India’s climate imperative

Why in news?

India still attributes the heatwave in Rajasthan, Uttar Pradesh, Gujarat, and New Delhi to the wrath of Mother Nature rather than acknowledging the anthropogenic global warming.

What has been the issue?

- In the absence of COVID-19, climate change-induced disasters would have been India’s biggest red alert in recent years.
- The heatwave that scorched Rajasthan, Uttar Pradesh, Gujarat, and New Delhi this year; torrential downpours in south India in 2021; and the super cyclone Amphan that battered West Bengal and Odisha in 2020 are symbols of man-made climate change.
- Temperatures over the Indian Ocean have risen by over 1°C since the 1950s, increasing extreme weather events.
- India is the fourth worst-hit in climate migration.
- Heat waves in India have claimed an estimated 17,000 lives since the 1970s.
- Labour losses from rising heat, by one estimate, could reach Rs.1.6 lakh crore annually if global warming exceeds 2°C, with India among the hardest hit.
- India needs a two-part approach: one, to adapt to climate impacts by building resilience against weather extremes, and two, to mitigate environmental destruction to prevent climate change from becoming more lethal.

How climate resilience can be achieved?

- Extreme heat waves hit swathes of India.
- Heatwaves are aggravated by deforestation and land degradation, which also exacerbate fires.
- Agriculture, being water-intensive, does not do well in heat wave-prone areas.
- A solution is to promote agricultural practices which are not water-intensive and to support afforestation that has a salutary effect on

warming.

- Financial transfers can be targeted to help farmers' plant trees and buy equipment, for example, for drip irrigation that reduces heavy water usage.
- Insurance schemes can transfer some of the risks of extreme heat faced by industrial, construction and agricultural workers to insurers.
- Climate-resilient agriculture calls for diversification, for example, the cultivation of multiple crops on the same farm.
- There will need to be more localised food production.
- Weather-based crop insurance would help.
- Floods and storms are worsened by vast sea ingress and coastline erosion in the low-lying areas in the south.
- Southern States need stronger guidelines to avoid construction in locations with drainages.
- It is vital to map flood-risk zones to manage vulnerable regions.
- Environment Impact Assessments must be mandatory for commercial projects.
- Kerala has some flood-resistant houses constructed on pillars.
- Communities can build round-shaped houses, considering optimum aerodynamic orientation to reduce the strength of the winds.
- Roofs with multiple slopes can stand well in strong winds, and central shafts reduce wind pressure on the roof by sucking in air from outside.

How can climate change be arrested?

- Leading emitters, including India, must move away from fossil fuels. But climate mitigation everywhere is painfully slow, because of a lack of political will.
- India has made slow progress in choosing 2070 as its target for net zero emissions.
- India gains from being part of the Glasgow declaration on forest protection that 141 countries signed in 2021.
- Management of dams can exacerbate glacier lake outbursts and floods. Nearly 295 dams in India are more than 100 years old and need repairs.
- In stemming landslides in Uttarakhand, regulations must stop the building of dams on steep slopes and eco-fragile areas, as well as the dynamiting of hills, sand mining, and quarrying.
- Dams in the southern States can moderate floods, but only if operated year-round to anticipate the need to control flows during floods.
- Climate finance is most suited for large-scale global funding from the World Bank, the International Monetary Fund, and the Asian Development

Bank.

- Smaller-scale financing can also be vital: the World Food Programme's funding for Nepal and Bhutan for community-based adaptation and agricultural resilience for vulnerable communities provides an interesting model.
- States can tap into the Union government's resources, financial and technological, from early warning meteorological systems to centrally sponsored climate schemes.
- MGNREGA funds can be used for climate adaptation in agriculture, waste management and livelihoods.
- States could make compensatory payment to local self-government resources being used for climate adaptation.

What is the way forward?

- India's share in disaster management should be raised to 2.5% of GDP.
- Adaptation alone will not slow climate damages if the warming of the sea level temperatures is not confronted.
- A big part of climate action lies in protecting and expanding forest coverage.
- Regulation needs to be tightened and enforced to ensure forest protection while acquiring land.
- For public pressure to drive climate action, we need to consider climate catastrophes as largely man-made.

Reference

1. https://www.thehindu.com/opinion/op-ed/indias-climate-imperative/article65654280.ece