# Prelim Bits 19-08-2022 | UPSC Daily Current Affairs

## UN Report on Contemporary forms of slavery

*A UN report on contemporary forms of slavery affecting persons belonging to ethnic, religious and linguistic minority communities was published recently.*

### Highlights of the report

- According to the report, the various manifestations of modern slavery includes, Child labour, Sexual slavery, Chattel slavery, Domestic servitude, Forced and bonded labour, Child and/or forced marriage.
- **Child labour** - (Among children 5 to 17 years of age) exists in all regions of the world.
- In Asia and the Pacific, the Middle East, the Americas and Europe, between 4% and 6% of children are said to be in child labour.
- **Bonded labour** - Dalits in South Asia are forced to undertake certain types of labour as a consequence of their assigned caste status.
- They are almost exclusively working in “unclean” jobs in urban areas, like street sweeping and burying the dead.
- Manual scavenging, predominantly carried out by Dalit women, have a negative impact on mental and physical health.
- **Child marriages** - A large majority of forced marriage cases relate to Pakistan and to a lower extent to Afghanistan, Bangladesh, and India.
- Trade unions make important contributions in advocating for the rights of minorities and migrant workers.
- It is encouraging that trade unions in Colombia, Ghana and India provide dedicated support and services for women workers.

### Reasons

- In India, Child labour, caste-based discrimination and poverty are closely inter-linked.
- Deep-rooted intersecting forms of discrimination are often the result of historical legacies.
- These includes slavery, colonisation, systems of inherited status, formalised and State-sponsored discrimination, etc.
- The systematic discrimination affects the ability to live a life of dignity and enjoy human rights on equal footing with others.
- Marginalised communities often remain overlooked in public policies and national budgetary allocations.
- Their access to justice and remedies during violations is generally limited.
- Stigmatisation of some communities, perpetuated by negative stereotypes in the media, textbooks, or on the Internet, contributes to their disempowerment.
- Additional intersectional factors, such as class, gender and religion are also affected

by caste realities.

*The year 2022 marks the 30th anniversary of the Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities.*

**Reference**

https://www.thehindu.com/news/international/child-labour-caste-based-discrimination-poverty-closely-interlinked-in-india-un-special-rapporteur-tomoya-obokata/article65782342.ece

## Photobombing Effect

- Photobombing refers to a situation when someone is taking picture, suddenly a random person came into the frame and ruin by taking away attention from the main subject.
- Similarly, photobombing effect would also impact a space telescope's ability to observe habitable exoplanets.
- According to a new NASA study, when a telescope is pointed at an exoplanet, the light reflected by the planet could be contaminated by light from other planets in the same system.
- For example, consider someone is looking at Earth sitting next to Mars or Venus from a distant vantage point.
- Depending on the observation, an exo-Earth could be hiding in [light from] what we mistakenly believe is a large exo-Venus.
- Venus has surface temperatures hot enough to melt lead and is therefore considered hostile to life.
- This kind of mixing could lead to scientists missing out on potentially habitable planets.

**Point-spread function (PSF)**

- This phenomenon stems from the "point-spread function" of the target exoplanet.
- PSF is the image created due to the diffraction of light coming from the source and becomes larger than the source for very distant objects, like an exoplanet.
- The PSF's size depends on the aperture of the telescope and the wavelength at which the image was captured.
- For distant exoplanets, the PSF may resolve in such a way that multiple planets or planets and satellites could seem to morph into one.
- When that happens, the data gathered about the exoplanet would be affected by whatever objects were photobombing it.

**Reference**

https://indianexpress.com/article/technology/science/nasa-research-suggests-planetary-photobombers-could-prevent-discovery-of-habitable-exoplanets-8097512/

## Megalodon

*A recent study by researchers used fossil evidence to create a 3D model of the Megalodon — one of the biggest predatory fish of all time.*

- It was estimated to be lived at around 23 million to 2.6 million years ago.
- It was around 50 feet (16 meters) from nose to tail.
- That's about two to three times the size of today's great white shark.
- It would have weighed around 70 tons, or as much as 10 elephants.
- It could have devoured a creature the size of a killer whale in just five bites.
- Once it filled its massive stomach, it could roam the oceans for months at a time.
- Its average cruising speed was faster than sharks today and it could have migrated across multiple oceans with ease.

