



Current Affairs of the Day

GS Paper III

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Centre moves to redact retrospective tax law

The government took the first step towards doing away with the contentious retrospective tax law of 2012, which was used to raise large tax demands on foreign investors such as Vodafone and Cairn Energy, and blamed for vitiating India's investment climate — less than a month after Cairn Energy secured an order from a French court to freeze India's assets in Paris.

Retrospective tax clauses

1. Union Finance and Corporate Affairs Minister Nirmala Sitharaman introduced the Taxation Laws (Amendment) Bill in the Lok Sabha to nullify the relevant retrospective tax clauses that were introduced in 2012 to bring past indirect transfer of Indian assets under the ambit of taxation.
2. As per the proposed changes, any tax demand made on transactions that took place before May 2012 shall be dropped, and any taxes already collected shall be repaid, albeit without interest.
3. To be eligible, the concerned taxpayers would have to drop all pending cases against the government and promise not to make any demands for damages or costs.

No plan to house Indian military base on Agalega island: Mauritius

Mauritius has denied a report that it has allowed India to build a military base on the remote island of Agalega.

Highlights:

1. Earlier this week, news broadcaster Al Jazeera reported on the construction of an airstrip and two jetties to house an Indian military base on Agalega, located about 1,000 km north of the archipelago's main island.
2. The Mauritian government denied any plans to allow a military installation on the Agalega island, home to about 300 people.

Chagos island

1. The report raised fears of a repeat of the 1965 decision by Britain to separate the Chagos Islands from Mauritius and set up a joint military base with the United States on Diego Garcia, the largest of the isles.



2. The decades-old move has sparked protests by Chagossians, who accuse Britain of carrying out an “illegal occupation” and barring them from their homeland.
3. Britain insists the islands belong to London and has renewed a lease agreement with the United States to use Diego Garcia until 2036.
4. Diego Garcia played a strategic role during the Cold War, and then as an airbase, including during the war in Afghanistan.

Nature-based solutions hold the key to transform our cities into resilient spaces

Nature-based solutions are emerging as powerful allies to address global interlinked challenges of climate change, biodiversity loss, and degradation of ecosystems in urban areas. Several cities have initiated a shift in their urban planning approach by harnessing the power of nature to provide environmental and societal benefits.

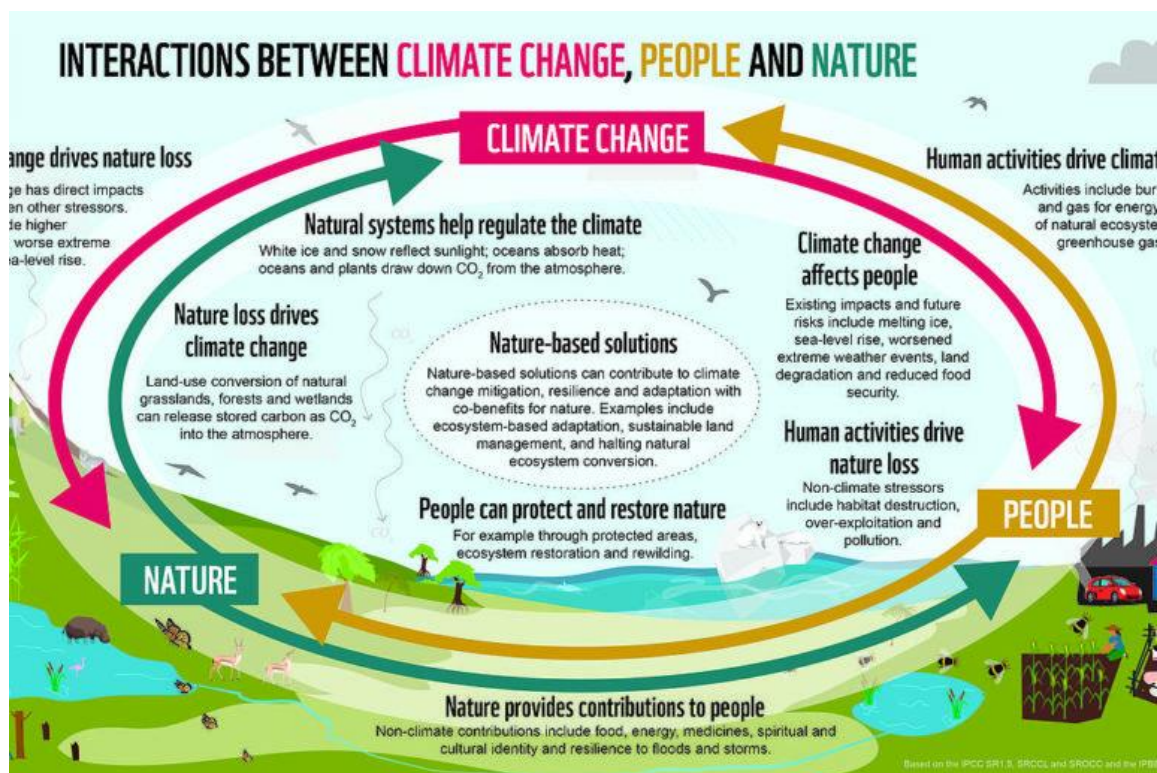
Urban Climate Resilience:

