

## **Daily Current Affairs | Prelim Bits 06-03-2020**

### **Merchant Shipping Act, 1958**

- The provision of Prevention and Containment of Pollution of the sea by oil is covered under Chapter XIA of Merchant Shipping Act, 1958.
- This provision is applicable to all ships registered under this Act and compliance is monitored and regulated by the Directorate General of Shipping (DGS).
- The Rules developed by Central Government under the Power granted by Section 356E of Merchant Shipping Act, 1958 is to deal with pollution of seas from ship-generated pollution sources.
- Ships are subjected to initial inspection once they are constructed to ensure that the ship is fitted with all necessary equipment to prevent pollution of seas.
- Surprise inspections are also conducted by Surveyors stationed at various Mercantile Marine Department on Indian and Foreign Flag vessels through powers granted under Section 356G of the Merchant Shipping Act, 1958.
- The DGS as a proactive measure and also being custodian of Merchant Shipping Act, 1958 has developed a centralized online portal called “SwachhSagar” for request and provisioning of waste reception facilities.

### **MARPOL Convention**

- The International Convention for the Prevention of Pollution from Ships 1978, is one of the most important international marine environmental conventions.
- It was developed by the International Maritime Organization with an objective to minimize pollution of the oceans and seas, including dumping, oil and air pollution.
- The original MARPOL was signed in 1973, but did not come into force at the signing date.
- The current convention is a combination of 1973 Convention and the 1978 Protocol, which entered into force on 2 October 1983.
- All ships flagged under countries that are signatories to MARPOL are subject to its requirements, regardless of where they sail and member

nations are responsible for vessels registered on their national ship registry.

- The MARPOL Convention has six annexes (I to VI) and it deals with prevention of Pollution from ships by Oil, Noxious liquid substances, Dangerous goods in packaged form, Sewage, Garbage and Air pollution from ships respectively.
- To reduce pollution of air by sulphur oxide, MARPOL (Prevention of Air Pollution) has been amended and now requires that Sulphur content of fuel used on board ships should not exceed 0.5% mass/mass.
- India has signed the International Convention for the Prevention of Pollution from Ships (MARPOL).
- With respect to prevention and control of pollution in inland-waterways, the Inland Waterways Authority of India (IWAI) regulates the same through the State Maritime Authorities concerned.

## **Dolphin Census**

- The dolphin census in Odisha coast was taken up by the Chilika Development Authority (CDA).
- According to last year's census, the Irrawaddy dolphin population in Chilika was 151, by which Chilika is considered as the highest single lagoon dolphin population in the world.
- According to recent census only 62 humpback dolphins were spotted at Gahirmatha down from 126 in 2019, their number was pegged at 307 in 2015.
- Officials conducted a dolphin census for the first time in Gahirmatha in 2015.
- The census in 2016 and 2017 had been cancelled due to bad weather.
- The 2020 census was the fourth such dolphin census undertaken in the marine sanctuary.
- The census was conducted using hydrophones.
- A hydrophone is a microphone designed to be used underwater for recording or listening to underwater sound.
- Most hydrophones are based on a piezoelectric transducer that generates an electric potential when subjected to a pressure change, such as a sound wave.
- A hydrophone can detect airborne sounds, but will be insensitive because it is designed to match the acoustic impedance of water, a denser fluid than air.

## **Gahirmatha Marine Sanctuary**

- Gahirmatha Marine Sanctuary is a marine wildlife sanctuary located within Bhitarkanika National Park in Odisha's Kendrapara district.
- It is the world's largest nesting beach for Olive Ridley Turtles.
- It extends from Dhamra River mouth in the north to Brahmani river mouth in the south.

### **Humpback Dolphin Vs Irrawady Dolphin**

- Humpback dolphin is a coastal dolphin found in Gahirmatha Wildlife Sanctuary.
- It is found along the coasts of Indian Ocean and coasts of West Africa.
- It is listed under appendix I and II of the convention on the conservation of migratory species of wild animals.
- Reduction in the humpback dolphin count in Gahirmatha could be due to their migration from Gahirmatha to Chilika Lake and towards the deep sea.
- Climate change and bad weather could have also pushed them towards deep sea.
- Sometimes, dolphins are trapped in fish nets or hit by propellers of fishing trawlers.
- Irrawaddy dolphins reside in estuaries of Chilika Lake, Humpback dolphins live in sea water near the coast at Gahirmatha.
- Irrawaddy dolphin is an example of euryhaline species, this means that it is able to tolerate a wide range of salinities.

### **Tadoba Andhari Tiger Reserve**

- Tadoba Andhari tiger reserve (TATR) is located in Chandrapur district of Maharashtra state in India.
- It is Maharashtra's oldest and largest national park.
- Created in 1995, the Reserve includes the Tadoba National Park and the Andhari Wildlife Sanctuary.
- The Reserve consists of 577.96 square kilometres (223.15 sq mi) of reserved forest and 32.51 square kilometres (12.55 sq mi) of protected forest.
- It is Maharashtra's largest reserve for the wild cat/Tiger .
- The reserve also hosts other wild animals, such as leopard, wild dog, sloth bear, gaur, sambhar, cheetal, besides the rarely spotted ratel, flying squirrel, pangolin and rusty spotted cat.
- A dam proposed on the river Human (pronounced Hooman) at Tadoba Andhari Tiger Reserve (TATR) in Chandrapur district threatens to

submerge more than 90 per cent of a 7-km forest area.

