UPSC Daily Current Affairs | Prelim Bits 20-03-2021

Forecasting the Cyclone-caused Damage

- National Disaster Management Authority and India Meteorological Department have developed tools for forecasting the expected damage to be caused by the landfalling cyclones over the country's coastal districts.
- These tools are a web-based Dynamic Composite Risk Analysis (Web-DCRA) & Decision Support System (DSS).
- This comes under National Cyclone Risk Mitigation Project (NCRMP) with a view to addressing cyclone risks in the country.
- This will enable the disaster managers to conduct a better assessment of the vulnerable areas and in mobilizing the structural and non-structural measures to mitigate the effects of cyclones in coastal areas.
- The National Disaster Management Authority (NDMA) will implement this project in coordination with participating State Governments.
- The Project has identified 13 cyclone-prone States and Union Territories (UTs), with varying levels of vulnerability.

GEMINI

- Indian National Centre for Ocean Information Services (INCOIS) has developed a simple handheld device named GEMINI (GAGAN Enabled Mariner's Instrument for Navigation and Information).
- This device receives the information transmitted through GAGAN and feeds that to the mobile handset through Bluetooth connection.
- An App developed by INCOIS converts the satellite messages in the form of readable maps and text.

Report by Index Monitoring Cell

- The Index Monitoring Cell (IMC) in its report recommended,
    1. Decriminalising of defamation
    2. Consent of the Press Council of India as a prerequisite before filing an FIR against the media or a publication.
- In the World Press Freedom Index, 2020, India had been ranked at 142nd among 180 countries.
- In the Freedom in the World Report, 2021, India's status had been downgraded from a free country to a "partly free" country.

Index Monitoring Cell

- It was set up by the Ministry of Information and Broadcasting in 2020.
- Chaired by Principal Director General of Press Information Bureau, the 15-member committee has 4 journalists and 10 government employees.
- It aims to improve India’s ranking in the World Press Freedom Index (of Paris-based Reporters Without Borders).
- It aims to evolve an objective yardstick to gauge media freedom.

Allotting Election Symbol

- The Supreme Court dismissed the special leave petition challenging the Kerala High Court judgments that upheld the Election Commission of India's order allotting the 'Two Leaves' symbol to Kerala Congress (M).
- The Election Commission (EC) has plenary powers under Article 324 of the Constitution to decide on the allotment of symbols.
- **Election Symbols (Reservation and Allotment) Order, 1968**, empowers the EC to allot symbols to the political parties at elections in Parliamentary and Assembly Constituencies.
- In every election, different symbols shall be allotted to different contesting candidates at an election in the same constituency.
- For the purpose of this Order symbols are either reserved or free.
    1. **Reserved symbol** is a symbol which is reserved for a recognised political party for exclusive allotment to contesting candidates set up by that party.
    2. **Free symbol** is a symbol other than a reserved symbol.
- For the purposes of this Order and for such other purposes as the EC may specify, political parties are either recognised political parties (National or a State party) or unrecognised political parties.

Particularly Vulnerable Tribal Groups

- As in March 2021, India has 75 Particularly Vulnerable Tribal Groups across 18 states and Union territory of Andaman and Nicobar Islands.
- Characteristics of Particularly Vulnerable Tribal Groups (PVGT’s)
    1. PVTGs have declining or stagnant population,
    2. Low level of literacy,
    3. Pre-agricultural level of technology,
    4. Economically backward,
    5. Generally inhabit remote localities having poor infrastructure and administrative support.
- Among the 75 listed PVTGs, highest number is in Odisha (13 PVTGs).

- All the 4 tribal groups in Andaman, and 1 in Nicobar Islands, are PVTGs.
- Largest population size among the PVTGs is Saharia people of Madhya Pradesh and Rajasthan. Smallest population size is the Sentineles.

Schemes for Particularly Vulnerable Tribal Groups

- Ministry of Tribal Affairs implements the Scheme of "Development of PVTGs" exclusively for them.
- Under this scheme, Conservation-cum-Development (CCD) / Annual Plans are to be prepared by each State / UT for their PVTGs based on their need assessment.
- These assessments are then appraised and approved by the Project Appraisal Committee of the Ministry.
- Also, priority is assigned to PVTGs under the schemes of
    1. Special Central Assistance (SCA) to Tribal Sub-Scheme (TSS),
    2. Grants under Article 275(1) of the Constitution,
    3. Grants-in-aid to Voluntary Organizations working for STs' welfare
    4. Strengthening of Education among ST Girls in Low Literacy Districts.

Vehicle Scrappage Policy

- This policy, proposed in the Union Budget for 2021-22, will deregister commercial vehicles in 15 years and private vehicles in 20 years if they fail to get fitness certificates.
- Every vehicle beyond the age-limit will have to undergo the mandatory automated fitness test, failing which it will be taken off the road and the owner will be fined.
- A vehicle that fails the fitness test or fails to get its registration renewed will be termed 'end of life vehicle'.
- To discourage people from driving around in their 'unfit', polluting vehicles, the cost of registration renewal for old vehicles have been hiked.
- Automated Fitness Centres will be set up on a PPP model by the state government, private sector and automobile companies to provide fitness certificates.

US India Artificial Intelligence Initiative

- The Indo-U.S. Science and Technology Forum (IUSSTF) has launched the U.S. India Artificial Intelligence (USIAI) Initiative.
- [IUSSTF is a bilateral organization funded by the Department of Science & Technology (DST), Governments of India, and the U.S. Department of States.]
- USIAI focuses on Artificial Intelligence (AI) cooperation in critical areas that

are priorities for both countries.
- It will provide an opportunity for key stakeholder groups to discuss opportunities, challenges, and barriers for bilateral R&D collaboration.
- It will serve as a platform to enable AI innovation, help share ideas for developing an AI workforce, and recommend modes and mechanisms for catalyzing partnerships.

Efficient Removal of Heavy Metals

- The Indian Institute of Technology (IIT) Mandi has developed a reusable fibrous membrane filter using a biopolymer-based material that helps to separate out the heavy metals from water samples.
- These membranes contain adsorbents (materials that attract and hold the metals) that has large amount of a biopolymer, **Chitosan**, derived from crab shells that are mixed with a synthetic polymer, Nylon.
- Normally, the fibres used to make regular cartridge filter-assemblies are processed by a method called melt blowing, but the IIT Mandi has used a process called “solution blowing”.
- **Solution blowing** produces fibres that are nanometres in diameter, which increases their surface area tremendously and results in better adsorption of heavy metals.
- Apart from producing nanofibres, solution blowing processes can enable blending of natural polymers with synthetic polymers.
- While normally absorbent fibres bind to the target metal only at their surface, in their nanofibre membranes, the adsorption happens at the sub-surface scale as well. This increases the metal removal efficiency.
- Recovery of the adsorbed metal in a metal-hydroxyl nitrate form is easy.

Heavy Metal Pollution

- Heavy metals are Arsenic, lead, mercury, chromium, cadmium, copper, aluminium, etc.
- Heavy metals are released into the water through anthropogenic activities such as manufacturing, electroplating, mining, etc.
- Heavy metals in water could lead to several neurological diseases in humans including Alzheimer’s, Parkinson’s and multiple sclerosis.

Source: PIB, The Hindu, Live Law, Down To Earth



SHANKAR
IAS PARLIAMENT
Information is Empowering