



WEEKLY CURRENT AFFAIRS

NOVEMBER, 2023

Week-1

1-7 Nov., 2023

★★ Useful for ★★

**CSE, ESE, PSUs, State Services Exams,
SSC and Banking Exams**

1st NOVEMBER, 2023

Global Declaration for Protection of River Dolphins

- **Context:** Eleven Asian and South American countries have signed a Global Declaration for Protection of River Dolphins.

Key Highlights:

- It was signed by 11 countries (Bangladesh, Bolivia, Brazil, Cambodia, Colombia, Ecuador, India, Nepal, Pakistan, Peru, and Venezuela).
- Its aim is to halt the decline of all river dolphin species by 2030.
- Measures to be taken: Improve water quality in the dolphins' habitat, create protected areas, tackle overfishing and involve Indigenous communities in the affected regions in protecting the animals.
- River dolphins are a group of fully aquatic mammals that reside exclusively in freshwater or brackish water.
- The six surviving river dolphins species are: Amazon, Indus, Ganges, Irrawaddy, Tucuxi and Yangtze finless porpoise. A seventh species, the Chinese river dolphin or baiji, was declared extinct in 2007.
- Since the 1980s, river dolphin populations have declined by 73% due to several threats like unsustainable fishing practices, hydropower dams, pollution from agriculture, industry and mining, and habitat loss.

India to become \$30-trillion Economy by 2047

- **Context:** NITI Aayog CEO BVR Subrahmanyam said a vision document is being prepared for India to become a developed economy of about USD 30 trillion by 2047.

Key Highlights:

- The vision document will outline the institutional and structural changes/ reforms that will be needed for

the country to become a developed nation by 2047 with a \$18,000–20,000 per capita GDP.

- The goal of the national vision plan is to prevent the nation from falling into the middle-income trap.
- It is also expected to include information about the country's global engagement in trade, investment, technology, capital, and R&D entities.
- The economy must grow by an average of 9.2% per year between 2030 and 2040, 8.8% per year between 2040 and 2047, and 9% per year between 2030 and 2047.

COP28 Presidency's Action Agenda

- **Context:** Recently, a joint report was launched on the sidelines of the pre-COP28 titled "Tripling Renewable Power and Doubling Energy Efficiency by 2030: Crucial Steps Towards 1.5 °C".

Key Highlights:

- There is a need to cut 22 gigatonnes of Greenhouse gases in the next seven years in order to keep 1.5°C within reach.
- The world's installed renewable power generation capacity has to be multiplied by more than three times to reach 11,174GW by 2030.
- Installed solar photovoltaic capacity, an increase to more than 5,400GW from 1,055GW in 2022 is required.
- Wind installations need to exceed 3,500GW (3,040GW onshore and 500GW offshore), from 899GW in 2022.
- Global installed hydropower capacity (excluding pumped hydro) would need to grow by almost 17 per cent from the 2022 level, reaching 1 465GW by 2030.

2nd NOVEMBER, 2023

Agartala-Akhaura Cross-Border Rail Link Project

- **Context:** The Indian and Bangladesh Prime Minister will jointly inaugurate the Agartala-Akhaura Cross-Border Rail Link Project.

Key Highlights:

- The rail link will significantly reduce the travel time between Agartala and Kolkata via Dhaka.
- At present, the rail route from Agartala to Kolkata is around 1600 kilometers and takes 38 hours. Once the rail link opens, the travel time will be reduced to roughly 10 hours.
- Expected to boost India-Bangladesh trade in various goods such as agriculture products, tea, sugar, construction items, iron and steel, and consumer goods.
- It Will help foster closer relationships between people from India and Bangladesh.

Rajyotsava Award

- **Context:** ISRO Chairman S. Somanath, golfer Aditi Ashok, and retired Supreme Court judge V. Gopala Gowda are among the 68 people and 10 organisations selected for the Rajyotsava Award – 2023 by the Karnataka government for their contributions in different fields.

