

ECOLOGY & ENVIRONMENT

- ❖ **Why have countries failed to meet their biodiversity goals?**
- ❖ **Context:** Delegates from 196 countries, Parties to the United Nations Convention on Biological Diversity (CBD) are meeting in Montreal, Canada from December 7-21 with the aim to hammer out a new global agreement on halting environmental loss.
- Many of the 24 conservation targets under discussion at the 15th Conference of the Parties (COP15) aim to avoid past mistakes and improve on the world's last set of conservation goals — the Aichi Biodiversity Targets that expired in 2020. No single country met all 20 Aichi Targets within its own borders, according to a September 2020 UN assessment.
- ❖ **About Aichi Targets:**
- The Aichi Targets, adopted during the 2010 CBD summit in Nagoya, located in Japan's Aichi prefecture, included goals such as reducing deforestation by at least half during the coming decade and curbing pollution so that it no longer harmed ecosystems. Many of the targets, however, included vague language and did not hold countries to a specific action.
- After parties adopted the Aichi Targets, they were expected to devise their own national biodiversity strategies that would mimic the goals laid out by Aichi. Nearly all parties created these strategies, but most were never fully implemented.
- ❖ **To what extent were the Aichi Targets met?**
- The most notable Aichi objective — and one of the few to include a numerical goal — aimed to protect or conserve 17% of all land and inland waters and 10% of the ocean by the end of the decade.
- While some progress was made toward that goal, the world ultimately fell short. Today about 15% of the world's land and 8% of ocean territories are under some form of protection, though the level of protection varies.
- About 10% of the targets saw no significant progress, the assessment found. Six of the targets, including the land and ocean conservation target, were deemed "partially achieved".
- "At a global level, none of the Aichi Biodiversity Targets were met or achieved, In the end, Aichi was deemed a failure by the United Nations and the CBD secretariat called on parties to come up with another guiding document to direct conservation efforts through 2030 and beyond.
- ❖ **But why did the Aichi Targets fail?**
- A lack of clearly defined metrics by which to gauge progress made the Aichi goals tough to implement. Aichi was made of aspirational targets, which was great for enabling people to do a lot, but not great for communication.
- Monitoring and reporting success was also a big issue with Aichi. Countries largely failed to update others on the progress they were or were not making.
- Lack of robust monitoring, planning, reporting and review framework made the Aichi framework so ineffective.
- ❖ **Issue of Finance:**
- A lack of financing to help developing countries meet the Aichi goals was also an obstacle to their success — a point that has led negotiators to include financing plans within the draft being negotiated at the Montreal talks.
- The Global Environment Facility, the primary source of financing for international biodiversity protection, has collected around \$5 billion from 29 countries for the funding period from 2022 to 2026.
- That is hardly enough to make up the \$711 billion funding gap per year estimated by a 2019 assessment by several conservation institutes.
- The Aichi Targets also failed to garner buy-in from governments beyond the environmental ministers who brokered the deal. It's not the matter to be left to the ministries of environment alone. This is one of the lessons to be learnt from the failure of the Aichi Biodiversity Targets.

POLITY & GOVERNANCE

- ❖ **Parliament passes Wildlife Bill**
- ❖ **Context:** Amended Wild Life Bill leaves scope for the transfer of captive elephants and retains the Centre's powers to declare species as 'vermin'. How could live elephant trade, human-wildlife conflict be impacted?
- **The Wild Life (Protection) Amendment Bill 2022**, which was passed by Rajya Sabha, has invited scrutiny on two major issues: the exemption made to allow the transfer of captive elephants, and the sweeping powers given to the Centre to declare species as vermin.
- The legal dilemma over the elephant's status — simultaneously an endangered wildlife species and a prized domestic animal has persisted for long.
- In 1897, the Elephants' Preservation Act prohibited the killing or capture of wild elephants unless in self-defence or to protect property and crops, or under a licence issued by the district collector.
- In 1927, the Indian Forest Act listed the elephant as 'cattle', prescribing the highest fine of Rs 10 for every impounded jumbo in comparison; a cow attracted a fine of Re 1, and a camel of Rs 2.
- The Wildlife (Protection) Act (WLPA), 1972, identified the elephant, along with the bullock, camel, donkey, horse, and mule, as a "vehicle". Given the highest legal protection in 1977, the elephant is the only animal in WLPA's Schedule-I that can still be owned legally — by means of inheritance or gift.
- ❖ **Turning the clock back:**
- In 2003, Section 3 of the WLPA prohibited trade in all captive wildlife and any (non-commercial) transfer across state boundaries without permission from the concerned chief wildlife warden.

