Integrating Heat Stress Management into Climate Policies and Guidelines for Gender-Sensitive Heat Action Plans in Sri Lanka

Meeting with Colombo Municipal Council

2022.10.07

Participants;

- Dr. R.L.D.S. Wijemuni, Chief Medical Health officer, Colombo Municipal Council
- Dr. Pavithra, Colombo Municipal Council
- Dr. Shiromani Jayawardena (PhD), Deputy Director Department of Meteorology
- Mr. Rohit Magotra Deputy Director, IRADe
- Ms. Nimisha Jha, Senior Research Analyst, IRADe
- Mr. Damith Samarakoon, SLYCAN Trust
- Mr. Mayantha Madurasinghe, SLYCAN Trust

Meeting overview

- SLYCAN Trust Present the overview and the activities of the project
- Dr. Shiromini presentation on the impacts of heat stress in Sri Lanka
- IRADe Present the previous experience of Irade and the regional component of the project.
- Open Discussion with Colombo Municipal Council

SLYCAN Trust (Damitha Samarakoon)

- Mainly explain the project objectives and activities

Project objectives

- Identifying heat hotspots, key stakeholders, vulnerable populations, and health risks specific to different population groups.
- Disseminating knowledge on heat stress and the development of replicable, spatially differentiated, gender-sensitive, and inclusive heat adaptation plans and guidelines.
- Building capacities of key institutional stakeholders for policy integration and implementation of urban heat stress management, mitigation, and adaptation.
- Developing an effective communication strategy to ensure outreach and knowledge sharing among different stakeholder groups across all levels.

- Developing a country-level factsheet and policy briefs on the topic.
- Enhancing awareness on heat-related impacts of climate change and vulnerabilities and sharing lessons learned and good practices.

Project activities

- Literature review of published research and development of a heat stress fact sheet for
- Colombo Mapping of stakeholders and enabling policy environment for heat stress management in Colombo
- Field survey of vulnerable communities to enhance evidence on vulnerabilities and needs
- Key informant interviews and consultations to identify and validate gaps and needs
- Capacity-building sessions with key government stakeholders
- Training of trainers and development of capacity-building module or toolkit
- Establishment of working group and national level workshop on heat action plans

Dr. Shiromani Jayawardena (PhD), Director; Weather forecast, Department of Meteorology

- Mainly focus on heat waves, possible early warning methods and heat health action plans for Sri Lanka.
- Now Sri Lanka is experiencing extreme heat conditions due to the high humidity level in Sri Lanka.
- April and May can be considered as the hottest months in Sri Lanka.
- In Sri Lanka, occupational heat stress is especially prevalent in the Western Province and North Central Province.
- In particular, urban areas are highly vulnerable to rising temperatures, and temperatures in Colombo city may have already risen by 1.6°C.
- Therefore, heat stress management is an important area to address through policies and plans, including considerations related to extreme heat impacts in vulnerable communities in cities like Colombo.
- Global Warming, Urbanization, Increase of Population and Migrate people to urban areas would cause a high risk of Heat waves in Sri Lanka in the near Future.
- There are less amount of research studies, publications and knowledge products in Sri Lanka due to low impact data

- According to the heat research conducted in Sri Lanka, the increase of temperature for the period 1900 – 2010 was 0.9 degree Celsius and the increase of temperature for the period 1961 – 2010 was 1.4 degree Celsius.
- In Sri Lanka, Heat Alerts started in 2018 by the Department of Meteorology Collaboration with the Health Ministry and Disaster Management Center.

Open Discussion

- This work takes place in the context of a regional project supported by the Asia-Pacific Network for Global Change Research (APN) in India, Bangladesh, and Sri Lanka, with SLYCAN Trust implementing activities in Sri Lanka and contributing to the regional project.
- IRADe will help to identify urban heat islands, vulnerable communities, and how to implement gender inclusive heat action plans in the CMC area.
- Colombo is a city with diverse ethnic composition, economic activities, physical qualities, and incomes, with approximately 50% of the population living in low-income settlements.
- Colombo has a long coastal side. But with the urbanization, heat islands and heat corridors can be seen in the Colombo District.
- Most vulnerable communities are poor people who live in semi permanent settlements in Colombo north, Colombo central and Borella area.
- Knowledge of understanding of the risks of heat waves, current readiness to address them, knowledge of existing heat stress management mechanisms, and strategies for building resilience are very low for people who live in semi permanent settlements.
- Another issue that they are facing is roofing facilities in their households. Most of the houses have old roofing facilities which need to be replaced soon.
- This kind of project has not been done in the past 20 years in Colombo Municipal Area and CMC is interested in coping with the project.
- Colombo Municipal Council has a good public health infrastructure system with health medical
 officers, public health inspectors, midwives and ets. In addition they are providing free medical
 dispensary service for the people who live in the CMC area.
- Dr. Pavithra was appointed by the CMC health department to assist with the future activities of the project.
- Policy makers of the Colombo Municipal council can associate with the research team and help to develop the heat adaptation plan.

- Once the heat map and gender inclusive heat plans are done in Colombo city, it can be replicated with other cities in Sri Lanka such as Kandy, Galla, Matara etc.
- IRADe has already developed the medical stakeholder training manual for managing the heat stress for doctors and medical staff. IRADe would like to share the details of the medical stakeholder training manual and conduct a consultation on that.
- To do the identification of the urban heat islands IRADe would need the boundary maps of the Colombo Municipal Council area and the latest boundary maps of the ward level areas as well as all mortality data in the last 10 years.
- These data can be used to develop the heat stress index in the city
- Identifying the correct threshold would help to develop the proper early warning systems for the city.
- Currently CMC is doing the digital mapping of the Colombo ward demarcations. CMC will be able to share that data with the IRADe and SLYCAN Trust.
- Colombo Municipal council does not have mortality data at the moment. However it can be checked with the Ministry of health and National Hospital Colombo.