Key Highlights:

- The Rajyotsava Award is the state's second-highest civilian award given by the Karnataka government annually TO including prominent writers, social workers and others.
- The 68th Karnataka Rajyotsava Awards will be conferred on the occasion of the state's formation. This year is the golden jubilee of renaming Mysore state as Karnataka.
- The Chief Minister is the head of the Award committee, who has selected the winners.
- The Rajyotsava Awardee will get cash rewards of Rs 5 lakh, a 25-gram gold medal and a plaque.

Deep Ocean Mission

- **Context:** For the first time, India will embark on a journey to a depth of 6,000 meters in the ocean using an indigenously developed submersible under the Deep Ocean Mission (DOM).

Key Highlights:

- DOM is implemented by the Ministry Of Earth Sciences (MoES) and was approved in 2021 at a cost of nearly Rs 4,077 crore over a five-year period in a phased manner. The mission has six pillars:
 1. Development of technologies for deep-sea mining and a manned submersible to carry three people to a depth of 6,000 meters in the ocean;
 2. Development of ocean climate change advisory services, involving an array of ocean observations and models to understand and provide future climate projections;
 3. Technological innovations for the exploration and conservation of deep-sea biodiversity;
 4. Deep-ocean survey and exploration aimed at identifying potential sites of multi-metal hydrothermal sulphides mineralisation along the Indian Ocean mid-oceanic ridges;
 5. Harnessing energy and freshwater from the ocean.
 6. Establishing an advanced Marine Station for Ocean Biology, as a hub for nurturing talent and driving new opportunities in ocean biology and blue biotechnology.

3rd NOVEMBER, 2023

Bletchley Declaration

- **Context:** Twenty-nine countries such as the US, the UK, China, Australia, Brazil and India, along with the European union have agreed to work together to prevent "catastrophic harm, either deliberate or unintentional" which may arise from artificially intelligent computer models and engines.

Key Highlights:

- The central objective of the Bletchley Declaration is to address risks and responsibilities associated with frontier AI in a comprehensive and collaborative manner.
- The document emphasizes the necessity of aligning AI systems with human intent and urges a deeper exploration of AI's full capabilities.

- Member countries are Australia, Brazil, Canada, Chile, China, France, Germany, India, Indonesia, Ireland, Israel, Italy, Japan, Kenya, Saudi, Arabia, Netherlands, Nigeria, The Philippines, the Republic of Korea, Rwanda, Singapore, Spain, Switzerland, Turkey, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, the United States of America, and the European Union.
- It was marked by an agreement which resolved to establish “a shared understanding of the opportunities and risks posed by frontier AI”. It includes:
 1. Acknowledgment of the substantial risks from potential intentional misuse or unintended issues of control of frontier AI — especially cybersecurity, biotechnology, and disinformation risks.
 2. The declaration noted the potential for serious harm, deliberate or unintentional, stemming from the most significant capabilities of these AI models, as well as risks beyond frontier AI, including those of bias and privacy.
 3. These risks are “best addressed through international cooperation”. As part of the agreement on international collaboration on frontier AI safety, future summits will be held annually.
 4. It highlights the importance of safeguarding human rights, transparency, explainability, fairness, accountability, regulation, safety, human oversight, ethics, bias mitigation, privacy, and data protection.
- They have a high surface area and various potential applications in fields such as materials science, electronics, and nanotechnology due to their exceptional properties and structure.
- It can remove up to 90% of pollutants containing arsenic, chromium, cadmium and mercury.
- These can absorb light at multiple frequencies like infrared, visible and ultraviolet.
- The nanoflorets can generate heat sustainably, without having to burn fossil fuels.
- The nanofloret coatings can help heat up housing and sterilise surfaces in hospitals.
- A single square meter of carbon nanofloret coating has the remarkable capacity to vaporize 5 liters of water per hour.

4th NOVEMBER, 2023

Right to Privacy Vs Right to Know

- **Context:** The Supreme Court of India is hearing the case on the validity of the electoral bond scheme.