- The WLP (Amendment) Bill 2021 proposed an exception to Section 43: “This section shall not apply to the transfer or transport of any live elephant by a person having a certificate of ownership, where such person has obtained prior permission from the State Government on fulfillment of such conditions as may be prescribed by the Central Government.
- Along with conservation and animal welfare groups, the Parliamentary Standing Committee headed by Congress leader Jairam Ramesh objected to the blanket exemption, and recommended that it should be limited to temple elephants kept for religious purposes.
- Under pressure, the government modified the exemption but worded the amended clause vaguely to allow the “transfer or transport of a captive elephant for a religious or any other purpose by a person having a valid certificate of ownership...subject to such terms and conditions as may be prescribed by the Central Government”
- ❖ **Loophole or relief:**
- Critics point out that the prohibition on commercial transfer only drove the live elephant trade underground as traders switched to dressing up commercial deals as gift deeds to bypass the 2003 amendment. The sweeping ambit of “any other purpose” in the present amendment, they say, will empower elephant traders, put wild populations at greater risk of capture, and defeat the very purpose of WLP.
- A counter view is that the 2003 amendment did not benefit captive elephants who suffer when their owners fail to bear the expenses of their upkeep, particularly in the post-Covid scenario, and allowing such owners to transfer their elephants legally to those willing to and capable of looking after the animals is a welcome step.
- ❖ **The vermin conflict:**
- The damage due to crop depredation by wild animals has never been computed. But for lakhs of farmers around the many protected forests, it is the biggest challenge to livelihood, not to mention the occasional threat to life.
- Since 1972, the WLP has identified a few species — fruit bats, common crows and rats — as vermin or nuisance animals that spread diseases or destroy crops and are not protected under the Act. Killing animals outside this list was allowed under two circumstances:
 - ✓ Under Section 62 of WLP, given sufficient reasons, any species other than those accorded the highest legal protection (such as tiger and elephant but not wild boar or nilgai) can be declared vermin at a certain place for a certain time.
 - ✓ Under Section 11 of WLP, the chief wildlife warden can allow the killing of an animal irrespective of its status in the Schedules, if it becomes “dangerous to human life”.
- The state governments took the decisions under Section 62 until 1991 when an amendment handed these powers to the Centre. The purpose was apparently to restrict the possibility of eliminating a large number of animals at a species level as vermin. Under Section 11, states could issue culling permits only locally and for a few animals.
- ❖ **Sweeping and selective:**
- In recent years, however, the Centre has started using its powers under Section 62 to issue sweeping orders declaring species as vermin at even state levels, often without any credible scientific assessment.
- For example, Nilgais were declared as vermin across 20 districts in Bihar for a year in 2015. The Centre cited “large-scale destruction of agriculture” as the ground for declaring monkeys (Rhesus macaque) vermin in Shimla municipality in 2019.
- The issue has since entered the realm of Centre-state politics. Since last year, Kerala’s requests for declaring wild boars as vermin have been turned down repeatedly by the Environment Ministry.
- That is why the House was divided on the issue, with members from Kerala highlighting the growing number of wild boar attacks in the state, and others seeking a more tempered approach in declaring a species as vermin.
- ❖ **To cull or not:**
- Wildlife targets crops either because there is insufficient food inside forests or because fields offer more nutrient alternatives like sugarcane or maize.
- In the first scenario, stopping their access to non-forest food by electric fences, etc. may make them starve and bring down the population over time. Besides, used locally, contraptions such as electric fencing divert animals to the next village and merely shift conflict. Used extensively, it turns forests into fenced-in zoos without enough food.
- In the second scenario, measures such as creating buffer zones so that crops do not stand at the edge of the forest, or promoting non-edible crops, may discourage but not eliminate conflict. Effective compensation schemes work where the damage is reasonable. Elsewhere, the only option is to reduce the number of habitual crop raiders.
- The absence of a legal option has not stopped farmers from secretly hunting ‘problem’ animals. Such unregulated culling encourages a practice that often extends to poaching of non-pest, rare and endangered species.
- Sweeping orders that allow large-scale culling at the species level also promote the same trigger-happy culture. There is no alternative to a site-specific, time-bound approach based on scientific evaluation.

PRELIMS

1. **Three Himalayan medicinal plants enter IUCN Red List**
- **Context:** Three medicinal plant species found in the Himalayas have made it to IUCN Red List of Threatened Species following a recent assessment.
 - ✓ **Meizotropis pellita** has been assessed as ‘critically endangered’.
 - ✓ **Fritillaria cirrhosa** as ‘vulnerable’.
 - ✓ **Dactylorhiza hatagirea** as ‘endangered’.

