

STAKEHOLDER CONSULTATION WORKSHOP PROCEEDINGS
DEVELOPING GENDER-SENSITIVE HEAT ACTION PLAN
RAJSHAHI



DATE: 19TH OCTOBER 2022

HYBRID

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This document is an outcome of the Stakeholder Consultancy jointly organised by Integrated Research and Action for Development (IRADe) & International Centre of Climate Change and Development (ICCCAD), Bangladesh in hybrid mode, for **Developing Gender-Sensitive Heat Action Plan for Rajshahi**, 19th October 2022.

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1. Gender-Sensitive Heat Action Plan, Rajshahi

1.1 Background

South Asia is a hotspot for Heatwave-related incidences. Between 1979 and 2017 the extreme combinations of heat and humidity doubled in much of India, Bangladesh and Pakistan. In some parts of the sub-continent, summer temperatures are projected to increase by 3°C–6°C by 2100. Around 800 million South Asians live in heat “hotspots” that will face worse heat waves in the future. However, there is a lack of a focused strategy to develop heat adaptation plans that local administrations can implement. To minimize heat stress impact on health, work productivity and livelihoods of the economically and socially marginalized population, especially women, there is an urgent need to design and implement Heat Action Plans focus on vulnerable groups.

Integrated Research for Action and Development (IRADe) in collaboration with the International Centre of Climate Change and Development (ICCCAD), Bangladesh and SLYCAN Trust in Sri Lanka as part of APN supported project is working on the development of spatially differentiated and gender-sensitive heat stress action plans in the South-Asian cities of Colombo, Rajshahi, Surat in association with their Municipal Corporations.

The objective of the proposed project is to disseminate knowledge on heat stress management strategies including the development of spatially differentiated and gender-sensitive Heat Adaptation Plans (HAP) in the South Asian countries of Sri Lanka and Bangladesh. HAPs developed through the initiative will serve to support South Asia’s medium-term development planning especially in prioritizing and integrating adaptive resilience within the agenda of climate-resilient smart cities. The purpose of this project is to:

- Knowledge dissemination of spatially differentiated Heat Adaptation Plan that is gender sensitive and easy to replicate in South Asian Cities.
- Build the capacities of the key stakeholders, especially at the local level that will ensure better institutionalisation and adoption of the newly developed strategies.
- Develop an effective communication strategy to ensure wider outreach and dissemination among different levels of stakeholders viz; people, CBO, NGOs, local institutions such as ULBs, and the various levels of government.

This research seeks to influence the appropriate adaptation plan and bring about positive changes in the associated policies horizontally and vertically. This will improve resilience and

reduce the vulnerability of heat-related risks and improve resilience and reduce the vulnerability of people in the selected areas.

2. Stakeholder Consultation Workshop, Rajshahi

IRADe in partnership with Rajshahi City Corporation (RCCC) organised a Stakeholder Consultation workshop on “Developing Gender- Sensitive Heat Action Plan for Rajshahi, Bangladesh. The workshop was coordinated by the International Centre of Climate Change and Development (ICCCAD), Bangladesh, under the Asia Pacific Network for Global Change Research (APN) Project under the Asia Pacific Network for Global Change Research (APN) Project.

2.1 Workshop Objective

The objective of the workshop is as follows:

1. Engage with the stakeholders and share the current repository of knowledge on the heat wave in Rajshahi city under the project.
2. Share vulnerability assessment of household survey results
3. Mapping of stakeholders and their responsibilities

3. Workshop proceedings

3.1 Welcome Remarks



**Mr. Sarder Shafiqul
Alam
ICCCAD**

Mr. Sarder Shafiqul Alam from ICCCAD extended his warm welcome to all the participants. Explaining the importance of the topic, he mentioned that the city of Rajshahi faces frequent heatwaves, and there has been an increase in its annual maximum and minimum temperatures. The extreme heat affects outdoor workers' livelihoods, productivity and income levels such as vendors, construction workers and labourers. There has also been a rise in the heat stress associated with morbidities and mortality during hot weather, with stronger heat effects found in cities and among the elderly, children and men. To develop the city's preparedness to manage and cope with heat waves in the wake of climate change, there is an urgent need to develop a Heat Action Plan for Rajshahi city.

