Prelim Bits 13-07-2023 | UPSC Daily Current Affairs

Association of World Election Bodies (A-WEB)

Chief Election Commissioner & 3 members of Election Commission of India (ECI) to attend the 11th meeting of the Executive Board of the Association of World Election Bodies (A-WEB).

- Association of World Election Bodies (A-WEB) is the largest association of *Election Management Bodies (EMBs)* worldwide.
- **Aim** – To achieve sustainable democracy around the world through the strengthening of the processes of election management in member countries.
- **Launch** - 2013 in Seoul, Republic of Korea.



- **Members** - 119 Election Management Bodies (EMBs) as Members and 20 Regional Associations/Organisations as Associate Members.
- All members may participate in all A-WEB activities, take part in making decisions for the Association, and receive services and benefits provided by the Association.
- A-WEB organises capacity building programmes and undertakes Election Visitor and Observation Programmes in various countries to study election management practices and share knowledge with other member EMBs.
- **India's position** – India is a member to the association of world election bodies (A-WEB) and is represented by Election Commission of India (ECI)
- **Election Commission of India (ECI)**
  - **Vice-Chairperson** of A-WEB for 2017-19 term.
  - **Chair** - 2019-22 term.
  - At present a *member* of its Executive Board for 2022-24.

India A-WEB Centre

- India A-WEB Centre has been established at New Delhi in 2019
- **Aim** – To document and research for sharing the best practices and training and capacity building of officials of A-WEB members.
- The Centre is bringing out several publications and documents, including a world class Journal titled '*A-WEB India Journal of Elections*.'
- The ECI is providing all the necessary resources for the India A-WEB Centre.

2023 Annual meeting

- **Theme, 2023** - A global view on the challenges of regional elections 2023.

- **Venue, 2023** – Colombia
- **ECI proposals**
  - Setting up an A-WEB portal which would serve as repository of electoral best practices and initiatives taken by member EMBs in various aspects of electoral management
  - Establishing A-WEB Global Awards for EMBs who make significant contribution and take important initiatives in the democratic processes.
  - Both the proposals were *approved by* the Executive Board.

References

1. PIB | Association of World Election Bodies (A-WEB)
2. A-web | About A-web

Atal Vayo Abhyuday Yojana

The Ministry of Social Justice and Empowerment has been working towards creating an inclusive and equitable society for all its citizens especially it is working for the welfare of senior citizens.

- The Atal Vayo Abhyuday Yojana (AVYAY) is a comprehensive initiative aimed at empowering senior citizens in India.
- National Action Plan for Senior Citizen (NAPSrc) had been revamped, renamed as Atal Vayo Abhyuday Yojana (AVYAY) and subsumed in April 2021.
- **Aim** - To empower senior citizens in India by ensuring their active participation and inclusion in all aspects of life.
- To implement Section 19 and 20 of the *Maintenance and Welfare of Parents and Senior Citizens Act, 2007*.
- **Ministry** - Ministry of Social Justice and Empowerment.

Important Schemes under Atal Vayo Abhyuday Yojana (AVYAY)

- **Integrated Programme for Senior Citizens (IPSrC)**
  - It provides financial assistance to eligible organization’s for running and maintenance of Senior Citizen Homes/ Continuous Care Homes to improve the quality of life of the senior citizens.
  - It is a Central Sector Scheme.
  - The funds are given to the implementing to the agencies, registered societies, Panchayati raj institutions, local bodies, non-governmental/voluntary organizations.
- **Rashtriya Vayoshri Yojana (RVY)**
  - It provides physical aids and assisted-living devices for senior citizens belonging to *Below Poverty Line category*.
  - It is a *Central Sector* Scheme.
  - The expenditure for implementation of the scheme is being met from the "Senior Citizens' Welfare Fund".

- It is being implemented by the Artificial Limbs Manufacturing Corporation (ALIMCO), a PSU under the Ministry of Social Justice and Empowerment.

Elderline for Senior Citizens - *Toll-free No (14567) is launched to provide free information, Guidance, Emotional Support and field intervention in cases of abuse and rescues in order to improve the quality of life of senior citizens is active in 31 States/UTs.*

References

1. PIB | Atal Vayo Abhyuday Yojana
2. PIB | Schemes for Senior Citizens

Atlantic Menhaden & Chesapeake Bay

Researchers say that overfishing of the Atlantic menhaden are at the root of the recently reported declining reproductive rates of ospreys at Mobjack Bay, an inlet at the southern end of the Chesapeake Bay.

Atlantic Menhaden

- **Scientific name** - Brevoortia tyrannus.
- **Family** - Clupeidae.
- It is also known as Fatback, Bunker, Pogie, Mossback.



