

13 December, 2023

Appointment of Chief Minister

Context: After the recent elections in 5 states, the process of appointment of Chief Ministers and expansion of Council of Ministers is underway.

- The Chief Minister's role is comparable to that of the Prime Minister at the national level.
- Appointment of the Chief Minister is made by the Governor in accordance with Article 164 of the Constitution.
- The selection of the Chief Minister involves leaders from the parties that secured the highest votes in assembly elections.
- The Governor holds formal executive authority in the state.
- The Chief Minister exercises real executive authority, distinguishing the practical leadership role.
- The appointment process involves democratic principles, aligning with the party or coalition with the majority in assembly elections.

Articles	Provision
163	Council of Ministers to aid and advise Governor
164	Other provisions as to Ministers
166	Conduct of business of the Government of a State
167	Duties of Chief Minister as respects the furnishing of information to Governor, etc.

➤ Appointment Process:

- The Governor appoints the leader of the largest party in the house or the leader chosen by the largest coalition as the Chief Minister.
- In the absence of a clear majority, the Governor may exercise situational discretion and appoint a leader as Chief Minister, who must then prove majority on the parliament floor.
- If the Chief Minister passes away without a successor, the Governor may use discretion to choose one; however, if the ruling party nominates someone, the Governor is obligated to appoint that person.
- Failure of the Chief Minister to become a member of either house within six months results in losing the position; however, the Governor appoints the Chief Minister and cannot dismiss them until they have a majority in the house.
- After a general election for the State Legislative Assembly, the party or coalition securing a majority elects its leader, who is named Chief Minister by the Governor. The appointed Chief Minister is then instructed to form a Council of Ministers.
- In cases where the State Legislative Assembly lacks a clear majority, the Governor often approaches the leader of the single largest party to form a government.

➤ Functions:

- Ministers appointed by the governor are proposed by the Chief Minister.
- The Governor has the authority to reassign and reshuffle ministerial portfolios.
- The Chief Minister, as the head of the council of ministers, can dissolve the council by resigning.
- Article 167 of the Constitution designates the Chief Minister as the liaison between the Governor and the state council of ministers.
- The Chief Minister advises the Governor on significant appointments, including the advocate general, State Public Service Commission officials, and State Election Commission members.
- The Chief Minister recommends the dissolution of the legislative assembly to the Governor.

• Other Functions:

- Serves as the chairman of the State Planning Board.
- Rotates as the vice-chairman of the relevant zonal council, holding office for one year at a time.
- Member of the Prime Minister's Inter-State Council and the NITI Aayog Governing Council.
- Acts as the state government's chief spokesperson.
- Functions as the chief crisis manager at the political level during times of crisis.
- Interacts with diverse groups, receiving memoranda on various issues.
- Serves as the political leader of the state's services.
- Announces all policies on the floor of the house.

➤ Term:

- The Chief Minister serves at the pleasure of the governor, and their term is not fixed.
- Dismissal by the governor is contingent on the Chief Minister losing support from the majority in the legislature.
- Removal from office is also possible if the State Legislative Assembly passes a vote of no confidence against the Chief Minister.

Face to Face Centres

DELHI MUKHERJEE NAGAR: 9205274741, 42 | **LAXMI NAGAR :** 9205212500, 9205962002 | **RAJENDRA NAGAR:** 9205274743 | **UTTAR PRADESH PRAYAGRAJ:** 0532-2260189, 8853467068 | **LUCKNOW (ALIGANJ):** 0522-4025825, 9506256789 | **LUCKNOW (GOMTI NAGAR):** 7234000501, 7234000502 | **GREATER NOIDA:** 9205336037, 38 | **KANPUR:** 7887003962, 7897003962 | **GORAKHPUR :** 7080847474, 9161947474 | **ODISHA BHUBANESWAR:** 9818244644/7656949029