Key Highlights:

- The case involves resolving a conflict between two rights that is voters Right to Know the source of political funding for ensuring transparency in the electoral process and Right to Privacy and confidentiality of companies in exercising their right to choose which party to fund.
- Privacy is defined as a human right enjoyed by every human being by virtue of his or her existence.
- The Right to Privacy was not directly envisaged by the Constitution makers. It also did not find a mention in Part III of the Constitution relating to Fundamental Rights.
- However, the Supreme Court gave a landmark decision on Right to Privacy in Justice K.S.Puttaswamy vs Union of India case (2017).
- It ruled that Right to Privacy is “intrinsic to life and personal liberty”. It is inherently protected under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution.

Carbon Nanoflorets

- **Context:** Recently, researchers at IIT Bombay have created carbon nanoflorets capable of converting sunlight into heat with unmatched efficiency.

Key Highlights:

- This innovation holds the potential to revolutionize sustainable heating solutions while minimizing the carbon footprint.
- Carbon nanoflorets are a unique nanostructure composed of carbon atoms arranged in a distinctive floret-like morphology.

- The court also ruled that the right to privacy is not absolute, but is subject to reasonable restrictions (as is every other fundamental right).
- The Right may be restricted only by state action that passes each of the three tests: First, such state action must have a legislative mandate, Second, it must be pursuing a legitimate state purpose, and Third, it must be proportionate i.e., such state action—both in its nature and extent, must be necessary in a democratic society and the action ought to be the least intrusive of the available alternatives to accomplish the ends.
- Right to know is the species of the right to speech and expression provided by the Article 19(1) (a) of the constitution of India. A citizen has a fundamental right to access towards information. It is the duty of the state to protect the fundamental right.

Air Quality Index (AQI)

- **Context:** The Air Quality Index (AQI) in New Delhi persisted in the 'severe' category, registering at 466, according to the data published by the Central Pollution Control Board.

Key Highlights:

- Its aim is to measure how safe the air around you is for breathing.
- AQI is launched by Central Pollution Control Board in 2014.
- Central pollution control board is empowered to set standards for air under Air (Prevention and control of pollution).
- The current National ambient air quality standards were notified by CPCB in 2009.
- India had set air quality standards in 1994, and this later revised in 1998

Pollutants Covered:

1. Particulate matter (PM_{2.5})
2. Particulate matter₁₀ (PM₁₀)
3. Ozone (O₃)

4. Carbon Monoxide (CO)
5. Nitrogen Dioxide (NO₂)
6. Sulphur Dioxide (SO₂)
7. Lead (Pb)
8. Ammonia (NH₃)

5th NOVEMBER, 2023

World Food India 2023

- **Context:** The Prime Minister has inaugurated the second edition of the 'World Food India 2023' in New Delhi.

Key Highlights:

- It was organized by Ministry of Food Processing Industries
- Its aim is to present India as the 'food basket of the world' and commemorate 2023 as the International Year of Millets.

The key focus pillars are:

- **Shree Anna (Millets):** Millets are ancient grains that have been part of India's rich heritage for millennia. They are super foods that provide high nutrition, gluten-free options, climate resilience, and eco-friendliness. The United Nations has declared 2023 as the International Year of Millets (IYM 2023) with the aim of increasing the production and consumption of millets worldwide.
- **Exponential Food Processing:** Positioning India as the Global Hub: India has a vision to become a global hub for food processing and create a competitive advantage for itself in the world food market. Financing Agri Food Value Chains, especially supporting MSMEs, is a key focus area.
- **Strategic Segments:** Unlocking Potentials for Growth: India is one of the world's largest producers and consumers of food products. India leads the world in the production of milk, bananas, mangoes, papayas, guavas, ginger, okra and buffalo meat. It ranks second in the production of rice, wheat, potatoes, garlic, cashew nuts.

- Creating an Inclusive and Efficient Ecosystem: Removing barriers and establishing a coordinated framework for inclusive opportunities. In line with this, government has allowed 100% FDI under the automatic route in food processing industries in India
- Sustainable Development for Prosperity: Embracing sustainable practices, renewable energy and eco-friendly agricultural and food processing methods for a more sustainable future.
- Moreover, the energy required for this electrocatalysis reaction can be harnessed directly from a renewable energy source (in the form of a solar panel or windmill) for a carbon-neutral conversion process.

British Academy Book Prize

- **Context:** India-born author Nandini Das won the 2023 British Academy Book Prize for her book 'Courting India: England, Mughal India and the Origins of Empire'.

