

- A 2019 MoU between AWP and International Centre for Integrated Mountain Development (ICIMOD) calls for **analyzing challenges and opportunities for basin wide management across: Indus, the Brahmaputra, and the Ganges.**
- **Key findings on Ganges Basin management**

Specification	Description
Challenges	<ul style="list-style-type: none"> ➤ Myriad complexities: Sheer size of the basin presents a barrier to cohesive governance, compounded by the complexities of gender, poverty, social inequity, Climate change, etc. ➤ Fragmented governance: Lack of multilateral agreement enabling basinwide collaboration while bilateral agreements are focused on infrastructure projects and short-term goals. ➤ Substantial data gaps: This gap is more prominent for experiences of different genders, indigenous communities, underprivileged, etc.
Opportunities	<p>Climate change represents a unifying catalyst for collaboration across the basin. Existing bilateral agreements contain references to, or acknowledgement of, basin-scale issues and solutions.</p> <p>For example, Framework Agreement on Cooperation for Development (of 2011) between India and Bangladesh has references to basin-scale issues such as climate change, and energy.</p>
Recommendations	<p>Delinking of key issues in the basin from the basin-wide political system. Expand existing bilateral agreements to stimulate multilateral cooperation. Support the</p> <ul style="list-style-type: none"> ➤ expansion of research and data collection and sharing. ➤ Strengthen the capacity of community groups to enhance local collaboration.

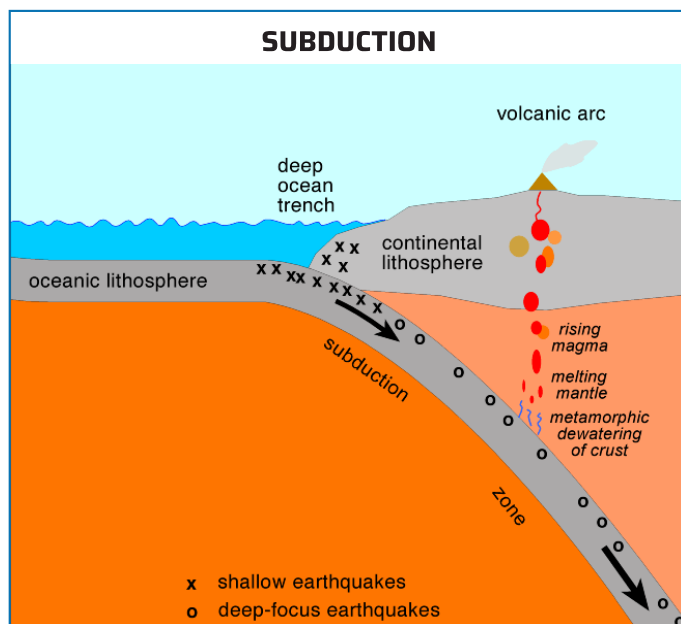
State of the Global Climate 2023 report released by the World Metrological Organization (WMO)

- WMO is a **specialized agency of the United Nations** for meteorology (weather and climate), operational hydrology, and related geophysical sciences.
- The report highlighted that 2023 broke every climate indicator like greenhouse gases, temperature, etc., and **also highlighted the State of Climate Finances** across the globe.
- **Current State of Climate Finance**
 - ⊕ **Climate flows nearly doubled in 2021-22 compared to 2019-20 levels** and reached **\$1.3 trillion.**
 - ◆ **China, the USA, Europe, Brazil, Japan, and India** together received **90% of the increase in funds.**
 - ⊕ Climate finance investments **need to grow more than six times**, by 2030 for a 1.5°C pathway.
- **Challenges in Climate Finance**
 - ⊕ **The cost of inaction is to rise** with insufficient mitigation and adaptation strategies
 - ⊕ **Climate-vulnerable countries and important sectors** like agriculture and industry – are **receiving little finance despite their mitigation potential.**
 - ⊕ **Adaptation actions of private sectors are yet to be tracked better.**
- **Recommendations in the report**
 - ⊕ **Transform the financial system** with an emphasis on concessional financing and de-risking; bridging climate and development needs, etc.
 - ⊕ **Mobilize domestic capital**, with an emphasis on enabling policies and regulatory frameworks.
 - ⊕ Improve the **availability and accessibility of quality, granular data** to measure and manage progress.

