

UPSC Daily Current Affairs| Prelim Bits 05-04-2025

Disclosure of Assets

Prelims - Indian Polity and Governance-Constitution, Political System, Panchayati Raj, Public Policy, Rights Issues, etc.

Mains (GS II) - Important aspects of governance, transparency and accountability, e-governance.

Why in news?

Recently, the Supreme Court (SC) decided in a full court meeting that its judges will soon make their assets public to enhance transparency within the judiciary.

- Unlike government officials and politicians, judges are currently not bound to make this information public.
- **Supreme Court Judges** - In 1997, a resolution was adopted for the Judges of the SC to disclose their assets only to the Chief Justice.
- The disclosure includes all assets in the form of real estate or investments held in their names, in the name of their spouses, or any dependent person.
- In 2009, the full Bench of the SC resolved to declare the assets of judges on the court's website "purely on a voluntary basis."
- The apex court itself held in 2019 that the assets and liabilities of judges are not "personal information."
- In its latest resolution, the SC has collectively decided to make asset disclosures publicly accessible, reinforcing its commitment to accountability.
- **High Court Judges** - Out of the 770 judges in all High Courts, only 97 (13%) of these judges have publicly declared their assets and liabilities.
- Most High Courts in the country have been against the public disclosure of their judges' assets and liabilities.
- In 2012, the Uttarakhand High Court passed a resolution stating that it "strongly objects to bring disclosure of assets by Judges under the purview of Right to Information Act".

In 2023, Parliament's Committee on Personnel, Public Grievances, and Law and Justice stated that legislation would be introduced to ensure mandatory disclosure of assets and liabilities by judges of the SC and High Courts.

- **Challenges** - Declarations by current judges are not available.
- The website only gives a list of 28 judges of the court (out of 33) "who have submitted their declarations of assets" to the CJI.

- Declarations by former judges have also been removed from the website.

Measures taken for disclosure of Assets

- **For Public servants** - Are often mandated to declare their assets, and this information is often easily accessible to ordinary citizens.
- *Right to Information Act, 2005* requires government officials to annually declare their assets to their respective cadre-controlling authorities.
- **For state Bureaucrats** - Several states such as Gujarat, Kerala, and Madhya Pradesh, have provisions to ensure state-level bureaucrats declare their assets.
- **For Ministers** - Since UPA-2 government (2009-14), it has become a norm for Union Ministers, including the Prime Minister to submit their declarations to the PM's Office.
 - Many state governments have followed this suit.
- **For elected members** - Members of Parliament submit their declarations of Assets to the Speaker (for Lok Sabha MPs) and the Chairperson of the House (for Rajya Sabha MPs).
- They can generally be accessed through RTI applications and this is similar for most states.
- **For election contestants** - Anyone contesting an election to Parliament or any state Assembly or Council must publicly declare their assets and liabilities as a part of the nomination process.
- This provision was mandated by the Supreme Court in 2002.

Reference

[The Indian express | Disclosure of Assets to public](#)

Fiscal Health Index (FHI)

Prelims - Economic and Social Development.

Mains (GS II & III) - GS I (Government Policies & Interventions NITI Aayog) |GS III (Inclusive Growth Growth & Development)

Why in News?

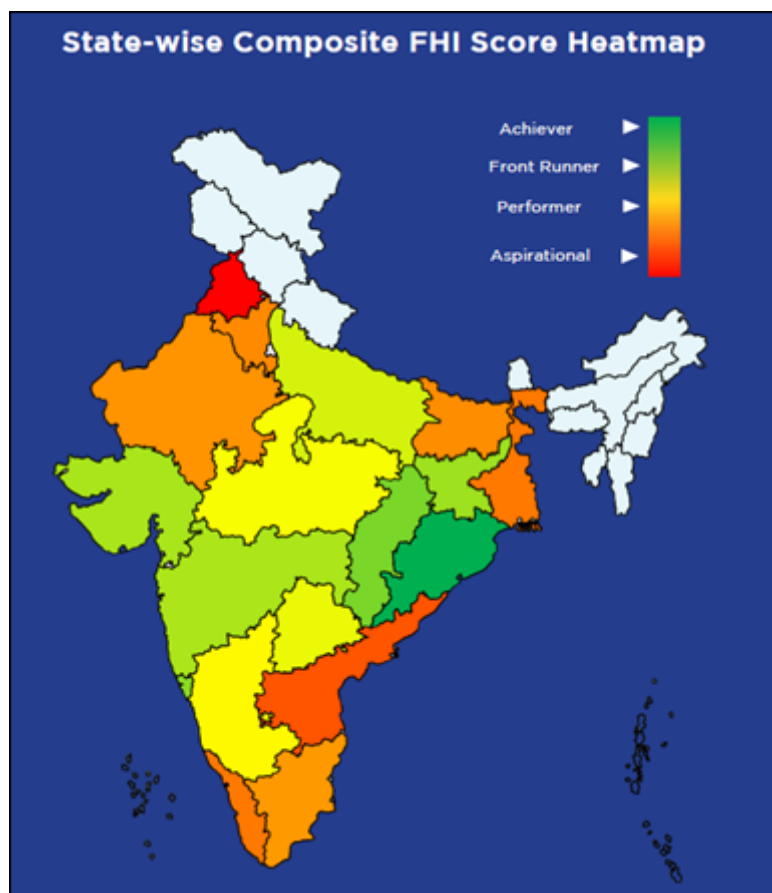
Niti Aayog's Fiscal Health Index (FHI) 2025 has ranked Odisha as the top-performing state in terms of fiscal stability.

