

# Climate Must Become A Poll Agenda

Latest IPCC report is another big warning to India's political leaders

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The latest report from the Intergovernmental Panel on Climate Change (IPCC) cautions that humans and natural ecosystems are now pushed beyond their adaptation limits due to climate change. India is highly vulnerable and will need a transformational climate action that cuts across sectors and regions to reduce substantial economic losses and damage to lives and biodiversity. A transformational climate action would require political will and administrative implementation at all levels, from panchayats to state and national levels. We would need a collective effort involving citizens, institutions and infrastructural redesign to reduce the risks from extreme weather events like flooding, cyclones, sea-level rise, heatwaves and droughts.

The IPCC report says that vulnerability and inability to adapt are more in regions where unsustainable ocean and land use, inequity and marginalisation are large. It says that up to 3.6 billion people living in this context are threatened. This is true for most of South Asia, surrounded by rapidly changing seas and mountains.

## Immediate, integrated and transformational climate action

While we cannot eliminate the multiple risks that global warming presents to ecosystems and humans, the report explicitly throws a ray of hope at us. Immediate actions that limit global warming to 1.5°C would substantially reduce losses and damages related to climate change that would otherwise be disastrous at higher warming levels.

The current report gives clear indications of what we lack with adaptation and how we can advance towards reducing multiple climate risks. First, many adaptation measures now are quick fixes and therefore reduce long-term benefits. We need transformational adaptation to reduce the root causes of vulnerability by shifting systems away from unsustainable trajectories. Second, adaptation requires working across sectors and regions at different levels. Integrated, multi-sectoral



Perilous climate change is upon us

solutions that address climate risks considering social inequities increase the effectiveness of adaptation.

## Pushing the limits of adaptation

In many cases, soft limits of human adaptation have been reached due to lack of financial support or adaptation measures. For example, coastal villages of India under imminent threats due to cyclonic storm surges, flooding, coastal erosion and depleting fisheries are those communities with low income. Hence the ability to relocate depends on the political and financial support of the local government. In these cases, risks can be reduced by addressing financial, governance and policy constraints for human adaptation.

For some ecosystems, hard limits to adaptation have reached, where any foreseeable measures in the future will not help. For example, many species, including humans and food crops like rice and wheat, have thermal limits to survival. Increased heatwaves, droughts and floods are already exceeding the tolerance thresholds of plants and animals, driving mass mortalities in trees and corals. They have exposed millions of people to acute food and water insecurity, especially in Africa, Asia, Central and South America, on Small Islands, and the Arctic.

Restoring degraded ecosystems and conserving 30-50% of the land, freshwater and oceanic habitats, can help achieve a sustainable future, but that requires adequate finance and political support.

## Political commitment

The IPCC writes in detail about the requirement for political commitment and mobilisation of adequate financial resources. Climate change is still not a critical factor determining the electoral outcome in India. However, India hosts the largest population that is under threat on a daily basis to rising cyclones, floods, rising sea levels, heatwaves and droughts. It is high time that climate change is a top priority on electoral charts. India needs climate-change-aware administrators and policymakers at the panchayat, district, state and national levels.

Though climate change is global, the impacts and adaptation measures are local. For example, impacts of climate change are aggravated during floods and landslides due to the way we manage our hills, forests and rivers. States might need to strengthen and implement their land-use policies. Political and administrative will is a must if India is working towards sustained adaptation.

## Collective action

Tackling the different challenges due to climate change requires collective action – governments, private sector and communities – should work together to prioritise risk reduction. Local citizens can work with panchayats, schools and colleges, engineers and scientists to assess the risks and monitor weather events. Starting climate action at schools is a good option, by equipping each school with rain gauge and temperature-humidity sensors. The cost will be between Rs1,000-7,000 per school. If we can install solar panels and rain-water harvesting and recharging in these institutions, that will be the next step towards climate action and mitigation – and will ensure energy and water security too.

*The writer is a climate scientist at the Indian Institute of Tropical Meteorology and a lead author, contributor and reviewer of recent IPCC reports*