CURRENT AFFAIRS 30th July 2022

INTERNATIONAL TIGER DAY

SYLLABUS: GS PAPER-III (CONSERVATION)

CONTEXT: International Tiger Day is observed on **29 July to raise awareness about the declining tiger population in the world.** The day encourages the work of conservation of tigers.

The Theme of International Tiger Day 2022 – **"Tiger Trails".** The WWF (World Wide Fund) aims to double the number of wild tigers in 2022.

BACKGROUND

- International Tiger Day was **established in 2010 at Saint Petersburg Tiger Summit in Russia to raise awareness about the decline of wild tiger numbers,** leaving them on the brink of extinction, and to encourage the work of Tiger conservation.
- In the Summit, a declaration was made that Governments of tiger-populated countries had vowed to double the tiger population by 2020.
- Several events every year are organized by animal organizations like WWF, IFAW, and the Smithsonian Institute.

CONSERVATION STATUS OF TIGER

- **Indian Wildlife (Protection) Act, 1972:** Schedule I
- **International Union for Conservation of Nature (IUCN) Red List:** Endangered**.**
- **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES):** Appendix I.

SIGNIFICANCE OF TIGER CONSERVATION

- Tiger conservation is a s**ymbol of conservation of forests**.
- The tiger is a unique animal which **plays a pivotal role in the health and diversity of an ecosystem.**
- It is a **top predator which is at the apex of the food chain** and keeps the population of wild ungulates (primarily large mammals) in check.
- Thus, Tiger helps in **maintaining the balance between prey herbivores and the vegetation upon which they feed.**

TIGER CONSERVATION PROJECTS IN INDIA

- **Project Tiger 1973:** Project Tiger is a **Centrally Sponsored Scheme of the Ministry of Environment, Forests and Climate Change (MoEFCC)** launched in 1973. It provides havens for tigers in the country's national parks.

- **National Tiger Conservation Authority (NTCA): I**t is a s**tatutory body** under the MoEFCC and was established in 2005 following the recommendations of the Tiger Task Force.

REASONS BEHIND THE DECLINING POPULATION OF TIGERS

- **Poaching and illegal trade:** For traditional Chinese medicines, tigers face the problem of poaching as there is a demand for every part of the body of the tiger. In illegal wildlife trades, they keep high prices.
- **Habitat loss:** Nowadays and with the increasing population forests are becoming less in number. Clearing of forests for several reasons like agriculture, industries, etc. made a loss of around 93% of the natural habitats of tigers.
- **Climate Change:** With the rise of sea level due to climate change led to wiping out of Sundarbans one of the habitats of the Royal Bengal Tigers.
- **Several diseases are also the key factor.** Several animals die and there is no way to ascertain the cause of their death. Certain diseases spread epidemic like Feline Panleukopenia, tuberculosis, etc.
- The study of Wildlife Institute of India (WII) in the Ranthambore Tiger Reserve (RTR) says that the tiger population in the park shown a loss of genetic diversity over the years.
- **Degradation of Habitats:** Big cats want secure and disturbance-free habitat to survive but due to several developmental activities in the landscape of the protected areas (PAs) pose a big threat to tigers.
- **Man-animal conflic**t also affects the population of big cats.
- Lack of protection infrastructure.
- **Increasing tourism** day by day is also one of the factors for the decline in tiger numbers.

ALL INDIA TIGER ESTIMATION REPORT

- According to 'All India Tiger Estimation Report 2018' India has achieved its 2022 target of tiger population in the country.
- India now has 2,967 tigers. The growth in the 4th cycle of the Tiger Census was 33 percent. 4 years before the deadline, India has achieved a target. Nine years ago in St. Petersburg, it was decided to double the population of the tiger by 2022.
- According to the census, **Madhya Pradesh saw the highest number of tigers that is 526** which is closely followed by Karnataka at 524 and Uttarakhand with 442 tigers at number 3 position.
- There is a decline in the population of tigers in Chhattisgarh and Mizoram while tiger numbers in Odisha remained constant.

PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

SYLLABUS: GS PAPER-II (GOVERNMENT POLICIES & INTERVENTIONS)

CONTEXT: Insurance companies made nearly Rs 40,000 crore under the Centre's flagship crop insurance scheme since its inception in 2016-17. This was revealed by the data shared by the Union Minister of Agriculture and Farmer's Welfare on the Pradhan Mantri Fasal Bima Yojana (PMFBY).

ABOUT PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

- Pradhan Mantri Fasal Bima Yojana is the **flagship scheme of the government for agricultural insurance in India** in line with the One Nation-One Scheme theme.

