

## Prelim Bits 15-03-2024 | UPSC Daily Current Affairs

### Netted in illegal wildlife trade: Sharks of India

A new analysis 'Netted in illegal wildlife trade: Sharks of India' reports that, Tamil Nadu tops illegal trade in shark body parts.

- **Published by** - TRAFFIC and WWF-India
- **Study period** - 2010 to 2022
- **Key findings** - About 16,000 kg of shark fins were seized in this period, constituting almost 80% of the shark-derived products.
- **Tamil Nadu** tops with almost 65% of the illegal trade in shark body parts followed by Karnataka, Gujarat, Kerala, and Maharashtra.
- **Usage** - Shark-fin soup as a delicacy, meat as food, skin as leather, liver oil (*squalene*) as a lubricant, in cosmetics and as a source of vitamin A, cartilage for *chondroitin sulphate extraction* for preparing medicines while jaws and teeth for making curios.
- **Measures** - TRAFFIC has created 3D-printed and painted replica fins and also published a new 3D Shark Fin Identification Guidebook on 11 shark and ray species.
- These 11 species are listed in Appendix II of [CITES](#) (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

*India is the 3<sup>rd</sup> largest shark-producing nation in the world according to a 2019 report by TRAFFIC.*

- Cartilaginous fishes of predatory habit that constitute the order Selachii, class Chondrichthyes and subclass elasmobranchii.
  - **Uniqueness** - Their fossil records date back 400 million years, outliving the dinosaurs and many other forms of life currently on earth.
  - They are the top predators in the oceanic food web.
  - **Ampullae of Lorenzini** are electrosensitive organs that, together with the olfactory organs, form the main sensory systems for foraging and navigation in skates, rays, and sharks.
  - **Habitat** - Deep and shallow waters throughout the world's ocean.
  - **Feed** - Plankton, fish, crustaceans, and marine mammals.
  - **Threat** - Overfishing, Low biological productivity.
  - **In India** - There are about 160 shark species.
  - **Conservation status**
    - **Wild Life (Protection) Act of 1972** - 26 sharks and rays out of 160 species have been listed in Schedules I and II.
  - **Measures** - India has banned the live finning of sharks and the export of fins of all shark and ray species.
  - 10 species are completely protected from any fishing and trade.
- Whale sharks are the largest fish species on Earth.*

### Quick Facts

- **TRAFFIC** - Trade Records Analysis of Flora and Fauna in Commerce, a wildlife trade monitoring network.
- Established in - 1976 by WWF and IUCN, and became an independent non-profit organization in 2017.
- Aim - To undertake data collection, analysis, and provision of recommendations to inform decision making on wildlife trade.
- **WWF-India** - World Wide Fund for Nature India
- Established in - 1969, as a Charitable Trust.
- Aim - To reduce the degradation of Earth's natural environment and building a future in which humans live in harmony with nature.

### References

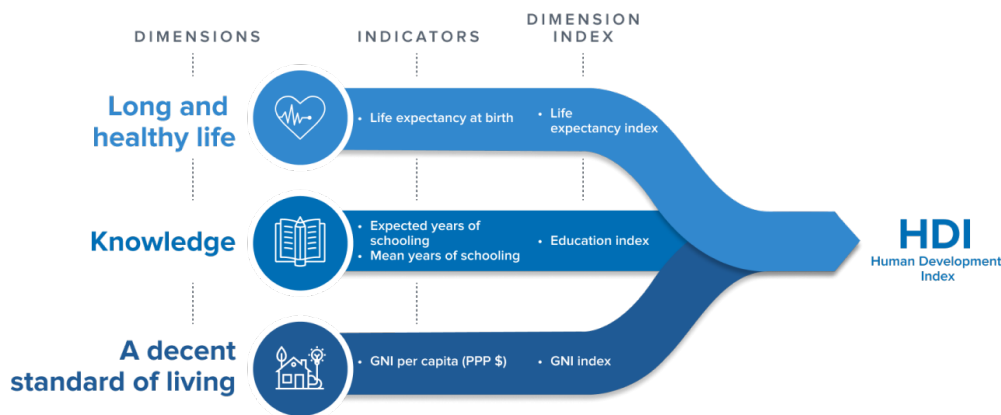
1. [The Hindu| Illegal Sharks Trade in India](#)
2. [WorldWildlife| Sharks](#)

### Human Development Index (HDI)

*India has moved up a rank to 134 in the 2023/24 Global Human Development Index (HDI).*

- **Created by** - United Nations Development Programme (**UNDP**) in 1990.
- It is the *geometric mean of normalized indices* for each of the **3 dimensions** that are measured with **4 indicators**.
  - A long and healthy life
  - Being knowledgeable

- Having a decent standard of living.



