



Multi-Stakeholder Workshop on Climate Preparedness in Coastal Agro-Farming

One of the month's most significant highlights was the successful organization of a multi-stakeholder workshop titled 'Agro-farming Dialogues on Climate Preparedness and Practices in Coastal Agriculture of South Asia', held on August 6th, 2025, in Kolkata. Supported by the Asia-Pacific Network for Global Change Research (APN) and organized by SAFE in association with PFRI, the workshop focused on bridging critical policy-practice gaps in climate-resilient coastal agriculture.

The event brought together a diverse group of stakeholders, including respected government representative Shri Animesh Mondal, Upadhyaksha of Zilla Parishad, South 24 Parganas, West Bengal, eminent academics Prof. R. Ravi Krishna & Prof. Sachin S. Gunthe from the Center for Atmospheric and Climate Sciences (CACS), IIT Madras, as well as practitioners, researchers, and policymakers.

Key findings

- Natural farming is necessary to reduce pollution from chemical fertilizers and protect biodiversity in ecologically sensitive coastal areas.
- The equitable distribution and careful life cycle analysis of new technologies can ensure sustainability.
- Climate induced migration could erode indigenous languages and cultural identities, reinforcing the need for accurate climate scenario modelling to inform socially sensitive policies.
- A community based participatory approach is vital for effective policy making.
- The integration of traditional knowledge with modern innovation, supported by financial tools like the 'Green Credit' initiative is required for just agricultural transition.

Raksha Bandhan



This *Raksha Bandhan 2025*, the Progyan Foundation for Research and Innovation, PFRI celebrated not only the ties between people, but also the enduring bond between communities and nature. On 9 *August 2025*, at our *Maipith Field Research Centre* in the Indian Sundarbans, we marked the occasion by tying Rakhi to mangrove pledging to protect them, as they protect us. We were honored to have **Prof. Sachin S. Gunthe** and **Prof. R. Ravi Krishna** from **CACS–IIT Madras** join the celebration, alongside local community members, our dedicated field staff, and research teams.

This year, Raksha Bandhan became a bond of conservation a reminder that safeguarding nature is as sacred as safeguarding one another. Mangroves, the lifeline of our coastal ecosystems, shield communities from storms, store vast amounts of carbon, support biodiversity, and protect shorelines from erosion. By tying Rakhi to mangroves, we symbolised our unwavering commitment to defend these green guardians from degradation and loss. Through our ongoing work in mangrove restoration, sustainable livelihoods, and climate resilience, we reaffirm our pledge: to protect the mangroves today, so they can protect us tomorrow.

Independence Day



This *Independence Day*, PFRI's *Maipit Research Centres* in the Sundarban came alive with patriotic fervour as the national flag was proudly raised to mark *India's 79th year of independence*. The occasion was a moment of pride and reflection, as staff and community members gathered to honour the nation's journey and pay tribute to the sacrifices that won us freedom.



The celebrations continued with vibrant in-house festivities. A heartfelt staff speech set the tone of reverence, followed by a stirring Shrutinatto performance that highlighted cultural expression. Students of *Snehanagan Nritya Kalakendra* added to the joy of the day with a graceful dance performance, celebrating India's rich heritage through rhythm and movement. To add a touch of excitement, an engaging rapid-fire quiz on India's freedom struggle tested knowledge while strengthening the spirit of unity and learning among participants.



Nature's Invoice: Dharali Pays the Price

The village of Dharali in Uttarkashi district of Uttarakhand was devastated by a terrible flash flood in just a few minutes. Numerous houses, shops, bridges and roads were swept away by the rapid flow of the river. Initially, allegations were made that 'cloudburst' or cloud-breaking rain was behind this disaster. But the data from meteorologists tells a different story.

In meteorology, it is said that if at least 100 mm (10 cm) of rain falls in an hour over a 10 km length and width of an area, it can be called a cloudburst. But in the 24 hours before the disaster, only 9 mm of rain fell in Harsil, 11 mm in Bhatwari and 27 mm in Uttarkashi. Which is far from the definition of a cloudburst.

According to geologists and environmentalists, the main cause of this disaster is man-made infrastructure, especially the Chardham Highway project, which is being built at a cost of Rs 12,000 crore. The construction of this 890 km long road connecting Kedarnath, Badrinath, Gangotri and Yamunotri. 690 hectares of forest land destroyed, 55 thousand trees destroyed, 20 million cubic meters of soil removal.

Cutting such a huge mountain has completely disrupted the balance of nature. In the last few years, 811 landslides have been recorded in the area adjacent to this highway, of which 81% occurred within 100 meters of the road.



Uttarakhand extends from 800 meters to 6900 meters above sea level. The land slopes mainly towards the southwest. There are more than 1200 glacial lakes here, many of which have weak banks and are at risk of erosion. Due to climate change, glaciers are melting rapidly, resulting in an increase in the number and size of lakes. This is an alarming sign for this region.

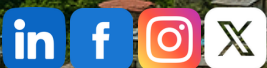
The soil of Uttarakhand contains brittle layers rich in phyllite and mica. These layers have been exposed by mountain erosion, which has led to major landslides even with a little rain.

To increase tourism, a large number of hotels, shops, resorts and other structures have been built along the riverbed. When the river widens during the monsoon or when the flash flood subsides, all these structures are washed away instantly, increasing the level of damage. Video footage from Dharali also shows that numerous structures built on the riverbed are being washed away like straw.

In 2013, after the Kedarnath disaster, the Chorabatal lake broke its banks and a huge amount of water came down, washing away numerous structures built on the riverbanks. Uttarakhand did not learn any lessons from that terrible experience. The situation in 2025 has proven that if riverbed construction and hill cutting continue, history will repeat itself.

According to geologists, similar disasters can happen at any time in areas of Uttarakhand like Harsil, Uttarkashi, Barkot, Rudraprayag, Devprayag, Chamoli, Guptkashi, etc. If unplanned development and environmental neglect are added to natural disasters, the danger increases manifold.

This devastation of Dharali is not just the result of natural forces; rather, it is the combined result of human ignorance, construction by cutting down mountains, deforestation, uncontrolled construction on river banks, and the fragility of the landscape. If we do not take precautions now, a bigger disaster for Uttarakhand is only a matter of time.



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