3.2 Developing Heat Action Plan for Rajshahi



Mr. Rohit Magotra
*Deputy Director, IRADe
Delhi*

Mr. Magotra provided overview of the project on Developing Gender Sensitive Heat Action Plans for selected cities in South Asia supported by Asia Pacific Adaptation Network (APN), Japan. He briefed about the current global condition of increasing heat Waves causing rise in heat –related mortality & morbidity, maternal health risks and negative impacts on the economic productivity and efficiency of the working population. He stressed upon developing heat index for the cities for developing effective heat stress thresholds. Current heat thresholds in India are developed on the basis of temperature and do not factor humidity. Heat Action Plans need to be gender sensitive and focus on vulnerable urban poor who are most vulnerable to negative impacts of heat stress. In conclusion, he added that Rajshahi and other cities across South Asia need to develop Climate Adaptive Heat Resilience Action Plans to enhance their preparedness to prevent and manage negative impacts of heat stress

3.3 Urban Heat Islands in Rajshahi City



Ms. Ananya Bhatia,
*Senior Research
Associate, IRADe*

The Land Surface Temperature (LST) maps of the city were presented to participants. It detailed the temperature spread of the city and hotter areas of the city and need to be prioritised in the city while preparing any plan to deal with the heat stress. It emphasised that Urban Heat Island would suffer further with a higher temperature and humidity. A detailed area-wise heat action planning will further help develop coping capacity at the micro-level to deal with heat stress.

3.5 Impact of Heat Stress on the city: Heat Stress Primary Survey Results

Sharing the development process of these plans, it was highlighted that identifying vulnerable



Dr. Nimisha Jha,
*Senior Research
Analyst, IRADe*

areas and communities is very important. For this purpose, a Household (HH) level field survey was conducted in the slums or slum-like locations in the city to assess heat stress vulnerabilities in the communities. The stratified random sampling technique was used in the survey. Structured interviews were carried out in the HH who have been living a minimum of the past 2 years between the ages of 18-60. The surveys were conducted in the identified vulnerable locations at the Household level. It analysed the HH level impact, livelihood productivity, heat-health issues and awareness of citizens and covered sectors of water, electricity and sanitation.



**Mr. Sarder Shafiqul
Alam**
ICCCAD

The survey identified the city-specific heat-associated issues and challenges faced by the citizens and understood their key adaptation strategies. It showed that most of the HH bear the brunt of the heat stress impacts, and it gets worse due to poor housing material, ventilation and lack of green cover in the area. About 77 per cent of the population is migrated and crowding is also observed in the HH with an average of 4 persons per HH. This has a bearing on the workload and health of female members of the HH.

Access to services of water supply and electricity becomes scarce during the peak summer period. About 28 per cent of the HH report water scarcity and about 59 per cent of the HH depend on neighbours and private players for the supply of water in case of any water supply scarcity. During the summer season the electricity consumption increases and has a bearing on the HH level monthly expenses and compromises on other priorities.

It also has an impact on the respondent's livelihood and productivity. The health impacts due to heat stress often result in absenteeism for up to 2 days in a month and 52 per cent spend more than 500 Taka towards medical expenses towards the treatment of illness due to heat stress. Most HH (84%) have health centres in vicinity close to 2.5 km.

The female members of the HH reported that their home care facility increases in the high heat period and 65 per cent female feel that household friction increase and do happen during this period.

The HH have very limited information on heat stress. The survey shows that HH has limited knowledge about the precautions that may be taken to protect against heat wave. Even community-level initiatives are missing.

These insights will feed into developing the Heat Action plan for the city that is sensitive to articulations from the communities and its stakeholders.

4. Stakeholder inputs on the Design of Gender-Sensitive HAP

The stakeholders gave feedback on the modalities involved in developing the Heat Action Plan. They suggested the use of larger sample sizes for the household questionnaire surveys. They also recommended assessing the existing and required green cover in the wards. Broadly their suggestions are summed as follows:

4.1 Identification of heat Vulnerable sections

There is a need to identify the vulnerable areas and the population that are at a higher risk due to heat stress. Apart from the people and the households residing in the slums/slum-like areas and scattered settlements across the city, other built-up areas are also required to be mapped and surveyed for the potential impact of heat stress.

The slum population is the most vulnerable section as they have the least access to basic urban amenities.

Sectors and individuals who are highly affected by heat stress like construction workers, sweepers, and other casual workers also need to be identified and mapped.

