## **Webinar on**

# Heatwave Early Warning and

## **Heat Action Plans in South Asia**

Date:

09<sup>th</sup> May 2024

Time:

2:30 PM-5:00 PM (IST) 09:00 AM-11:30 AM (GMT)

**Registration Link:** To register, please click <u>here</u>

**Organised by:** 

South Asia Heat Health Network (SAHHIN)

**South Asian Meteorological Association (SAMA)** 

























### **Background**

The Climate Report AR6 IPCC 2021 states the heating of Earth's surface, around 2.0 °F (1.1 °C) highlights that future global mean temperatures and related heatwaves are only expected to increase (Climate Neutral Group, 2021). According to the Global Climate Risk Index 2020 (Germanwatch, 2018), countries in South Asia are among the most vulnerable globally to the impacts of climate change. The duration of heat waves is also expected to increase 92- to 200-fold (Mishra, et al, 2017). Heat waves impact not only human health but have significant economic impacts also. These impacts are unevenly distributed with poor countries being impacted more. Callahan and Mankin (2022) have reported that increases in heat waves have depressed economic output most in the poor tropical regions. Cumulative 1992–2013 losses from anthropogenic extreme heat were estimated between \$5 trillion and \$29.3 trillion globally. Losses amount to 6.7% of Gross Domestic Product per capita per year for regions in the bottom income decile, but only 1.5% for regions in the top income decile. (Callahan & Mankin, 2022). Between 1979 and 2017 the extreme combinations of heat and humidity doubled in much of India, Bangladesh and Pakistan. In some parts, summer temperatures are projected to increase by 3°C-6°C by 2100 (Raymond et al, 2020). In addition to their profound impacts on health, heat waves also pose significant economic and non-economic impacts affecting livelihoods and productivity.

Heat Action Plans establish a co-ordination framework for planning, preparedness and management of heat waves by government agencies. A well-structured and well-implemented heat action plan focused on vulnerable communities can prevent thousands of heatwave-related mortality cases every year. In India, between 2010-22 there has been a decrease in the heat related mortality from 2040 to 79 people. However, the average heat wave days have increased. This can be attributed to the introduction and adoption of the Heat Wave Action Plans across India, which has helped in reducing heat-related mortality significantly.

















Early Warning Systems (EWS) for heatwaves are a critical component of an effective Heat Action Plan (HAP). Early prediction and warning of heat alerts are important adaptation measures for increasing the preparedness of the agencies/stakeholders involved in the implementation of HAPs. Heatwave forecasting and warning systems can substantially help planners and administrators for effective heat action. The early onset of heatwaves in South Asia calls for a sub-regional action pathway of climate resilience. It is crucial to expand heat resilience across South Asia, particularly in India, which is the most vulnerable country to heat waves in South Asia.

#### About the webinar

The webinar on "Heatwave Early Warning and Heat Action Plans in South Asia" is organised by the South Asia Heat Health Information Network (SAHHIN) and the South Asian Meteorological Association (SAMA). The workshop will bring together subject experts from research institutions, practitioners, and policymakers from the South Asia Region. It will share and deliberate on new knowledge, updates, and issues for enhancing effectiveness of early warning systems and heat wave management in the region.



















#### **About SAHHIN**

Since 2020, the South Asia Heat Health Initiative (SAHHIN) hosted at IRADe has been established as a complementary node of the Global Heat Health Information Network (GHHIN) supported by the World Health Organization (WHO) and the World Meteorological Organization (WMO). SAHHIN is an independent, voluntary, and member-driven forum of scientists, practitioners, and policymakers focused on improving capacity to protect populations from the avoidable health risks of extreme heat in a changing climate. For more details: <a href="https://climateandcities.org/">https://climateandcities.org/</a>

#### **About SAMA**

South Asian Meteorological Association (SAMA) is a non-profit scientific society of nine South Asian countries including Afghanistan, Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal, Pakistan and Sri Lanka engaged in promoting regional cooperation in the field of meteorology and allied sciences. For More details: <a href="https://southasianmet.org/">https://southasianmet.org/</a>

#### **About IRADe**

IRADe is an autonomous advanced research institute and reputed think tank in Asia. Its research covers many areas including energy and power systems, urban development, climate change, and environment, poverty alleviation and gender, food security and agriculture as well as the policies that affect these areas. Over the past 20 years, the multidisciplinary, outcome-oriented perspectives provided by IRADe have formed the basis of numerous policy decisions taken by the Government of India. IRADe has contributed to policy inputs to Govt. of India climate negotiations at the Conference of the Parties (COP). Policy-related suggestions put forward by IRADe in connection with the power and the energy sector, moreover, have made their way into government policies in other South Asian countries also. For More details: <a href="https://irade.org/">https://irade.org/</a>

For more information please write to: <a href="mailto:sama03aug@gmail.com">sama03aug@gmail.com</a>