dhyeyaias.com

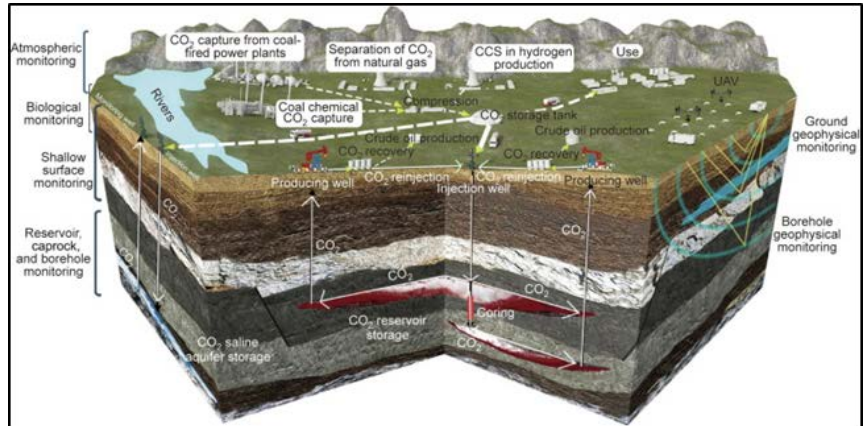
13 December, 2023

Carbon Capture and Storage (CCS)

Context: At COP28 in Dubai, discussions centre around using carbon capture and storage (CCS) and carbon dioxide removal (CDR) technologies to address and reduce carbon emissions.

➤ CCS Process:

- **Carbon Capture:**
 - Involves capturing CO₂ emissions from industrial processes or fossil fuel burning.
 - Common sources include steel and cement production and power generation.
- **Transport:** Compressed CO₂ is transported via pipelines, road transport, or ships to a storage site.
- **Storage:**
 - CO₂ is injected deep underground into geological formations for permanent storage.
 - Possible storage sites include saline aquifers or depleted oil and gas reservoirs.



➤ CCS and Global Warming:

- To achieve Paris Agreement goals, technologies like CCS are crucial.
- IPCC emphasizes the need for carbon removal technologies to limit temperature increases to 1.5°C.
- CCS plays a vital role in preventing global warming by capturing and storing carbon emissions.

➤ CCUS (Carbon Capture, Utilisation, and Storage):

- CCUS involves capturing carbon and reusing it in industrial processes.
- The difference lies in utilizing captured carbon for applications like plastics, concrete, or biofuel.

➤ Safety of CCS:

- According to the Global CCS Institute, CCS is a proven technology with over 45 years of safe operation.
- All components of CCS are proven technologies used on a commercial scale.

➤ Current Status and Development:

- 194 large-scale CCS facilities globally, with 61 new facilities added in 2022.
- Projects in operation, under construction, and in various stages of development.
- Significant growth in CO₂ capture capacity, reaching 244 million tonnes per annum in 2022.

➤ Global Implementation:

- Projects globally, with 80 in the U.S., 27 in the UK, and others in Europe, Asia-Pacific, and the Middle East.
- Continuous development and expansion of CCS facilities to address carbon emissions.

➤ First CCS Facility:

- CCS has been in operation since 1972 in the U.S.
- Natural gas plants in Texas were the first to capture and store over 200 million tons of CO₂ underground.

State of Finance for Nature Report

Context: A recently released United Nations report titled "State of Finance for Nature" discloses that countries allocate almost \$7 trillion each year in subsidies and private investments causing direct harm to the environment.

➤ Annual finance flows from public and private sources that have direct negative impact on nature are estimated at almost US\$7 trillion per year.

➤ Global Private Finance Flows Impacting Nature:

- Estimated at US\$5 trillion per year, accounting for approximately 5% of global GDP.
- Private nature-negative finance is 140 times larger than tracked private investments in Nature-based Solutions (NbS).
- Five industries, including construction, electric utilities, real estate, oil and gas, and food and tobacco, collectively represent 43% of nature-negative flows.

