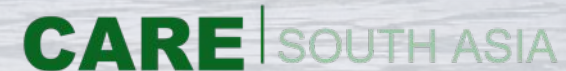


PLANNING WORKSHOP ON Impact-Based Forecasting and Climate Services

21–24 January 2025 | Bangkok, Thailand

Learnings and Experiences on reach and impact of climate and weather services from Anticipatory Action and Climate Smart Programming in South Asia

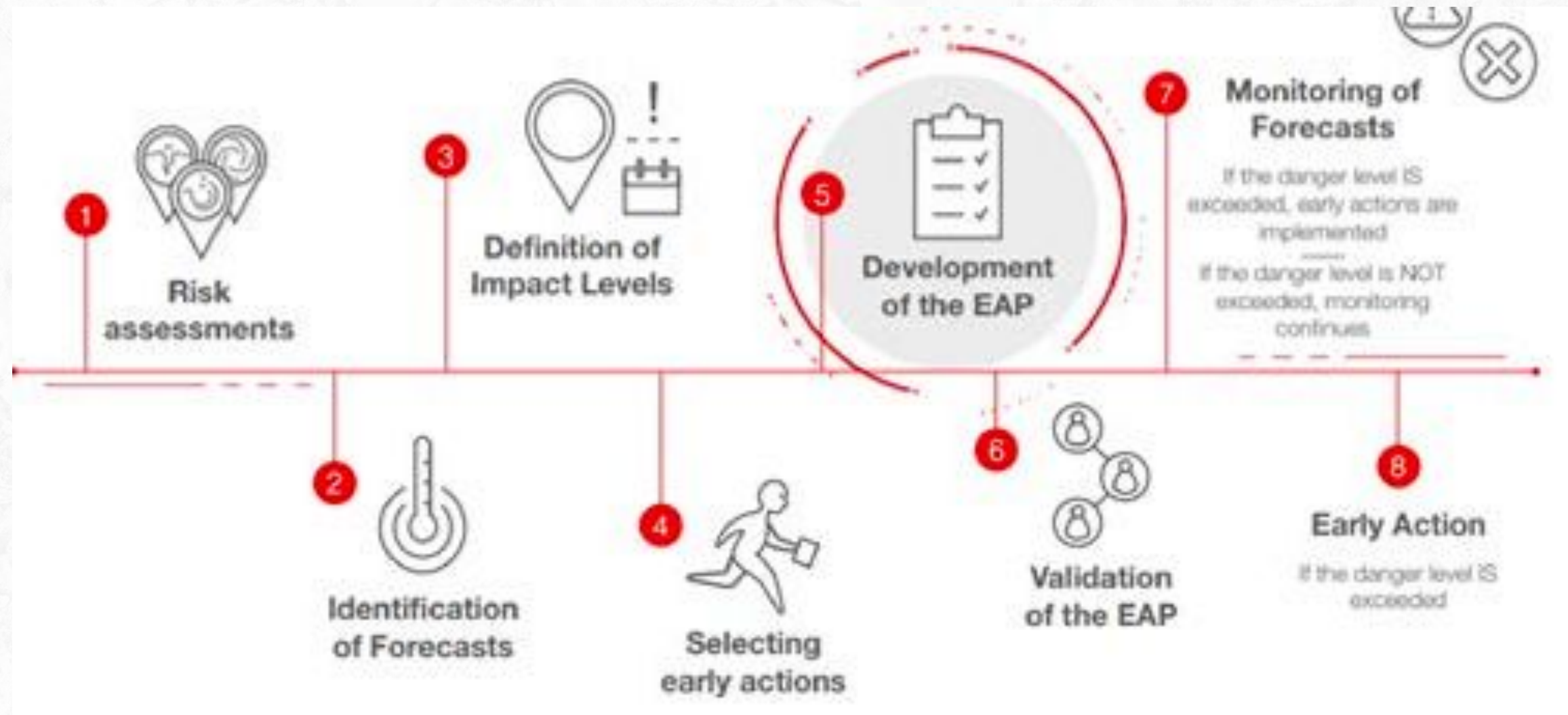
Ramiz Khan, Red Cross Red Crescent Climate Centre



The image features a large, white satellite dish antenna mounted on a tall, cylindrical tower. The dish is a complex grid of metal struts. The background is a deep blue night sky filled with stars and the faint, glowing band of the Milky Way galaxy. On the left side, there is a large, stylized graphic element consisting of overlapping, curved shapes in shades of yellow, orange, and red, resembling a map or a stylized landscape. The word "Bangladesh" is written in a clean, white, sans-serif font across the middle-right portion of the image, partially overlapping the tower and the sky.

Bangladesh

What is Anticipatory Action (AA) or Forecast-based Financing (FbF)?



Forecast-based Financing (FbF) is a programme that enables access to humanitarian funding for early action based on in-depth forecast information and risk analysis.

This photo by Unknown Author is licensed under CC BY

Anticipatory Action before the flooding in 2020: in the Brahmaputra basin, Bangladesh

- On 24 June 2020, the Global Flood Awareness System (GloFAS) issued a forecast of 50% or more probability of a 1-in-10 year flood which would remain above that threshold for three days.
- The flood was expected to affect 3.7 million people.
- This triggered the forecast-based financing (FbF) mechanism of Bangladesh Red Crescent Society (BDRCS), which began to take action as planned in their Early Action Protocol for floods.
- BDRCS distributed an unconditional multi-purpose cash grant of 4,500 Bangladeshi Taka (about US\$53) to 3,789 vulnerable households across 10 Unions in the districts of Jamalpur, Gaibandha and Kurigram.