- **Aim** - To emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone.
- **HDI scores** - Range from **0 to 1**, with higher values indicating higher levels of human development.
- **4 HDI categories** - Very High, High, Medium and Low human development.

*UNDP also publishes Inequality-Adjusted Human Development Index (IHDI), Gender Development Index (GDI) whereas the Augmented Human Development Index (AHDI) is produced by the economic historian Leandro Prados de la Escosura.*

- **2023/24 HDI Report** - Titled 'Breaking the Gridlock: Reimagining cooperation in a polarized world'.
- It ranks 193 countries in 2022 compared to 191 countries in 2021.

Key Findings	
Top performers	Bottom performers
<ul style="list-style-type: none"> <li>• <u>Switzerland</u></li> <li>• Norway</li> <li>• Iceland</li> </ul>	<ul style="list-style-type: none"> <li>• Central African Republic</li> <li>• South Sudan</li> <li>• Somalia</li> </ul>
India's case	
<ul style="list-style-type: none"> <li>• India has moved up a rank to <b>134</b> compared to 2021 in the <b>Medium</b> Human Development category.</li> <li>• But still, it falls behind Bangladesh, Sri Lanka and Bhutan.</li> </ul>	

- **Concerns** - The widening human development gap shows that the 2-decade trend of steadily reducing inequalities between wealthy and poor nations is now in reverse.
- A 'democracy paradox', coupled with a sense of powerlessness & lack of control over government decisions, has fuelled political polarisation & inward-looking policy approaches.

**Democracy paradox** is a state, where most of the people surveyed expressing support for democracy but also endorsing leaders who may undermine democratic principles.

- **India's improvement** - Life expectancy at birth has slightly improved from 67.2 years in 2021 to 67.7 years in 2022.
- There is an overall increase (5.88%) in expected years of schooling (EYS) from 11.9 years to 12.6 years.
- The Gross National Income (GNI) per capita also improved from \$6,542 to \$6,951.

*India, Bhutan and Bangladesh are all in the medium category while Sri Lanka and China are in High HDI category. Nepal and Pakistan have been ranked lower than India.*

## References

1. [The Hindu| India slightly improves in HDI](#)
2. [UNDP| 2023/24 HDI Report](#)

## Process of Denotifying a Protected area

*Supreme Court of India stops Assam's move to withdraw notification of Pobitora wildlife sanctuary.*

### Protected areas

- **About** - Areas where human occupation or at least the exploitation of resources is limited.
- **Protected areas in India** - 4 categories constituted under the provisions of the Wildlife (Protection) Act, 1972
  - National Parks
  - Wildlife Sanctuaries
  - Conservation Reserves
  - Community Reserves
- Apart from above protected areas, India also has the following
  - Biodiversity Reserves
  - Tiger Reserves
  - Elephant Reserves
  - Marine Protected Areas

- **Denotified Area** - Areas that cannot be protected with legally defined do's and don'ts like notified areas.
- **Process for de-notification** - It is governed by the provisions of *Wildlife (Protection) Act 1972*.
- The *proposals submitted by States/UTs* for alteration of the boundaries of protected areas are examined by the Standing Committee of the National Board for Wild Life (NBWL).
- **Denotifying a sanctuary or National Park**
  - Recommendation of National Board for Wildlife
  - Approval by the Supreme Court (no specific time limit)
- **Denotifying a tiger reserve**

- Recommendation of National Tiger Conservation Authority
- Approval of National Board for Wildlife
- **Recommended** - Only if such alteration is not likely to cause any adverse impact on wildlife.

## Pobitora Wildlife Sanctuary

- It is *called 'Mini Kaziranga'* due to similarity of landscape, floral, and faunal distribution.
- **Notified in** - 1998
- **Location** - It is situated in the flood plains of River Brahmaputra in the district of Morigaon, Assam, India.
- **3 distinct categories** - Forest, grassland and water bodies or beels.
- **Biodiversity** - One-horned rhino, leopard, wild boar, Barking deer, Chinese pangolins, Leopard cat, wild buffalo, waterfowl etc.
- **Rhinoceros** - It was pegged at 107 by 2022 census, has the highest concentration of the one-horned rhinos on earth.
- **Challenges** - Boundary of Pobitora was yet to be demarcated.
- The control of khas (fallow) land was yet to be handed over to the Forest Department by the Morigaon district administration.

