

# Atmospheric & Climate Research – Modeling Observing Systems & Services (ACROSS)

March 17, 2021

**In News:** The Cabinet Committee has approved continuation of the nine sub-schemes of the umbrella scheme “Atmosphere & Climate Research-Modelling Observing Systems & Services (ACROSS)” during 2017-2020.

## About ACROSS

- The ACROSS scheme pertains to the atmospheric science programs of the Ministry of Earth Sciences (MoES).
- This scheme is a part of the umbrella scheme “Atmosphere & Climate .
- It addresses different aspects of weather and climate services, which includes warnings for cyclones, storm surges, heat waves, thunderstorms etc.
- Each of these aspects is incorporated as nine sub-schemes under the umbrella scheme “ACROSS” and is implemented in an integrated.
- The ACROSS scheme consists of nine sub-programmes which are multi disciplinary and multi institutional in nature and will be implemented in an integrated manner.
- As the objective of the ACROSS scheme is to provide a reliable weather and climate forecast for betterment of society, the scheme will aim at improving skill of weather and climate forecast through sustained observations, intensive R & D.

## Major components of the scheme

- Gramin Krishi Mausam Sewa (Agrometeorological Advisory Services)
- Augmentation of Aviation Meteorological Services

- Climate Services
- Training in Operational Meteorology
- Capacity Building

## Objectives

- Develop an Advanced Weather Prediction System for block level forecasts, skilful for next 3-5 days and develop advisories for sectors like Agriculture, Disaster Management, Water resources, Power, Tourism and Pilgrimage, Smart cities, Renewable Energy sector and Transport.
- Setting up of District Agro-Met Units (DAMUs) in all the districts of the country for extension of Agromet Advisory Services (AAS).
- To expand the outreach of weather based Agromet advisories to the 94 million farmers through multiple means of communication, collection of feedback and impact assessment of AAS.
- Develop a state-of-the-Art support system for Aviation safety with the automated Aviation Weather Observing System and advanced forecasting tools for all the civil airports in the country.
- Establishing new Aerodrome MET Offices at Greenfield Airports and setting up of automated Heliport Weather Observing & Transmitting System at Heliports, Landing ground and other strategic locations to support the Helicopter and low level flight operation of Indian Air Force, Indian Army and also at important tourist and pilgrimage locations.
- Establish a state-of-the-art Climate Data Centre with integrated advanced climate data services portal for rendering national and regional climate services. The climate data centre will provide a comprehensive set of improved and specialized climate services for the country through upgradation of the existing operational activities of climate monitoring, climate prediction,

climate data management and climate application.

- Provide appropriate climate services to South Asia as WMO recognized Regional Climate Centre (RCC) for the region.
- To upgrade the training infrastructure and facilities to enhance the capacity of the training establishment to bear increased loads of long term ab-initio training courses for new entrants, career progression courses and short term courses in specialized topics, training to the personnel from countries.
- Contributions among WMO, Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES)/ Economic and Social Commission for Asia and the Pacific (ESCAP)/ Global Framework for Climate Services (GFCS) in South Asia etc.