Does the Anticipatory Action make a difference before flood?

- 27% of cash beneficiaries reported that they evacuated adults after receiving an early warning, vs 11% (+16%) of respondents among the comparison group.
- None of the cash beneficiaries had to sell household assets (e.g., beds, furniture, cooking stoves, kitchen items, etc.), whereas 12% of the comparison group had to adopt that strategy to cope with difficult economic conditions after the flood (-12%).
- 44% of beneficiaries said they had to borrow money to cope with the impacts of the flood, vs. 56% of the comparison group (-12%)
- 51% of beneficiaries indicated that some of their working equipment (such as tools, fishing equipment, pumps, etc.) was damaged to some degree or lost, vs. 72% of comparison households (-21%).

Is FbF lower women's vulnerability to flooding in Bangladesh?

The study was conducted in two distinct geographical settings in northern Bangladesh: Charland (river island) and Mainland, without flood embankment protection.)

- It reveals that FbF cash assistance primarily **aided rural women in reducing the financial vulnerability of their households**. Spending the cash assistance on buying food and boat evacuation directly benefits women and men alike and reduces the need for taking loans.
- **No spending was made on women's personal utility and safety needs before, during, and after the flood. Charland and Mainland females faced barriers to basic utility and hygiene services**, with Charland women faring slightly better.
- **Existing rural socio-cultural norms, timing of cash disbursement, and other factors influenced these females' FbF utilization**. Despite the immediate nature of their flood-induced concerns about personal well-being, sanitation, healthcare etc., **some opted to prioritize saving the money for their family members' future needs**.

F. Rahman et al., 2024 (Progress in Disaster Science 24 (2024) 100389)

Learnings

- 'Forecast-based early action' (FbA) is emerging
- Forecasting is limited but has future potential
- The risk of 'acting in vain' is a major perceived barrier to scaling up FbA
- Value for money?
- Institutional incentives and finance are still skewed towards relief.



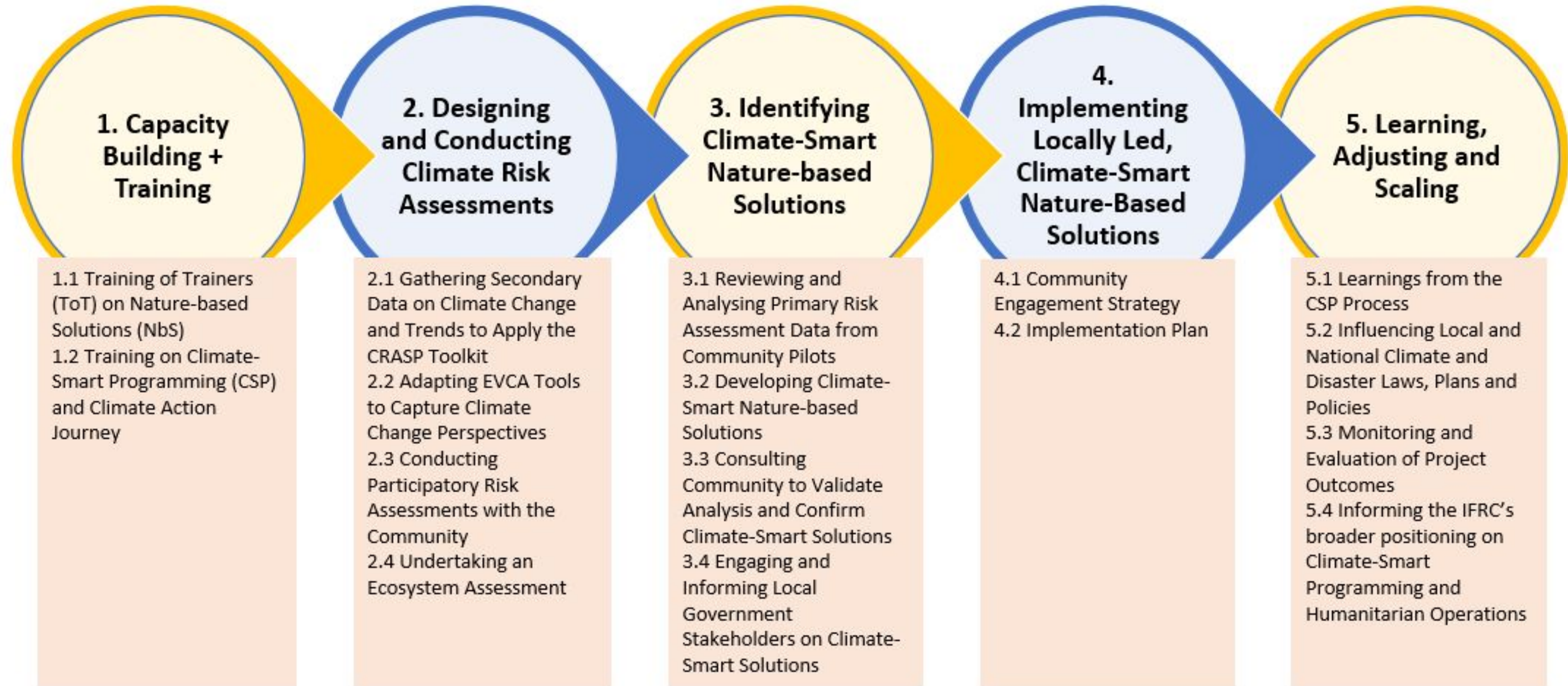
Nepal

Dhangadi Resilient Livelihood Recovery :

