

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 3rd 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"> • <i>Switzerland</i> • Norway • Iceland 	<ul style="list-style-type: none"> • Central African Republic • South Sudan • Somalia
India's case	
<ul style="list-style-type: none"> • India has moved up a rank to 134 compared to 2021 in the Medium Human Development category. • But still, it falls behind Bangladesh, Sri Lanka and Bhutan. 	

- **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 1st 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 1st 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 1st 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 1st 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 1st 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.



Global Connectedness Report, 2024

- **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 62nd 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.

