter starting point each summer. Rapid urbanisation, widespread deforestation, and land degradation are intensifying this effect by trapping more heat and reducing natural cooling across landscapes. At the same time, shifting wind patterns and weakened pre-monsoon showers are limiting the relief that once came naturally with seasonal changes, allowing heat to build and persist for longer periods. Together, these factors have made extreme heat more frequent, more intense, and more dangerous — especially for outdoor workers, rural communities, children, livestock, and vulnerable populations.

1.1 In context to Gujarat:

According to recent assessments by the Gujarat State Disaster Management Authority (GSDMA) and the India Meteorological Department, Gujarat has seen a clear rise in extreme heat events over the past four years, with particularly intense spells in 2022 and 2023, when cities like Ahmedabad touched 46.8°C, Kutch reached 47.5°C, Rajkot recorded 48.4°C, and Bhuj hit 47.8°C. In 2024, India experienced one of its longest nationwide heatwaves, with Gujarat also reporting above-normal temperatures and prolonged heat stress across several districts. In 2025, temperatures fluctuated more due to widespread pre-monsoon rainfall, although regions such as Rajkot, Surendranagar, and Kandla still experienced persistent high heat, while Ahmedabad crossed 40°C on only a handful of days. These recurring heat events continue to pose serious threats to public health—with heightened risks of heatstroke, dehydration, and exhaustion—while also straining agriculture, reducing productivity, and stressing ecosystems. Together, the intensifying and increasingly unpredictable heat patterns strongly indicate the ongoing influence of climate change on Gujarat's climate landscape.

2. Why is there a need?

Capacity building on extreme heat prevention and management is essential because the risks tied to rising temperatures are growing rapidly and affecting multiple layers of society. The National Disaster Management Authority reports that heatwaves have caused thousands of deaths in recent years, with the elderly and young children among the most vulnerable. The Indian Council of Medical Research highlights that people living with cardiovascular, respiratory, or metabolic conditions face a significantly higher risk of heat-related illnesses. Climate trends deepen this concern: the Intergovernmental Panel on Climate Change warns that heatwaves will become more frequent and intense as global temperatures rise, a pattern already visible in India as noted by the India Meteorological Department, which has recorded a steady increase in both the frequency and severity of heatwaves over the past few decades. The economic consequences are equally stark—the IIT Bombay estimates that extreme heat costs India over USD 7 billion annually through healthcare burdens, reduced productivity, and agricultural losses, while projections from National Disaster Management Authority suggest a potential 5–10% decline in agricultural productivity by 2030. Taken together, these factors underscore the urgent need for strengthening capacity: to safeguard public health, enhance climate resilience, and mitigate the growing economic toll of extreme heat events.

3. Objective of the Programme:

The objective of the SATCOM programmes on 'Extreme Heatwave Prevention and Preparedness' is to enhance the capacity of stakeholders to effectively prepare for, respond to, and mitigate the impacts of heatwaves. The programme aims to achieve the following goals:

- To develop a sound understanding about Extreme Heat Prevention.
- To increase awareness about the risks associated with heatwaves and the importance of preparedness and resilience measures.
- To build the capacity of relevant professionals, and community volunteers, to effectively respond to heatwaves through the SATCOM programme.
- To encourage community participation and engagement in heatwave preparedness and resilience efforts, including the development of community-based initiatives and strategies.

4. Target Department:

Sr. No.	Departments	Target Participants
1.	Health & Family Welfare Department	ASHA & Paramedic Staff

5. List of Proposed Programme:

It is proposed to conduct a SATCOM programmes on 'Extreme Heat Prevention and Preparedness' as per the following details:

Sr. No.	Departments	Dates
1.	Health & Family Welfare Department	16 March 2026