- **Habitat** - Found in *coastal and estuarine waters* from Nova Scotia to northern Florida. They are large in numbers by volume, along the Atlantic Coast of the United States.
- In the *Chesapeake Bay*, menhaden are common in all salinities.
- **Diet** - They are filter feeders, toothless and primarily consuming phytoplankton and zooplankton.
- **Uses** - Menhaden are harvested for use as fertilizers, animal feed, and bait for fisheries including blue crab and lobster.
- They are a major source of *omega-3 fatty acids*, so they are used to develop human and animal supplements.
- Menhaden isn't usually sold for food as it has a pungent flavor and is very bony.
- **Significance -** In estuaries like the Chesapeake Bay, they are food for striped bass and other fish, as well as for predatory birds, including osprey and eagles.
- **Impact on ecosystem** - The disappearance of most of the menhaden from the bay is contributing to the disappearance of the many species that rely on menhaden
- **Conservation Status**
  - IUCN Status - Least Concern.
- **Atlantic commission**
  - Atlantic States Marine Fisheries Commission, a federal regulator regulates the

commercial fishing of the atlantic menhaden.

Chesapeake Bay



- It is the largest inlet in the Atlantic Coastal Plain of the *eastern United States.*
- The southern part of the bay is bordered by Virginia and its northern part by Maryland.
- It is created by the submergence of the lower courses of the *Susquehanna River* and its tributaries.

References

1. The Indian Express | Atlantic menhaden & Chesapeake Bay
2. National Oceanic and Atmospheric Administration | Atlantic menhaden
3. Chesapeake Bay Program | Atlantic Menhaden

Zhuque-2 carrier rocket

A private Chinese company launched first methane-liquid oxygen rocket into orbit named Zhuque-2 recently, beating U.S. rivals.

- The rocket successfully delivered a test payload into sun-synchronous orbit (SSO)
- The Zhuque-2 mission became successful in its second attempt.
- Zhuque-2 mission carried *no payload* and the rocket's first stage was not recovered.
- The rocket is currently expendable but Landspace is working on a restartable version of the 80-ton-thrust TQ-12 engine which powers the Zhuque-2 first stage.
- **Launched by –** LandSpace, a Chinese private company.
- **Fuel** - It is a *methane-liquid oxygen* rocket.
- A methane-powered rocket, also known as Methalox, uses methane as the fuel and liquid oxygen (LOX) as the oxidizer.
- **Mission** - In this mission 2 planned rockets will carry the spacecraft, one will land on the moon's surface and the other will transport the astronauts.
- Both the rockets will enter the moon's orbit and after a successful docking the Chinese astronauts will enter the lunar lander to descend onto the moon's surface.
- After Chinese astronauts have completed their scientific tasks and collected samples from the moon, the lander will transport the astronauts back to Earth using the orbiting spacecraft.
- **Advantages**
  - Less polluting,
  - Safer,
  - Cheaper,
  - A suitable propellant for a reusable rocket.
- **Landspace** - It became the 2nd private Chinese company to ever launch a liquid-propellent rocket.
- Previously, Beijing Tianbing Technology successfully launched a *kerosene-oxygen*

rocket.

Other methane based rockets in development stage

Methane based Rockets	Agencies	Country
Starship	SpaceX	U.S.A
New Glenn	Blue Origin	U.S.A
Vulcan Centaur	United Launch Alliance	U.S.A
Neutron	Rocket Lab	U.S.A
Terran R	Relativity Space	U.S.A

To know more about India and reusable rockets - Next-Gen Launch Vehicle (NGLV), RLV-TD

References

1. The Indian Express | Private Chinese company launched Zhuque-2
2. Aljazeera | China launches world's first methane-fuelled space rocket
3. Space News | China's Landspace reaches orbit

Ocean Colour

A new study revealed that Climate change has altered the colour of 56% of the world's oceans and the waters in the tropics have turned green particularly the southern Indian Ocean.

- **Findings** - The oceans appear blue, but the true colour may contain a mix of subtler wavelengths, from *blue to green* and even *red*.
- The oceans' hue changes naturally from one year to another, so the researchers observed how the 7 colours changed from region to region during a given year.
- Next, they checked how annual variations in ocean colour have changed over the 2 decades and this analysis showed that climate change was driving the change.
- They then used to model to simulate 2 scenarios - one with the addition of greenhouse gases and the other without them.
- The scenario that considered the addition of greenhouse gas emissions showed that colour could change in about 50% of the world's surface oceans, which is comparable to satellite observations.
- These observations estimated that 56% of the saltwater bodies are turning green or blue.
- Though the southern Indian Ocean is seeing a significant change, the waters near *India are not following* the same trend.
- Changes in the ocean colour indicate alternations to the *phytoplankton communities*.

Phytoplankton are primary producers of energy - Using chlorophyll, they convert sunlight into energy, thus feeding an entire food chain above them.

- Phytoplankton consume carbon dioxide and release oxygen, making their presence crucial to marine creatures.
- They also ‘fix’ nitrogen making them an important part in the enrichment of oceanic waters.
- Nitrogen also plays a key role in regulating the *global carbon cycle*.
- **Green** - Indicates life, especially phytoplankton.
- **Blue** - Indicates little life, the amount of carbon dioxide (co2) absorbed by the ocean.

Currently, oceans absorbed 25% of all carbon dioxide (CO2) emissions.

References

1. Down to Earth | Tropical waters have turned green in colour
2. The Print | By the end of the century, our blue oceans will turn green

