Prelim Bits 13-10-2023 | UPSC Daily Current Affairs

Global Hunger Index (GHI) 2023

India ranks 111 out of a total of 125 countries in the Global Hunger Index 2023.

- **Released by** – Concern Worldwide and Welthungerhilfe.

Global Hunger Index (GHI) GHI is a tool for comprehensively measuring and tracking hunger at global, regional, and national levels.	
Indicators	**Meaning**
Undernourishment	• Share of the population with insufficient caloric intake.
Child stunting	• Share of children under age five who have low height for their age. • It reflects chronic undernutrition.
Child wasting	• Share of children under age 5 who have low weight for their height. • It reflects acute undernutrition.
Child mortality	• Share of children who die before their 5th birthday. • It reflects inadequate nutrition and unhealthy environments.

- Based on the values of 4 indicators, a GHI score is calculated on a ***100-point scale*** reflecting the severity of hunger.
- Zero "0" is the best possible score (no hunger) and "100" is the worst.
- **Global Scenario** – Global hunger remains too high, and progress on reducing hunger has largely stalled.
- This *stagnation relative to 2015* largely reflects the combined effects of overlapping crises
    - COVID-19 pandemic
    - Russia-Ukraine war
    - Economic stagnation
    - Impacts of climate change,
    - Conflicts among many countries
- **India's Performance** - With a score of ***28.7***, India's hunger level is ***serious***.
- India has the ***highest*** *child wasting rate in the world*, at 18.7%, reflecting acute undernutrition

Issues in methodology

- GHI does *not reflect India's true position*.
- According to Poshan Tracker % of child wasting has been below 7.2%, as compared to the value of 18.7% of GHI 2023.
- 3 out of the 4 indicators are related to the health of children and cannot be representative of the entire population.
- The 4th indicator 'Proportion of Undernourished (PoU) population' is based on an opinion poll conducted on a very small sample size.

'Poshan Tracker' ICT Application was developed and deployed by Ministry of Women and Child Development to dynamically determine stunting, wasting, underweight, and obesity status based on a child's height, weight, gender, and age.

References

1. PIB| Issues in calculating GHI
2. GHI| Global Hunger Index 2023

Sagar Maitri Mission

Recently, an oceanographic research vessel 'INS Sagardhwani' embarked on Sagar Maitri (SM) Mission-4.

- **Sagar Maitri** - A novel initiative of ***DRDO*** to support Safety and Growth for All in the Region (SAGAR) policy.
- **Objective** - To promote closer cooperation in socio-economic aspects and long-term *scientific partnerships & collaborations* with the 8 Indian Ocean Rim (IOR) countries.

The 8 IOR countries are Oman, Maldives, Sri Lanka, Thailand, Malaysia, Singapore, Indonesia and Myanmar.

- **MAITRI** – Marine and Allied Interdisciplinary Training and Research Initiative is a scientific component initiated by DRDO under SAGAR Policy
- It establishes long-term collaboration with IOR countries in Ocean Research and Development.

SM Mission	Visit and Year
SM - 1	• Yangon (Myanmar) in 2019
SM - 2	• Klang (Malaysia) & Singapore in 2019
SM - 3	• Oceanographic studies in the Southern Indian Ocean in 2020
SM - 4	• Collaborative research programmes with the Sultan Qaboos University, Oman in 2023

INS Sagardhwani

- A marine acoustic research ship.

INS Sagardhwani	
Launch	1994
Design and Development	• Naval Physical & Oceanographic Laboratory (NPOL) of DRDO, Kochi. • The NPOL is involved in studying the ocean environment and other related fields.
Construction	Garden Reach Shipbuilders & Engineers Ltd., Kolkatta.
Activities	Oceanic observation and research for the last 25 years.
In SM - 4	It will retrace the tracks of INS Kistna which *participated in the International Indian Ocean Expedition during 1962-65.*

References

PIB| Sagar Maitri Mission

Dragonfly Festival, 2023

The 6th edition of the Dragonfly Festival is being conducted across 11 States in India.

