

1. The Biological Diversity (Amendment) Bill, 2021

Topic: Environment and Ecology



In News: A joint parliamentary committee reviewing a contentious draft legislation to modify India's biodiversity conservation law has accepted amendments proposed by the government.

More on the Topic:

- The Bill amends the Biological Diversity Act, 2002 to simplify compliance requirements for domestic companies.
- Users of codified traditional knowledge and AYUSH practitioners will be exempted from sharing benefits with local communities.
- The Bill removes research and bio-survey activities from the purview of benefit sharing requirements.
- Benefit sharing will be based on terms agreed between the user and the local management committee represented by the National Authority.
- The Bill decriminalises all offences under the Act.

Reasons for amendment:

- **Providing a conducive environment** for the Ayush medicine, seed, industry and research sectors by simplifying the process.
- They also sought **to simplify the patent application process**, widen the scope of access and benefit-sharing with local communities.
- Ayush companies have been seeking relaxation of the benefit-sharing provisions.

Key Issues and Analysis:

- The term **codified traditional knowledge has not been defined**. A broad interpretation might exempt all local traditional knowledge from benefit sharing requirements.
- The Bill **removes the direct role of local communities** in determining benefit sharing provisions.
- The Bill **decriminalises offences under the Act and instead provides for a wide range of penalties**.

- Further, the Bill **empowers government officials to hold inquiries** and determine penalties. It may be questioned whether it is appropriate to confer such discretion to government officials.

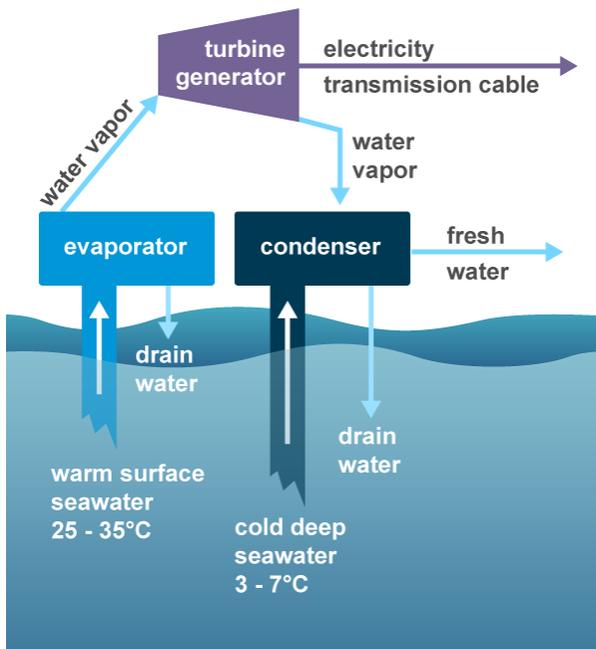
Context of the Bill:

- The BDA, 2002 was enacted for the conservation of biological diversity and fair, equitable sharing of the monetary benefits from the commercial use of biological resources and traditional knowledge.
- The main intent of this legislation is **to protect India’s rich biodiversity and associated knowledge against their use by foreign individuals.**
- It seeks **to check biopiracy, protect biological diversity and local growers** through a three-tier structure of central and state boards and local committees.
- The Act provides for **setting up of a National Biodiversity Authority (NBA), State Biodiversity Boards (SBBs) and Biodiversity Management Committees (BMCs)** in local bodies.
- The NBA will enjoy the power of a civil court.

Source: Indian Express

2. Ocean thermal energy conversion plant

Topic: Science and Technology



In News: The National Institute of Ocean Technology, an autonomous institute under the Union Ministry of Earth Sciences (MoES) is establishing an Ocean Thermal Energy Conversion plant with a capacity of 65 kilowatt (kW) in Kavaratti, the capital of Lakshadweep.

More on the Topic:



- The plant will power the one lakh litre per day low temperature thermal desalination plant, which converts seawater into potable water.
- Ocean thermal energy is derived from **the solar energy that is absorbed by the oceans.**
- OTEC is a **process for producing energy by harnessing the temperature differences** (thermal gradients) between ocean surface waters and deep ocean waters.
- 1°C variation in seawater temperature can lead to a 15% energy yield difference in output.
- **OTEC systems use a temperature difference** (of at least 77° Fahrenheit/25 degrees Celsius) to power a turbine to produce electricity.
- **Warm surface water is pumped through an evaporator containing a working fluid.**
- The vaporized fluid drives a turbine/generator. Vaporized fluid is turned back to a liquid in a condenser cooled with cold ocean water.

Significance:

- **It produces freshwater as a by-product.** In an open-cycle system, when the surface water is vaporized, it precipitates out all of its salt, so once the vapour is condensed again it is drinkable.
- **Aquaculture is yet another important by-product.** As nutrient-rich deep water is brought to the surface, it fertilizes the ocean via artificial upwelling. Aqua culture can be introduced here.
- It is **renewable energy** and one that never stops producing energy, unlike wind for example.
- India is geographically well-placed to harness ocean thermal energy.

Source: The Hindu

3.Trade Infrastructure for Export Scheme

Topic: Government Schemes

TRADE INFRASTRUCTURE AND LOGISTICS

Trade Infrastructure for Export Sector (TIES)

Department of Commerce was earlier working with states to fill infrastructure gaps through ASIDE.