- **Meizotropis pellita**, commonly known as Patwa, is a perennial shrub with restricted distribution that is endemic to Uttarakhand. The species is listed as 'critically endangered' based on its limited area of occupancy (less than 10 sq.km). The species is threatened by deforestation, habitat fragmentation and forest fires.
 - ✓ The essential oil extracted from the leaves possesses strong antioxidants and can be a promising natural substitute for synthetic antioxidants in pharmaceutical industries.
- **Fritillaria cirrhosa (Himalayan fritillary)** is a perennial bulbous herb. It is reasonable to conclude a decline of at least 30% of its population over the assessment period (22 to 26 years). Considering the rate of decline, long generation length, poor germination potential, high trade value, extensive harvesting pressure and illegal trade, the species is listed as 'vulnerable'.
 - ✓ In China, the species is used for the treatment of bronchial disorders and pneumonia. The plant is also a strong cough suppressant.
- **Dactylorhiza hatagirea (Salampanja)**, is threatened by habitat loss, livestock grazing, deforestation, and climate change.
 - ✓ It is extensively used in Ayurveda, Siddha, Unani and other alternative systems of medicine to cure dysentery, gastritis, chronic fever, cough and stomach aches.
- ❖ **About IUCN:**
- IUCN was founded in October 1948 as the International Union for the Protection of Nature (or IUPN) following an international conference in Fontainebleau, France.
- The organization changed its name to **the International Union for Conservation of Nature and Natural Resources in 1956** with the acronym IUCN (or UICN) with **its headquarters in Gland, Switzerland**.
- To influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.
- IUCN Members include both States and non-governmental organizations.
- Priority Areas of IUCN:
 - ✓ Biodiversity
 - ✓ Climate Change
 - ✓ Sustainable Energy
 - ✓ Human well-being
 - ✓ Green Economy
- **IUCN Red Data Book:** International Union for Conservation of Nature treats threatened species not as a single category, but as a group of three categories: vulnerable, endangered, and critically endangered, depending on the degree to which they are threatened.
- **Critically Endangered species:** Critically Endangered (Cr) is the highest risk category assigned by the IUCN for wild species. Critically endangered species means a species numbers have decreased, or will decrease by 80% within three generations. It is therefore considered to be facing an extremely high risk of extinction in the wild.
- **Endangered species:** Endangered (EN) species is a population of organisms which is at risk of becoming extinct because it is either few in numbers, or threatened by changing environmental or predation parameters. Also it could mean that due to deforestation there may be a lack of food and/or water. It is therefore considered to be facing a very high risk of extinction in the wild.
- **Vulnerable Species:** Vulnerable (VU) species is a species which has been categorised by the IUCN as likely to become endangered unless the circumstances threatening its survival and reproduction improve. It is therefore considered to be facing a high risk of extinction in the wild.
- **Extinct, functionally Extinct and Extinct in the wild:**
 - ✓ A species becomes **Extinct** when the last existing member of that species dies. Extinction therefore becomes a certainty when there are no surviving individuals that are able to reproduce and create a new generation.
 - ✓ A species may become **functionally extinct** when only a handful of individuals survive, which are unable to reproduce due to poor health, age, sparse distribution over a large range, a lack of individuals of both sexes (in sexually reproducing species), or other reasons.
 - ✓ An important aspect of extinction at the present time is human attempts to preserve critically endangered species, which is reflected by the creation of the conservation status "**Extinct in the Wild**" (EW).
 - ✓ Species listed under this status by IUCN are not known to have any living specimens in the wild, and are maintained only in zoos or other artificial environments. Some of these species are functionally extinct; as they are no longer part of their natural habitat and it is unlikely the species will ever be restored to the wild.
- 2. **Pradhan Mantri Surakshit Matritva Abhiyan**
- ❖ **Context:** The Union Minister of State for Health and Family Welfare informs Lok Sabha about the progress of Pradhan Mantri Surakshit Matritva Abhiyan.
- ❖ **Key details:**
- Government of India launched Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) with an aim to provide **fixed-day, free of cost, assured, comprehensive and quality antenatal care every month** universally to **all pregnant women** in their 2nd / 3rd trimesters of pregnancy.
- As part of the campaign, a minimum package of antenatal care services are provided to pregnant women at **Government health facilities** (PHCs/ CHCs, DHs/ urban health facilities etc) in **both urban and rural areas**.