4.2 City Disaster Management Plans

The proposed plan for the city has incorporated corridor widening across the city. There is a need to relook/ remap and rejuvenate the existing Blue-Green Infrastructure. Retaining/ preserving ponds, parks, and community green places needs to be incorporated.

4.3 City Planning - Land-use Land Cover

Apart from mapping areas with higher surface temperature records, the vegetation cover along these hotspots across the city also needs to be mapped and identified. This will help the planning department and the forest department to demarcate areas that require plantation drives.

Pilot projects can be initiated, where a vulnerable ward/ thermal hotspot can be planted with trees, and its impact on the temperature (pre & post plantation) can be monitored/ recorded. The learning from such projects can be replicated in other words, to lower the surface and ambient temperature.

4.4 Housing structure/ Designs

Need to implement the Bangladesh National Building code, for the provision of cross ventilations within the housing unit. The cooking areas need to have proper venation, as it is the part of the house where women spent the maximum hours in a day.

Housing unit orientation and the building material (heat residents) need to be an essential part of building a house. Policy-level intervention is required to make it mandatory for new constructions like heat-resilient roofing structures, and cool roofing mechanisms likewise.

4.5 Community Mobilisation

There is a need for active campaigns and awareness workshops for the community at large, including casual workers, slum households, and medical practitioners.

4.6 Capacity Building

The role and responsibilities of the department for heat action plan should be documented. Proper training needs to be conducted for the officials of Rajshahi City Corporation (RCC), Rajshahi Development Authority (RDA), Roads and Highways Department (RHD), private construction consultancies, Architects and Planners for mitigating Heat stress. Training of the medical professionals and the front-line workers to mitigate heat stress needs to be prioritised.

4.7 Health & Medical Infrastructure

Mental health has become an important aspect of heat stress; wherein gender-based violence seems to have accelerated with the increase in heat. Special wards and centres need to be set up to treat heat stress during peak periods. The wards and centres need to be equipped with uninterrupted electricity supply, water and ORS, saline and required medicines.

The workshop concluded with thanking all the participants and the people who extended their support to make this workshop a success.