- **Annual Commercial / Annual Horticultural crops, oilseeds, and food crops** (Cereals, Millets, and Pulses) are covered under the scheme.
- **PMFBY is optional for the farmers who have not availed institutional credit**, while all the farmers who have borrowed institutional loans from banks are covered under the scheme mandatorily. (This was modified and enrolment was made voluntary post-Kharif season 2020.)
- The scheme is a**dministered by the Ministry of Agriculture.**

OBJECTIVES

- Financial support will be provided to farmers in distress due to loss and damage to crops caused by unexpected calamities.
- Making sure the income of farmers is stabilized for them to continue their farming activities.
- Promoting farmers to adopt and use modern equipment and agricultural practices for efficient and high yield farming.
- Ensuring the flow of credit to the agriculture sector contributes to food security, crop diversification, and enhancing growth and competitiveness of the agriculture sector besides protecting farmers from production risks.

WHAT IS COVERED UNDER PMFBY?

The Pradhan Mantri Fasal Bima Yojana will cover the following cases under crop insurance:

- Local natural calamities like landslides, hailstorms, etc.
- Calamities leading to loss of yield like floods, dry spells, droughts, etc. Pest infestation that causes yield loss is also covered by PMFBY.
- Losses that occurred after harvesting crops can also be covered under this scheme. These circumstances may fall due to cyclones, unseasonal rains, cyclonic rains, etc.

Nevertheless, PMFBY does not provide any safety against the following circumstances:

- Losses occurred due to war or similar hazardous activities.
- Loss of yield due to the act of enmity or riots.
- Yield destruction caused by domestic and/or wild animals
- Contamination due to nuclear risks.
- Malicious damage leading to yield carnage.

It is proposed by the scheme to use remote sensing technology, smartphones, or drones to expedite crop loss estimation.

ENVIRONMENT PERFORMANCE INDEX (EPI)

SYLLABUS: GS PAPER-II (ENVIRONMENTAL PLLUTION & DEGRADATION)

CONTEXT: Last month, India protested its ranking on the En**vironmental Performance Index (EPI) of 2022, prepared by researchers at the Yale and Columbia Universities in the U.S.**

The report measures **40 performance indicators across 11 categories** to measure the "state of sustainability around the world."

India **was ranked last (180)** with low scores across a range of indicators.

The Indian Government as well as environment experts have pointed to the faulty methodology of the index that skews the results in favor of the Global North.

ABOUT THE ENVIRONMENT PERFORMANCE INDEX (EPI)

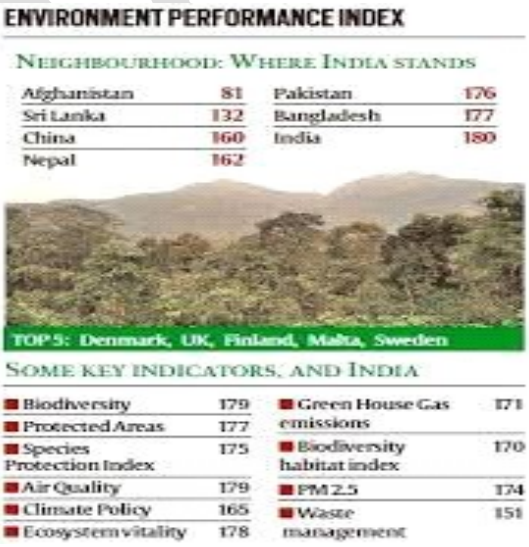
- The Environment Performance Index (EPI) is an **international ranking system that measures environmental health and sustainability of countries.**
- The EPI, a **biennial index,** was started in 2002 as **Environmental Sustainability Index by the World Economic Forum in collaboration with the Yale Center for Environmental Law and Policy and the Columbia University Center** for International Earth Science Information Network.

FRAMEWORK

- The 2022 EPI leverages **40 performance indicators grouped into 11 issue categories.**
- These issue categories are in turn aggregated into 3 policy objectives:

1. **Environmental Health**
2. **Ecosystem Vitality**
3. **Climate Change.**

- These indicators provide a gauge on a national scale of how close countries are establishing environmental policy targets.
- The EPI team transforms the raw environmental data into indicators that place countries on a **0–100 scale from worst to best performance.**



KEY HIGHLIGHTS OF THE REPORT

- **Denmark tops the 2022 rankings** — an achievement rooted in impressive performance across nearly all issues tracked by the EPI, with notable leadership in efforts to promote a clean energy future and sustainable agriculture.
- The **United Kingdom and Finland place 2nd and 3rd,** both earning high scores for slashing greenhouse gas emissions in recent years.
- The **United States places 20th out of 22 wealthy democracie**s in the Global West and 43rd overall.
- With a paltry s**core of 18.9, India's 180th ranking comes after Pakistan, Bangladesh, Vietnam, and Myanmar.**
- India has also scored low on rule of law, control of corruption and government effectiveness, according to EPI.
- India was r**anked 168th in EPI-2020, with a score of 27.6.**
- In EPI-2020, Denmark has been ranked first in environmental health and sustainability.