A Climate-Smart using Locally led Nature-based Solutions project

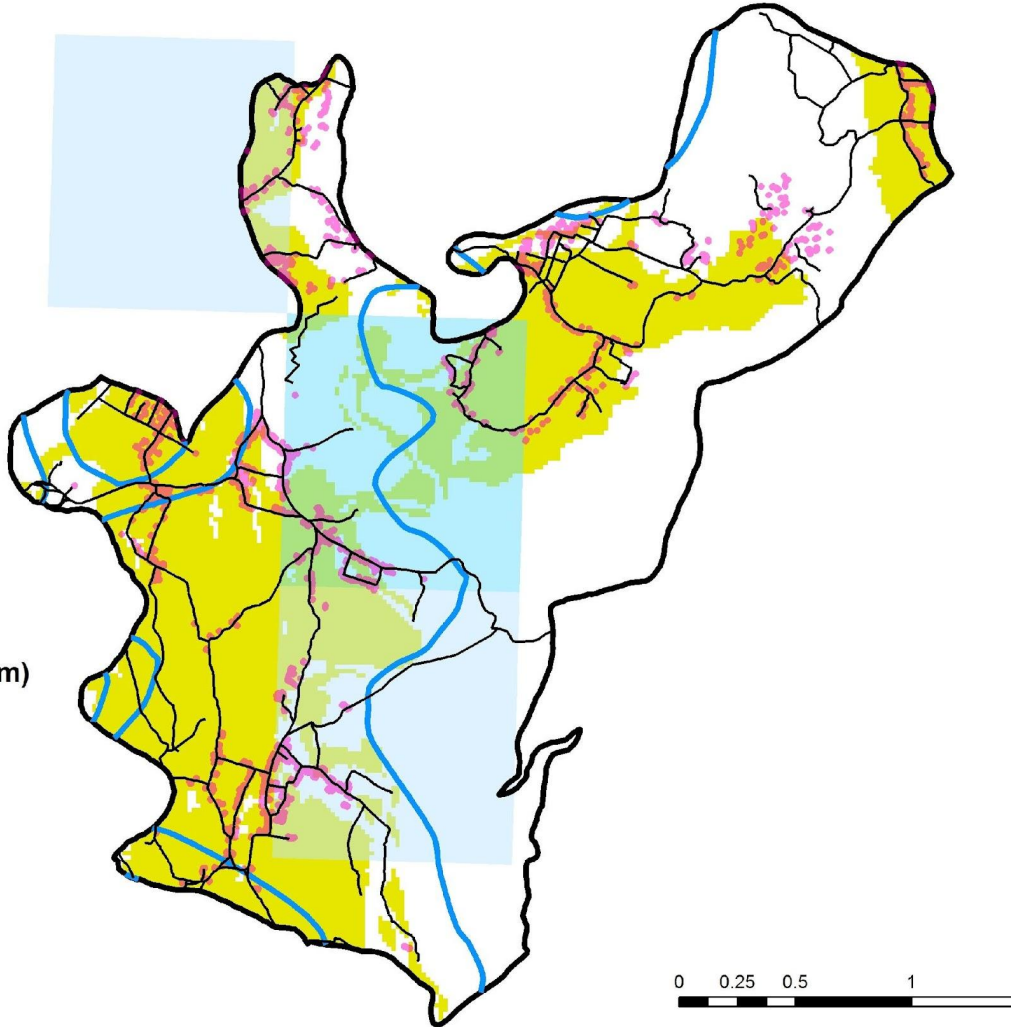


Approach