Face to Face Centres

DELHI MUKHERJEE NAGAR: 9205274741, 42 | **LAXMI NAGAR :** 9205212500, 9205962002 | **RAJENDRA NAGAR:** 9205274743 | **UTTAR PRADESH PRAYAGRAJ:** 0532-2260189, 8853467068 | **LUCKNOW (ALIGANJ):** 0522-4025825, 9506256789 | **LUCKNOW (GOMTI NAGAR):** 7234000501, 7234000502 | **GREATER NOIDA:** 9205336037, 38 | **KANPUR:** 7887003962, 7897003962 | **GORAKHPUR :** 7080847474, 9161947474 | **ODISHA BHUBANESWAR:** 9818244644/7656949029



dhyeyaias.com



13 December, 2023

- Annual finance flows from public and private sources negatively impacting nature are estimated at almost US\$7 trillion.

➤ **Tracked Nature-Negative Public Finance Flows:**

- Estimated at almost US\$1.7 trillion in 2022, over 10 times greater than public finance flows to NbS (US\$165 billion).
- Nearly 90% of tracked negative public flows are directed to fossil fuels (69%) and agriculture (20%).
- Fossil fuel subsidies to consumers doubled from US\$563 billion in 2021 to US\$1,163 billion in 2022.

➤ **Nature-based Solutions (NbS) Finance:**

- Total annual finance flows to NbS in 2022 were approximately US\$200 billion, one-third of the needed amount by 2030.
- Governments lead with 82% (US\$165 billion) of total NbS finance flows.
- Finance flows to NbS need to almost triple to reach US\$542 billion per year by 2030 and quadruple to US\$737 billion by 2050.

➤ **Additional Finance Needs for NbS:**

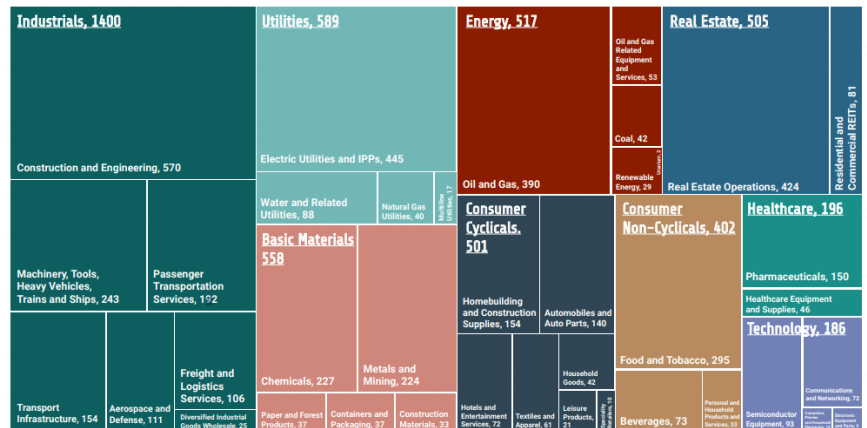
- Additional annual finance needs to reach Rio Convention targets: US\$542 billion by 2030 and US\$737 billion by 2050.
- Annual investment opportunities in sustainable land management (SLM) are likely to increase from US\$63 billion in 2025 to US\$241 billion by 2050.

➤ **Public and Private Finance Flows to NbS:**

- Both public and private finance flows to NbS must dramatically increase to close the finance gap.
- Private finance share potentially increasing from 18% to 33% by 2050, with total annual private NbS finance exceeding US\$100 billion by 2030.
- Current NbS finance is less than 3% of nature-negative finance flows.
- Annual NbS investment needs in 2030 are 3 times current NbS finance and less than 10% of nature-negative finance flows.

➤ **Recommendations for Action:**

- Greening finance by reducing nature-negative finance flows.
- Financing green by scaling public funding and private investment into NbS.
- Establishing green and inclusive financial systems for a just transition, especially for vulnerable groups, women, and Indigenous Peoples.



Nature-negative private finance by sector, \$ billion

NEWS IN BETWEEN THE LINES

Global Partnership for Artificial Intelligence



Recently, the annual Global Partnership for Artificial Intelligence (GPAI) Summit kicked off in New Delhi's Bharat Mandapam with discussions on AI issues like safety and development challenges.

