Heat Early Action 2025
Opportunities and Lessons learned from Nepal

November, 2025

UK International Development
Partnership | Progress | Prosperity

RAIN
Resilience, Adaptation and Inclusion in Nepal

Heat Early Action 2025
Opportunities and Lessons learned from Nepal

- About RAIN and its plan under Early warning Early action
- Background and aim of heat early action 2025
- Targeting
- Timeliness of Action
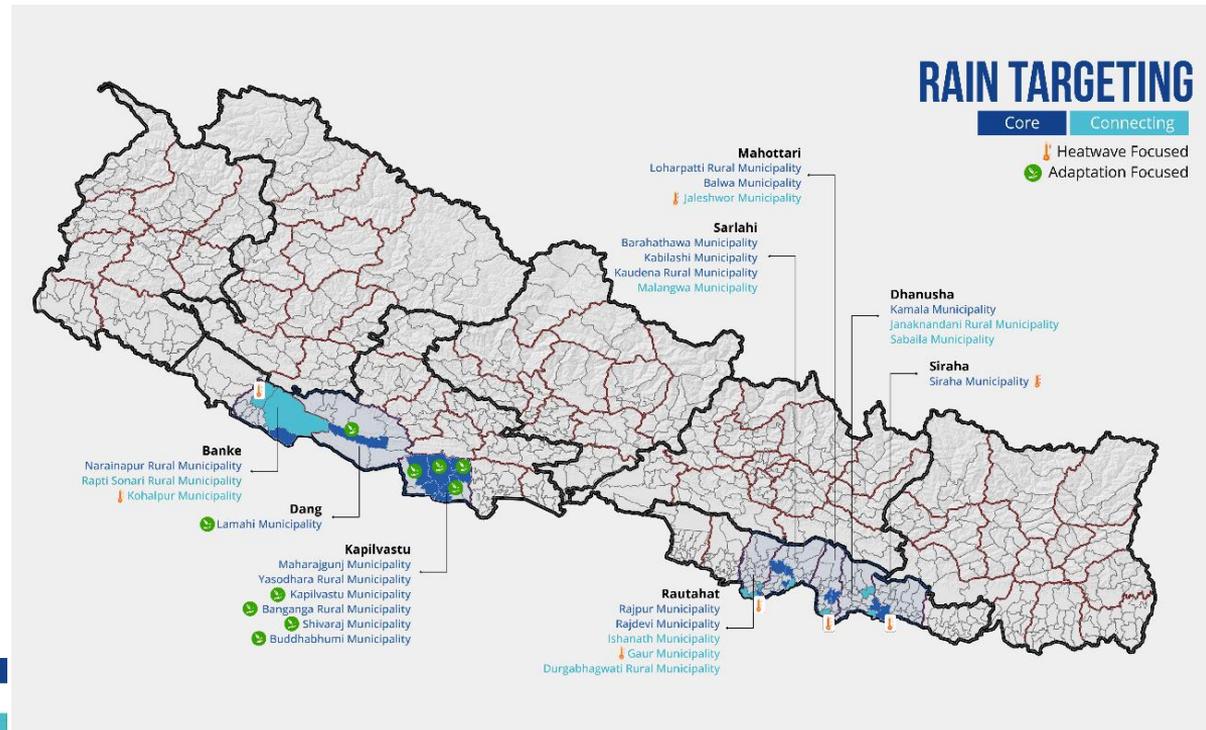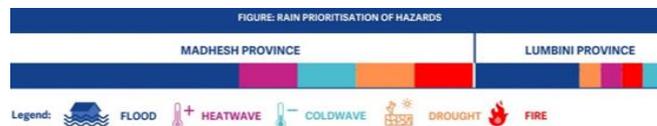- Key Interventions
- Findings
- Opportunities

RAIN

People in Need (PIN): (Lead),

Dan Church Aid (DCA): (Co-Lead), collaborating closely with

- **National NGO partners:** Community Self Reliance Centre (CSRC), Prerana, LIBIRD, and Youth Innovation Lab (YI-Lab)

- **Technical Partners:** Red Cross Climate Center (RCCC) and UKMet

Project components

- **Early Warning and Early Action**

- **Community Resilience and Adaptation**

- **Inclusion and Localization**

- **Shock Responsive Social Protection**

FIGURE: RAIN PRIORITISATION OF HAZARDS

MADHESH PROVINCE | LUMBINI PROVINCE

Legend: FLOOD | HEATWAVE | COLDWAVE | DROUGHT | FIRE

RAIN TARGETING
Core | Connecting
Heatwave Focused
Adaptation Focused

Mahottari
Loharpatti Rural Municipality
Balwa Municipality
Jaleshwor Municipality