### Quick Facts

- **National Board for Wildlife (NBWL)** - A statutory body constituted under the Wildlife Protection Act, 1972.
- **Primary function** - To promote the conservation and development of wildlife and forests.
- **Composition** - 47 members including the Prime Minister.
- **Chairman** - Prime Minister of India.
- **Powers** - It recommends on the setting up of and management of national parks, sanctuaries, and other protected areas and on matters relating to restriction of activities in those areas.

## References

1. [The Hindu| SC halts Denotifying parts of Pobitora Wildlife Sanctuary](#)
2. [SANSAD| Process of Denotifying a Protected Area](#)
3. [SANSAD| Role of Supreme Court in Denotifying a Protected Area](#)

## Nana Jagannath Shankarseth

*The Maharashtra cabinet decided to ask the Ministry of Railways to rename Mumbai Central station after Nana Jagannath Shankarseth.*

- He is a *social reformer, educationist, and philanthropist* who earned the goodwill of both Indians and the British.
- **Life time** - 1803 to 1865.
- **Inspired by** - The merchant and philanthropist Sir Jamsetjee Jeejeebhoy.

*Nana Jagannath Shankarseth became the 1<sup>st</sup> Indian to be nominated to the Legislative Council of Bombay.*

- **Architect of Mumbai** - He made valuable contributions in terms of both ideas and money to multiple sectors, to lay a strong foundation for the city.
- **Education** - He donated land for educational institutions and also worked for the *education of girls and women*.
- He founded the *Native School of Bombay*, which was renamed 1<sup>st</sup> as the Bombay Native Institution, and then as the Board of Education which finally evolved into the prestigious *Elphinstone College*.
- He suggested to name the 1<sup>st</sup> medical college of Mumbai after the Sir Robert Grant, the erstwhile Governor of Bombay who tried to establish medical institution in the then Bombay

*Grant Medical College in Mumbai is one of the oldest medical institutions in South Asia.*

- **Architecture** - One among the wealthy donors who helped promote *Dr Bhau Daji Lad Museum in Byculla*.
- The *Bhawani Shankar Temple* near Nana Chowk was his tribute to his late mother Bhawanibai Murkute.
- He also built a *Ram temple*.
- **Railways** - He was a committee member that gave impetus to *India's 1<sup>st</sup> train* which ran between Boribunder and Thane (34 km) in 1853.

## Reference

[The Indian Express| Efforts to recognize Nana Jagannath Shankarseth](#)

## World Monuments Fund (WMF)

*Conservationists to propose Kazhuveli watershed region for nomination to World Monuments Fund Watch 2025.*

***World Monuments Fund Watch 2025*** is a nomination-based programme that connects local heritage preservation to global awareness and action.

- A leading independent organization devoted to enrich people's lives and build mutual understanding across cultures and communities.
- **Established in** - 1965
- **Aim** - To conserving the world's irreplaceable treasures like architectural and cultural sites that span the history of human civilization.
- **Headquartered in** - New York, USA

- **Offices and affiliates in** - Cambodia, France, India, Peru, Portugal, Spain and the UK.
- **Partners** - Local communities, funders, and governments.
- **Work** - Preserves the world's diverse cultural heritage at more than 700 sites in 112 countries.
- **Significance** - It embraces the potential of the past to create a more resilient and inclusive society.
- It draws on heritage to address some of today's most pressing challenges like climate change, underrepresentation, imbalanced tourism, and post-crisis recovery.

*World Monuments Fund began work in India in 1996 after placing the Taj Mahal on the World Monuments Watch.*

- **WMF India** - It was established in 2015, under India's Companies Act, following the India's policy to include heritage conservation in corporate social responsibility programs.
- **Spearheaded by** - Maharaja Gaj Singh of Jodhpur
- **Aim** - To serve as a local representative for WMF, assisting with project management and outreach.

### **Kazhuveli Lake**

- It is a watershed area, covers an area of 740 sq. km.
- It is also part of a bird sanctuary near Marakkanam in Villupuram district in Tamil Nadu.
- **Eri (tank) network** - A network of tanks created 1000's of years ago that sustains the agricultural practices for millennia.

