

## UPSC Daily Current Affairs| Prelim Bits 14-04-2025

### Bridge Inventory and Condition Rating System (BICRS)

**Prelims** - *Current events of national and international importance; Economic and Social Development.*

**Mains (GS IV)** - *Infrastructure: Energy, Ports, Roads, Airports, Railways etc.*

### Why in News?

- **Launched by** - National Highways Authority of India (NHAI).
- It is a ranking mechanism ***to rate NHAI's infrastructure assets*** to determine their structural safety and look for remedial measures for their upkeep and regular monitoring.

**National Highway Authority of India** was set up NHAI Act, 1988 to provide for the constitution of an Authority for the development, maintenance and management of national highways and for matter connected therewith.

- **Aim** - To prepare a unified repository of all its structures, and each property will be assigned a union assessment identification number.
- **Development** - Based on input from its design division to ensure the systematic management and safety of infrastructure assets.
- **Mandate** - Comprehensive documentation, assessment, and inspection of bridges twice a year.
- **Key features** - Systematic evaluation of health based on predetermined rating parameters.
- Identification of structures that require immediate remedial measures, including the imposition of traffic restrictions or suspension of heavy vehicle traffic.
- **Functions** - It will record comprehensive structural specifications, geographical coordinates, AS-IS drawings, and other related documentation.

**AS-IS** is documentation of the measurements and elements of an existing building.

- This data is used in the context of renovation.
- **Implementation** - The engineers will record structural specifications and details of all projects, and the first inspection of structures must be completed before the monsoon.
- The project director will cross-check the data prepared by the engineers during their

monthly inspections and make observations if discrepancies are found in records and the physical state.

- **Importance** - It ensures *systematic management and safety of infrastructure assets*.

## Reference

[The New Indian Express| Launch of Bridge Inventory and Condition Rating System \(BICRS\)](#)

## Navkar Mahamantra Divas

**Prelims** - *Current events of national and international importance.*

**Mains (GS-I)** - *Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.*

## Why in News?

Recently, Navkar Mahamantra Divas was inaugurated in line with celebration of Mahavir Jayanti.

**Mahavir Jayanti** is celebrated on April 9th every year to *commemorate the birth of Lord Mahavir, the 24th Tirthankara of Jainism.*

- **Navkar Mantra** - It is not just a mantra but the core of our faith and the essence of life.
- It is *central to Jain prayer*, is more than a collection of sacred syllables, it is a rhythmic flow of energy, stability, and light.
- 9 resolutions are anchored in a commitment to knowledge, action, harmony, and rooted progress.
- Repeating the mantra 9 times, or in its multiples like 27, 54, or 108 *represents spiritual completeness and intellectual clarity.*

Navkar Mantra - Nine Resolutions for a New India	
9 Resolutions	Description
1 Water Conservation	Emphasizing the need to value and save every drop of water.
2 Plant a tree in Mother's Name	Planting of over 100 crore trees in recent months and urging everyone to plant a tree in their mother's name and nurture it like her blessings.
3 Cleanliness Mission	Understanding the importance and contributing to cleanliness in every street, neighbourhood and city.
4 Vocal for Local	Promotion of locally made products, turning them global and supporting items that carry the essence of Indian soil and the sweat of Indian workers.

<b>5 Explore India</b>	To explore India's diverse states, cultures, and regions before traveling abroad, emphasizing the uniqueness and value of every corner of the country.
<b>6 Adopting Natural Farming-</b>	The Jain principle of "One living being should not harm another", and for freeing Mother Earth from chemicals, supporting farmers, and promoting natural farming.
<b>7 Healthy Lifestyle</b>	Following Indian dietary traditions, including millets (Shri Anna), reducing oil consumption by 10%, and maintaining health through moderation and restraint.
<b>8 Incorporating Yoga and Sports-</b>	Making yoga and sports a part of daily life, whether at home, work, school, or parks, to ensure physical health and mental peace.
<b>9 Helping the Poor</b>	Assisting the underprivileged, whether by holding a hand or filling a plate, as the true essence of service.

- **Ecological relevance of Jainism** - Lord Mahavir's timeless teachings *align beautifully with Mission LiFE* (Lifestyle for Environment), a national call for sustainable living.
- **Jainism's emblem, "Parasparopagraho Jivanam"**, meaning the mutual interdependence of all life offers a deeply ecological worldview.