As per 14th Finance Commission recommendations, tax devolution to states increased from 32% to 42%, thus delinking ASIDE from support of the Centre.

TIES launched to strengthen export infrastructure in March 2017.

Central Government funding normally not more than the equity put in by implementing agency or 50% of total project equity (80% for Northeastern & Himalayan states including J&K).



Scheme to help export-linked infrastructure projects like:

- Border Haats
- Land customs stations
- Quality testing and certification labs
- Cold chains
- Trade Promotion centres
- Dry Ports
- Export warehousing and packaging
- SEZs and ports/airports cargo terminuses

In News: The GOI has extended the IIES scheme for the period 2021-22 to 2025-26.

More on the Topic:

- The Department of Commerce, under **the Ministry of Commerce and Industry** has launched and is implementing the Trade Infrastructure for Export Scheme (TIES) since 2017.
- Its objective is to assist the Central and State/UT Government agencies in the creation or up-gradation of appropriate infrastructure for growth of exports.
- Under the scheme, **financial assistance in the form of grant-in-aid is provided to Central/State Government owned agencies** (or their Joint Ventures with major stake-holding by them).

Source: Hindu

4. Diammonium Phosphate

Topic: Agriculture

Chemical Properties

Chemical formula:	$(\text{NH}_4)_2\text{HPO}_4$
Composition:	18% N 46% P_2O_5 (20% P)
Water solubility (20 °C):	588 g/L
Solution pH:	7.5 to 8

In News: India will become Aatmanirbhar In Diammonium Phosphate (DAP).

More on the Topic:

- Diammonium phosphate (DAP) is **the world's most widely used phosphorus fertilizer**.
- **India is the largest agricultural consumer of DAP in the world.**
- DAP fertilizer is an excellent source of Phosphorus and nitrogen (N) for plant nutrition.
- It's highly soluble and thus dissolves quickly in soil to release plant-available phosphate and ammonium.
- DAP also acts as a **fire retardant**. For example, a mixture of DAP and other ingredients can be spread in advance of a fire to prevent a forest from burning.
- It then becomes a nutrient source after the danger of fire has passed.
- DAP is used in various industrial processes, too, such as **metal finishing**.
- It's commonly **added to wine to sustain yeast fermentation and to milk to produce cheese cultures**.

Source: Indian Express

5. Ukraine's Odesa port

Topic: Environment and Ecology



In News: First grain cargo ship has left Ukraine’s Odesa port.

More on the Topic:

- The so-called Black Sea Grain Initiative involving signing of separate accords by Russia and Ukraine with the UN and Turkey on July 22 provides for exports from three ports: Odesa, Chornomorsk and Yuzhny.
- Under the deal, the ships are to be guided through the Black Sea waters by Ukraine’s navy to avoid mined areas.
- The milestone comes after **the United Nations and Turkey signed agreements with Russia and Ukraine to re-open Ukraine’s Black Sea ports** and resume exports of grain, cooking oil and fertilizer.
- Odesa is the third most populous city and municipality in Ukraine and a major seaport and transport hub located in the south-west of the country, on the north western shore of the Black Sea.
- Odessa is a warm-water port. The city of Odessa hosts **both the Port of Odessa and Port Yuzhne**, a significant oil terminal situated in the city's suburbs.

Source: Business Standard

6. Tonga volcano

Topic: Geography

TSUNAMI

Volcano eruption tsunami warnings

An **underwater volcano eruption in the South Pacific triggered tsunami warnings** across the Pacific, including in Samoa, Australia, Japan, Hawaii, Chile and the US Pacific coast.



In News: Volcanic eruption in Tonga is likely to add to global warming and the depletion of Earth's ozone layer.

More on the Topic:

- Tonga eruption may be **the first volcanic eruption observed to impact climate** not through surface cooling caused by volcanic sulfate aerosols, but rather through surface warming caused by excess water vapour.
- Underwater eruption of Hunga Tonga-Hunga Ha'apai volcano injected 146 teragrams (1 teragram equals a trillion grams) of water vapour (a greenhouse gas) into the stratosphere.
- Excess stratospheric H₂O will persist for years, could affect stratospheric chemistry and dynamics and may affect surface warming.

Source: Hindu

7. Central Vigilance Commission

Topic: Polity and governance



In News: Vigilance Commissioner Suresh N Patel was appointed as the Central Vigilance Commissioner.

More on the Topic:

- Central Vigilance Commission (CVC) was mainly created to address governmental corruption and to advise the central government in the field of surveillance.
- The Commission consists of: A Central Vigilance Commissioner as Chairperson and Not more than two Vigilance Commissioners as Members
- **President of India appoints CVC members** by warrant under his hand and seal after the recommendation by a three-member committee of Prime Minister, Minister of Home Affairs (MHA) and Leader of Opposition in Lok Sabha.
- The term of the Office of the vigilance commissioners is four years or if they attain 65 years of age (whichever is earlier)
- After they retire, they are not eligible for reappointment in any central or state government agency.
- **The CVC is not controlled by any Ministry/Department.** It is an independent body which is only responsible to the Parliament.

Source: Hindu