CO₂ Conversion Technology

- **Context:** National Centre of Excellence in Carbon Capture and Utilisation (NCoE-CCU) at IIT Bombay has developed a carbon dioxide (CO₂) conversion technology.

Key Highlights:

- It was developed by National Centre of Excellence in Carbon Capture and Utilisation (NCoE-CCU) at IIT Bombay.
- It converts carbon dioxide (CO₂) to carbon monoxide (CO) under electrocatalytic conditions at ambient temperatures and in the presence of water.
- Carbon monoxide (CO) is a widely used chemical in the industry especially in the form of syngas.
- In the steel industry, CO is an essential ingredient for converting iron ores to metallic iron in blast furnaces.
- Currently, CO is generated by partial oxidation of coke/coal which leads to a significant production of CO₂ as an end product of this process.
- If this emitted CO₂ can be captured and converted into CO, it can lead to a circular economy in this process while reducing the carbon footprint and associated costs.
- Currently, the process for CO₂ to CO conversion occurs at elevated temperatures (400-750 °C) making it an energy-intensive process.
- But this newly developed CO₂ conversion process requires only minimal energy as it can proceed under ambient temperatures (25-40 °C) in the presence of water.

Key Highlights:

- The British Academy Book Prize, worth 25000 British pounds sterling, is awarded annually for a non-fiction book that promotes global cultural understanding for a wider public audience.
- The prize covers various subjects within the social sciences and humanities.
- It aims to promote cross-cultural dialogue and appreciation of diverse cultures.
- Nandini Das is 49-year-old and is English Professor at the University of Oxford.
- She has sought to present a new perspective on the origins of the empire through the story of the arrival of the first English ambassador in India, Sir Thomas Roe, in the early 17th century.

6th NOVEMBER, 2023

ATL Marathon 2023-24

- **Context:** Atal Innovation Mission (AIM), NITI Aayog opened applications for 'ATL Marathon 2023-24'- a flagship innovation challenge organised this year in collaboration with the Ministry of Education, YuWaah and UNICEF.

Key Highlights:

- It is a national-level innovation challenge for young innovators across India who can solve community problems of their choice, and develop innovative solutions in the form of working prototypes.

- Amazon Web Services (AWS) is the hosting partner of this edition of ATL Marathon.
- The last edition of the Marathon witnessed 12000+ innovations from school students across India.
- This year's ATL Marathon is themed around "India's 75th Republic Day", with several problem statements on which student teams can build projects like Space, Agriculture, Inclusivity, Disaster management, Mobility, Health, Education & Skill Development.
- ATL Marathon is open for all schools across the country, independent of whether they are connected to an Atal Tinkering Lab or not.
- Countries need financing of \$215 billion to \$387 billion every year to adapt to climate change. But they have been receiving only \$21.3 billion.
- The adaptation finance needs of developing countries are 10-18 times greater than what they have been receiving.
- A recent study indicates that the 55 most climate-vulnerable economies alone have already experienced losses and damages of more than US \$500 billion in the last two decades.

Recommendations of the report:

- Every billion invested in adaptation against coastal flooding leads to a USD 14 billion reduction in economic damages.
- COP-28 must deliver new momentum on adaptation and loss and damage –Policymakers, multilateral banks, investors and the private sector must ensure the same

About Atal Innovation Mission (AIM):

- Atal Innovation Mission (AIM), NITI Aayog is Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country and was set up in 2016.
- Towards this end AIM has taken a holistic approach to ensure creation of a problem-solving innovative mindset in schools and creating an ecosystem of entrepreneurship in universities, research institutions, private and MSME sector.

Adaptation Gap Report 2023

- **Context:** Recently, The Adaptation Gap Report 2023 was issued by the United Nations Environment Programme (UNEP). According to the report, the world is underprepared, under invested and lacks the necessary planning for adaptation to climate change.

Key Highlights:

- The UNEP Adaptation Gap Report (AGR) series provides an annual science-based assessment of the global progress on adaptation planning, financing, and implementation.
- The AGR is co-produced by UNEP, the UNEP Copenhagen Climate Centre (UNEP-CCC) and World Adaptation Science Programme (WASP).

