

Union Minister of Jal Shakti Shri C R Patil inaugurates C-FLOOD, a Unified Inundation Forecasting System

C-FLOOD is a web-based platform that provides two-days advance inundation forecasts up to village level in the form of flood inundation maps and water level predictions

Shri C R Patil appreciated the collaborative efforts of CWC, C-DAC, and NRSC in operationalising this state-of-the-art flood forecasting dissemination system

The project marks a transformative step towards strengthening India's flood management and disaster response framework

This initiative executed under the National Supercomputing Mission (NSM) jointly steered by Ministry of Electronics and Information Technology (MeitY) and Department of Science and Technology (DST)



Inauguration of unified Flood inundation Model (FIM) Dissemination portal by Union Minister, Jal Shakti

The Union Minister of Jal Shakti, Shri C. R. Patil inaugurated C-FLOOD, a Unified Inundation Forecasting System collaboratively developed by the Centre for Development of Advanced Computing (C-DAC), Pune and Central Water Commission (CWC), Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR), Ministry of Jal Shakti on today. The inauguration ceremony was held at Shram Shakti Bhawan, New Delhi in the presence of senior officers from Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR), Ministry of Electronics and Information Technology (MeitY) and Department of Science and Technology (DST).

This initiative, executed under the National Supercomputing Mission (NSM) jointly steered by Ministry of Electronics and Information Technology (MeitY) and Department of Science and Technology (DST), marks a transformative step towards strengthening India's flood management and disaster response framework.



C-FLOOD is a web-based platform that provides two-days advance inundation forecasts up to village level in

the form of flood inundation maps and water level predictions. The platform will act as a unified system integrating flood modelling outputs from national and regional agencies, offering a comprehensive decision-support tool for disaster management authorities. At present, the system covers the Mahanadi, Godavari, and Tapi river basins, with more river basins to be incorporated in the future.

The C-FLOOD platform uses advanced 2-D hydrodynamic modelling to simulate flood scenarios. The simulations for Mahanadi Basin are run on High Performance Computing (HPC) infrastructure under NSM at C-DAC Pune, with integration of outputs for Godavari and Tapi Basins, which have been developed by National Remote Sensing Centre (NRSC) under the National Hydrology Project (NHP).



On this occasion, the Union Minister directed CWC and concerned agencies to widely popularize the C-FLOOD portal to enhance public awareness and preparedness, and to prepare a comprehensive plan for inundation studies covering all river basins. Inundation forecasts must be promptly integrated into the National Disaster Management Emergency Response Portal (NDEM). Agencies were instructed to improve forecast accuracy through satellite validation and ground-truthing, etc. Additionally, CWC was directed to coordinate closely with C-DAC, NRSC, and other stakeholders to ensure effective implementation and continuous enhancement of the forecasting system.



At last, the Union Minister appreciated the collaborative efforts of CWC, C-DAC, and NRSC in operationalising this state-of-the-art flood forecasting dissemination system, reiterating the Government's commitment towards proactive disaster preparedness and management.

Dhanya Sanal K

Director

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