- The festival has been running for the *past 5 years* and celebrates Dragonfly and Damselfly's role in keeping our environment healthy.

  The tag for this year's festival is *Dragonflies in Focus: Inspire Wetland Champions'.*

- **Organised by** - WWF India
- **Partnership** - Bombay Natural History Society, India Biodiversity Portal, Indian Dragonfly Society and other partners.
- **Aim** - To *create awareness for the conservation* of these insects.
- **Activities** - *Documenting the dragonflies and damselflies* by observing different patterns like mating, resting, flying or feeding.

Odonates

- It is an order of flying insects that includes the dragonflies and damselflies.

	Dragonfly	Damselfly
Size	Larger and bulkier	Relatively smaller
Wings	2 sets	2 sets

Front and rear wings	Different size	Same size
Wings at rest	Like an aeroplane	Fold closed over their back

- Depleting wetlands has had a cascading effect on the dragonflies and damselflies.

References

The Hindu| Dragonfly Festival 2023

Ozone Hole over Antarctica

European Space Agency Copernicus Sentinel-5P satellite measurements over Antarctica have detected a giant hole in the ozone layer which was roughly 3 times the size of Brazil.

- This is one of the biggest ozone holes observed so far and this year's ozone hole started earlier than usual, and had a big extension.
- **Ozone Hole** - It is not technically a "hole" where no ozone is present, but is actually a ***region of exceptionally depleted ozone*** in the stratosphere over the Antarctic.
- **Timing** – At the beginning of Southern Hemisphere spring (August–October).
- **Ozone hole over Antarctica** – Its ***size fluctuates every year***, opening in August and closing again in November or December.
- **Opening of hole** – In the long months of polar darkness over Antarctica in the winter, atmospheric conditions are unusual.
- An endlessly circling whirlpool of stratospheric winds called the polar vortex isolates the air in the center.
- Because it is completely dark, the air in the vortex gets so cold that clouds form and enables chemical reactions to take place.
- This converts the inactive Cl reservoir chemicals into active chlorine gas (Cl2) in atmosphere.
- In spring, the UV light from sunlight rapidly breaks Cl gas into free Cl in the stratosphere which destroys ozone.

> *A free chlorine atom in atmosphere participate in a series of chemical reactions called as catalytic reaction and thus a single chlorine atom to destroy thousands of ozone molecules.*

- **Closing of hole** – When temperatures warm and the polar vortex weakens, it ends the isolation of the air in the polar vortex and thus hole starts to close.
- As air from the surrounding latitudes mixes into the polar region, the ozone-destroying forms of chlorine disperse.
- The ozone layer stabilizes until the following spring.

Ozone Layer

• Ozone is a molecule of 3 oxygen atoms which sits in our planet's stratosphere between 15 and 30 kilometres above the earth surface. • They are constantly formed and destroyed in the stratosphere. • Ozone layer absorbs a portion of the radiation from the Sun and prevents UVB radiation from reaching the Earth that might harm living beings. • The total amount of ozone in the layer would remain constant over time if there aren't any human induced impacts. • Human made chemicals which releases bromine (Br) and chlorine (Cl) atoms react with ozone and breaks it down and thus the rate of destruction becomes faster than rate of creation of ozone. • The Montreal Protocol of 1989 brought together world governments to protect the ozone layer by phasing out many ozone-depleting substances (ODS).

References

1. Indian Express| Ozone Hole over Antarctica
2. NASA| Formation of Ozone Hole

Miniature Eastern Ghats

A forest arena titled 'Miniature Eastern Ghats' (MEG) will come up in about 30 acres of reserve land in Visakhapatnam.

- It is a *one-stop place for the flora* found in the Eastern Ghats which will be opened for public from November, 2023.
- It is the *1st such project in Andhra Pradesh* to attract the nature lovers and tourists.
- **Umbrella program** – Eastern Ghats Biodiversity Centre project.
- **Funding** – Around Rs 2.5 crore from government funds and from corporate social responsibility (CSR) funds of private organisations.

