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XPoSat

The X-Ray Polarimeter Satellite (XPoSat) that is scheduled to be launched later this year by the Indian Space Research Organisation (ISRO).

- The X-Ray Polarimeter Satellite (XPoSat) is being built in collaboration with the Raman Research Institute (RRI), Bengaluru.
- XPoSat will study various dynamics of bright astronomical X-ray sources in extreme conditions.
- India's first, and only the world's second polarimetry mission.
- It is meant to study various dynamics of bright astronomical X-ray sources in extreme conditions.
- **IXPE -** The first polarimetry mission is NASA's Imaging X-ray Polarimetry Explorer (IXPE) that was launched in 2021.
- **Payloads -** The spacecraft will carry two scientific payloads in a low earth orbit.
    1. Primary payload POLIX
    2. XSPECT
- POLIX (Polarimeter Instrument in X-rays) is being developed by RRI in collaboration with ISRO's U.R.Rao Satellite Centre (URSC) in Bengaluru.
- POLIX will measure the polarimetry parameters (degree and angle of polarisation).
- The XSPECT (X-ray Spectroscopy and Timing) payload will give spectroscopic information.
- It would observe several types of sources, such as X-ray pulsars, blackhole binaries, low-magnetic field neutron star, etc.

> *X-rays have much higher energy and much shorter wavelengths, between 0.03 and 3 nanometers.*

References

1. IE - What is XPoSat, India's first polarimetry mission?
2. ISRO - XPoSat

Pygmy Hogs

The conservation of pygmy hogs is crucial to India's wildlife protection goals.

- Pygmy hogs are smallest and rarest wild piggy.
- Their skin is dark brownish-black in colour and their hair is dark.
- **Distribution -** Native to alluvial grasslands in the foothills of the Himalayas.

- Once found all the way from Uttar Pradesh to Assam, but vanished by the early 1960s.
- Now their population is confined to Assam and southern Bhutan.
- **Diet -** They are omnivores and feed on roots, tubers, insects, rodents, and small reptiles.
- **Significance -** they are an indicator species. They live only in the wet high grasslands at the foothills of the Himalayas.
- Their presence ensures a healthy habitat for other rarities such as the one-horned rhinoceros, hog deer, Eastern barasingha, tiger, water buffalo, lesser florican and the hispid hare.
- **Threats -** loss and degradation of habitat due to agricultural encroachments, human settlements, livestock grazing, etc.
- **Conservation Status**
    1. IUCN - Endangered
    2. CITES - Appendix 1
- **Conservation Efforts -** Pygmy Hog Conservation Programme in 1995

References

1. IE - Why the conservation of pygmy hogs is crucial to India?
2. Animalia - Pygmy Hog
3. IUCN - Pygmy Hog

NHRC and Paris Principles

An organisation affiliated to the UN High Commissioner for Human Rights has deferred re-accreditation of the National Human Rights Commission (NHRC) of India for a year.

- The Global Alliance for National Human Rights Institutions' (GANHRI) Sub Committee on Accreditation (SCA) deferred re-accreditation to NHRC for the second time.
- The first such instance was in 2016 and accreditation was restored in 2017.
- **Significance of Accreditation -** Without the accreditation, NHRC will be unable to represent India at the UN Human Rights Council.
- **NHRC -** The National Human Rights Commission (NHRC) of India was established on 12 October, 1993.
- It is a statutory body under the Protection of Human Rights Act (PHRA), 1993.
- The statute was amended by the Protection of Human Rights (Amendment) Act, 2006.
- NHRC is in conformity with the Paris Principles.
- The NHRC is an embodiment of India's concern for the promotion and protection of human rights.
- **Paris Principles -** Officially known as 'Principles Relating to the Status of National Human Rights Institutions'.
- The Paris Principles set out the minimum standards that NHRIs must meet in order to be considered credible and to operate effectively.
- The key pillars of the Paris Principles are pluralism, independence and effectiveness.
- Paris Principles was adopted Paris in October 1991, and adopted by the General Assembly of the United Nations in 1993.

- Paris Principles are a crucial step in development of standards for national human rights institutions across the world.
- The six principles require a country's human rights agency to be independent from the government in its structure, composition, decision-making and method of operation.

References

1. IE - Global agency affiliated to GANHRI defers NHRC accreditation
2. GANHRI - Paris Principles

WTO Appellate Body Division

India has appealed against a ruling of the World Trade Organization's (WTO) trade dispute settlement panel in the Appellate Body.

- The World Trade Organization's (WTO) trade dispute settlement panel ruled that India's import duties on certain information and technology products are inconsistent with the global trade norms.
- India has appealed against it ruling in the Appellate body of WTO.
- The Appellate Body was established in 1995.
- It is a standing body of seven persons that hears appeals from reports issued by panels in disputes brought by WTO Members.
- The Appellate Body can uphold, modify or reverse the legal findings and conclusions of a panel.
- Appellate Body Reports are adopted by the Dispute Settlement Body (DSB) unless all members decide not to do so.
- The Appellate Body has its seat in Geneva, Switzerland.
- Currently, the Appellate Body is unable to review appeals given its ongoing vacancies.
- The term of the last sitting Appellate Body member expired on 30 November 2020.

References

1. The Hindu - India challenges WTO panel ruling
2. WTO - Appellate Body

Community-based initiative for Hornbills

A community-based conservation initiative, involving the Kadar tribal community, has restored the dwindling hornbill population.

- **Initiative -** The Hornbill nest tree monitoring programme was started in 2005 to address the declining hornbill population and restore their vanishing nesting habitat
- It involved the Kadars, an indigenous community, in the Vazhachal forest division.
- The programme had technical support of the Western Ghats Hornbill Foundation for the conservation processes.
- The Athirappilly - Vazhachal areas is the only location where all the four south Indian species of hornbills are seen.

1. The Great Hornbill (the State bird of Kerala)
2. Malabar Pied Hornbill
3. Malabar Grey Hornbill
4. Indian Grey Hornbill

Kadar Tribal Community

- Kadar, small tribe of southern India residing along the hilly border between Cochin in Kerala and Coimbatore in Tamil Nadu.
- Kadar live in the forests and do not practice agriculture.
- They are specialized collectors of honey, wax, sago, cardamom, ginger.

References

1. The Hindu - How a community-based initiative restored dwindling hornbill population in Western Ghats
2. Britannica - Kadar

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