SIGNIFICANCE OF EPI

- EPI enables decision-makers to recognize the drivers of top-tier performance.

- Analysis of the EPI data demonstrates that financial resources, good governance, human development, and regulatory quality matter for elevating a country's sustainability.
- Highlighting these connections, the EPI helps to promote sustainable development in support of a more environmentally secure and equitable future.

WHY INDIA REJECTED THE REPORT?

- As per Indian govt, the **report used many indicators based on unfounded assumptions.**
- The methodology **does not consider per capita emissions and different socio-economic conditions across countries.**
- The weight of indicators in which India was performing well has been reduced.
- The **principle of equity is given incredibly low weightage** in the form of indicators like GHG emission per capita and GHG emission intensity trend.
- The c**ommon but differentiated responsibilities and respective capabilities (CBDR-RC) principle is also barely reflected** in the composition of the index.
- **Forests and wetlands**, which act as crucial carbon sinks, **have not been factored in while computing the projected GHG emissions** trajectory up to 2050 by EPI 2022.

PRELIMS FACTS

TECHNICAL RECESSION

- **The US is expected to avoid a technical recession.**
- **When the overall output of goods and services, which is typically measured by the Gross Domestic Product (GDP), decreases from one quarter to another,** the economy is said to be in a phase of a technical recession.
- It is most often caused by **one-off events (**say COVID-19 pandemic and lockdowns imposed**) and is generally shorter in duration.**
- It is mainly **used to capture trends in GDP while a recession encompasses a more broad-based decline in economic activity t**hat covers several economic variables including employment, household and corporate income.

GAIA HYPOTHESIS

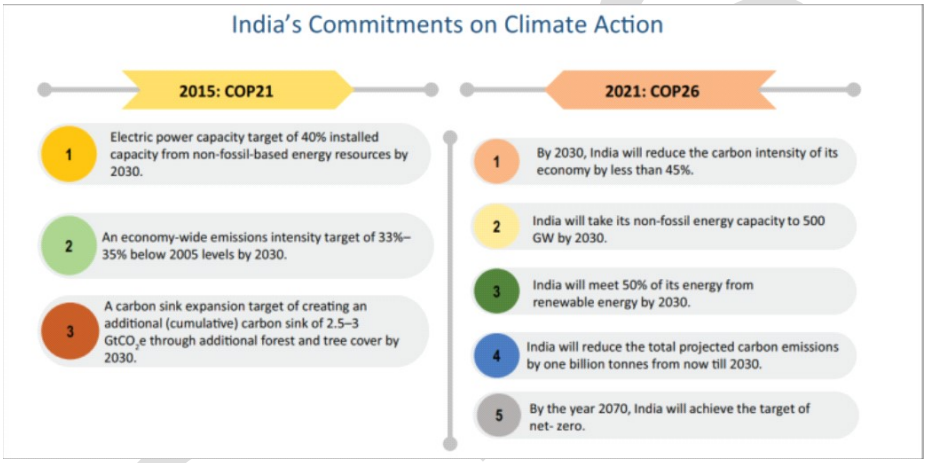
- **James Lovelock** (scientist) who created Gaia ecology theory, passed away.
- The Gaia hypothesis proposes that **all organisms and their inorganic surroundings on Earth are closely integrated to form a single and self-regulating complex system,** maintaining the conditions for life on the planet.
- For instance, climatic conditions depend on the interactions among living organisms like human beings and their non-living atmosphere, all of which regulate each other constantly.
- The Gaia hypothesis is named after the **mythical Greek goddess Gaia** who personifies the earth.

ROADMAP TO INDIA'S 2030 DECARBONIZATION TARGET

- TERI, **an independent, multi-dimensional research organization** has released a roadmap for feasible pathways to achieve India's decarbonization targets.

- **Key suggestions:**

1. **Increase in Share of decentralized solar power** by introducing feed-in-tariff attractive enough for private investment and approved by the State Electricity Regulatory Commission
2. **State leadership** in the development of pumped storage plants, and feed-in-tariff for solar generation.
3. **New Energy storage solutions:** While India has the right policy regime in place, we need to adopt new energy storage solutions and technologies which bring stability and flexibility to the grid.
4. **Introducing requisite flexibility into the power system** to integrate wind and solar power generation.
5. Emphasis on India growing into a **cost-effective and competitive manufacturing hub for renewable energy.**



6. **Extension of PLI (Production Linked Incentive scheme)** to cover the full spectrum of renewable energy equipment production, solar panels, mirrors and sensors for solar thermal, batteries for grid use, and hydrogen.
7. **DISCOMs need to give Commercial and Industrial consumers** the choice to buy carbon-free electricity on a real-time basis with separate tariffs.