About Global Partnership for Artificial Intelligence:

- The Global Partnership on Artificial Intelligence (GPAI) is an international initiative that guides the responsible development and use of AI.
- It was launched in June 2020 with **15 members**.
- Its goals are: **Responsible development, Human rights, Democratic values, Inclusion, Diversity, Innovation, Economic growth.**
- It **aims to bridge the gap between theory and practice** by supporting research and applied activities on AI-related priorities.

Face to Face Centres





13 December, 2023

Demaorchestia alanensis

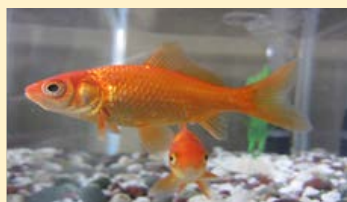


Recently, the researchers at Berhampur University, Odisha have discovered a new species of marine amphipod Demaorchestia in Chilika lake.

About Demaorchestia alanensis:

- Demaorchestia alanensis is a new species of marine **amphipod**.
- The species was **named after Professor Alan Myers** of University College Cork, Ireland, who has made significant contributions to global marine amphipod studies.
- It is a **shrimp-like crustacean**.
- It is **white-colored** and less than **15 millimeters long** with **13 pairs of legs**.
- It **contributes to the food chain** and serve as vital indicators for climate change impacts and coastal ecosystem health.

Goldfish



Recently, the goldfish has emerged as a colossal threat when released into natural water bodies.

About the Goldfish:

- The goldfish (**Carassius auratus**) is a **freshwater fish** that is commonly kept as pets in aquariums.
- It was first raised for food in **China** during the **Tang Dynasty**.
- It is part of the **Cyprinidae** family of fish, which also includes minnows, bitterlings, barbs and carps.
- It has **acute senses of smell and hearing**.
- It is an **omnivore** that eat plants and animals.
- It can grow to over a foot long and live **up to 15 years**.

Turbulence



Recently, amidst the chaotic swirl of turbulence phenomena, scientists have been fervently pursuing elusive hints of concealed order.

About Turbulence:

- Turbulence is **chaotic, unpredictable fluid motion** with irregular speed and pressure fluctuations, characterized by swirling patterns and eddies.
- An **eddy** is a **swirling** or circular movement in fluids like air or water, often seen as whirlpools or vortices.
- Turbulence can stem from various conditions, such as **atmospheric pressure, jet streams, air near mountains, cold or warm weather fronts and thunderstorms**.
- It is **different from laminar flow**, which occurs when a fluid flows in parallel layers without disruption.
- **Navier-Stokes equations** encapsulate fluid behavior, encompassing both laminar and turbulent flows.

Place in News

Yemen

Recently, Yemen's Houthi rebels claimed responsibility for a missile strike on a Norwegian-flagged tanker.

Yemen (Capital: Sanaa)

Location: Yemen is a country in **West Asia**, located at the southern end of the Arabian Peninsula.

Boundaries: Yemen shares its boundaries with **Saudi Arabia** (North), **Oman** (East), the **Red Sea** (West), the **Bab-el-Mandeb Strait** (Southwest), the **Gulf of Aden** (South) and maritime borders with **Djibouti, Eritrea and Somalia**.

Physical Features:

- **Jabal An-Nabi Shu'ayb** is the highest mountain in Yemen and the Arabian Peninsula.
- **Jabal Tiyaal** is the second highest peak in Yemen and the Arabian Peninsula.
- Yemen possesses several islands in both the Red Sea and the Arabian Sea, such as the **Hanish Islands, Kamaran** and **Perim** in the Red Sea and **Socotra** in the Arabian Sea.



POINTS TO PONDER

- ❖ Which state is renowned for the food product called 'Kala Jeera Rice'? - **Odisha**
- ❖ What is the name of the Telangana Government scheme for providing free travel to women passengers? - **Maha Laxmi Scheme**
- ❖ RBI has enhanced the UPI limit from 1 lakh to 5 lakhs for which sectors' e-Mandates? - **Healthcare and Education**
- ❖ "One province, One policy" has been initiated by which country for the handling of financial risk? - **China**
- ❖ Which is the nodal ministry for SVAMITVA Scheme? - **Ministry of Panchayati Raj**

Face to Face Centres