### Reference

https://indianexpress.com/article/explained/explained-sci-tech/this-word-means-megalodon-sharks-8098489/

## Lake Garda

*Water levels on Italy's Lake Garda at 15-year low.*

- Italy's worst drought in decades has reduced Lake Garda, the country's largest lake, to near its lowest level ever recorded.
- The lake exposes swaths of previously underwater rocks.
- But the issue goes beyond Italy, with land across Europe parched by a lack of rainfall and sweltering temperatures, driven by climate change.
- Several other European countries also reporting record temperatures and low levels of water in rivers.

### Geography of Lake Garda

- Lake Garda, also called Benaco, the largest of the Italian lakes.
- It is separated from the Adige River valley by the narrow ridge of Mount Baldo.
- The lake is fed by the Sarca River at its northern end, while the Mincio flows out toward the Po River at the southern end.
- It is narrow at the northern end and it widens gradually southward into a nearly circular basin.
- The predominant winds are the sover from the north in the morning and the ora from the south in the afternoon.
- The northern end belonged to Austria until 1919.
- Well sheltered by the Alps to the north, Lake Garda has a temperate Mediterranean climate.

### Reference


1. https://www.bbc.com/news/av/world-europe-62578571
2. https://www.britannica.com/place/Lake-Garda


## Agasthiyamalai Elephant Reserve

*Union Minister for Environment, Forest and Climate Change Bhupender Yadav, announced the notification of Agasthiyamalai Elephant Reserve in Tamil Nadu.*

- The new reserve will be spread over an area of 1,197 sq.kms in Agasthiyamalai.
- This will be the 31st Elephant Reserve in the country.
- In the last 3 years, Dandeli Elephant Reserve in Karnataka, Singphan Elephant Reserve in Nagaland and Lemru Elephant Reserve in Chhattisgarh has been notified.

### Indian Elephant

- It is found in the central and southern Western Ghats, North East India, eastern India and northern India and in some parts of southern peninsular India.
- It is included in Schedule I of the Indian Wildlife (Protection) Act, 1972 and in Appendix I of the Convention on International Trade in Endangered Species of Flora and Fauna (CITES).
- The Indian elephant is found in 16 states in the country and is showing an increasing trend across its distributional range.
- The population of the animals had become critically low in 1992.
- That is when Project Elephant was launched to ensure the protection of the pachyderms and their environment.
- According to the 2017 elephant census, Karnataka had the highest number of elephants (6,049), followed by Assam (5,719) and Kerala (3,054).

### Project Elephant

- It was launched by the Government of India in the year 1992 as a Centrally Sponsored Scheme with following objectives:
    1. To protect elephants, their habitat & corridors
    2. To address issues of man-animal conflict
    3. Welfare of captive elephants
- The Project is being mainly implemented in 16 States / UTs , viz. Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Kerala, Maharashtra, Meghalaya, Nagaland, Orissa, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal.
- Under this project, Ministry of Environment, Forest and Climate Change provides financial and technical support to major elephant range states in the country.

### World Elephant Day

- It is an international annual event, celebrated on 12$^{th}$ of August every year.
- The goal of World Elephant Day is to create awareness on elephant conservation, and to share knowledge and positive solutions for the better protection and management of wild and captive elephants.

**Reference**


1. https://www.downtoearth.org.in/news/wildlife-biodiversity/centre-notifies-india-s-31st-elephant-reserve-in-tamil-nadu-84306
2. https://wii.gov.in/nwdc_elephantreserve
3. https://pib.gov.in/PressReleseDetail.aspx?PRID=1851260



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