



Date – 28 July 2022

India's five wetlands included in Ramsar sites



- Five more wetlands in India have been included in the Ramsar Sites, or Wetlands of International Importance, taking the number of such sites in the country to 54.

New Ramsar Sites:

Karikili Bird Sanctuary (Tamil Nadu):

- The sanctuary is spread over five kilometers in width and is home to cormorants, egrets, gray herons, open-billed storks, darters, spoonbills, white albanese, night herons, grebes, gray pelicans, etc.

Pallikaranai Marsh Reserve Forest (Tamil Nadu):

- The Pallikaranai Marsh is one of the few and last remaining natural wetlands in South India. It covers an area of 250 square kilometers which includes 65 wetlands.

Pichavaram Mangroves (Tamil Nadu):

- One of the last mangrove forests in the country.
- It consists of an island covered with mangrove forests with vast expanses of water.

Sakhya Sagar (Madhya Pradesh):

- Formed by Maniyar River in the year 1918, Sakhya Sagar is situated near Madhav National Park.

Pala Wetlands (Mizoram):

- It is home to a wide range of animals, birds and reptiles.
- Its geographical location comes under the Indo-Burma biodiversity hotspot, hence it is rich in animal and plant species.
- The lake is a major component of Palak Wildlife Sanctuary and supports major biodiversity of the sanctuary.

Ramsar Recognition:

- The Ramsar site is a wetland of international importance under the Ramsar Convention, also known as the 'Convention on Wetlands', an intergovernmental environmental treaty established by UNESCO in 1971 and named after the city of Ramsar in Iran where the convention was signed that year.
- Ramsar recognition is the recognition of wetlands around the world that are of international importance, especially if they provide habitat for waterfowl (about 180 species of birds).
- Conservation of such wetlands and the judicious use of their resources involves international interest and cooperation.
- The Sundarbans in West Bengal is the largest Ramsar site in India.
- India's Ramsar wetlands, 11,000 sq km of the country's total wetland area in 18 states.
- No other South Asian country has as many sites, although this has a lot to do with India's geographical expanse and tropical diversity.

Criteria:

One of nine criteria must be met in order to be a Ramsar site.

- **Criterion 1:** If it contains a representative, rare or unique example of a natural or near-natural wetland type found within the appropriate biogeographic area.
- **Criterion 2:** If it supports vulnerable, endangered or critically endangered species or threatened ecological communities.
- **Criterion 3:** If it supports a population of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.
- **Criterion 4:** If it supports plant and/or animal species at a critical stage in their life cycle or provides shelter during adverse conditions.
- **Criterion 5:** If it regularly supports 20,000 or more waterfowl.
- **Criterion 6:** If it regularly supports 1% of individuals in a population of a species or subspecies of waterbird.
- **Criterion 7:** if it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of the benefits and/or values of the wetland and Types contribute to global biological diversity.
- **Criterion 8:** If it is an important source of food for fish, spawning grounds, nurseries and/or migration routes on which fish stocks depend, either within wetlands or elsewhere.
- **Criterion 9:** If it regularly supports 1% of the population of species or subspecies of wetland-dependent non-avian animal species.

Importance:

- Ramsar Tag helps develop and maintain an international network of wetlands that are critical to human life through the conservation of global biological diversity and the maintenance of their ecosystem components, processes and benefits.
- Sites are protected under strict convention guidelines.

Wetlands:

- Wetlands are ecosystems that are seasonally or permanently saturated or filled with water.

- These include mangroves, swamps, rivers, lakes, deltas, floodplains and floodplains, rice fields, coral reefs, marine areas where low tides do not exceed 6 meters deep, as well as man-made wetlands such as treated wastewater.
- Although they cover only 6% of the ground surface. 40% of all plant and animal species are found or breed in wetlands.

Importance:

Helping in the fight against climate change:

- Wetlands produce CO₂ (carbon dioxide), CH₄ (methane), N₂O (nitrous oxide) and greenhouse gas (GHG) by reducing climate and land-use-mediated GHG emissions and increasing their ability to actively collect CO₂ from the atmosphere Helps in stabilizing the concentration.
- Wetlands also help reduce the risk of disasters such as floods by protecting beaches.

Carbon Storage:

- Wetland microbes, plants and wildlife are part of global cycles of water, nitrogen and sulfur.
- Wetlands store carbon within their tree communities and soil instead of releasing it into the atmosphere as carbon dioxide.