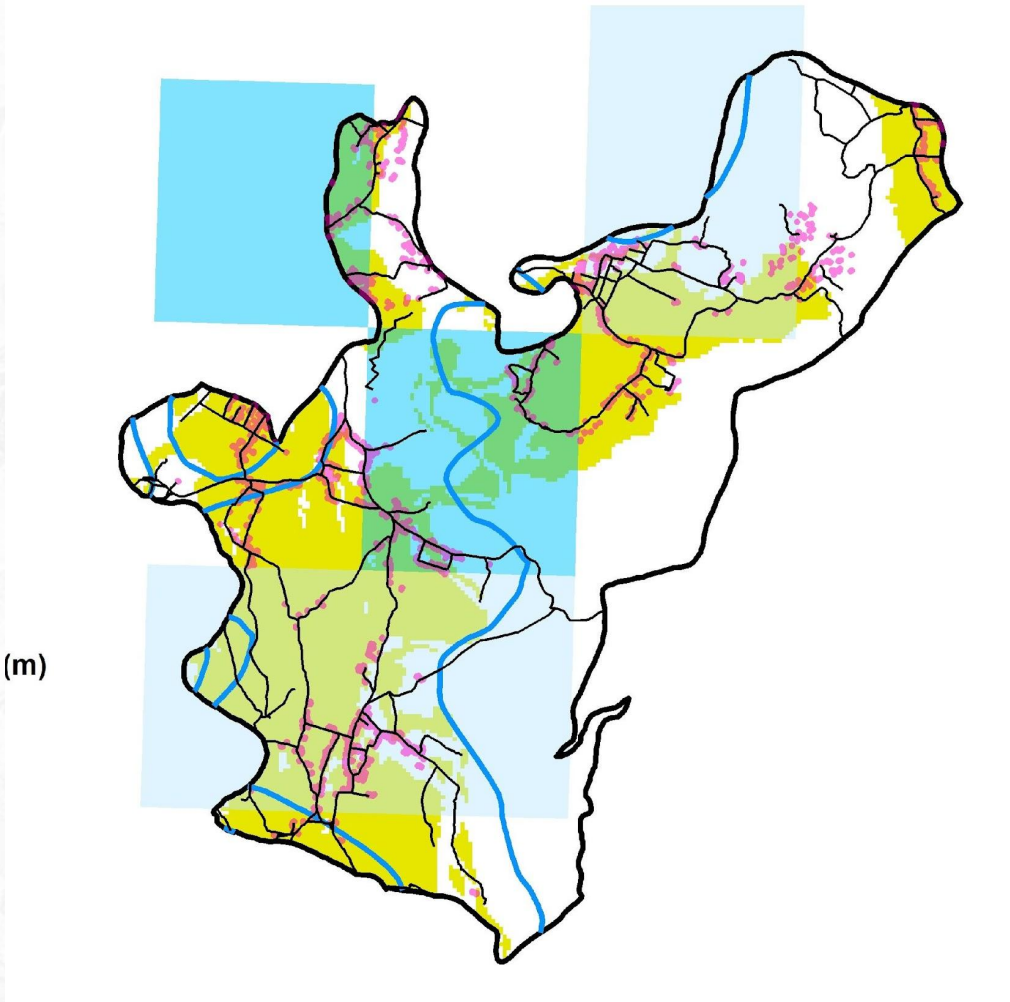


Climate Risk

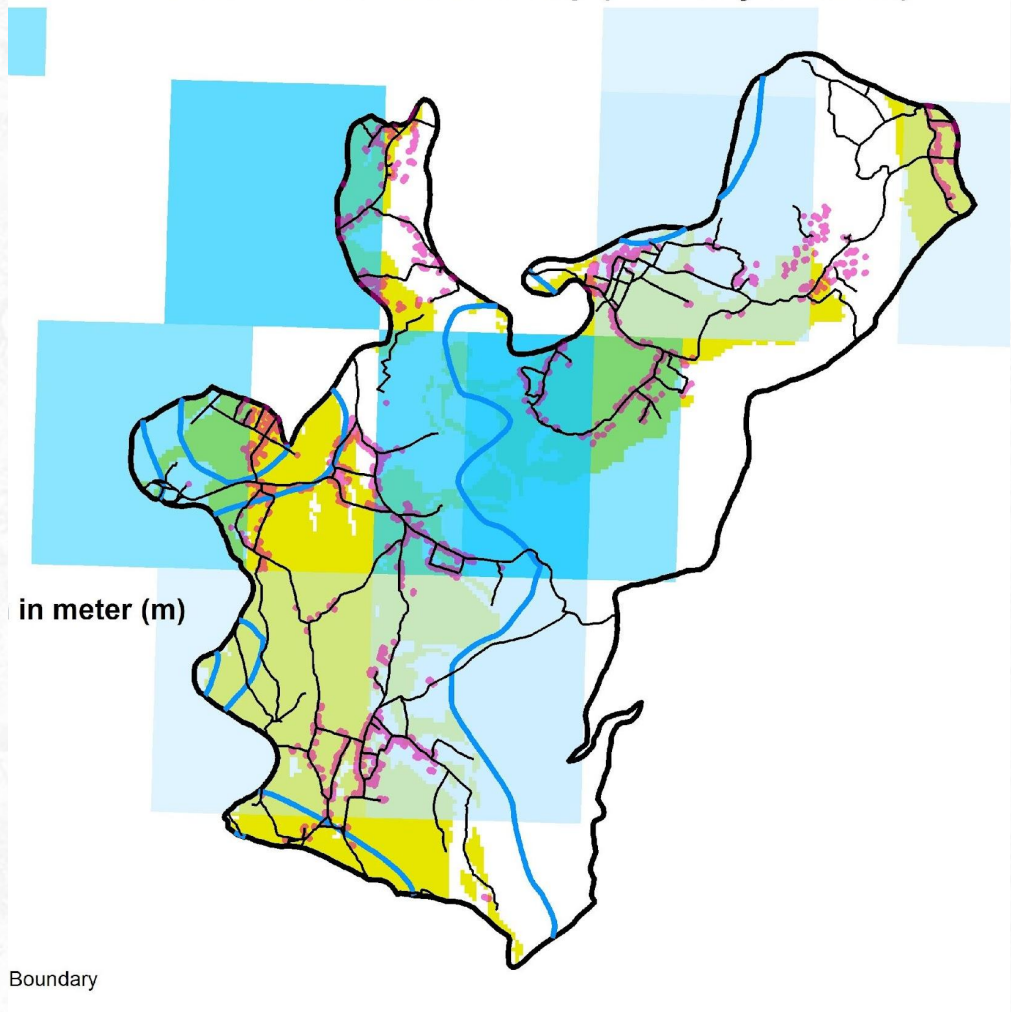
Ward 17- Flood Hazard Map (1 in 5 year event)