Sarlahi
Barahathawa Municipality
Kabilashi Municipality
Kaudena Rural Municipality
Malangwa Municipality

Dhanusha
Kamala Municipality
Janaknandani Rural Municipality
Sabaila Municipality

Siraha
Siraha Municipality

Banke
Narainapur Rural Municipality
Rapti Sonari Rural Municipality
Kohalpur Municipality

Dang
Lamahi Municipality

Kapilvastu
Maharajgunj Municipality
Yasodhara Rural Municipality
Kapilvastu Municipality
Banganga Rural Municipality
Shivaraj Municipality
Buddhabhumi Municipality

Rautahat
Rajpur Municipality
Rajdevi Municipality
Ishanath Municipality
Gaur Municipality
Durgabhagwati Rural Municipality

16 LGs in Madhesh Province and 10 in Lumbini Province

Early Warning and Early Action

Provincial EAPs (flood, heatwave and cold wave) for the Lumbini and Madhesh with support from Red Cross Climate Center (RCCC) in collaboration with provincial government, based on National Framework on AA (draft stage)

EWS- Observation and Monitoring

- Installation of Meteorological stations; UKMET training to DHM officials
- Heat sensors installation

EWS- Dissemination Mechanism

- 6 Multi-hazard Sirens, Setting up innovative early warning dissemination mechanism (smart flood tower); Mural Art for risk communication

EWS- Community Capacity for response

- EWS-EA and Inclusion Training for CBOs, CDMCs
- 12 functional LEOCs in RAIN targeted LGs, SAR materials in coordination with NDRRMA, 3 Renovation of safe shelters, 4 construction of new safe shelters.

EWS- Understanding Risk (Participatory GIS at 12 working LGs)

Heat Early Action- 2025

For 2026

- Provincial EAP in collaboration with Provincial government

For 2025

- Piloting internal SOP with the aim to collect heat impact information from the ground while support Communities at risk Heat Early Action implemented based on DHM weather forecasts in Siraha, Gaur, Jaleshwar;

Background to heat Spell

- The Department of Hydrology and Meteorology (DHM) forecasted temperature rise from June 8-11 in the RAIN targeted LGs.

- RAIN activated its heat early action and response SOP to reduce the impact of heat spell based, prepared in consultation with project-targeted local levels, District land rights forum (DLRF), local Red Cross district chapters and sub-chapters aligning with existing NDRRMA plan of action for heatwave and DHM's existing heat alert mechanism.

- Pre-identified Early Actions and Response

Targeting

A. Target Groups for Heat Action

Vulnerable Person/Groups
•Outdoor workers such as rickshaw riders, street vendors, daily wage labours, agricultural workers, traffic police, security guards and street dwellers

Vulnerable Households
•Landless, Informal settlements, Marginalised communities

Public places for Heat Action
•Crowded public places (Bus Park, marketplaces, vegetable market etc.)

B. Target Areas (Locations) for Heat Action
This heat early action and response targeted the following municipalities of Madhesh.

Madhesh Province			• **Rautahat (Gaur Municipality)** • **Mahottari (Jaleshwor Municipality)** • **Siraha (Siraha Municipality)**	
S. N	**LG**	**Wards**	**Name of Communities**	
1	Gaur	1, 2, 3, 4, 5, 7, 8 & 9	1 Kanu & Dalit Tole	5 Chamar Tole, bin tole
			2 Musahar/ Ram /Majhkotiya Tole	
			3 Ram Tole, Mjhkotiya tole	8 Dhangar Tole
			4 Sahani Tole	9 Baitha, Chamar tole
2	Jaleshwor	1, 2, 3, 4, 5, 6, 7, 8, 9, 11 & 12	1 Paswan Tole, Vaslar	7 Mahadebpatti Paswan Tole,
			2 Paswan Tole	8 Latwara, Khatwe, Bajrahi
			3 Khayera, Musahara Tole	9 Parkauli
			4 Sugagau, Paswan Tole	11 Locahna Khatwe Tole
			5 Pahaili, Musahar Tole	12 Velahi Ram tole, Chauryadi tole
			6 Ram tole, Dhabauli Tole, Khatwe Tole	
3	Siraha	1, 5, 6, 7, 10, 11, 12, 13, 14, 16 & 17	1 Das Tole	11 Musahar Tole
			5 Musahar Tole	12 Katti Tole
			6 Chamar Tole	13 Musahar Tole
			7 Sada Tole	14 Sada Tole
			10 Padampur- Paswan tole	16 & 17 Musahar Tole

Timelines of Intervention

- RAIN was constantly monitoring the temperature (minimum and maximum) in the targeted LGs.