### **References**

1. [The Hindu| Proposal to include Kazhuveli Lake in WMF](#)
2. [WMF| World Monuments Fund](#)
3. [WMF| WMF India](#)

### **Other Important News**

#### **Digital Criminal Case Management System (CCMS)**

*Union Home Minister has launched a unique Digital Criminal Case Management System (CCMS) Platform recently.*

- **About** - It is a browser-based software to help the State Police forces in their investigations and prosecution.

- **Designed by** - **National Investigation Agency (NIA)**.

- **Significance** - Enable the NIA personnel to better co-ordinate in terrorism and organized crime cases, thereby improving justice delivery.

### **Sankalan App**

- **About** - Collection of new criminal laws by **National Crime Records Bureau (NCRB)**.

- **Significance** - Designed for navigating through new criminal laws as a bridge between old and new criminal laws.

- Enables the users to run the application on offline mode.

## **Personalities in News**

### **Sheena Rani**

- A distinguished scientist from Hyderabad-based Advanced Systems Laboratory (ASL) of Defence Research & Development Organisation (DRDO).

- She led a DRDO team for **Mission Divyastra**, India's maiden flight test of the Agni-5 missile equipped with MIRV technology.

- She was awarded with the prestigious **"Scientist of the Year" award** in 2016.

### **Gyanesh Kumar & Sukhbir Singh Sandhu**

- Gyanesh Kumar, Sukhbir Singh Sandhu were appointed as **Election Commissioners (ECs)**.

- **Selection Committee of ECs** - Prime Minister, Leader of Opposition in the Lok Sabha and a Union Cabinet Minister to be nominated by the Prime Minister.

## **RBI's Gold Imports**

*India has recently allowed RBI to import gold without paying import levies.*

- Generally, import of gold attracts 15% import duty, including 5% agriculture infrastructure development Cess.

- According to the World Gold Council data, the RBI has a gold holding of **812.3 tonne** in January 2024.

- Of that, 388.06 tonnes is held overseas and 372.84 tonnes is held domestically.

- **Need**- To diversify the forex reserves and hedge against foreign currency risks

### **Agriculture Infrastructure and Development Cess (AIDC)**

- It is a tax on the commercial production of agricultural goods in India.

- A cess is a form of tax levied by the government on tax with specific purposes till the time the government gets enough money for that purpose.

- It was announced on certain items, including petrol, diesel, gold and some imported agricultural products to boost agriculture infrastructure.

## **Lamphelpat Lake**



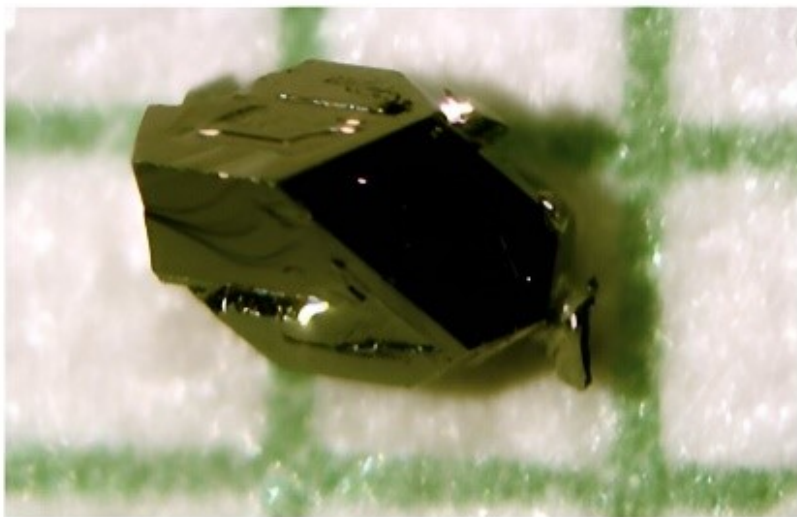
*Lamphelpat Lake is now undergoing a remarkable revival under Lamphelpat Waterbody Project.*

- **Lamphelpat** - A natural lake ***in Manipur*** located in the foothills of the *Langol hill range*.
- It served as a reservoir, storing excess water of the *Luwangli and Nambul rivers*.
- The lake is considered a ***mini Loktak lake*** that maintains the ecosystem of Imphal and its surrounding areas.
- **Loktak Lake** - Located in Manipur, it is the largest freshwater lake in Northeast India
- **Lamphelpat Waterbody Project** - Initiated by the Manipur Water Resource Department in collaboration with the Ministry of Jal Shakti.
- It has 6 major components that includes flood control, drainage management and promotion of ecotourism.