1. In recent times, the increased intensity and frequency of climate-related hazards have often disrupted urban economies and infrastructure. Further, rapid urbanisation leading to higher demand for energy and water, higher carbon emissions, air pollution, and adverse health impacts, makes it imperative for cities to adopt climate-resilient and low carbon development plans.
2. Several cities are harnessing the power of nature to address the impacts of climate change, and adapting urban planning approaches towards a deeper focus on blue (like rivers, lakes, and wetlands) and green (such as trees, parks, gardens, playgrounds and forests) spaces.
3. Nature-based solutions can augment the efforts to reduce urban greenhouse gas emissions and help us adapt to the impacts of climate change.
4. Besides addressing climate-related impacts, such solutions provide multiple co-benefits in terms of improving air and water quality, enhancing green cover and biodiversity, while creating healthy and sustainable living spaces.



Nature-based solutions

1. Nature-based solutions (NbS) are defined by the International Union for Conservation of Nature (IUCN) as “actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”.



2. The importance of nature has been re-emphasised and reinforced in the current pandemic situation as the world collectively experienced the close interaction between human health and the health of the planet.
3. There is now a concerted call for policymakers to integrate nature into COVID-19 response and recovery efforts, while fully incorporating nature-based solutions into future climate goals.

Nature-based solutions in India:

1. In India, several initiatives undertaken in urban areas demonstrate the role of nature-based solutions in climate-proofing cities.



2. Last year (2020), the Indian government launched the Nagar Van Scheme to develop 200 urban forests across the country in the next five years, with a renewed focus on people's participation and collaboration between state and non-state actors.
3. Interestingly, the inspiration was the success of Warje Urban Forest in Pune, also called 'Smruti Van,' which was a noteworthy example of a collaborative effort between the Forest Department, civil society, and the corporate sector to revive green cover in the city.
4. In the past few years, cities such as Mumbai, Bengaluru, and Chennai have developed Miyawaki forests, an afforestation technique that uses native species to grow multi-layered, dense forests.
5. Thereafter, several other municipal authorities and organisations have adopted this concept. Delhi's seven biodiversity parks around the Yamuna floodplain and the Aravalli landscape have led to a healthy restoration of the city's native flora, and fauna. There are similar efforts to conserve urban biodiversity in Indian cities.
6. The East Kolkata Wetlands being the world's only fully functional organic sewage management system has been treating over 900 million litres per day (900 MLD) of Kolkata's wastewater resulting in multiple direct and indirect benefits such as sequestering carbon, mitigating environmental degradation, reducing public health risks, and yielding livelihoods.
7. Since Bengaluru got its first vertical garden, several more have been developed in cities across the country to lower the pollution levels and beautify urban spaces. Kochi is one of the first cities in India to prepare an informed and participatory local biodiversity strategy and action plan.

The role of hydropower projects in development and disasters in Uttarakhand

UK Tragedy of Aspirations:

1. When Uttarakhand was formed in 2000, it was envisaged as an 'Urja Pradesh' (power state) because of its high hydropower potential.



2. However, hydropower projects in the state have escalated social, economic and ecological vulnerability to natural disasters.
3. Uttarakhand has an estimated potential of 24,551 MW of hydropower but has been able to identify and process projects of only about 16,000 MW capacity so far. The state is still dependent on importing power generated outside the state.
4. Over the years, more than 100 hydropower projects were initiated in different river valleys of the state. However, the planning, construction and operation of many of these projects are not free from cultural, ecological and economic controversies. Recently, these projects were also accused of escalating the impact of natural disasters as well.
5. The state imports more than 50 per cent of its energy demand from other states to meet its demand-supply gap.

IPCC AR6 and its relevance to India

Every few years, the IPCC produces an Assessment Report, which examines all the scientific literature related to climate published in the years since the last report. Even though the IPCC assessments report are global in scale, it will help India realise where its development and environment conservation trajectories are moving vis-à-vis these climate change realities.

The Assessment Report process involves the publication of the reports of three working groups –

- Working Group I, dealing with the physical science basis of climate change;
- Working Group II, dealing with impacts, adaptation and vulnerability; and
- Working Group III, dealing with the mitigation of climate change.

How did the IPCC start and what is its purpose?

