

02 Dec 2021: PIB Summary & Analysis

TABLE OF CONTENTS

- 1. Cyclone Jawad
- 2. Dam Safety Bill
- 3. Enhancing Ocean Alkalinity by removing CO2
- 4. SPPEL (Scheme for Protection and Preservation of Endangered Languages of India)
- 5. <u>Hornbill Festival</u>
- 6. Convergence of Sfurti Scheme

1. Cyclone Jawad

Related to Geography (GS-I) and Disaster Management (GS-III)

Prelims: About Cyclone

Mains: Preparedness to deal with the implications of Cyclone

Context: The Prime Minister chaired a meeting to review the preparedness plan to tackle the aftermath of Cyclone Jawad that is likely to approach the Andhra Pradesh-Odisha coast.



Source: The Indian Express

The image depicts a low pressure created over the southeast of the Bay of Bengal



Cyclone Jawad: Important Facts

- The <u>IMD</u> has notified that there is a low pressure created in the southeastern part of the Bay of Bengal.
- This results in the concentration of depression and ultimately gets intensified to a cyclonic storm which is likely to strike the Andhra Pradesh – Odisha coast with an estimated wind speed of 100 km/hour.
- The cyclone is named Jawad by Saudi Arabia and it means generous or merciful.

How are Cyclones named?

The World Meteorological Organisation and the Economic and Social Commission for Asia and the Pacific (ESCAP) associated and formed a Panel on Tropical Cyclones in 1972

This Intergovernmental body consists of the countries that are affected by tropical cyclones in the Bay of Bengal and the Arabian Sea with an objective to mitigate the disastrous impact of tropical cyclones.

In the 27th session of WMO/ESCAP Panel on Tropical Cyclones in Muscat in 2000, the Organisation was entitled to assign names to the tropical cyclones. These names are proposed by the member countries such as Bangladesh, India, Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand

- India, Bangladesh, Myanmar, Pakistan, Maldives, Oman, Sri Lanka and Thailand decide the names of cyclones in the region.
- The countries submit a list of cyclone names from time to time to choose the names from the pool.
- While selecting names for cyclones, countries first analyse them to see if the word is easily understood by people in the region, hence the names are generally familiar words.

Know more about Cyclones and their naming in the link.

Preparedness:

• The NDRF (<u>National Disaster Response Fund</u>) at the centre and the SDRF in the states are all set to carry out the operations to initiate preventative measures to reduce the adverse effects of the cyclone.



- The Indian Coast Guard has also started taking actions to safeguard the people of coastal areas, properties and tasked the ships and aircraft to convey the weather-related information to the mariners.
- The district authorities are directed to establish the relief camps.

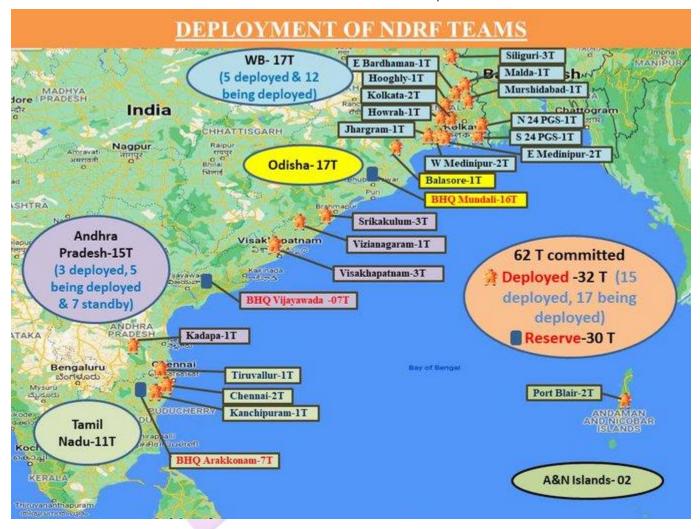


Image source: NDRF

To read more about cyclone disaster management, check the link.

2. Dam Safety Bill

Related to Polity, GS II

Prelims: About the Bill

Mains: Significance



Context: Rajya Sabha passed the landmark dam safety bill which was ratified by Lok Sabha in 2019.