- The project not only falls in TATR buffer zone, but also the eco-sensitive zone of Ghodazari Wildlife Sanctuary closeby.
- It will break the only linking corridor for tiger movement between TATR, Ghodazari and Umred-Karhandla wildlife sanctuaries in the state.
- Indravati Tiger Reserve in Chhattisgarh is in east of TATR and Kawal Tiger Reserve in Telangana is in south west.

### **NASA's Curiosity rover**

- The Curiosity rover is a Martian mission of NASA, which landed in supersized Gale Crater on Mars in 2012.
- It found that the crater contained a lake billions of years ago and an environment that could have supported microbial life.
- The Curiosity also found new pieces of evidence suggesting that salty, shallow ponds once dotted a Martian crater a sign of the planet's drying climate.
- Before that, Curiosity found odd rocks halfway into a region called the "clay-bearing unit".
- It also revealed that the methane levels have sharply decreased on Mars continuing the methane mystery of the red planet.
- Curiosity had also captured two solar eclipses on Mars
- The rover so far has travelled 21.92 kilometers and snapped a total of 654,661 pictures of the red planet
- NASA's Curiosity rover has recently released its highest-resolution panorama of the Mars that has a file size of 2.43 GB.
- NASA is planning for Mars 2020 rover, which will be officially called- Perseverance.
- While the Curiosity is exploring the Gale Crater, the Mars 2020 will explore the Jezero Crater- the site of an ancient delta.

### **UNESCO's List of Intangible Cultural Heritage**

- Representative List of the Intangible Cultural Heritage of Humanity is annually released by UNESCO.
- This coveted list is made up of those intangible heritage elements that help demonstrate diversity of cultural heritage and raise awareness about its importance.
- The list was established in 2008 when Convention for Safeguarding of the Intangible Cultural Heritage came into effect.
- It has two parts viz. Representative List of Intangible Cultural Heritage of

Humanity and List of Intangible Cultural Heritage in Need of urgent safeguarding.

- District or State administration will nominate any cultural heritage to enter into the list to UNESCO through Sangeet Natak Akademi in New Delhi, which is the nodal center for such work in the country.
- UNESCO will take over a year to decide on the matter once the nomination is submitted.
- From India the Intangible Cultural Heritages added into this list include:
  1. Tradition of Vedic chanting
  2. Ramlila, the traditional performance of the Ramayana
  3. Kutiyattam, Sanskrit theatre
  4. Ramman, religious festival and ritual theatre of the Garhwal Himalayas.
  5. Mudi yettu, ritual theatre and dance drama of Kerala
  6. Kalbelia folk songs and dances of Rajasthan
  7. Chhau dance
  8. Buddhist chanting of Ladakh: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region, Jammu and Kashmir.
  9. Sankirtana, ritual singing, drumming and dancing of Manipur.
  10. Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab
  11. Yoga
  12. Nawrouz
  13. Kumbh Mela

### **Ger or 'Phag Yatra'**

- Indore district administration plans to nominate 'Ger', a traditional Holi procession, for UNESCO's list of intangible cultural heritage.
- 'Ger' or 'Phag Yatra' is a procession that is taken out on Rang Panchami in different parts of Madhya Pradesh's Indore city during the five-day Holi festivities.
- Efforts are also being made to observe 'Ger' in traditional Holkar style.
- The tradition of Ger in Indore was started under the Holkar dynasty, when royals would take to streets to celebrate Holi with the general public.

### **Holkar Dynasty**

- The Holkar dynasty was a Maratha clan of Dhanger origin in India.
- The Holkars were generals under Peshwa Baji Rao I, and later became Maharajas of Indore in Central India as an independent member of the

Maratha Empire until 1818.

- Later, their kingdom became a princely state under the protectorate of British India.
- The dynasty was founded with Malhar Rao, who joined the service of the Peshwas Baji Rao of the Maratha Empire in 1721, and quickly rose to the rank of Subedar.
- Malhar Rao Holkar (1694-1766) established the dynasty's rule over Indore.
- The name of the dynasty was associated with the title of the ruler, who was known informally as Holkar Maharaja.

## Swamp Wallaby

- Swamp wallaby, is a marsupial related to the kangaroo.
- It is likely the only mammal pregnant and lactating all lifelong.
- It typically conceives a new embryo days before delivering the newborn from its previous pregnancy.
- Female wallabies and kangaroos have two uteri and two separate ovaries.
- At the end of a pregnancy in one uterus, a new embryo develops in the other uterus.
- Kangaroos and wallabies regularly have an embryo in the uterus, a young joey in the pouch, and a third semi-dependent young at foot, still drinking its mother's milk.
- In kangaroos, the new embryo is conceived a day or two after the previous birth.
- In the swamp wallaby (*Wallabia bicolor*), the new conception happens one or two days before the previous joey is delivered.
- As soon as the mature fetus is born and settles in the pouch, the swamp wallaby arrests the development of the new embryo.
- This is called embryonic diapause, which happens in many animals to pause reproduction until the conditions are right — season, climate, food availability.

**Source:** Indian Express, Down to Earth, Business Standard.