World Local Production Forum

- **Context:** 2nd World Local Production Forum (WPLF) being held in The Hague, the Netherlands,

Key Highlights:

- It is a regular global platform that encourages discussions and partnerships aimed at strengthening sustainable, quality, eco-friendly local production and technology transfer.
- It is a platform created at the initiative of WHO with the aim of increasing access to medicines and other health technologies.
- It provides Member States and the global community with a regular platform to shape strategies, galvanize collective action, and foster partnerships on sustainable local production to improve timely and equitable access to quality assured health products.
- The Local Production and Assistance (LPA) Unit at the WLPF Secretariat is closely working with the Kingdom of the Netherlands as the hosting country to organize this Forum.

7th NOVEMBER, 2023

Project Kusha

- **Context:** Project Kusha entails operational deployment of India's own long-range air defense system by 2028-29

Key Highlights:

- This indigenous air defense system is designed to detect and destroy a wide array of threats, including stealth fighters, aircraft, drones, cruise missiles, and precision-guided munitions at ranges of up to 350 km.
- It is developed by Defense Research and Development Organization (DRDO)
- Aim is that it seeks to establish a formidable three-layered defense system with the capability to neutralize enemy aircraft and missiles from extended distances effectively.

Features:

- The long range surface to air defence system (LR-SAM) incorporates advance long range surveillance and fire control radars.
- Interceptor missiles with a range of 150 km, 200 km and 350 km, provide the ability to detect and strike hostile targets at different distances.
- The firing units of "Project Kusha" can be seamlessly integrated with IAF's air command and control system, facilitating coordination with wide range of military radars.
- Impressive single shot probability of around 80%. When two missiles are fired consecutively, kill probability rises to 90 percent.

Composite Water Management Index

- **Context:** NITI Aayog is said to have marked the Composite Water Management Index' report for the year 2018-19 and 2019-20 for "internal use" after having publicly released the previous editions.

Key Highlights:

- It was started in 2018 by NITI Aayog and its associated ministries is Water Resources, Drinking Water & Sanitation and Rural Development
- Aim is to evaluate and rank the states and Union Territories in India on their management of water resources.
- To enable effective water management in Indian states in the face of this growing crisis.
- The latest Composite Water Management Index report maps the performance of states for 2018-19 and 2019-20. According to the report: Water scarcity is a "national problem".
- The average annual per capita water availability is expected to reduce to 1,486 cubic meters per person per year by 2021 from 1,545 cubic meters per person per year in 2011.
- As per the annual water availability norms, the availability value of less than 1,700 cubic meter/person/year indicates water shortage. Water availability below 1,000 cubic metre/capita/year is considered as "scarcity".
- Gujarat tops the list with continuous improvements year on year. It is closely followed by Rajasthan, Andhra Pradesh and Madhya Pradesh in terms of performance.
- **The index consists of 9 key themes which are:**
 1. Restoration of Water Bodies
 2. Groundwater
 3. Major and Medium Irrigation
 4. Watershed Development
 5. Participatory Irrigation Practices
 6. Sustainable on-farm Water Use Practices
 7. Rural Drinking Water
 8. Urban Water Supply and Sanitation
 9. Policy and Governance.

Pradhan Mantri Garib Kalyan Anna Yojana

- **Context:** Prime Minister Narendra Modi said that Pradhan Mantri Garib Kalyan Anna Yojana will be extended for five more years.

Key Highlights:

- It was introduced in 2020 as a pandemic relief measure, providing 5 kg of free food grains per beneficiary per month in addition to the 5 kg of subsidised food grain they were entitled to under the National Food Security Act.
- PM-GKAY is the world's largest food security scheme-1 launched by the Government of India to combat COVID-induced economic disruptions
- All beneficiaries of the targeted public distribution system (TPDS) for Antyodaya Anna Yojana (AAY) and priority household (PHH) ration cardholders are eligible for food grains under this scheme.
- In December 2022, as PMGKAY came to an end after multiple extensions, the Union Cabinet decided to make NFSA rations free for one year. That will now be extended further.

