Supported by:

REGIONAL WORKSHOP ON IMPACT-BASED FORECASTING:

Training-of-Trainers and National Demonstration Planning for Temperature-Related Hazards

SAHF IBF Working Group Implementation Plan Project

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Leaving No One Behind in Temperature Hazards: A GEDSI Perspective

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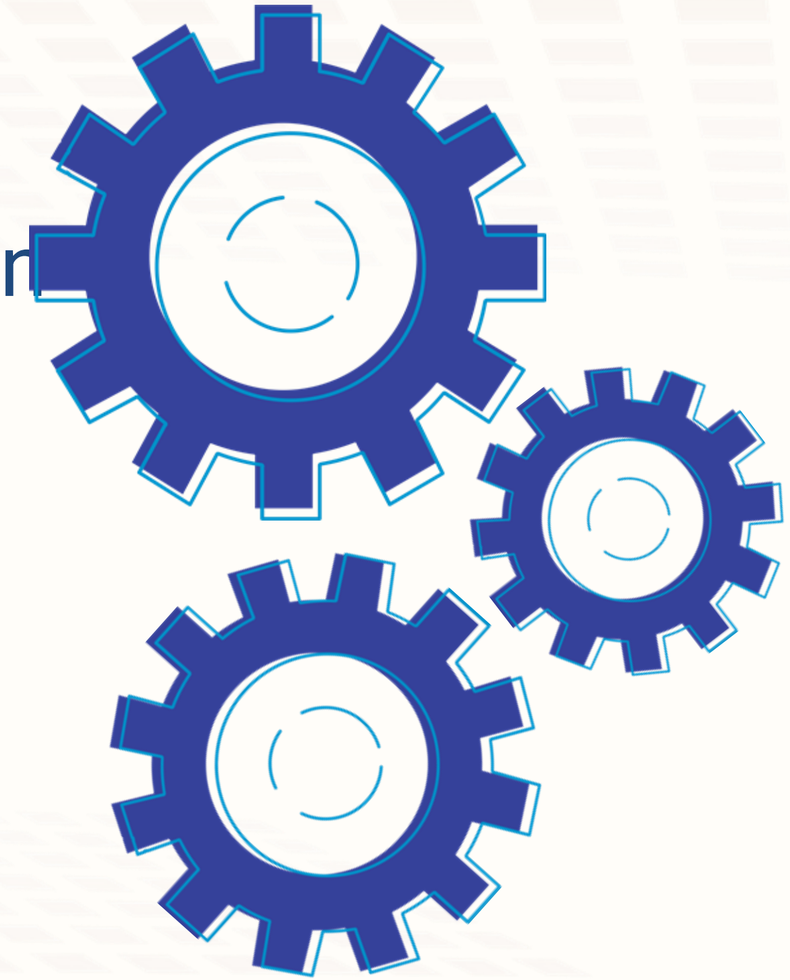
RIMES

AGENDA

- GEDSI as a critical consideration in temperature hazards
- Vulnerability pathways
- Indicators and data limitations, practical GEDSI Integration
- Questions and other concerns



Why GEDSI Matters for Temperature Hazards in South Asia

Different groups experience **unequal exposure, sensitivity, and adaptive capacity**

- 209,000+ heat-related deaths in South Asia in 2021
- Highest burden: children under 5 and adults over 55

Gender roles and socio-economic status influence time spent outdoors, caregiving, and labor conditions

- 25 million workdays lost to heat in Bangladesh (2024)
- 60% of women reported increased unpaid care work during heatwaves

Why GEDSI Matters for Temperature Hazards in South Asia

Disability, age, migration status, and social exclusion shape access to protection, services, and information

- 70% increase in deaths among people over 65 in two decades

Intersectionality: overlapping identities amplify risk (e.g., elderly women with disabilities in informal housing)

GEDSI Principles

Gender Equity

Being fair to different genders, ages and ability, social economic constraints, or marginalised groups – creating an **equal level playing field** by redressing the balance.

Leave No One Behind

Commitment by all UN Member States to eradicate poverty, end discrimination and exclusion, and reduce the inequalities and vulnerabilities that cause people to be marginalized.