- Using the principles of a single window system, it is envisaged that a minimum package of investigations and medicines such as IFA and calcium supplements etc would be provided to all pregnant women attending the PMSMA clinics.
- Critical component:
 - **Identification and follow-up of high risk pregnancies and red stickers** are added on to the Mother and Child Protection cards of women with high risk pregnancies.
- 3. **Chages in UPI**
- ❖ Context: RBI governor recently announced an additional function for Unified Payments Interface (UPI) platforms.
- ❖ **More about the new changes to UPI:**
- **The current function:**
 - The UPI currently includes functionality to undertake recurring payments and single-block payments.
- **Changes:**
 - It is now being enhanced to allow customers to block funds in their accounts for multiple payments of specific nature.
- **Significance:**
 - This is expected to improve the ease of making payments for online shopping and investments in securities.
 - With the new feature, the merchant can make multiple debits up to a permitted amount.
 - The feature will also be helpful in the purchase of government securities using the RBI's retail direct scheme.
- **Implementation:**
 - Separate instructions will be issued to the National Payments Corporation of India (NPCI) to implement the enhancement.
 - RBI governor also announced an expansion in the scope of Bharat Bill Payment System (BBPS) to include all payments and collections.
- ❖ **About Unified Payments Interface (UPI):**
 - Unified Payments Interface (UPI) is an instant real-time payment system developed by National Payments Corporation of India (NPCI).
 - The interface facilitates inter-bank peer-to-peer (P2P) and person-to-merchant (P2M) transactions.
- **Transfer of funds:**
 - It is used on mobile devices to instantly transfer funds between two bank accounts. The mobile number on the device is required to be registered with the bank.
 - The UPI ID of the recipient can be used to transfer money.
- **Function & regulation:** It runs as an open-source **application programming interface (API)** on top of **Immediate Payment Service (IMPS)** and is regulated by the **Reserve Bank of India (RBI)**.

ANSWER WRITTING

Q: The establishment of smaller states can improve the administrative structure of India but it does not come without a challenge. Examine.

The demand for the creation of smaller states has been one of the most widely debated issues which is based on language, culture, ethnicity, religion etc.

Though the establishment of new smaller states since the independence has fulfilled the aspiration of masses and improved political participation but it has created new challenges and issues regarding inter-state and centre-state cooperation.

Benefits of creating smaller states

- **Improved administration:** Factual analysis of the development report of three newly states in 2000 (Uttarakhand, Jharkhand and Chhattisgarh) and Telangana in 2014 created shows that all of them have shown remarkable annual growth in the development and efficiency in the administration. Getting a state of its own releases the untapped or neglected growth potential of the people with the creation of new small state by getting a control over resources and political power helps people to realise their long neglected dream of development.
- **Better political participation:** the creation of new smaller states leads to greater interaction of political parties with the people thereby making the government more responsible and accountable.
- **economic efficiency:** Political stability that arises from better representation of people creates conducive environment for investment in the region. Thereby encouraging regional economic development.
- **Better development prospects:** it is often argued that smaller states can improve the development indicators such as Human development, gender equality, reduction in maternal mortality rate etc.
- **cultural homogeneity:** Given the greater social heterogeneity of India, there should be higher number of states. When there are too many diverse groups in a large state, conflict emerge. Smaller states with socio-cultural homogeneity can lead to better distribution of resources along with better cooperation.

Challenges in smaller states:

- Different statehood may lead to the hegemony of the dominant community/ caste/ tribe over their power structures. This can lead to emergence of intra-regional rivalries among the sub-regions.
- There is also possibility of increase in the inter-State water, power and boundary disputes.
- Creation of smaller states only transfers power from the old state capital to new state capital without empowering already existing institutions like Gram Panchayat, District Collector, etc. rather diffusion of development in the backward areas of the states.
- There is no proven evidence that smaller states lead to better social indicators. While analysing the socio-economic development of the new states of Jharkhand, Chhattisgarh and Uttarakhand, there is a contrary opinion as well. Uttarakhand continues to be at the end in the Human Development Index.
- Small states do not generate enough revenue for the state, thus are heavily dependent on the central assistance. Creation of new states means establishing new administrative machineries and new institutions which leads to increased revenue expenditure in turn puts pressure on fiscal pressures for the government.

Way forward

- Economic and social viability rather than political considerations must be given primacy.
- It is better to allow democratic concerns like development, decentralisation and governance rather than religion, caste, language or dialect to be the valid bases for conceding the demands for a new state.
- Apart from this the fundamental problems of development and governance deficit such as concentration of power, corruption, administrative inefficiency etc must be addressed.
- Thus, Creation of new states offer possibilities of having better governance structure, greater participation for people, administrative convenience for the State and equitable distribution of resources. But the aforementioned suggestions should be taken into account before taking any consideration of formation of smaller states to ensure good governance and efficiency in administration.

