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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 in 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.

The Paris Principles identify six criteria that NHRIs should meet:

- Clearly defined and **broad-based mandate** based on universal human rights standards
- **Autonomy** from government
- **Independence** guaranteed by legislation or the constitution
- **Pluralism** including membership that broadly reflects their society
- Adequate **resources**
- Adequate **powers of investigation**

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 its 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](#)