Prelim Bits 19-09-2021 & 20-09-2021 | UPSC Daily Current Affairs

Sea Cucumber

Indian Coast Guard (ICG) team at Mandapam, Tamilnadu seized two tonnes of sea cucumber, a banned marine species.

- Sea cucumber is primarily smuggled from Tamil Nadu to Sri Lanka in fishing vessels.
- In 2020, the world's first conservation area for endangered sea cucumbers was set up in Lakshadweep Islands.

Agency or Act	Conservation Status
IUCN Red List	Endangered
CITES	Appendix II and III
Wildlife Protection Act, 1972	Schedule I

- **Threats** - Illegal overfishing and smuggling for food & traditional medicine and human population density.
- Sea cucumbers are in high demand in China and Southeast Asia.
- **Geographic hotspots** for conservation action include east Africa, the Coral Triangle in the southwest Pacific and Central-Western Pacific.

Humboldt Penguin

Mumbai's Byculla Zoo announced the addition of two new Humboldt penguin chicks.

- Humboldt penguin (Spheniscus humboldti) is a medium-sized species that belongs to a genus that is commonly known as the 'banded' group.
- It has an average height of over 2 ft.
    - Emperor penguin, the largest of penguin species, stands at over 4 ft tall, while the little penguin has a maximum height of 1 ft.
- Humboldt penguins are endemic to the Pacific coasts of Chile and Peru.
- They are so named because their habitat is located near the Humboldt Current, a large oceanic upwelling characterised by cold waters.

- Humboldt Penguins burrow and create nesting sites in guano (fecal) deposits.
- Their breeding season in the wild is either March-April or September-October depending on the location of the colony.
- They have large, bare skin patches around their eyes, an adaptation to help keep them cool.

Agency	Conservation Status
IUCN Red List	Vulnerable
CITES	Appendix I (endangered)

- **Threats** - Habitat destruction, overfishing of their prey species, drowning in gill nets, guano harvesting, ecological disasters like oil spills, pollution like trash in the ocean, human interference & El Niño Southern Oscillation events.

Planet Nine

A study says that it has found more evidence for a distant giant planet in our solar system called Planet Nine.

- It has found that the Planet Nine could have a mass of 6.2 (+2.2/-1.3) Earth masses. It may be a typical extra-solar super-Earth.
- Planet Nine is not a new discovery. It had appeared in the images taken by the Hubble Space Telescope in 2004.
- It orbits far beyond Neptune in a highly eccentric orbit around the Sun.
- A 2018 study noted that a trans-Neptunian object called 2015 BP519 had an unusual trajectory as it was affected by Planet Nine's strong gravity.

Criteria for Planet

- International Astronaumical Union determines the criteria and vote on the decisions.
- The 3 conditions for a celestial object to be declared as a planet
    1. It must orbit the Sun.
    2. It should be massive enough to acquire an approximately spherical shape.
    3. It has to clear its orbit (being the object that exerts maximum gravitational pull within its orbit).

- **Dwarf Planet** - If a celestial object satisfies any 2 of the above 3 conditions, it is called as dwarf planet.
- It orbits the sun, and has enough mass to assume a nearly round shape.
- It has not cleared the neighbourhood around its orbit and is not a moon.
- **Exoplanet** is a planet outside the Solar System. The first confirmation of detection of exoplanet occurred in 1992.

Meghalaya Enterprise Architecture Project

Ministry of Electronics & Information Technology (MeitY) launched Meghalaya Enterprise Architecture Project (MeghEA).

- MeghEA envisions making Meghalaya a **high income state by 2030** by **improving service delivery and governance** for the people at the grassroots level using power of Digital technologies.
- The project is spread across **6 pillars** - Governance, Human Resources, Entrepreneurship, Primary Sector, Infrastructure and Environment.
- It will be implemented by the MeitY, National Informatics Centre (NIC), and Information Technology Department of state.
- During the launch of the North East vision document (2018), Meghalaya was selected as the pilot first pilot State for preparing MeghEA and implementing MeghEA integrated Finance

Solution Architecture.

- **Goals** - MeghEA demands coordination between strategies, policies, processes, services and organizational capacity to absorb change.
- Coordinate all ICT initiatives under one umbrella.
- Implement and ICT enable state government process reengineering to provide multi-channel service delivery in a manner that increases digital take-up and completion rates.
- Ensure that state government applications and systems provide end-users with information they need to make decisions and influence government operations.
- Craft an ecosystem for the digital economy to boost shared prosperity.

- Preparation of a vision and roadmap to achieve the MeghEA vision (including SDGs adopted by the State) and mission levers
    1. Connect (connected citizen connected government),
    2. Collaborate (efficiently collaborating government) and
    3. Empower (digitally enabled citizens).
- Interoperability among various public, private and governmental applications leading to a connected ecosystem to foster innovation and promote secure data sharing.

India Enterprise Architecture

- The UN e-Governance survey emphasized on a whole-of-government approach, policy integration and use of Big Data Analytics to provide better governance to citizens.
- So, a working group was constituted by Standardisation Testing and Quality Certification (STQC), MeitY under the J. Satyanarayana, to develop the India Enterprise Architecture (IndEA) framework.
- In 2018, IndEA was notified under the Digital India Programme to design and implement **integrated, nationally portable and scalable digital platforms.**
- IndEA provides a generic framework comprising of a set of architecture reference models that can be converted into a Whole-of-Government Architecture for India, Ministries, States, Govt. Agencies etc.
- IndEA framework is based on federated architecture approach.
- It recognizes the need to accommodate both greenfield (new) and brownfield (existing / legacy) e-Governance initiatives.

SPIN Scheme

Khadi and Village Industries Commission (KVIC) launched the Strengthening the Potential of India (SPIN) Scheme and set up a pottery cluster under SFURTI Scheme in Varanasi to empower the marginalized potters.

- SPIN Scheme is a specially-designed no-subsidy program that enables to make potters self-sustainable.
- It enables the registered potters to get easy direct loans from the banks under Pradhan Mantri Shishu Mudra Yojana.
- Under the SPIN Scheme, KVIC is acting as a facilitator for financial aid to potters through RBL bank and also providing training to the artisans.
- There will be no financial burden on the exchequer and the loan will be repaid by the potter in easy instalments.

Source: PIB, The Indian Express, Hindustan Times, The Conversation, Bird Life

International