Disability Inclusion

Involves recognizing and addressing the barriers that hinder people with disabilities from participating fully and effectively in society, particularly in CIEWS and climate action

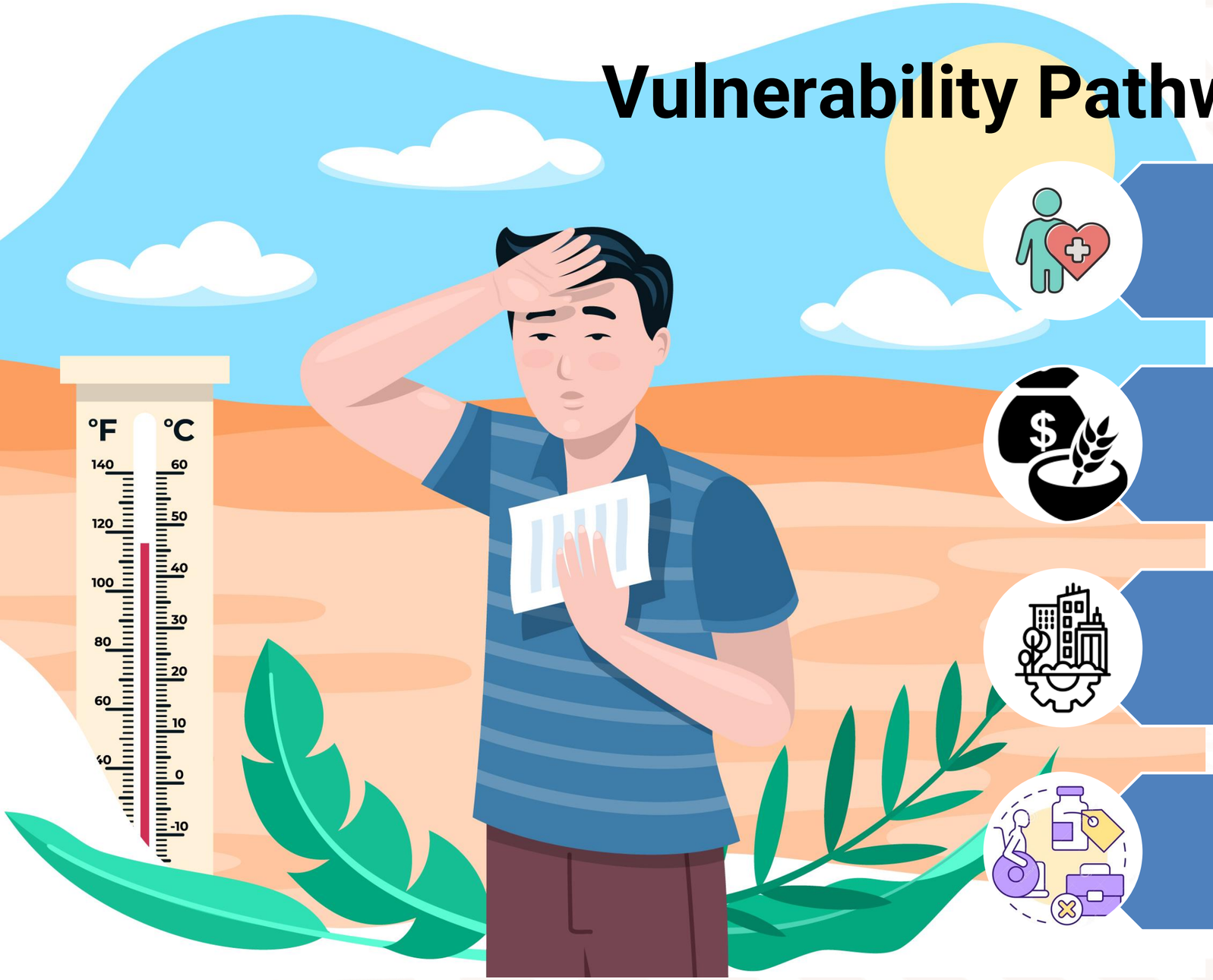
Do No Harm

Recognizing that the actions we take in a particular context are not neutral. Our actions will affect the relationships within that context, either for better or worse.

Social Inclusion

Entails recognizing and addressing the processes and structures of social, economic, and political exclusion that prevent certain groups from participating equally in society.