### **Miassite (Rh17S15)**

*Scientists have recently identified the 1<sup>st</sup> unconventional superconductor, Miassite that can be found in mineral form in nature.*

- Miassite is one of only 4 minerals found in nature that act as a superconductor when grown in the lab.
- It is an ***unconventional superconductor*** with properties similar to high-temperature superconductors.
- ***Superconductivity*** is when a material can conduct electricity without energy loss.
- ***London penetration depth test*** was used to identify the type of superconductivity present in miassite.



- **By** - DHL and New York University's Stern School of Business
- It ranked the connectedness of 181 countries, accounting for 99.7% of the world's gross domestic product.
- **India's Ranking** - India ranks 62<sup>nd</sup> out of 181 economies, based on 2022 data tracking global flows of trade, capital, information and people.
- Breadth of merchandise trade (reach of India's exports and imports across global markets) - Ranks **9**
- Depth of merchandise trade (size of India's international flows relative to its domestic activity) - Ranks **161**

## Darien Gap

*A record 520,000 people crossed the Darien Gap in 2023.*

- It is a stretch of densely forested jungle across **northern Colombia and southern Panama** around the Gulf of Urabá.
- It forms the physiographic link between **Central and South America**.
- It is a hot, humid area typified by tropical rainforests, mangrove swamps, and low mountain ranges with cloud forest vegetation.
- No paved roads exist in the Darien Gap but it has become a major route for global human migration.
- The Missing Migrant Project reported 141 known deaths in the Darien Gap in 2023.
- **Darien National Park in Panama and Los Katios National Park** in Colombia finds mention in the UNESCO World Heritage List.



## Old-growth forests

Sweden has vast 'old growth' forests but they are being chopped down faster than the Amazon.

- Old-growth forests are forests that have developed over a ***long period of time without disturbance***.
- They are also known as primary forests, virgin forests, primeval forests, late seral forests, or ancient woodlands.
- They are exceptionally valuable as they tend to host more species, store more carbon, and are more resilient to environmental change.
- Forests cover approximately 31% of the total global land area out of which roughly one-third is old-growth forest.
- More than half of the world's old-growth forests are found in ***Brazil, Canada, and Russia***.
- Examples of old-growth forests - California redwoods, Tongass National Forest in Alaska, and Adirondack forests in New York.

***Clear-cutting*** is the practice of cutting down most or all of the trees in a forest at once.

## Neonatal deaths

The recent report by United Nations Inter-agency Group for Child Mortality Estimation noted that the annual number of global under-5 deaths in 2022 declined by more than half.

- **Neonatal deaths** - Number of deaths during the first 28 completed days of life per 1000 live births in a given year or other period.
- **Classification**
  - **Early neonatal deaths** - Occur within the first 7 days of life.
  - **Late neonatal deaths**- Occur between 7 to 28 days.
- **Causes** -Preterm birth, low birthweight and birth defects.
- Globally, neonatal deaths happened every 14 seconds, a child aged under 5 died every 6 seconds and an adolescent died every 35 seconds in 2022.

### **United Nations Inter-agency Group for Child Mortality Estimation (UN IGME)**

- UN IGME is a technical group that produces annual estimates of child and adolescent mortality.
- It was ***established in 2004*** to share data, improve methods, and report on progress towards child survival goals.
- The UN IGME includes representatives from UNICEF, WHO, the World Bank, and the United Nations Population Division.

## Global Seed Vault

- **Location** - Spitsbergen, part of Norway's [Svalbard](#) archipelago.
- It stores millions of seed samples from around the world and is only accessible 3 times a year.
- Also known as "**doomsday**" **vault**, as the reserve of seeds can be of use in case of an apocalyptic event or a global catastrophe.
- The facility was built in 2008 with assistance from the Norwegian government and the Global Crop Diversity Trust.
- It is part of the international system for conserving plant genetic diversity guided by the **UN organisation for Food and Agriculture (FAO)**.  
*The Arctic World Archive that aims to preserve data for the world's governments and private institutions is also located in Spitsbergen, Norway.*