*On Mahavir Jayanti in April 2024, a commemorative stamp and coin on the occasion of 2550th Bhagwan Mahaveer Nirvan Mahotsav.*

## Reference

[PIB| Introduction of Navkar Mantra](#)

## Optional Practical Training program

*Prelims - Current events of national and international importance.*

*Mains (GS II) - Bilateral relations of India*

## Why in News?

*A Bill was introduced in the US recently to end the Optional Practical Training program for those no longer engaged in full-time study in the United States.*

*The F-1 Visa (Academic Student) allows you to enter the US as a full-time student at an accredited college, university, seminary, conservatory, academic high school, elementary school, or other academic institution or in a language training program.*

- The OPT program allows students (who are in the US on F1 visas) to work for **up to**

**12 months** in a field related to their area of study.

- **Types**

- **Pre-completion OPT** - International students are required to be enrolled in a full-time program in the United States for a minimum of one academic year before they can finish their studies.
- **Post-completion OPT** - It allows the student to work after graduating.
- **Eligibility** - To be eligible for the OPT program, students are required to be enrolled full-time for a minimum of one academic year.
- They must submit their application through their educational institution, which has the authority to endorse them for OPT.
- The application process is managed by the United States Citizenship and Immigration Services (USCIS).
- Students who hold F-1 status are permitted to stay in the United States while participating in OPT employment.

*Of the 3,31,602 Indian students in the US, around 29% or 97,556 students were on OPT in 2023-24.*

- **Extension for STEM students** - Students in STEM (Science, Technology, Engineering, and Mathematics) fields can extend their OPTs by another 24 months.
- This effectively means that a student in a STEM field can work in the US for 3 years after graduation.

## References

1. [The Indian Express | Optional Practical Training program in US](#)
2. [Economic Times | Optional Practical Training \(OPT\) program](#)

## PM-POSHAN Scheme

*Prelims – Indian polity and Governance*

*Mains - GS II |Government Policies & Interventions & GS I | Social empowerment*

### Why in News?

*The Union government recently increased the material cost for midday meals per day for those enrolled in kindergarten and primary schools and upper primary schools*

- The PM-POSHAN Scheme, previously referred to as the Mid-Day Meal Scheme.
- It is a **Centrally Sponsored initiative** overseen by the Ministry of Education.
- **Aim** - To provide a hot, cooked meal each school day to 11.20 crore children enrolled in Balvatikas (pre-primary) and Classes 1 to 8 across 10.36 lakh **government and government-aided schools**.
- This scheme serves two main purposes
  - To enhance the nutritional status of children attending school.

- To boost enrollment, retention, and attendance rates, particularly among underprivileged children.
- The updated material cost per student per day is as follows
  - Rs. 6.78 for Balvatika and Primary students (an increase from Rs. 6.19).
  - Rs. 10.17 for Upper Primary students (up from Rs. 9.29).
- These amounts represent the minimum required contribution; however, States and Union Territories have the option to allocate additional funds from their budgets to offer meals with improved nutritional quality.
- **Nutritional standards**
  - For Balvatika and Primary classes - 20g of pulses, 50g of vegetables, and 5g of oil.
  - For Upper Primary classes - 30g of pulses, 75g of vegetables, and 7.5g of oil.
- The Labour Bureau, under the Ministry of Labour, provides inflation data for the items included in the PM-POSHAN meal basket, which is derived from the Consumer Price Index - Rural Labourers (CPI-RL) based on 600 sample villages across 20 States.
- The POSHAN Abhiyan, managed by the Ministry of Women and Child Development, focuses on improving nutrition for adolescent girls, pregnant women, lactating mothers, and children aged 0 to 6 years.
- **Mission POSHAN 2.0**, launched in 2021, combines the efforts of POSHAN Abhiyan and the Supplementary Nutrition Program into a single, cohesive framework.
- **Funding structure**
  - A 60:40 split between the Centre and States/UTs with a legislature.
  - A 90:10 split for Northeastern and Himalayan States.
  - Full central funding for Union Territories without a legislature.