Vulnerability Pathways



- Health Sensitivity
- Livelihood and occupational exposure
- Urban and housing conditions
- Social exclusion and access barriers

Health-related Vulnerability

Higher heat stress risk among

- Pregnant women
- Infants and young children
- Older persons
- Persons with disabilities or chronic illness

Gender differences in:

- Occupational heat exposure
- Care burdens limiting rest and recovery
- Access to healthcare and cooling

Socio-Economic and Livelihood Sensitivity

Outdoor and informal workers face higher exposure (e.g., agriculture, construction, street vending)

Women often concentrated in:

- Low-paid, informal, or home-based work
- Care and service roles with limited heat protection

Loss of income during heat extremes deepens poverty and food insecurity

Urban, Housing, and Environmental Factors

Urban heat islands disproportionately affect:

Informal settlements

Densely populated, low-income neighborhoods

Limited access to:

Green spaces

Cooling infrastructure

Safe water and Sanitation

Indicators and Data for Temperature Hazard Analysis

Gender

- ✓% of women vs men employed in outdoor or heat-exposed occupations
- ✓Average daily hours spent outdoors by gender during hot seasons
- ✓Heat-related illness or mortality rate, disaggregated by gender
- ✓% of female-headed households without access to cooling (fans/AC)
- ✓% of women with access to heat early warning information
- ✓Time spent on unpaid care work during heatwaves (hours/day, by gender)

Age

- ✓Heat-related morbidity and mortality rates for:
  - Children under 5
  - Adults 65+
- ✓% of elderly people living alone in heat-exposed areas
- ✓School absenteeism rates during extreme heat events
- ✓Access to cooling spaces for children and older persons
- ✓Ratio of dependents (children + elderly) to working-age adults

Disability

- ✓% of persons with disabilities living in heat-prone areas
- ✓% of cooling centers that are physically accessible
- ✓% of heat alerts available in accessible formats (audio, sign language, easy-to-read)
- ✓Prevalence of chronic illnesses that increase heat sensitivity
- ✓Access to healthcare during heatwaves (distance, affordability)

Indicators and Data for Temperature Hazard Analysis

Socio-Economic Status and Poverty

- ✓% of low-income households lacking electricity or cooling devices
- ✓Heat-related income loss by livelihood group
- ✓% of households below poverty line in heat-exposed areas
- ✓Access to social protection or cash assistance during heatwaves
- ✓Food price volatility during extreme heat periods

Livelihoods and Work Conditions

- ✓% of workforce in heat-exposed sectors (agriculture, construction, transport)
- ✓% of informal workers without heat protection measures
- ✓Workdays lost due to extreme heat, by sector and sex
- ✓Availability of occupational heat safety regulations
- ✓Access to shaded rest areas and drinking water at worksites

Urban and Housing Factors

- ✓% of households in informal or substandard housing
- ✓Urban heat island intensity by neighborhood
- ✓Green space per capita in low-income areas
- ✓Access to safe water and sanitation during heatwaves
- ✓Population density in high-temperature zones

Indicators and Data for Temperature Hazard Analysis

Social Inclusion and Marginalized Groups

- ✓Heat vulnerability among migrants, refugees, or minorities
- ✓% of marginalized groups reached by early warning systems
- ✓Access to healthcare and cooling services by social group
- ✓Language accessibility of heat advisories
- ✓Reported discrimination in accessing public cooling spaces

Access to Information and Decision-Making

- ✓% of households receiving heat alerts, disaggregated by GEDSI categories
- ✓Participation of women and marginalized groups in local DRR planning
- ✓Trust in early warning information by gender and age
- ✓Access to mobile phones or media for receiving alerts
- ✓Community awareness of heat health risks

Data Gaps and Limitations

- ○ Availability of sex-, age-, and disability-disaggregated heat data
- ○ Frequency of heat-related health reporting
- ○ Integration of climate and health datasets
- ○ Coverage of informal workers in official statistics
- ○ Use of qualitative data in risk assessments

Integrating GEDSI in IBF and EWS

Risk assessments:

- Use disaggregated data where available
- Apply qualitative methods (community consultations, participatory mapping)
- Map vulnerable groups, not just hazard zones.
- Combine temperature forecasts with social vulnerability data.

Impact Thresholds

- Define thresholds linked to real impacts

For example:
Temperature levels at which outdoor work becomes unsafe
Heat index levels linked to hospital admissions

Early warning systems:

- Tailor communication channels and formats
- Targeted communication: use SMS, radio, community channels
- Address access barriers (language, literacy, disability)
- Ensure messages reach women, elderly, and disabled groups.

Planning and policy:

- Prioritize high-risk groups in heat action plans
- Align health, labor, housing, and social protection systems
- Action protocols: adjust work hours, open cooling centres, and provide social protection

Approaches for GEDSI-Responsive Temperature Risk Management

Intersectional vulnerability mapping

Gender-responsive indicators for heat impacts

Community-based monitoring and feedback

Co-design solutions with affected groups

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ANY QUESTIONS?

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