Miniature Eastern ghats
• An astrology-themed garden, with 27 plant varieties. • Greenery, with about 200 species from the Eastern Ghats. • Orchidarium, with nearly 200 species of orchids of Eastern Ghats. • A circular walkway with dense raw green moss.

Eastern Ghats

- It is a *discontinuous range of mountains* along India's eastern coast.
- An ancient orogenic belt formed from the collision of crustal rocks during the Archean Era.
- The Eastern Ghats are older than the Western Ghats.
- **Geographical location** – Odisha, Andhra Pradesh, Tamil Nadu, Karnataka and Telangana.
- **Major rivers** - Godavari, Mahanadi, Krishna, and Kaveri
- **Highest point** – Arma Konda or Seethamma Konda in (1,680 metres or 5,510 ft)
- **Rocks** – Made up of charnockite, granite gneiss, khondalite, granite and quartzite
- **Minerals found**– Limestone, bauxite and iron ore

- **Madhurawada Dome** – It was formed by a tectonic arrangement with the khondalite suite and quartzite Archean rocks north of Visakhapatnam.

It is estimated that there are 25,000 species of orchids in the world. Of these, more than 1,300 species have been recorded in Indian forests, including the Eastern Ghats.

References

The Hindu| Miniature Eastern Ghats

Other Important News
International Olympic Committee (IOC) • The IOC's 141st session was held recently in Mumbai, India. • It is the 2nd session in India ***after 40 years***. • The IOC is an independent international non-profit organization based in ***Switzerland***. • The IOC organizes the modern Olympic Games and Youth Olympic Games (YOG), held every ***4 years*** in summer and winter. • The IOC Session is the IOC's supreme organ and its decisions are ***final***, held once a year and each member has *one vote*. • India is a member of IOC.
Passport to Earning (P2E) Programme • It is a digital learning platform that aims to equip young people with the essential skills and relevant opportunities for financial independence. • **Agency** - UNICEF India, YuWaah and partners. • P2E is aligned with the National Education Policy (NEP) 2020. • 11th October 2023 is celebrated as the UN International Day of the Girl Child.
Poorvottar Sampark Setu portal • It is a tool designed to streamline and enhance monitoring of fortnightly visits of Union Ministers to North East Region (NER). • Ministry of Development of North Eastern Region (MDoNER). **MDoNER "Data Analytics Dashboard"** • It will keep a close watch on NER Aspirational districts, North East border districts and the most backward districts in NER. • It has the data of 112 schemes across 55 Departments and Ministries of North eastern region.
Second spaceport of ISRO • Second spaceport of ISRO will be set up at Kulasekarapattinam in Tamil Nadu. • It will be dedicated exclusively for *Small Satellite Launch Vehicles (SSLVs)* developed completely by the private sector. • At present, ISRO has one space station, the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.

Project Nilgiri Tahr

• It is India's first project to conserve the Nilgiri Tahr, the state animal of Tamil Nadu.
• The species has a mention in the age old tamil epics of *Silappathikaram and Sivakasindamani.*

Nilgiri Tahr

• **Habitat -** It is endemic to Western Ghats.
• **IUCN Status** – Endangered
• **WPA Status** - Schedule I of the Wildlife (Protection) Act, 1972.

Akshardham temple

• It is possibly the 2nd largest hindu temple after Angkor Wat (Buddhist temple) in Cambodia.
• Akshardham is located in Robbinsville City of New Jersey, U.S.A
• It is dedicated to Bhagwan Swaminarayan (1781-1830), the guru who founded Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS) sect.

Operation Kolleru 2.0

• It aims to protect India's largest freshwater lake ecosystem, Kolleru Lake in Andhra Pradesh.
• The lake is under severe threat due to ***illegal aqua ponds***.
• Kolleru lake is located between the Krishna and Godavari Deltas.
• In 2006, the Andhra Pradesh government executed 'Operation Kolleru', demolished 1,776 aqua ponds within the Kolleru Wildlife Sanctuary (KWS).
• Operation kolleru 2.0 is repeating the same to protect the lake.
• It was declared a Wildlife sanctuary in **1999** and it still struggles to get an Eco-Sensitive Zone tag despite facing repeated threats.

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