Initiatives to improve climate finance

- **Global Climate Finance Framework** adopted in COP28, Dubai.
- **France's AFD 2050 Facility** supports around 30 developing countries in their implementation of the Paris Agreement.
- **Just Energy Transition Partnerships (JETPs)** to developing countries in accelerating their transition to a just energy system.

- **Subduction Zones (SZs) or Benioff Zones are locations of convergent plate boundaries where one tectonic plate is pushed below the other tectonic plate and sinks into the mantle (a process called subduction).**
 - ⊕ **Subduction initiation is a cornerstone of the Wilson cycle** (repetitive opening and closing of ocean basins due to the seafloor spreading and subduction respectively).
 - ⊕ Subduction produces **deep trenches, earthquakes, and volcanoes** that often form **arcs of islands** along the convergent boundary.
- **SZs in Atlantic**
 - ⊕ SZ initiation in **mature Atlantic-type oceans** that have formed from the breakup of a supercontinent is **believed to be difficult**.
 - ◆ This is because the **aged oceanic lithosphere is thick and strong, making it resistant to breaking and bending** (both are prerequisites for the start of subduction in an ocean surrounded by passive margins).
 - ⊕ Yet, the Atlantic has **two fully developed SZs Lesser Antilles and the Scotia arcs**.
 - ⊕ Its 3rd such zone, **Gibraltar Arc** has **significantly slowed** over years raising a debate **whether it is active or not**.
 - ◆ According to the latest study, the **Gibraltar subduction is still active** and it will propagate further into the Atlantic after a **period of quiescence**.
 - ◆ Study also reveals that a **subduction zone starting in a closing ocean (Ligurian) can migrate into a new opening ocean (Atlantic) through a narrow oceanic corridor**.



Scientists at IARI have red-flagged the illegal cultivation of high-yielding Pusa Basmati varieties in Pakistan

- **IARI scientists have raised objections and called for action against Pakistan as it has officially registered India's high-yielding Pusa Basmati varieties and also cultivating the same illegally.** These varieties, **originally developed by IARI, include:**
 - ⊕ **Pusa Basmati-1121 (PB-1121)** known for the **extra kernel length of its grains**.
 - ⊕ **PB-1509**, which **matures in 115-120 days** as against the 135-145 days of other high-yielding basmati varieties.
 - ⊕ **PB-1847, PB-1885 and PB-1886** (all improved versions of PB-1509) have **resistance to bacterial blight and rice blast fungal disease**.
- **Legal protection**
 - ⊕ All these varieties are **notified under the Seeds Act, of 1966**.
 - ◆ The Act **prohibits the export and import** of seeds of notified kinds or varieties **for sowing or planting**
 - ⊕ They are also registered under the **Protection of Plant Varieties and Farmers' Rights Act, 2001**.
 - ◆ This Act allows **only Indian farmers to sow, save, re-sow, exchange or share the seeds** of any protected/ registered varieties.
 - ◆ The Act also enumerate breeder's rights.
- **Basmati rice export from India**
 - ⊕ India is the **leading exporter of Basmati Rice** in the world.
 - ⊕ Major Export destinations are **Saudi Arab, Iran, Iraq, U.A.E and Yemen** where consumers want parboiled rice.
 - ◆ Parboiled rice has **harder grains and is less susceptible to breakage** on cooking for long.

About Basmati Rice

- Also known as 'scented Pearl', Basmati is a **long-grain aromatic rice variety** grown for many centuries mainly in the Himalayan foothills.
 - ⊕ Currently, it is cultivated in the states of **J & K, Himachal Pradesh, Punjab, Haryana, Delhi, Uttarakhand and western Uttar Pradesh**.
- They require **prolonged sunshine, high humidity and assured water supply**.
- So far **34 varieties of Basmati rice** have been notified under the seeds Act, 1966.

