



Ahllesh Yadav @yadavahllesh
The BJP government should clarify whether the money from the massive scam of 'digital arrest' that goes into certain accounts cannot be investigated, or is not investigated due to some collusion.



Mahua Mottra @MahuaMottra
Supreme Court directs BEC/SVEEP to accept Aadhaar as 2nd proof of identity in Bihar SBC. Vote Choti & mass disenfranchisement just got more difficult for ECI!



Amir Maity @amirmaitiya
Aadhaar is proof of identity, not citizenship. The ECI is the final arbiter of who qualifies to be on the voter roll.

Water scientist says immediate need is to strengthen adaptation policies, while 'Waterman of India' calls it a man-made disaster

'Can't control weather extremes, but can reduce our vulnerability'

'Must have political will for climate change mitigation'

R Ashwini Ranade, Senior Scientist at the Centre for Cryosphere and Climate Change Studies, National Institute of Hydrology, Roorkee, cautions in an interview with **Harpreet Bajwa** that the Himalayas are now also prone to occurrences of Compound Extremes. Region-specific early warning systems and strong adaptation and mitigation policies are the only answer, she asserts. **Excerpts:**



Do the extreme weather events across the hill states constitute a climate emergency?

I would not call it a climate emergency, but yes, climate change is the main driver. Clear changes in rainfall patterns and intensities are evident. However, the real emergency is to strengthen adaptation and mitigation policies. Since we cannot control the occurrences of extremes, we need these policies to reduce our vulnerability.

Have past events spurred climate change?

Extreme events themselves do not accelerate climate change, but they are strong indicators of the climate change we are currently experiencing. Not only are natural factors involved, but anthropogenic factors are also playing a major role.

For example, recent instance

Himalayas are a very fragile system. Not all slopes in the Himalayas are suitable for infrastructure, and in unstable areas, development should be completely restricted.

In Punjab, the flood situation also occurs because of the release of excess water from upstream dams. To control this water, various embankments are constructed. However, many of them are breached, and numerous dry channels are encroached upon.

List the specific reasons for the climate calamities.

In the Himalayan region, the primary reason for climate change is global warming. A rise of about one degree in temperature leads to nearly a 7 per cent increase in atmospheric moisture, and this increased moisture results in heavier rainfall. Another reason is the alteration in monsoon patterns due to global climate change. Now, the Himalayas are also prone to occurrences of Compound Extremes.

In Punjab, there are three major reasons. First, persistent rainfall often occurs since the second week of August. Second, heavy rainfall in Himachal Pradesh increases inflows in the Sutlej, Beas, and Ravi rivers, which flow downstream into Punjab. Third, encroachments on dry channels and the weakening and breaching of em-

bankments worsen flooding by obstructing natural drainage.

Do we need a national plan for climate change?

The government is already developing a national adaptation plan for climate change, as well as plans for various sectors, including agriculture, water, health, and energy. Our institute is also contributing to these efforts.

Is it a collective failure on the part of scientists, weather and agriculture experts, state governments, and the Centre?

I would not call it a collective failure, because everyone is working in their own domain—scientists are identifying causes and solutions, and governments are investing significant resources in planning and policies. The real issue is the lack of coordination among these different agencies.

What immediate and long-term measures would you suggest?

We need to develop early warning systems, define the roles of the public and private sectors, build resilient water supply systems and energy infrastructure and convince people to relocate from unsafe zones.

AL Purush (Waterman of India), **Dr Rajendra Singh**, the renowned river rejuvenator and environmentalist and recipient of the Stockholm Water Prize and Earth Repair Award, tells **Harpreet Bajwa** that political will is needed to implement adaptation and mitigation policies for climate change, besides putting in place early warning systems. **Excerpts:**

Is this a climate emergency, given the recent extreme weather events?

This is a climate emergency created by our education system. Our system has various definitions of development. This development led to the displacement of our natural knowledge system, followed by destruction and disaster. This disaster and its impact on the education system are causing cloud bursts and heavy rainfall in the Himalayan region. I am in the highest regions in Leh, and one can see the effects of climate change. So, there is an increase in climate refugees. People from the Himalayan region are migrating to cities as concrete constructions are now being built in this region.

Isn't this a man-made tragedy?

I can say, based on my 50 years of experience in nature conservation and management of water and soil, that this disaster is completely man-made. We are working against nature, and it never forgives us. These disasters are occurring due to unplanned development. In the name of development, we ensure that more disasters occur.

Do you think the events of



the recent past has fast-forwarded climate change?

Climate change began a few decades ago, but it has now accelerated due to a range of factors. For example, in the Himalayan region, corporations have established mega projects, drawing people to work in this fragile landscape.

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Can you list the reasons for

the calamities in the Himalayan region?

This is all due to "greedy development". They are destroying nature, cutting mountains, building all-weather roads, and undertaking infrastructure projects, including dams. This region cannot take such big projects. In the name of this development, we are creating disaster in the Himalayan region. The political leaders are not listening to the people, experts, and ecologists.

Do we need a national plan for climate change?

We need national, regional, and local plans. We have not yet created an agro-ecological and climatic diversity-based map. The government has not yet considered a geo-cultural map. No map or design has been created so far to help us avoid such disasters. Also, plans for agro-ecological boundaries are needed.

Can we say it is a collective failure of all stakeholders?

Politicians are not listening to scientists, engineers, and planners, the latter claim. On the other hand, the political class blames them for not informing them in a timely manner about what can be done. Each of them is blaming the other. However, I will say that the necessary political will is not there. It is a complete failure.