Ward 17- Flood Hazard Map (1 in 20 year event)



Ward 17- Flood Hazard Map (1 in 100 year event)



Identifying Climate-Smart Nature-Based Solutions



Reviewing and Analysing Primary Risk Assessment Data



Developing Climate-Smart Nature-Based Solutions



Consulting Community to Validate Analysis and Confirm Climate-Smart Solutions



Engaging and Informing Local Government Stakeholders on Climate-Smart Solutions

Implementation of Locally Led, Climate-Smart Nature-Based Solutions:

Riverbed Farming

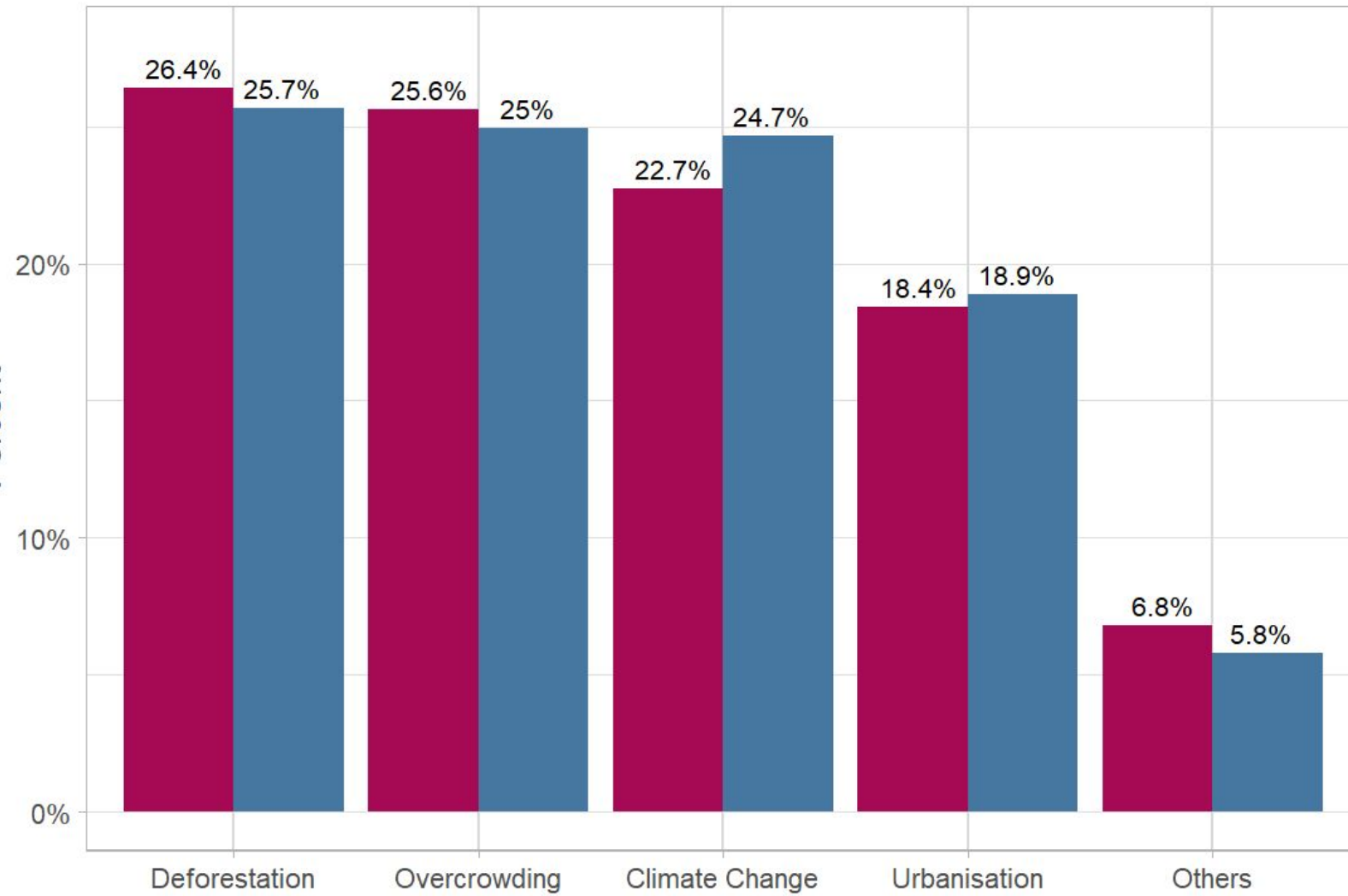


Restoration of the ponds

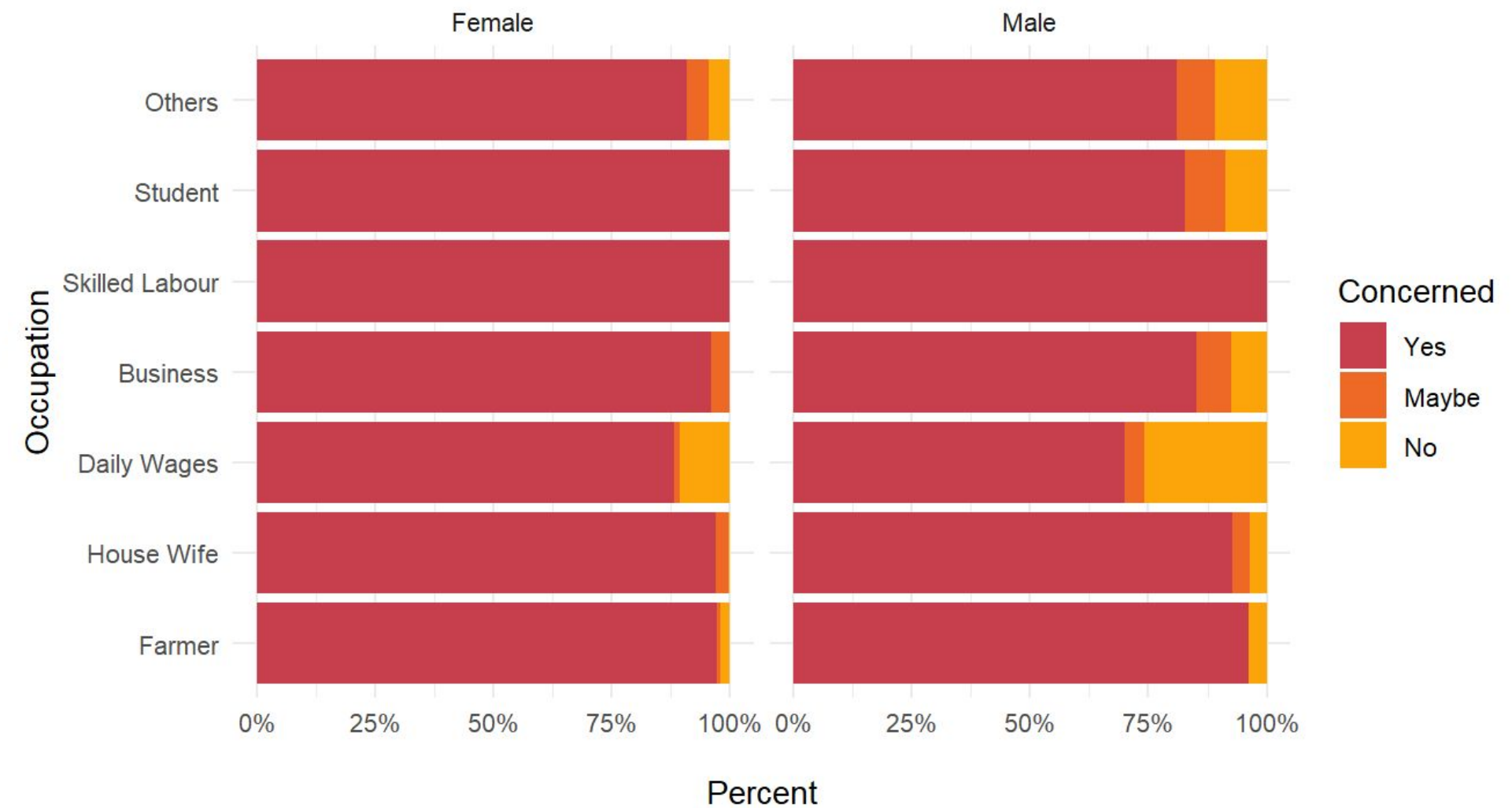