## Reference

[Hindustan Times | PM Poshan Scheme](#)

## Magic of Indian Silk

**Prelims** - *Current events of national and international importance| Economic and Social Development.*

**Mains (GS III)** - *Inclusive growth and issues arising from it.*

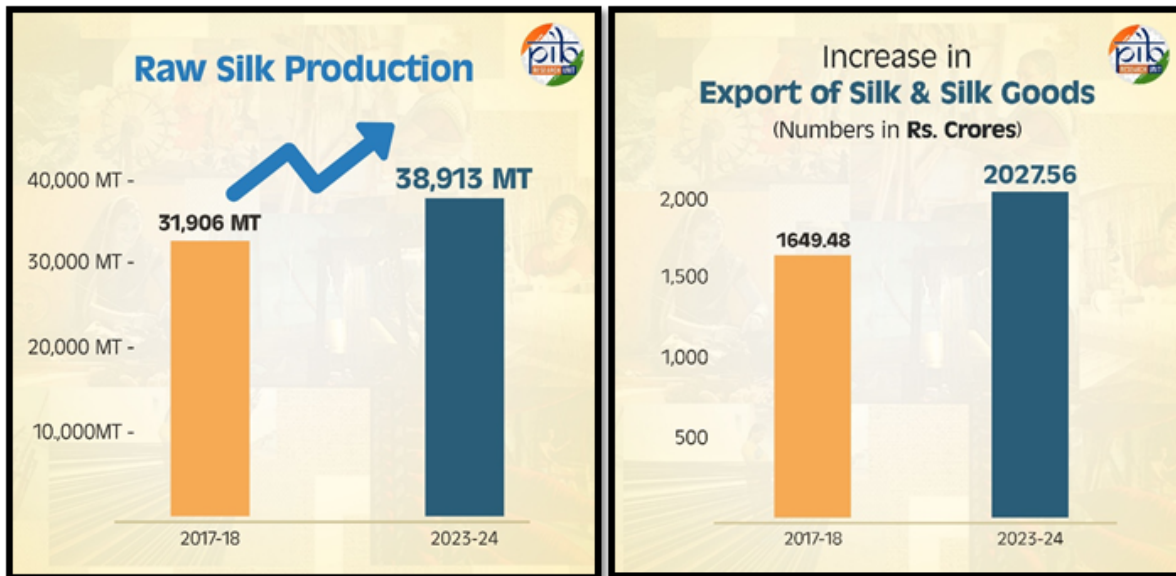
## Why in News?

*According to the recent data of Ministry of Textiles, India's silk production and exports have been raised from 2017-18 to 2023-24.*

- **Silk** - It is a thread made from **pure mulberry silk**, which is woven by skilled artisans.
- **Silk from silkworms** - Sericulture is the process of farming silkworms, which eat mulberry leaves to make silk.
- **Global production** - It has accounting for only 0.2 % of world's total textile production.

- **India's production** - It is the **2<sup>nd</sup> largest producer and consumer** of silk globally.
- **State wise production**
  - **Mulberry silk** - Karnataka, Andhra Pradesh, Tamil Nadu, Jammu & Kashmir and West Bengal.
  - **Non-mulberry silk** - Jharkhand, Chattisgarh, Orissa and north-eastern states.

*India's total raw silk production increased during the period 2017-24 and Exports of silk and silk goods rose during the period 2017-24.*



### Initiatives to Silk Development

- **Silk Samagra Scheme** - To scale up production by improving the quality and productivity of sericulture in the country.
- **Silk Samagra-2** - To improve the entire silk production process, from raising silkworms to producing quality silk fabrics.
- **Raw Material Supply Scheme (RMSS)** - To make available quality yarn & their blends to the eligible Handloom weavers at subsidized rates.
- **National Handloom Development Programme (NHDP)** - To support weavers in the handloom sector, including silk fabric producers.
- **Scheme for Capacity Building in Textile Sector Scheme (SAMARTH)** - To focus on entry-level training, upskilling and reskilling in Apparel & Garmenting, handloom, handicraft, silk, and jute.

### Types of Silk in India



- **Mulberry silk** - It comes from silkworms that *eat only mulberry leaves*.
- **Feature** - It is soft, smooth, and shiny with a bright glow, making it perfect for luxury sarees and high-end fabrics.
- **92%** of the country's total raw silk production comes from mulberry.
- **Non-mulberry silk** - It comes from wild silkworms that feed on leaves from trees like oak, castor and arjun.
- **Feature** - It is a natural silk with less shine but is strong, durable, and eco-friendly.
- **Silk waste** - It's repurposed to *create lower-quality products* like silk yarn or fabric, or even recycled into new silk items.