Annexure

Agenda

Stakeholder Consultation Workshop

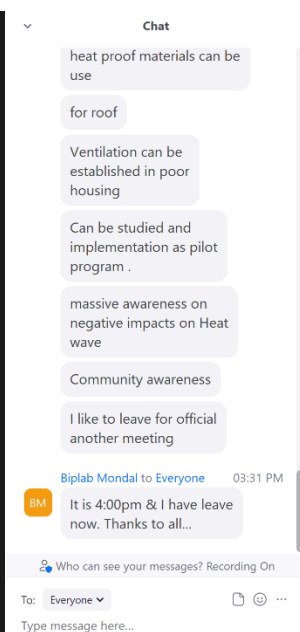
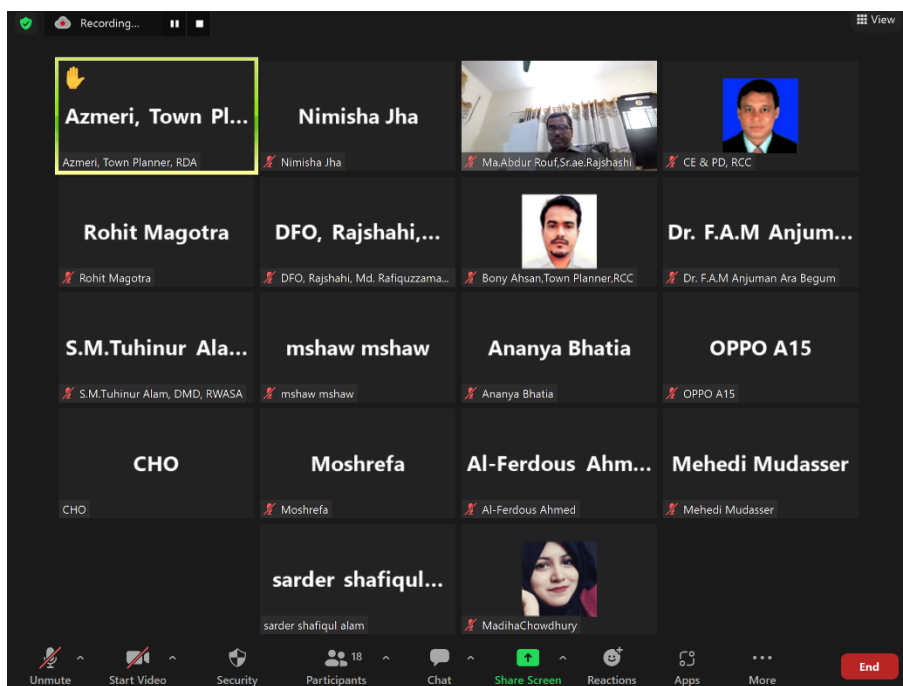
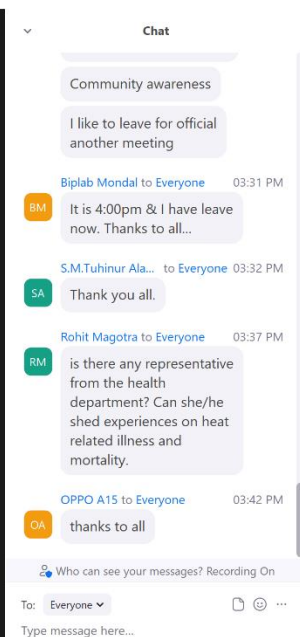
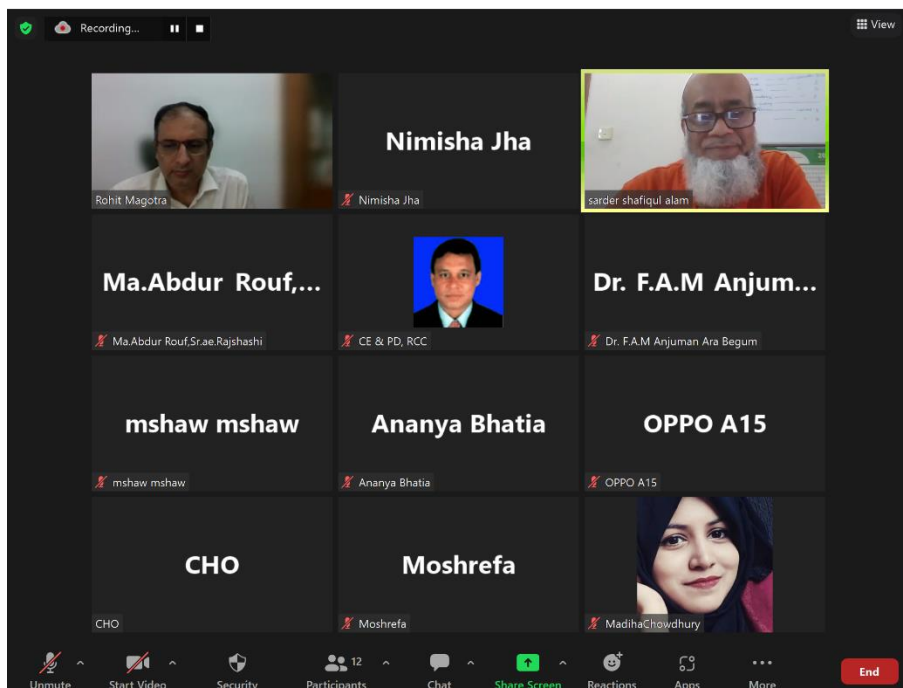
On Developing Gender Sensitive Heat Action Plan for Rajshahi, Bangladesh

Date: 19th October 2022, Time: 1400-1600 hrs (BST)

Hybrid Mode

Time	Topic	Organisation
14:00-14:05 (05 min)	Introduction and Welcome	ICCCAD
14:05 -14:15 (10 min)	Aims and Objectives of the consultation	ICCCAD
14:15-14:25 (10 min)	Heat Adaptation Plan Components Q&A	IRADe
14:25-14:35 (10 min)	Climatology of the Rajshahi and Heatwaves	IRADe
14:35-14:55 (20 min)	Impact of Heat Stress on the city: Heat Stress Primary Survey Results	ICCCAD & IRADe
14:55-15:55 (1 hour)	Stakeholder Mapping for designing and implementing heat action Plan Discussions	IRADe & ICCCAD
15:55-16:00 (05 min)	Concluding remarks and way forward	ICCCAD