Extreme Heat Risks Perception Study in Dhangadi, Nepal

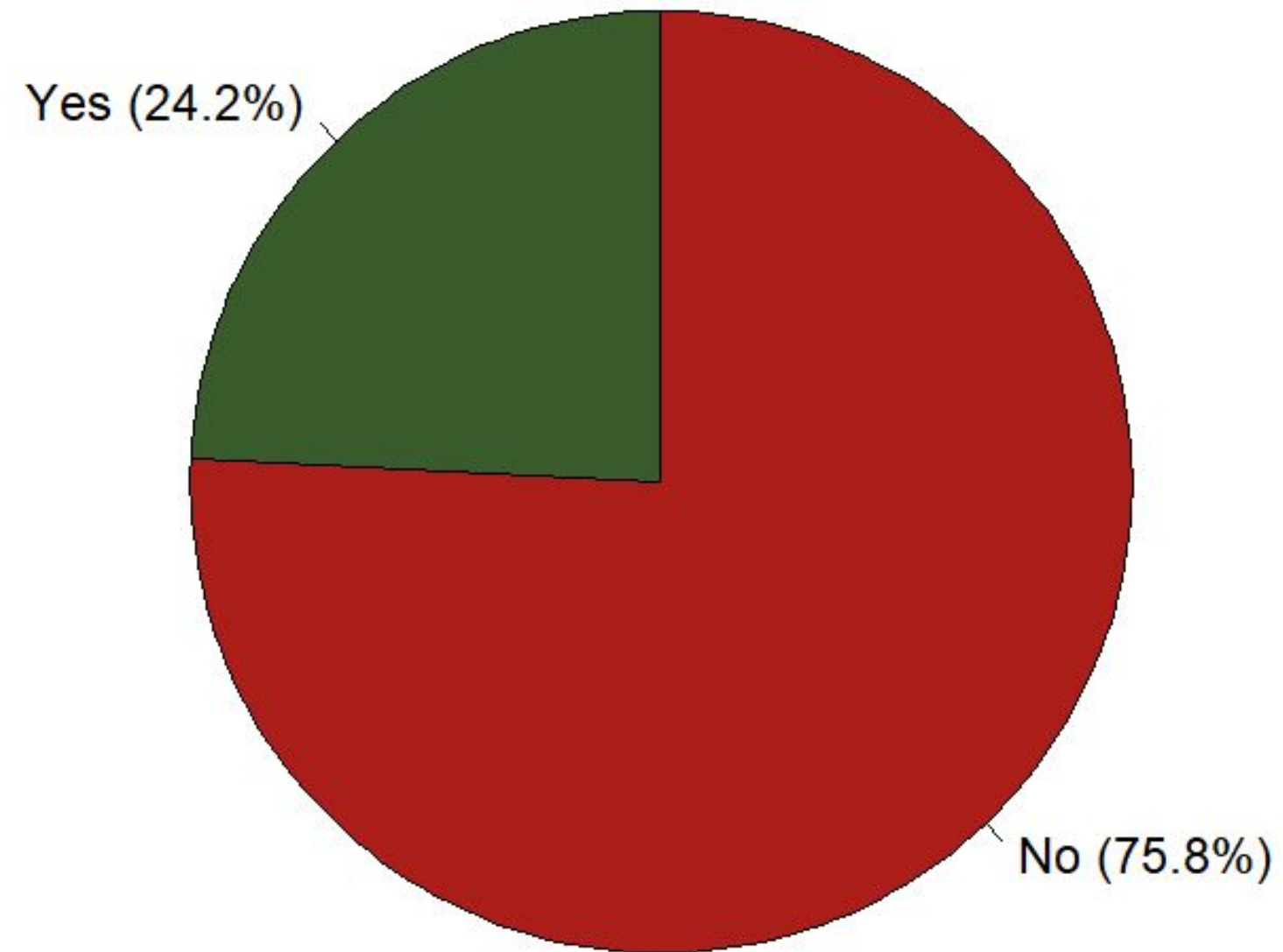
Perceived causes for rising temperatures by gender



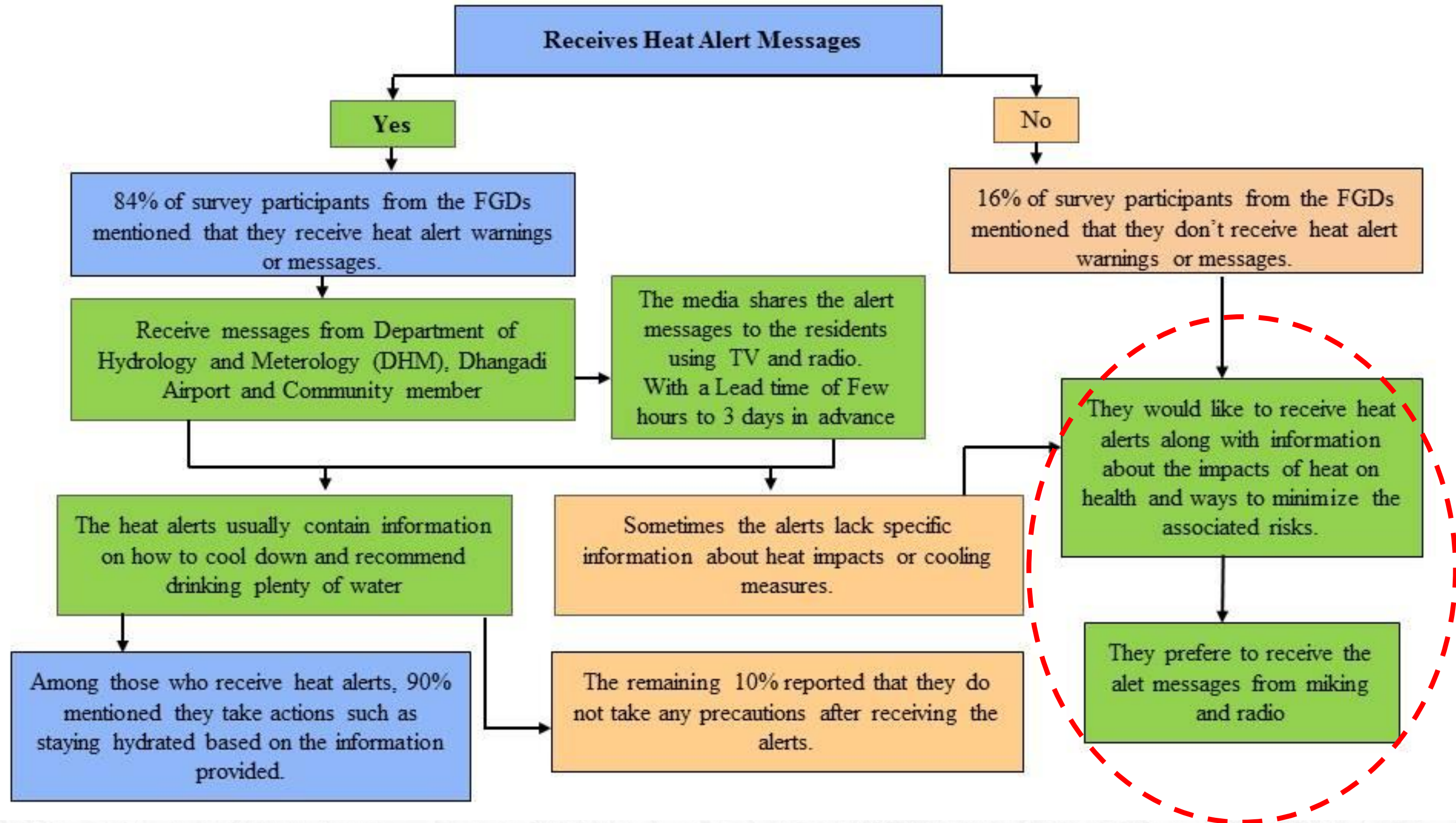
Are the respondents concerned about extreme heat-related risks that can affect them?