About the Bill:

- Within the ambit of the Dam Safety Bill, a National Committee on Dam Safety will be created to facilitate the dam safety policies, protocols and procedures.
- A regulatory body, National Dam Safety Authority, will be constituted for the holistic implementation and monitoring of dam safety protocols and standards.
- At the state level, the regulatory functions would be operated by State Committees on Dam Safety and State Dam Safety Organisation.
- The interrelationship between dam safety and climate change has been acknowledged by the bill and it provides for regular inspection and hazard classification of dams.
- Emergency action plans and comprehensive dam safety reviews will be carried out by expert intervention.
- It also provides for a flood warning system to protect the inhabitants from calamities.
- In order to follow compliance, there is a penalty imposed on the dam owners for poor maintenance of the dams.

Significance:

- The bill opens a new chapter that leads to the beginning of an era of Dam Safety and Water Resource Management in India.
- Adequate surveillance, inspection, operation and maintenance of large dams in the country are the major objectives of this historic legislation.
- India is the third-largest dam-owning country in the world and about 80% of the dams are over 25 years old. India's dam safety records look well with the functioning of dams over 100 years of age. However, there have been instances of dam failures and poor management issues.
- This demands planning to rejuvenate the dams for better management of water resources replenishing the ground-water levels through environment-friendly measures. The dam safety bill addresses the concerns and will ensure to prevent adverse effects due to dam failures by the cooperation of both the centre and the states.
- This bill envisages a robust legal and institutional framework towards the safety of dams.

Read about Passage of Bills in the linked article.

3. Enhancing Ocean Alkalinity by removing CO2

Related to Science and Technology, GS III

Prelims: About Ocean Alkalinity



Mains: What is the objective and significance of increasing ocean alkalinity?

Context: An Indian biogeochemist has won the Swarnajayanti fellowship for his path-breaking work on the enhancement of ocean alkalinity by removing atmospheric carbon dioxide which can be a potential step to tackle increasing carbon emissions contributing towards climate change. The Swarnajayanti fellowship is conferred by the Department of Science and Technology.

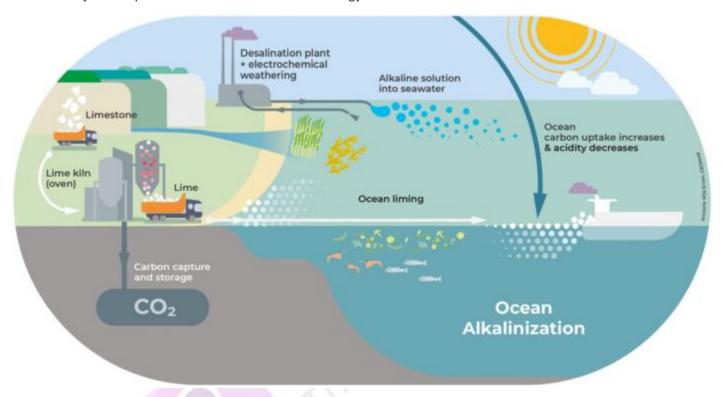


Image source: www.oceannets.eu

About Ocean Alkalinity:

- Ocean alkalinization can be defined as the removal of carbon dioxide by the addition of substances that are alkaline in nature to the seawater increasing the carbon sink of the oceans.
- These minerals can be olivine, lime or other industrial substances.
- In this process, the atmospheric carbon dioxide is dissolved in water and forms carbonates and bicarbonates. The increasing concentration of carbonates and bicarbonates results in further absorption of carbon dioxide by the oceans to maintain the acid-base equilibrium.

Methods To add Alkalinity to Oceans:

 Spreading finely alkaline substances to oceans, depositing alkaline sand, gravels on beaches or coastal seabeds.

Significance:

• Ocean alkalinization is a potential method to reverse ocean acidification which results in the protection of marine ecosystems which are threatened by implications of climate change.