1. The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) to provide political leaders with periodic scientific assessments concerning climate change, its implications and risks, as well as to put forward adaptation and mitigation strategies.



2. In the same year, the UN General Assembly endorsed the action by the WMO and UNEP in jointly establishing the IPCC. Currently, it has 195 member states. The IPCC published its First AR in 1990, second in 1995, third in 2001, fourth in 2007 and the Fifth Assessment Report in 2014.
3. The reports are significant and often become the foundation for discussion during global climate summits. For instance, the AR5 was taken as a basis for discussions at the Paris Conference of Parties of 2015, which resulted in the Paris Agreement.
4. In addition to the ARs, the IPCC also prepares special reports dealing with specific subjects. The most famous recent one was on Global Warming of 1.5 degrees C of 2018.
5. There was the Special Report on Ocean and Cryosphere (2019) and also Climate Change and Land (2019). Of special relevance to India was the Special Report on Managing the Risks of Extreme Events and Disasters of 2012.

The Assessment Report coming this year is significant as the year 2020 was considered a milestone in international climate change negotiations as it is the year in which the 2015 Paris Agreement became operational, and the CoP of 2020 was considered as the transition point between the Kyoto Protocol and the Paris Agreement.

What is the significance of IPCC assessment reports for India?

1. Like with the other parts of the world, in the report of the AR6 Working Group I will give a picture of what are the climate change realities for India.
2. So, even though the IPCC AR assessments are global in scale, it will help India realise where its development and environment conservation trajectories are moving vis-à-vis these climate change realities.
3. Since, in the past few years, extreme weather events such as floods and droughts have been occurring with increased frequency and intensity, the report will give the trend for the coming years for India, which is considered a crucial player in the global climate change debate.
4. India has also had a paradigm transition since the Paris Agreement. In the pre-Paris Agreement scenario, India did not have emission reduction targets.



5. Although voluntary, declared through the Nationally Determined Contributions, India now has some form of a target as it promised to reduce the emissions intensity of its GDP by 33-35 per cent by 2030 from 2005 levels.
6. According to the INDCs, India promised to adopt a climate-friendly and cleaner path, achieve about 40 per cent cumulative electric power installed capacity from nonfossil fuel-based energy resources by 2030, create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030.
7. India also promised to better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, the Himalayan region, coastal regions, health and disaster management.

Now, six years later, the Working Group I report will help India mark its trajectory against the climate reality. The Working Group II report will help identify vulnerabilities and adaptation possibilities. And the Working Group III report will help India fine-tune its mitigation strategies.

Climate emergency: Tipping points are already here, scientists warn

Climate emergency: Limited time available to shift priorities to alleviate climate crisis

Time's winged chariot hurrying near:

1. Several key metrics of planet Earth have already crossed the tipping points, according to a new study part of a project signed by over 13,900 scientists from 153 countries.
2. The West Antarctic and Greenland ice sheets, warm-water coral reefs and the Amazon rainforest were particularly highlighted in the analysis for the record deterioration of their conditions.
3. In 2019, more than 11,000 scientist signatories talked about the need for declaring a climate emergency. They emphasised that conservation endeavours have to be scaled up immensely to avoid unprecedented suffering due to the climate crisis.



4. Now, as many as 18 of the 31 vital signs/variables that the researchers tracked reached new most dangerous levels.
5. Ruminant world livestock numbers soared past 4 billion for the first time and exceeded the mass of all humans and wild animals combined, the authors observed. This rise in numbers means a rise in deforestation as forests are cut to make way for agricultural land and livestock ranches.
6. Annual forest loss at the Brazilian Amazon reached a 12-year-high of 1.11 million hectares destroyed between 2019 and 2020. Forest degradation due to fires, drought, logging and fragmentation has transformed the region to act as a carbon source rather than a carbon sink.

Manifestations:

1. An alarming rise in extreme weather events is being witnessed every year, the authors noted. The year 2019 was categorised by the World Meteorological Organization as the conclusion of a decade of exceptional global heat and high-impact weather.
2. From tropical cyclones to floods, heavy rainfall and droughts — 2020 saw it all. The most dramatic was the record-breaking Atlantic Hurricane Season.
3. In India, the annual mean land surface air temperature was above normal in 2020, the India Meteorological Department said in its statement on the Climate of India during 2020. This made 2020 the eighth-warmest year on record since 1901.

Even though solar and wind power consumption increased by 57 per cent between 2018 and 2021, this is 19 times lower than fossil fuel consumption, the report showed.

The researchers stressed a change of course in six areas:

- Fossil fuel elimination and shift to renewables
- Slashing black carbon, methane and hydrofluorocarbons
- Restoring biodiversity
- Switching to plant-based diets, reducing food waste and improving cropping practices
- Switching to ecological economics and a circular economy
- Lowering fertility rates