Do respondents receive alerts or warnings about extreme heat?



Heatwave alert messages





Pakistan and Maldives

Climate Action Journey

Steps for Climate-smart programmes and operations



- ENABLERS:** Institutional buy-in, Resources, Awareness
- Basic principles:** working with climate information across timescales and partnerships
- Amplifying through influencing:** climate and disaster laws, policies and plans at national level
- Parallel trajectories:** integrating environmental sustainability and climate change mitigation

CLIMATE RISK MANAGEMENT in all HUMANITARIAN SECTORS

CLIMATE IN HUMANITARIAN PROGRAMMES AND OPERATIONS



Disaster management, DRM, & DRR

More **frequent** and **extreme** weather-related **disasters** & increasingly erratic **seasons**.



Health & care systems

Human health impact of stronger heatwaves, floods, droughts & changing disease patterns.



Water, sanitation & hygiene

Changing water availability: too much or too little.



Livelihoods & food security

Effects of warmer weather and more variable rainfall on **food production & businesses**.



Shelter, housing & settlements

Emergency operations challenged by increasingly intense & frequent disasters.



Migration & displacement

Increasing displacement & livelihood loss from climate change & disasters.



Climate change adaptation

National Societies/IFRC will increasingly need to engage in **dedicated adaptation efforts**.



Other National Society activities

Many National Societies have other activities that can also be affected by climate & weather.

EXAMPLES OF CLIMATE RISK MANAGEMENT



Preparedness, response, **early warning - early action**, & **Anticipatory Action** programmes.



Scaling up health programmes & strengthening **health system resilience**.



Enhanced water resource **management**, **innovative** WASH interventions & **awareness** raising.



Livelihood & crop diversification, research & capacity building for **long-term sustainable adaptation**.



More **complex emergency ops** & building shelter/housing in **safe(r)** locations (with **new extremes in mind**).



Guiding vulnerable people towards **safer areas**, assistance along routes and when settling, helping create new **livelihood opportunities**.



Increasing **expertise**, making regular programmes **climate-smart**, & investing in **additional adaptation projects** that reduce the impacts of climate change from the onset.



Cross-cutting work across areas like protection, gender & inclusion, & community engagement & accountability to ensure **focus is on those hit hardest by the climate crisis and/or who are at greater risk because of it**.



Support rebuilding of shelters on higher/ safer ground in flood prone areas



Planning of temporary shelter locations and structures with extreme heat, cold or flood risks in mind

Critical reflections and learnings from AA/IBF implementation

- Number of IBF pilots/services from Met Agency, however the **inclusion of humanitarian/AA community in the coproduction** process of IBF is still limited.
- A bit of disconnect in the common understanding of **AA trigger/threshold (and how IBF product and services can inform this) between NMHS and AA/humanitarian community.**
- Multiple triggers and thresholds for AA exists for same given context and hazard in the country - lots of confusion - **requires trigger harmonization process together with NMHS**
- There is **need of distinction between what it is needed for the public (as IBF warnings) and what is needed for AA/humanitarian community (IBF products and information)** to mobilize funds and implement early action, the latter demands more specific and quantifiable information.
- Uptake of **seasonal outlook information for humanitarian preparedness is growing; however the process is still ad-hoc, not much streamlined or mainstreamed** as that for short-term forecasts - the SAHF and NMHS in the region has more to do on this space.
- Lots of demand on **climate related information (future climate projections, trends) across humanitarian & DRR community, but this information are not easily available** (in the scale needed) and understood well (correct interpretation at user levels), leading to limited uptake for climate smart programming.

Thank You

Group Work

- **Group 1:** How can IBF and climate services be effectively tailored to address the specific vulnerabilities of marginalized communities in South Asia, including considerations of Gender Equality and Social Inclusion (GESI)?
- **Group 2:** What innovative tools, metrics, and approaches can be used to measure the real-world impact of IBF and climate services in improving resilience and adaptive capacity in vulnerable communities?
- **Group 3:** How can we develop evidences and best practices on GESI consideration in IBF and climate services across the SAARC communities?