• The electrochemical fuel cells that are used to increase the alkaline concentration of seawater generates hydrogen that can be clubbed with hydrogen energy plants as India is already heading towards the adoption of hydrogen energy for achieving its low carbon future in accordance with the targets set at the recently concluded COP26. This can also reduce the net cost of alkalinization.

Also Read About: National Hydrogen Energy Mission

- The alkaline minerals facilitate ocean fertilization.
- Oceans are capable of storing billions of tons of CO2 and this formulates the underlying principle of increasing the alkalinity of oceans.

Concerns:

- The addition of alkaline minerals through artificial means might have an adverse impact on marine ecosystems which is not yet estimated.
- Besides, there can be traces of heavy metals that can accumulate in the marine food chain leading to bioaccumulation.
- The process of alkalinization demands extensive mining and processing of raw materials which might affect the environment and health of the individuals involved.
- The process of ocean alkalinization is thriving in the early stages of research and development and needs government intervention to promote research, scale-up and replication. The policies must ensure sustainability in terms of mining, processing, transport and the supply chain of the minerals.

The study carried out by the Indian researcher:

- Minerals were identified and a thorough assessment of the impact of alkaline substances on carbon, phosphorus and nitrogen cycles was carried out.
- This study also provides an understanding of the effect of alkalinization on phytoplanktons and marine bacteria.

4. SPPEL (Scheme for Protection and Preservation of Endangered Languages of India)

Related to Culture, GS I

Prelims: About the scheme

Context: The Government of India has decided to promote all Indian languages under the Scheme for Protection and Preservation of Endangered Languages of India.

About the Scheme:

- The Central Institute of Indian Languages, Mysore, under the scheme offers protection, preservation and documentation of all mother languages which are spoken by less than 10,000 people and these languages are known to be endangered.
- The <u>UGC</u>, in the same context, introduced two schemes to protect the endangered languages:



- Funding support to the State Universities for the study and research in indigenous and endangered languages in India.
- Establishment of Centres for Endangered Languages in Central Universities.
- The SPPEL scheme was initiated by the then Ministry of Human Resource Development in the year 2013.
- Documentation of the endangered languages and those languages that have a tendency to become endangered was the sole aim of the scheme.
- This scheme intended to promote unity among Indian languages by developing a scientific approach.
- Moreover, it also protects the documents of minority and tribal languages.

5. Hornbill Festival

Related to Art and Culture, GS I

Prelims: Important Facts of the Festival

Context: The Hornbill Festival is a reflection of the rich culture, lifestyle and food habits of Nagaland and it is the largest festival of the warrior tribes of Nagaland wherein the celebration continues for 10 days.

About the Festival:

- The festival derives its name from the bird hornbill (also called Dhanesh bird) which occupies an important place in the culture and historic tales of Naga tribes.
- This festival is celebrated every December in Nagaland and North-East India.
- This attracts many tourists from different parts of the country and abroad who participate in the celebration.
- It involves tribal arts, folk songs, games and other cultural activities.

6. Convergence of Sfurti Scheme

Related to GS III, GS II (govt schemes)

Prelims: About the Scheme

Mains: Application and Significance



Context: The Ministry of Micro, Small and Medium Enterprises (MSME) assessed the functional SFURTI clusters in terms of their profitability and marketability.

What is Cluster Development?

- In order to increase the productivity and competitiveness of the micro, small and medium enterprises the MSME had introduced a new method of capacity building known as cluster development.
- These clusters are a group of enterprises located in a particular area or a value chain span over different geographical areas and produce similar products and services which can be linked by a common infrastructural facility.

About SFURTI Scheme:

- The Scheme for Registration of Traditional Industries is a cluster of 50 artisans that was initiated by MSME and is distributed across 18 districts.
- It was launched to promote cluster development.
- It operates under the Khadi and Village Industries Commission which is the nodal agency for the cluster development of khadi and other village products

Read more about the SFURTI scheme in PIB dated Feb 22, 2021.

Importance of the Scheme:

- The scheme significantly contributes to empowering the rural economy by boosting the clusters with the engagement of government, industry, artisans and stakeholders.
- It involves innovative and upgraded technological interventions along with market intelligence that employ various public-private partnership models.