Importance of Peatlands:

- The term 'peatland' refers to peat soils and surface wetlands.
- They cover only 3% of the world's land surface, but store twice as much carbon as forests, thus playing an important role in meeting global commitments on climate crisis, sustainable development and biodiversity.
- Peatlands, one of the world's largest carbon reserves, are scarce in India and require urgent attention.

Paradise for Migratory Birds:

- Millions of migratory birds visit India and wetlands are important for this annual event.

- Ecologically dependent on wetlands, migratory waterfowl connect continents, hemisphere cultures and societies through their seasonal migration.
- The diversity of wetland communities provides essential habitat for birds.

Cultural and Tourism Importance:

- Wetlands are also closely related to Indian culture and traditions.
- Loktak Lake in Manipur is revered by the locals as “Ima” (Mother), while Khechopalri Lake in Sikkim is popularly known as “Lake of Wishes”.
- The North Indian festival of Chhath Puja is one of the most unique expressions of the association of people, culture, water and wetlands.
- Dal Lake in Kashmir, Khajjiar Lake in Himachal Pradesh, Nainital Lake in Uttarakhand and Kodaikanal in Tamil Nadu are popular tourist destinations.

Hazard:

Human Activities:

- According to the Global Assessment of the Intergovernmental Science-Policy Forum on Biodiversity and Ecosystem Services (IPBES), wetland ecosystems are most threatened by human activities and global warming.

Urbanization:

- Wetlands located near urban centers are facing developmental pressure due to increase in residential, industrial and commercial facilities.
- In the case of sea level rise in areas surrounded by urban wetlands, the increase in coastal pressure can eventually lead to the loss of wetlands.

Climate change:

- The vulnerability of wetlands to climate change and associated factors and pressures is highly likely to increase.
- Rise in temperature, change in rainfall, increase in frequency of storms, droughts and floods, increase in atmospheric CO₂ concentration and rise in sea level can also affect wetlands.

Adverse effect on adaptability:

- The adaptability of wetlands is also likely to decrease due to the potential for adverse effects on ecosystems.
- Building aquifers to increase the storage of fresh or fresh water, for example in upper reaches of the river, can further increase the risk of salinization in coastal wetlands.

Swadeep Kumar

Ecotani / Despite concerns, the Cheetah project is worth pursuing



- Cheetah is the fastest land animal which was declared extinct in India in the year 1952. Now once again a plan is underway to bring him to India, under which he will be rehabilitated in the Kuno-Palpur National Park (KNP) in Madhya Pradesh. These African cheetahs are being brought under an inter-continental transfer project between India and Africa (mainly from South Africa and Namibia).
- Plans to bring cheetahs to India, initially from Iran and now from the African continent, have been going on for decades and have been controversial enough. Many conservationists in India are skeptical of the plan's success and fear it will divert attention away from the conservation of other endangered species in need of relocation, such as the Asiatic lion.

India's rationale behind the return of the cheetah and the associated challenges:

Biological Purpose:

- To reestablish its ecosystem function role in representative areas of the cheetah's former habitat and contribute to the global effort towards the conservation of the cheetah as a species.
- After bringing back the cheetah, India will become the only country where all the **five members of the 'Big Cat' species** – tiger, lion, panther, snow leopard and cheetah will be present.

Increase in livelihood options:

- The reintroduction of cheetahs will enhance livelihoods for local communities in and around those areas through increased revenues from ecotourism and related activities.

Sustaining the food chain:

- Apex predators control all levels in the food chain and are considered the umbrella species for the food chain (Umbrella species).
- Cheetah may prove to be a key and umbrella species for mobilizing resources to restore open forest ecosystem and restore balance in food web.

Climate Change Mitigation:

- It will enhance India's capacity for carbon sequestration through ecosystem restoration activities in cheetah conservation areas and thereby contribute to global climate change mitigation goals.

Reasons for the extinction of cheetahs in India:

- The cheetah in India has been recorded in history since before AD. Records of cheetahs being caught date back to the 1550s.
- A decrease in the level of genetic diversity due to a historical genetic bottleneck, resulting in its high infant mortality rate in the wild and its low ability to breed in captivity were some of the major factors in its extinction.

Hunting Entertainment:

- For centuries, cheetahs (both male and female) were widely and continuously captured from forested areas for hunting purposes.
- Detailed accounts of its contact with humans are available since the 16th century when it was recorded by the Mughals and other kingdoms of the Deccan.

'Bounty Killing':

- The British increased the species' crisis by announcing a reward for killing it in the year 1871.
- The final phase of its extinction was completed with the end of British colonial rule.
- It is recorded that the last remaining cheetahs were killed in India in 1947 and were officially declared extinct in 1952.