- As of June 6: Decided for immediate field deployment from June 8 onwards; with preparatory works from June 6

Municipalities/ Cities	Relevant (Nearest) Weather Stations	Forecasted Temperature (As of June 6) (Tmax: degree Celsius)					
		6th June	7th June	8th June	9th June	10th June	11th June
Gaur	Gaur	34	35	36	37	38	35
Jaleshwor	Janakpur Airport	34	35	37	38	38	35
Siraha	Lahan	34	35	36	37	38	34

Target Municipalities/ Cities	Temperature Thresholds Percentile (Tmax)			Pilot Trigger Threshold
	90th Percentile	95th Percentile	99th Percentile	
Gaur	37.6	38.5	40.5	**38.5**
Jaleshwor	36.8	38.05	40	**38.05**
Siraha	35.5	36.5	38.5	**36.5**

Municipalities/ Cities	Relevant (Nearest) Weather Stations	Observed Temperature (Tmax and Tmin: degree Celsius)					
		6th June	7th June	8th June	9th June	10th June	11th June
Gaur	Gaur	34.18/24.16	36.96/24.53	38.5/26.76	38.82/28.27	39.19/28.87	39.69/29.6
Jaleshwor	Janakpur	33/23.9	36/24	36.8/25.0	36.8/28.8	37/29	37.5/29.6
Siraha	Lahan	33.9/22.8	35.3/23.9	36.5/26.5	36.9/27.6	37.1/28.3	37.4/29

Heat Interventions

- 1,800+ marginalized people received health check-ups and awareness sessions on heat illnesses via Female Community Health Volunteers (FCHVs).

- 17,500+ outdoor workers accessed safe drinking water in Jaleshwor, Siraha & Gaur.

- Heat risk awareness jingles aired in local languages (Bajika, Maithali) on community radios (Radio Rudraksha 98.8 Mhz, Jaleshwor, Radio salhesh 88.8mhz Siraha, Jan awaj FM)

- Respective Local governments consulted on heatwave history and DHM forecasts.

- Post action assessment

Heat action targets range from individual to community levels.

Community

Awareness Campaigns
Disseminates heat risk information via radio

LG Consultation
Coordinates heat response with local leaders

Mobile Water
Offers free water in urban areas

FCHV Visits
Provides health checks and heat advice

Individual

Made with 🍸 Napkin
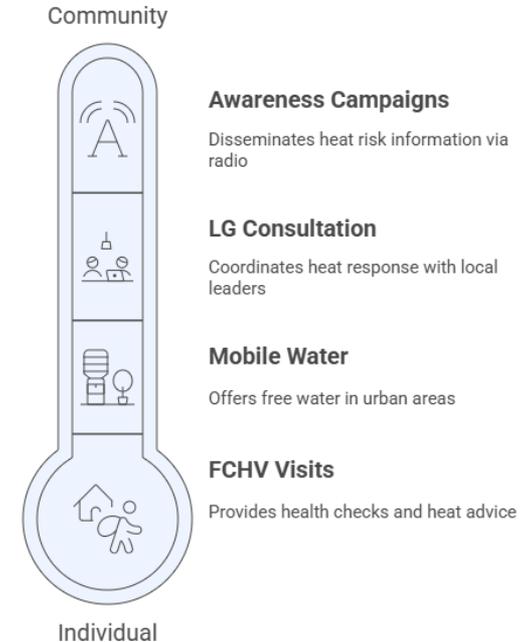
Findings:
FCHVs as Community Champions