## Reference

[PIB| Magic of Indian Silk Production](#)

### One Liners 14-02-2025

#### History, Art and Culture

##### **Khultabad Name Change to Ratnapur**

*Recently, Maharashtra government announced the renaming of the historic town Khultabad to its original name, Ratnapur.*

- **History of Ratnapur/Khultabad** - Originally known as Ratnapur, the town's name was changed to Khultabad during the Mughal era.
- **Location** - Situated approximately 25 km from Chhatrapati Sambhaji Nagar (formerly Aurangabad)
- **Tomb of Aurangzeb** - The town houses the tomb of Mughal emperor Aurangzeb, along with the graves of his son Azam Shah and Asaf Jah I, the founder of the Hyderabad Nizam dynasty.

#### Geography

##### **Thar Desert Greening**

*The Thar Desert in India saw a striking 38 per cent rise in greening annually over the last two decades, a new study showed.*

- **Thar Desert** - It is an arid region in the north-western part of the Indian subcontinent that covers an area of 200,000 km<sup>2</sup> in India and Pakistan.
- **Thar desert States** - Rajasthan, Gujarat, Punjab and Haryana.
- It is the world's 18th-largest desert, and the world's 9th-largest hot subtropical desert.
- **Unique phenomena** - Thar was the only desert in the world with the highest concurrent increase in population, precipitation and vegetation during the last few decades.
- This remarkable transformation stands in contrast to vegetation trends observed in other deserts globally.
- Thar is among only four major deserts (Thar, Arabian, Negev and Eastern Gobi) worldwide that have experienced significant precipitation increases during this period.
- **Reason for greening:**
  - Enhanced South West Monsoon rainfall
  - Groundwater pumping for irrigation.

#### International Relations and Issues

### **Country Partnership Framework (CPF)**

Recently, Mauritius has signed a Country Partnership Framework (CPF) with the International Solar Alliance (ISA).

- **CPF** - It is a strategic document designed to facilitate medium- and long-term cooperation with ISA member countries to achieve their solar energy goals.
  - **Aim** - To promote the deployment of solar-based applications, capacity-building on technical, regulatory, and financing needs to the country.
  - To establish the Solar Technology Application Resource Centre (STAR-C), scaling of solar rooftop, projects, agrivoltaics, water pumping systems and solar Green Hydrogen.
- Solar Technology Application Resource Centre (STAR-C)** is a program initiated by ISA, to build a skilled solar workforce through specialized training, tools, and learning modules.
- **Mauritius** - It has become the **1<sup>st</sup> African nation and 4<sup>th</sup> globally** to enter into this partnership with ISA.
  - **Duration** - 3 years and renewed based on mutual consent.

### **Economy**

#### **GI Tags for Meghalaya's Textiles**

Recently, the Geographical Indication (GI) tags to Ryndia silk and Khasi handloom, two significant traditional textile products from Meghalaya.

- **Ryndia Silk** - It is a hand-spun eri silk which is naturally dyed, and organically produced and ethically sourced.
- **Ryndia** - It is the Khasi name for eri, named after the ryndia (castor) plant that nourishes the eri silkworms.
- **Peace Silk, or Ahimsa Silk** - Its yarn is extracted without cruelly boiling the silkworms and killing them, unlike other silks.
- **Region** - It is particularly associated with the Umden-Diwon region, designated as Meghalaya's first Eri Silk Village in 2021.
- **Khasi Handloom** - It is the traditional textile art of the Khasi community.
- **Uniqueness** - This handloom is known for its distinctive weaves and the use of natural dyes.

### **Environment**



### **Vembur Sheep**

*Vembur sheep in Tamil Nadu faces threat from industrial plan.*

- **Vembur Sheep** - It is one of 5 the indigenous hair sheep breeds in Tamil Nadu and locally called as Pottu aadu.
- **Characteristics** - It has medium-sized drooping ears, short thin tails, and tall lean bodies.
- It doesn't require shearing and well-suited to the Tamil Nadu climate.
- **Unique coating pattern** - White fur adorned with irregular reddish brown patches, and in rare cases black fawn patches.
- It does not rely on commercial cattle fodder, but entirely on natural grazing grounds.
- Recognising its uniqueness, the National Bureau of Animal Genetic Resources officially registered the breed in 2007.



- **Climate resilient** - The breed's natural resilience and adaptability to dry climate makes it ideal for the rain-fed agricultural regions.
- **Conservation status** - IUCN - Not listed.