Climate Change (MoEFCC) notifies Battery Waste Management (Amendment) Rules, 2024

- ▶ The rules have been changed by MoEFCC as per the powers conferred by the **Environment (Protection) Act, 1986**
- ▶ New rules are to amend the **Battery Waste Management Rules, 2022**.
- ▶ **Amendments**
 - ▶ **Central Pollution Control Board (CPCB)** shall fix the highest and lowest price for Extended Producer Responsibility (EPR) certificates.
 - ◆ It shall be equal to **100% and 30%, respectively** of the environmental compensation leviable on the obligated entities for non-fulfilment of EPR.
 - ◆ EPR strategy holds **producers responsible for the end-of-life consequences** of their goods.
 - ▶ **The exchange price of the EPR certificate between registered entities** through the portal shall be between the highest and lowest prices.
 - ▶ **CPCB** shall prepare and recommend guidelines for the imposition and collection of **environmental compensation** in cases of non-compliance with rules.
- ▶ **Objectives of Battery Waste Management**
 - ▶ **Promoting circular economy** by recycling and ensuring environmentally sound management of waste batteries.
 - ▶ **Promoting new industries and entrepreneurship** in the collection and recycling/refurbishment of waste batteries.
 - ▶ **Implementing the polluter pays principle** through EPR
 - ▶ Reducing the **dependency on new raw materials** and saving natural resources.

Nomination process

- ▶ **Nomination process for first phase** of Lok Sabha polls **2024** began.
- ▶ Nominations is filed under section **33 of the Representation of the People Act, 1951**.
 - ▶ Date for filing of nomination is fixed by **Election Commission of India**.
 - ▶ Candidate or any of his / her proposer should deliver the nomination paper to the **Returning Officer (RO) or to the Assistant RO**.
 - ◆ Only an **elector in the constituency** in which the candidate contests the election, can be proposer.
 - » **One proposer** is needed for candidate from a **recognised political party**.
 - » **10 proposers** are needed for **independent** or candidates from **registered unrecognised political party**.
 - ⊖ A candidate can file maximum 4 nomination for a constituency.
- ▶ **Nomination paper** cannot be filed on **holiday**.

2023: World Inequality Lab (WIL) study

- ▶ The WIL is a **global research center** focused on the study of inequality and public policies that promote social, economic, and environmental justice.
- ▶ **Key findings of the study:**
 - ⊖ **Inequality declined post-independence** till the early 1980s, after which it began rising and has **skyrocketed since the early 2000s**.
 - ▶ By the end of 2023, India's richest citizens owned **40.1 percent of the country's wealth**.
 - ▶ India's top 1 percent income share is **among the very highest in the world**, higher than even South Africa, Brazil, and the US.
- ▶ **Issues with extreme inequality**
 - ▶ It facilitates the **disproportionate influence of wealthy people** on society and government leading to plutocracy.
 - ▶ Poor people find it **more difficult to escape poverty** as they do not have the same opportunities.
 - ▶ Leads to lower **overall economic growth**.
- ▶ **Recommendations given in the study for removing income inequality**
 - ▶ To improve the **quality of economic data**.
 - ▶ **Broad-based public investments** in health, education, and nutrition to enable the average Indian.
 - ▶ **Restructuring of the tax code** to account for both income and wealth.
 - ◆ A **“super tax” of 2%** on the net wealth of the wealthiest families can be imposed.

Great Indian Bustard (GIB)

SC considers lifting the ban on transmission lines through GIB habitats.

Protection status

IUCN status: Critically Endangered Schedule 1 and 4 of wildlife protection act. Appendix 1 of CITES.

Covered under species recovery program.

Characteristics

- ⊖ An agro-grassland bird **endemic to Indian subcontinent**.
- ⊖ **Omnivorous bird**.
- ⊖ **Other bustard species found in India:** lesser florican and Bengal florican.
- ▶ **Habitat:** Mainly confined to Rajasthan, Gujarat, and few tracts of Andhra Pradesh.
- ⊖ **Rajasthan** has the highest population.