- Mobilising Female Community Health Volunteers (FCHVs) through door-to-door visits proved effective way for reaching marginalized populations including the poor, marginalised, persons with disabilities, and women.
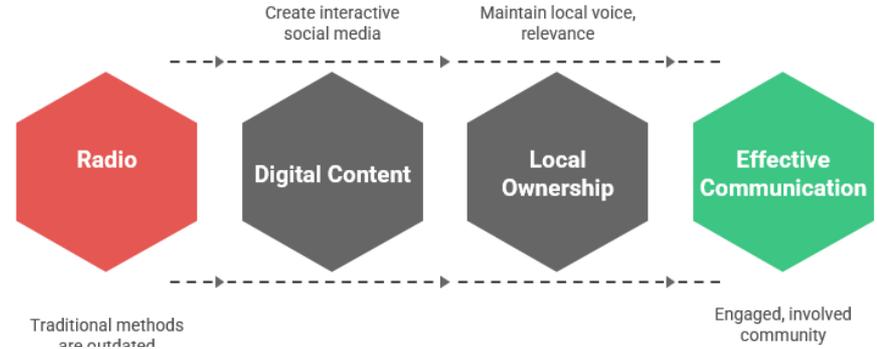
- FCHVs when properly trained and supported, are trusted messengers to the most vulnerable (senior citizens, women, children, pregnant, lactating, adolescent girls, persons with disability) and are capable of spreading awareness before, during and after disasters.
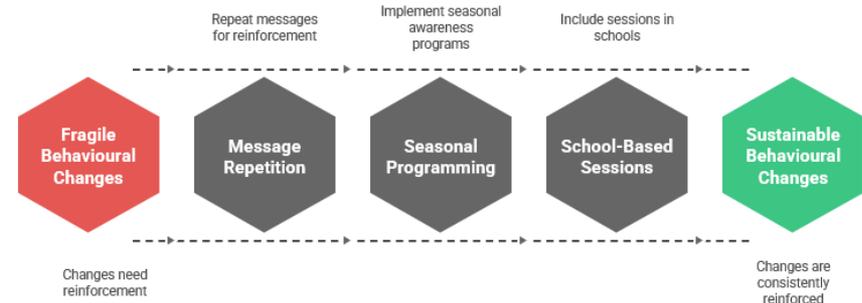
Findings from Post Action Community Consultations

- Transition of Awareness Messaging from Traditional t Digital Platforms while maintaining Local ownership

- Behavioural Change Is Possible with Repetition, Trust Personalisation

- Short-Term Response Is Not Enough—Long-Term, Systemic Solutions (RAIN is implementing 32 small adaptation interventions- managing local ponds, agroecological village, drinking water schemes, plantations, and others)

Transitioning to Digital Awareness

Create interactive social media

Maintain local voice, relevance

Radio

Digital Content

Local Ownership

Effective Communication

Traditional methods are outdated

Engaged, involved community

Achieving Sustainable Behavioural Change

Repeat messages for reinforcement

Implement seasonal awareness programs

Include sessions in schools

Fragile Behavioural Changes

Message Repetition

Seasonal Programming

School-Based Sessions

Sustainable Behavioural Changes

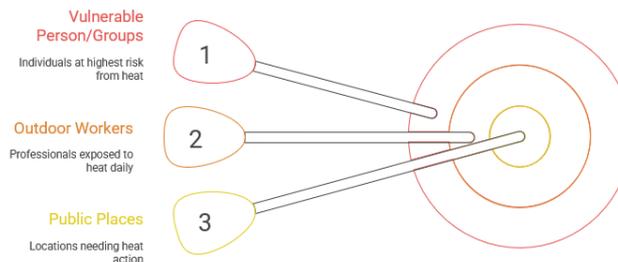Changes need reinforcement

Changes are consistently reinforced

Opportunities

Evidence-Based Thresholds for Heat Early Action

- Community-level evidence on the impacts of heat to be systematically collected to support DHM in revising and designing its existing thresholds and triggers.

- While 58% of respondents reported heat related signs and symptoms (skin rashes, headache, excessive sweating, headache, loss of appetite), the actual correlation between piloted temperature threshold and the impact of the heat spell could not be linked, especially that it was only a week-long heat spell.

- This year, as the heat spell was shorter, it was not technically feasible to collect the evidences of heat impact but collecting community impact on health is critical opportunity for any early action.

- Moving further, RAIN aims to test the temperature threshold with the health-related signs/symptoms and the differential impact on different groups and even different housing types; which will allow for evidenced based heat early action. Identifying these critical temperature thresholds would also support DHM and response agencies with evidenced based heat alert mechanism linking with early action.

Health coordinator in Jaleshwar: *"People were already affected at 37–39°C. Waiting for 40°C is too late."* Similarly, a teacher in Siraha reported that *"Even at 38°C, schools were shut down, and people fell ill."*

Heat Action Target Groups

Vulnerable Person/Groups
Individuals at highest risk from heat
1

Outdoor Workers
Professionals exposed to heat daily
2

Public Places
Locations needing heat action
3

Mural Art for Heat Risk Communication

First Draft Mural Art

Mural Art for Heat Risk Communication

Thank you

Sanchita Neupane,
RAIN Programme Manager, People in Need
Contact: sanchita.neupane@peopleinneed.net

UK International Development

Partnership | Progress | Prosperity

RAIN

Resilience, Adaptation and Inclusion in Nepal