Heat Hotspot Analysis, Mapping & Alert System

Siddharthanagar and Nepalgunj

Climate Change

Heatwave

Project Background

The exemplary Heat Action Plan (HAP) developed by Nepalgunj HAP serves as a successful model that is now being replicated in several other major heat-prone cities such as Siddharthanagar, Biratnagar, and Dhangadhi. This initiative will bring together the learnings and knowledge gained from this project to inform wider advocacy and policy dialogues on heat action with national and provincial governments to promote heat preparedness and resilience across

High Nepalgumi Submitted Nepalgumi Submitted Nepalgumi Submitted Nepalgumi Submitted Data Analysis Web-based Alert System

Outcomes

- Empowered Policy Formulation: Local governments are well-equipped to formulate informed plans, policies, and frameworks based on the analysis results, leading to more effective management and mitigation of heatwave impacts.
- Enhanced Heatwave Management: Aid the stakeholders in effective identification, monitoring, and management of heat hotspots using real-time meteorological data and early warning system.









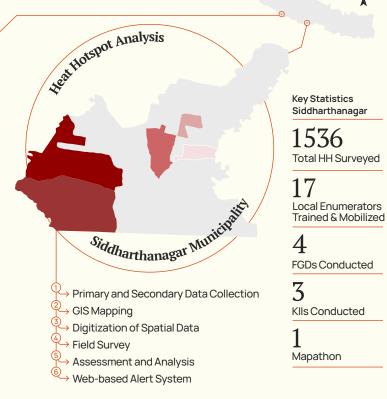
Scan to read the news about this project https://khabarpatro.com/archives/21411

The Problem

The Terai region of Nepal experiences temperatures exceeding 40°C annually, with humidity levels reaching up to 80%. Urban areas in the lowland Terai are at risk during heat waves. Factors such as urbanization, extensive concrete structures, high population density, and the compounding effects of climate change are the leading cause of severe health conditions, injuries, and deaths.

Project Goals

Strengthen local frameworks, response and preparedness for heat waves by equipping communities with the knowledge and tools needed to effectively reduce the impacts of heat waves.



Outputs

NEPALGUNJ SUB-METROPOLITAN CITY

- Ward-level Heat hotspot Reassessment using Census data and local government records.
- Web-based Map Visualization Platform and Alert System

SIDDHARTHANAGAR MUNICIPALITY

- · Household survey for 1536 households.
- Train and mobilize local Red Cross Volunteers in digital data collection.
- Ward-level Heat hotspot Analysis using Census data and local government records.
- Household-level Heat hotspot Analysis using Field Survey data in NAXA Assessment
- Web-based Map Visualization Platform and Alert System