Chief Minister's Relief Fund (CMRF)

- Election Commission has **exempted certain emergency works under CMRF** from the ambit of the **Model Code of Conduct**.
- The fund aims **to provide relief for the distressed people** affected by major natural calamities, accidents etc.
- **Similar to the PM Relief fund**, these funds primarily **operate with donations from public and private institutions**, voluntary organisations etc.
- The donations to CMRF are **100% exempted from Income Tax under section 80G of the Income-Tax Act,1961**.

Summit for Democracy

- Prime Minister addressed the third edition of Summit for Democracy.
- **Summit for Democracy**
Genesis: Launched by the US in 2021, the summit has emerged as an important **platform where democracies share experiences and learn from each other**.
Aim: To **strengthen democratic institutions, protect human rights, and accelerate the fight against corruption** globally.
Presidential Initiative for Democratic Renewal: It was launched in the 1st summit and supports initiatives for **advancing technology for democracy, defending free and fair elections, independent media**, etc.
 ♦ **US also provides financial aid** to this initiative.

Sound Laser (Phonon Laser)

- Chinese Scientists have created a powerful Sound Laser.
- Just as light is made up of many particles called photons, sound consists of **particle-like chunks called phonons**.
- They are also known as **Sound Amplification by Stimulated Emission of Radiation (SASER)**
 First developed in 2009.
- New device **uses a micrometer-long silica bead that is levitated by two beams of light** within a reflective cavity.
- Levitation leads to the **production of amplified phonons** and makes up the laser beam.

Phanindra Nath Ghosh (1918-1992)

- **Birth Anniversary** of Phanindra Nath Ghosh was celebrated,
- **About**
 Born in **Serampore in the Hooghly district of West Bengal**, Shri Ghosh was the son of Charuchandra Ghosh.
- **Contributions:**
 His **leadership steered the revolutionary movement** across the **Hooghly district**.
 He **Joined the Yugantar revolutionary party** alongside **J.N. Lahiri**.
 Became an active member of the **"Gupt Samity" in Serampore**.
 Played a **pivotal role during the Quit in 1942**.
 Was **deeply committed to Gandhiji's philosophy**.
- **Awards:** Government of India honoured him with a **Copper Plate in 1972**.
- **Values:** **Courage of conviction; patriotism; leadership, etc.**

NOTE: Please do not confuse this personality with Phanindra Nath Ghosh who was approver of hanging of Bhagat Singh, Sukhdev and Rajguru and who was also murdered by revolutionary Baikuntha Shukla.



Project Gaia

- Central banks unveiled **Project Gaia to evaluate climate financial risks**.
- **About Project Gaia**
 - ⊕ It is a collaboration between the Bank for **International Settlements Innovation Hub Eurosystem Centre, Bank of Spain, etc.**
 - ⊕ It leverages **generative artificial intelligence (AI)** particularly **Large Language Models (LLMs)** to facilitate the analysis of climate-related risks in the financial system.

Benefits

Can examine firm **carbon emissions, green bonds, and optional net-zero commitment disclosures**.
Enhanced accessibility to climate-related disclosures, Efficient data extraction, Harmonised climate metrics, Scalability and reliability.

Grid Controller of India Limited (GRID-INDIA)

GRID-INDIA was **conferred with Miniratna Category-I status** for Central Public Sector Enterprises (CPSEs).

About GRID-INDIA

Established in 2009.

Its mandate is to oversee the operation of the Indian Power System.

About Miniratna Status

Category I: CPSEs with **continuous profit in the last three years** with pretax **profit >30cr** in at least one year and have a positive net worth.

Category II: CPSEs that have **made profit for the last three years and have a positive net worth**.

PIB Fact Check Unit

Ministry of Electronics and Information Technology notifies **Fact Check Unit under Press Information Bureau (PIB)**.

PIB is the nodal agency of the government to disseminate information on government policies, programmes, initiatives, and achievements.

It has been notified under the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules 2021)**.