### India in Mission Innovation Annual Gathering (MIAG), 2025

Recently, India highlighted their initiatives at Mission Innovation Annual Gathering, 2025 which was held at Seoul, South Korea.

- **Mission Innovation** - It is a global clean energy initiative to catalyse action and investment in research, development and demonstration in clean energy.
- **Launched in** - It was announced at COP21 in 2015 by the then President Obama of the United States.
- **Members** - 23 countries including India and the European Commission (on behalf of the European Union).
- **Missions**

ZERO-EMISSION SHIPPING

GREEN SHIPPING CORRIDOR HU

CLEAN HYDROGEN

GREEN POWERED FUTURE

CARBON DIOXIDE REMOVAL

SMART CDR COMPETITION

URBAN TRANSITIONS

NET-ZERO INDUSTRIES

INTEGRATED BIOREFINERIES

- **Mission Innovation 2.0** - It was launched on 2021, is catalysing a decade of action and investment.
- **India's leadership** - The Department of Biotechnology (DBT), Government of India - co-leads the Mission Integrated Biorefinery jointly with the Netherlands as part of Mission Innovation (MI) 2.0.
- **Bio E3 Policy** - Biotechnology for Environment, Energy, and Economy Policy.

### Security

#### Gaurav - Long-Range Glide Bomb (LRGB)

Recently, the Defence Research and Development Organisation (DRDO) has successfully conducted the trials of Gaurav from a Su-30 MKI aircraft.

- **LRGB 'Gaurav'** - It is a 1,000 kg class glide bomb.



- **Indigenous production** - It is indigenously designed and developed by DRDO's Research Centre Imarat, Armament Research and Development Establishment, and Integrated Test Range, Chandipur.
- **Range** - The trials successfully demonstrated range close to 100 kms with pin-point accuracy.

### **YARD 3039- Next Generation Offshore Patrol Vessel**

*Recently, The Keel Laying ceremony for Yard 3039, the third Next Generation Offshore Patrol Vessel (NGOPV) was held in Kolkata.*

- **Yard 3039** – It is a Next Generation Offshore Patrol Vessel.
- **Developed by** - Goa Shipyard Ltd (GSL), Goa and Garden Reach Shipbuilders and Engineers (GRSE), Kolkata.
- **Features of Yard 3039**
  - It has a tonnage capacity of around 3000T.
  - Designed for coastal defence and surveillance, search and rescue, offshore asset protection, and anti-piracy missions.

### **Science**

#### **Black Rats: Primary Hantavirus Carriers in Madagascar**

*Recent research published in Ecology and Evolution has identified black rats as the primary carriers of hantavirus in rural Madagascar, highlighting a significant health risk to local populations.*

• **Hantavirus infection** - Hantavirus is a serious viral infection transmitted to humans through contact with the excreta (urine, droppings, saliva) of infected rodents.

• **Associated Syndromes**

- Hantavirus Pulmonary Syndrome (HPS), a potentially fatal respiratory disease
- Hemorrhagic Fever with Renal Syndrome (HFRS), which primarily affects kidney function.

• **Black rat (*Rattus rattus*)** – It is an invasive species, introduced to Madagascar centuries ago, between the 10th and 14th centuries.

• **Increased Human Contact** - Deforestation and agricultural expansion in Madagascar have led to increased interaction between human communities and hantavirus-carrying black rats, elevating the potential for disease transmission.

### **Miscellaneous**

#### **National Safe Motherhood Day, 2025**

*National Safe Motherhood Day is observed annually on April 11th in India, coinciding with Kasturba Gandhi's birth anniversary, to emphasize the critical need for maternal healthcare.*

• **Theme** - “Healthy Beginnings, Hopeful Futures,” focusing on ensuring accessible and quality maternal healthcare from the beginning of pregnancy for safe outcomes.

• **Maternal death** - It is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy.

• **Maternal mortality rate in India** - It is declined from 130 per 100,000 live births in 2014-16 to 97 per 100,000 live births in 2018-20.

• While some states, like Kerala, Maharashtra, Telangana, Andhra Pradesh, and Tamil Nadu, have witnessed a significant reduction in maternal deaths, others continue to struggle with large numbers.

• **White Ribbon Alliance** - It is an international non-profit organization that advocates for maternal health.

• **Janani Shishu Suraksha Karyakram (JSSK)** - It is one of the schemes launched by the central government to provide free and zero-expense delivery and treatment for pregnant women and sick newborns.