MCQs

1. Consider the following statements.
 1. The Aichi Targets, adopted during the 2010 CBD summit included goals such as reducing deforestation by at least half during the coming decade and curbing pollution so that it no longer harmed ecosystems.
 2. The City of Nagoya located in Japan.
 3. Nationally Determined Contribution (NDC) related to Aichi Target.
 Select the correct statements using the codes below
 - a) 1 and 3 only
 - b) 1 and 2 only**
 - c) 1 only
 - d) 1, 2 and 3
2. Recently Minister of Railways announces a new train service Kashi Tamil Sangamam Express to commemorate the event. Consider the following statement regarding Kashi Tamil Sangamam.
 1. The broader objective is to bring the two knowledge and cultural traditions (of the North and South) closer, create an understanding of our shared heritage and deepen the people-to-people bond between the regions.
 2. It is being organized by the Ministry of Education in collaboration with other ministries like Culture, Textiles, Railways, Tourism, Food Processing, Information & Broadcasting etc. and the Government of Tamil Nadu.
 3. IIT Madras and Banaras Hindu University (BHU) are the two implementing agencies for the programme.
 Select the correct statements using the codes below
 - a) 1 & 2 only
 - b) 1 & 3 only**
 - c) 2 & 3 only
 - d) 1, 2 & 3
3. Consider the following statements regarding recent trends on remittances to India as per the latest Migration and Development Brief (2022):
 1. It reported that remittances to India are set to touch a record \$100 billion in 2022, the highest ever in the world.
 2. Migration and Development Brief is published annually by International Labour Organization (ILO).
 Which of the above statements is/are correct?
 - a) 1 only**
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2
4. Consider the following statements regarding ChatGPT, seen in news recently:
 1. It is an artificial intelligence tool developed by a company founded by Elon Musk and others.
 2. ChatGPT can work like a chat bot but is much more developed than any existing chat bots as it is a Language Model
 Which of the above statements is/are correct?
 - a) 1 only**

- b) 2 only
c) **Both 1 & 2**
d) Neither 1 nor 2
5. With reference to the Unified Payment Interface (UPI), consider the following statements:
1. It is a payment system developed by the National Payments Corporation of India (NPCI).
2. It is regulated by the Ministry of Finance.
3. It is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features.
Select the correct statement using codes given below
a) 1 and 3 only
b) 2 and 3 only
c) 1 and 2 only
d) **All of the above**
6. Concerning Global Environment Facility', which of the following statements is/are correct?
a) **It serves as financial mechanism for Convention on Biological Diversity' and 'United Nations Framework Convention on climate change**
b) It undertakes scientific research on environmental issues at global level
c) It is an agency under OECD to facilitate the transfer of technology and funds to under developed countries with specific aim to protect their environment
d) Both (a) and (b)
7. Which of the following statements regarding Processes under G20 is/are correct?
1. There are 2 parallel tracks- Finance track and Sherpa track- the representatives of which meet throughout the year.
2. Finance track is led by finance ministers and central bank governors of member nations.
3. Sherpa track is led by Sherpas, who are personal emissaries of leaders or heads of governments of G20 states.
Select the correct option using the code given below:
a) 1 & 2 only
b) 2 & 3 only
c) 1 & 3 only
d) **1, 2 & 3**
8. Consider the following statement about appointment of Judges:
1. The President of India appoints the CJI and the other SC judges.
2. As far as the CJI is concerned, the outgoing CJI recommends his successor.
3. For other judges of the SC, the proposal is initiated by the CJI.
4. The CJI consults the rest of the Collegium members, as well as the senior-most judge of the court hailing from the High Court to which the recommended person belongs.
Select the correct answer using the codes given below:
a) 1, 3 and 4
b) 1, 2 and 4
c) 2, 3 and 4
d) **1, 2, 3 and 4**
9. Consider the following statements;
1. Recently, the Report of Longitudinal Ageing Study in India (LASI) was released by the Ministry of Social Justice.
2. As per the recent Report, around 5.2% of senior citizens surveyed reported ill-treatment/abuse.
Which of the statements given above is/are correct?
a) Only 1
b) **Only 2**
c) Both 1 and 2
d) Neither 1 nor 2
10. Consider the following statements with respect to United Nations Security Council (UNSC)
1. It is the only organ of the United Nations that has the power to make decisions that member states are obligated to implement.
2. Each year the UN General Assembly elects five non-permanent members for UNSC, out of 10 in total, for a two-year term.
Which of the statement(s) given above is/are correct?
a) 1 only
b) 2 only
c) **Both 1 and 2**
d) Neither 1 nor 2