Challenges associated with relocation of cheetah to India

Transition from enclosure to forest area:

- An important problem is whether a cheetah living in a cage and dependent on humans for food will be able to hunt on its own if released into the wild.
- For example, a tigress named Sundari (who had returned from Satkosia in Odisha after a failed rehabilitation effort) was eventually placed in Bhopal Zoo for life.

Adaptability:

- Re-introduced species are more vulnerable to the effects of drift, selection and gene flow evolutionary processes due to their smaller size and climatic and ecological differences between source and native habitats.
- African cheetahs need a long open space to run. Indian gardens are much smaller than those in Africa; thus providing less opportunity for their free movement.
- Studies in Africa have shown that female cheetahs stay alone and roam long distances, while males defend their small territories and bond with passing females. It causes fertility problems.

Coexistence with large predatory organisms:

- Since there has never been a time anywhere else that the cheetah coexisted with other species of the big cat, there is no real-life experience to suggest the coexistence of cheetahs, lions, tigers and leopards.
- Studies have shown that leopards have also preyed on cheetahs in Africa, and similar fears are being expressed for the Kuno, where about 50 leopards live around the same native area where the cheetahs will be kept.

Rehabilitation concerns:

- Many villages will have to be relocated to adequately protect the cheetah habitat, which will certainly affect the local people and cause unrest and migration.

Swadeep Kumar

Fiscal federalism: A Changing Pattern after the 2014

Context: Dr. Bhim Rao Ambedkar, in his first speech in the constitution assembly regarding fiscal federalism stated that we should reduce the possibilities of political and social conflict. Economic inequality is a big challenge for the Indian democracy which should be curtailed and by reducing this economical inequality, social justice could not be established. Organized fiscal federalism is the only tool through which this economical inequality can be reduced

Introduction

The term fiscal federalism means the dedication of the fiscal power to the lowest political units. In the Indian constitution, the financial right (Sharing and imposing of taxes) are given to various levels. Like state level and the panchayat level also. The basic objective of this decentralization of financial rights is to curtail the inequality

Changing pattern of fiscal federalism

Recently we observed the changing nature of fiscal federalism. If we observe the latest two latest finance commissions—the Fourteenth and Fifteenth. We can easily conclude that fiscal federalism is moving towards fiscal decentralization. The central government is continuously intervening in the financial rights of the state

It seems that the government is ignoring the basic principles and the objective of fiscal federalism which is the reduction of economical inequality. In the process of political centralization, fiscal federalism is being ignored. To be sure, India was never truly federal — it was a ‘holding together federalism’ in contrast to the ‘coming together federalism,’ in which smaller independent entities come together to form a federation (as in the United States of America).

Political India was more centralized in 1950, the federalism has been always the objective of the Indian constitution for the long term always. Through recent policies the central government is weakening the financial power of the state. The central government is hollowing the fiscal capacity of the state. Presently The ability of States to finance current expenditures from their own revenues has declined from 69% in 1955-56 to less than 38% in 2019-20. While the expenditure of the States has been shooting up, their revenues did not. The state government has to still invest and expend in education and the health sector which are the backbone of the country. The reduction of fiscal capacity would hamper the education and health sectors also.

However, the share of the state is increased by the 14th finance commission from 32% to 42 % but it was subverted by raising non-divisible cess and surcharges that go directly into the Union kitty. This non-divisible pool in the Centre's gross tax revenues shot up to 15.7% in 2020 from 9.43% in 2012, shrinking the divisible pool of resources for transfers to States. In addition, the recent drastic cut in corporate tax, with its adverse impact on the divisible pool, and ending GST compensation to States have had huge consequences.

States had to pay a high-interest rate of 10 % instead of 7 %. It is not just that States are also losing due to gross fiscal mismanagement — increased surplus cash in the balance of States that is money borrowed at higher interest rates — the Reserve Bank of India, when there is a surplus in the

treasury, typically invests it in short treasury bills issued by the Union at the lower interest rate

Conclusion

Finally, it can be concluded that the load of the fiscal deficit is continuously increasing in the state states; the capacity of the fiscal affairs is continuously decreasing. Extreme political centralization would never bring prosperity to the states. In India type diversified culture political and fiscal decentralization is necessary. Therefore, recent Trends, up to e certain extent reduce the financial capacity of the state. The government of India and the financial expert should think in this regard also.

Anshul