Workshop Photos



List of Participants

1. Bony Ahsan, Town Planner, Rajshahi City Corporation
2. Azmeri Ashrafi, Town Planner, Rajshahi Development Authority
3. Dr. F.A.M. Anjuman Ara Begum, Chief Health Officer, Rajshahi City Corporation
4. Md. Noor Islam, Chief Engineer, Rajshahi City Corporation
5. S. M. Tuhinur Alam, Deputy Managing Director, RWASA
6. Md. Rafiquzzaman Shah, Divisional Forest Officer, Social Forest Division, Rajshahi
7. Dr. Anika Haque, Department Member, Department of Geography, The University of Cambridge, UK.
8. Dr. Nazneen Islam Khan, Researcher, ICCCAD at IUB
9. Biplab Mondal, Governance and Mobilization Officer, LIUPC Project, UNDP
10. Dr. Mizan R Khan, Deputy Director, ICCCAD at IUB
11. Md. Abdur Rouf, Senior Assistant Engineer, LGED, Rajshahi
12. Farzana Parveen, Regional Coordinator, Urban Development Programme, BRAC, Rajshahi
13. Dr. Md. Kumruzzaman, URP department, RUET
14. Mohammad Aktaruzzaman, Ward Councilor, Ward no. 26, RCC
15. Mr. Matiur Rahman, Ward Councilor, Ward no. 4, RCC
16. Mr. Rohit Magotra, Deputy Director, IRADe
17. Ms. Moumita Shaw, Research Analyst, IRADe
18. Ms. Nimisha Jha, Senior Research Analyst, IRADe
19. Ms. Ananya Bhatia, Research Associate, IRADe
20. Mr. Sarder Shafiqul Alam, Programme Coordinator, ICCCAD
21. Ms. Madiha Chowdhury, Research Officer, ICCCAD

About IRADe

Integrated Research and Action for Development (IRADe) is an autonomous advanced research institute. Its research covers many areas including energy and power systems, urban development, climate change and environment, poverty alleviation and gender, food security and agriculture, and the policies that affect these areas.

Since its inception, IRADe has been working on addressing these with a focus on the components of socio-economic and health vulnerability of people, using a variety of data and methodologies which include vulnerability assessment by observing indicators, sustainable livelihood approaches as well as using state-of-the-art advanced technologies such as remote sensing and GIS for different projects. Since 2008, it is a Centre of Excellence (CoE), Urban Development and Climate Change of the Ministry of Housing and Urban Affairs. We have worked with 32 cities spread over 20 states in India. For more details visit www.irade.org

About ICCCAD

The International Centre for Climate Change and Development (ICCCAD) is one of the leading research and capacity building organisations working on climate change and development in Bangladesh. ICCCAD's aim is to develop a world-class institution that is closely related to local experience, knowledge and research in one of the countries that is most affected by climate change. It is our mission to gain and distribute knowledge on climate change and, specifically, adaptation and thereby helping people to adapt to climate change with a focus on the global south. By focusing on such work in Bangladesh, ICCCAD allows international participants to gain direct knowledge of the issues in a real-world context. Through the expertise of ICCCAD and its local partners, international organisations will be exposed to relevant and grounded knowledge that can be shared and transmitted around the world for the benefit of other LDCs, and their governments, donors and international NGOs. For more details visit www.icccad.net

About the APN Project

The project “Integrating Gender-Sensitive Heat Adaptation Plans in the climate policy and guidelines of selected cities in South Asia” is funded by Asia-Pacific Network for Global Change Research (APN). Integrated Research and Action for Development (IRADe), supported by International Development Research Centre, worked with three cities viz. Rajkot, Bhubaneswar and New Delhi Municipal Corporation (Delhi) in India to design and develop climate-adaptive heat action plans. The project also led to the setting up of the South Asian Heat Health Information Network (SAHHIN), which has been accredited by the World Health Organization (WHO) and Global Heat Health Information Network (GHHIN).

This project aims to further support South Asia's medium-term development planning, especially in prioritizing and integrating adaptive resilience within the agenda of climate-resilient smart cities. It will disseminate knowledge on heat stress management strategies, including the development of spatially differentiated and gender-sensitive Heat Adaptation Plans (HAP) in the South Asian countries of Sri Lanka (Colombo), India (Surat) and Bangladesh (Rajshahi). For more details, visit <https://www.apn-gcr.org/project/integrating-heat-action-plans-in-the-climate-policy-and-guidelines-for-evolving-gender-sensitive-heat-adaptation-plan-in-cities-in-south-asia/>

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