- **Initiative by** - NITI Aayog.
- **Aim** - To evolve an understanding of the **fiscal health of states** in India.
- The FHI analysis covers **18 major states** that drive the Indian economy in terms of their contribution to India's GDP, demography, total public expenditure, revenues, and overall fiscal stability.
- **Objectives** - To provide a comparative analysis of fiscal health across Indian states through standardized metrics.
- To identify areas of strength and concern in states' fiscal management practices.

- To promote transparency, accountability, and prudent fiscal management through empirical assessment.
- To assist policymakers in making informed decisions aimed at enhancing fiscal sustainability and resilience.
- **Indicators - Revenue Generation and Mobilization** - Assessment of states' own revenue receipts, tax buoyancy, and non-tax revenue generation.
- **Expenditure Management and Prioritization** - Evaluation of efficiency in expenditure allocation, prioritization of capital expenditure, and adherence to fiscal discipline.
- **Debt Management** - Analysis of states' debt-to-GSDP ratios, interest payment burdens, and overall sustainability of debt portfolios.
- **Fiscal Deficit Management** - Measurement of states' fiscal deficit as a percentage of Gross State Domestic Product (GSDP) and adherence to statutory limits.
- **Overall Fiscal Sustainability** - Composite analysis of revenue, expenditure, deficit, and debt indicators to gauge long-term fiscal health

Key Findings

- **Top Performers** - Odisha, Chhattisgarh, and Goa excel in Debt Index, Debt Sustainability, and Revenue Mobilization.
- **Revenue Mobilization** - Odisha, Jharkhand, Goa, and Chhattisgarh effectively mobilize non-tax revenue (average 21% of Total Revenue).
- **Aspirational States** - Punjab, Andhra Pradesh, West Bengal, and Kerala face fiscal challenges like poor debt sustainability and high deficits.
- **Capital Expenditure** - High allocation (27%) by Odisha, Goa, Madhya Pradesh, Karnataka, Uttar Pradesh; Low allocation (10%) by West Bengal, Andhra Pradesh, Punjab, Rajasthan.
- **Debt Concerns** - West Bengal and Punjab face growing debt burdens and increasing debt-to-GSDP ratios.



Achiever	Front Runner	Performer	Aspirational
Odisha (1)	Maharashtra (6)	Tamil Nadu (11)	Kerala (15)
Chhattisgarh (2)	Uttar Pradesh (7)	Rajasthan (12)	West Bengal (16)
Goa (3)	Telangana (8)	Bihar (13)	Andhra Pradesh (17)
Jharkhand (4)	Madhya Pradesh (9)	Haryana (14)	Punjab (18)
Gujarat (5)	Karnataka (10)		

Quick Facts

- **Tax Buoyancy** - It is a ratio of change in tax revenue in relation to change in gross state domestic product or GSDP of a state. It measures how responsive a taxation policy is to growth in economic activities.
- **Debt-to-GSDP** - It is a metric that compares a state's total public debt to its gross state domestic product (GSDP), indicating its ability to repay its debts, and is often expressed as a percentage.
- **Sustainability of Debt Portfolios** - It refers to state's ability to meet its current and future debt obligations without defaulting or requiring exceptional financial assistance, focusing on both solvency and liquidity.
- **Debt Index** - The ratio of Interest Payments to Revenue Receipts (IP/RR) indicating the percentage of Revenue Receipts used for interest payment on account of outstanding debt.

Reference

[PIB | Fiscal Health Index 2025](#)

New Pamban Bridge

Prelims - *Current Events of National Importance.*

Mains (GS III) - *Infrastructure.*

Why in News?

PM Modi to inaugurate New Pamban Rail Bridge on Ram Navami.

Old Bridge

- Pamban Bridge was a **railway bridge** that connected the town of Rameswaram on Pamban Island with Mandapam in mainland India.
- **Built in** - 1914 by British government.
- It is **India's first sea bridge**, built for trade.
- It remained India's longest sea link until the Bandra-Worli sea link opened in 2010.
- **Bascule Mechanism** - It had a double-leaf bascule section with a *Scherzer rolling-type lift span* that used to be raised to let ships pass.
- It is considered a technical marvel as the bridge was constructed with lesser availability and the corrosive environment it withstood.
- **Life span** - 108 years until 2022.

New Bridge

- **Built by** - Rail Vikas Nigam Limited (RVNL).
- The new bridge is **India's first vertical lift sea bridge**, which will replace the century-old original Pamban Bridge.
- It is a state-of-the-art infrastructure project, ensuring faster rail movement and seamless maritime navigation.
- **Expected lifespan** - 58 years.
- **Key Features**
- The bridge features a vertical lift span that can be raised in just 5 minutes to allow ships to pass.
- Built with stainless steel reinforcements and *Polysiloxane Paint*, the bridge is designed to withstand harsh marine conditions.
- Trains can now travel at speeds of up to 75 kmph, a much higher speed from the previous 10 kmph limit.
- With a clearance of 22 meters above sea level, surpasses the old bridge's 1.5-meter clearance, allowing larger vessels to pass.
- Designed to support future railway electrification, the bridge ensures seamless upgrades to modern rail systems.

References

1. [The Indian Express | New Pamban Bridge](#)
2. [Tamil Nadu Tourism | Pamban Bridge](#)

Euphaea Wayanadensis

Prelims - Bio-diversity.

Mains (GS III) - Conservation.

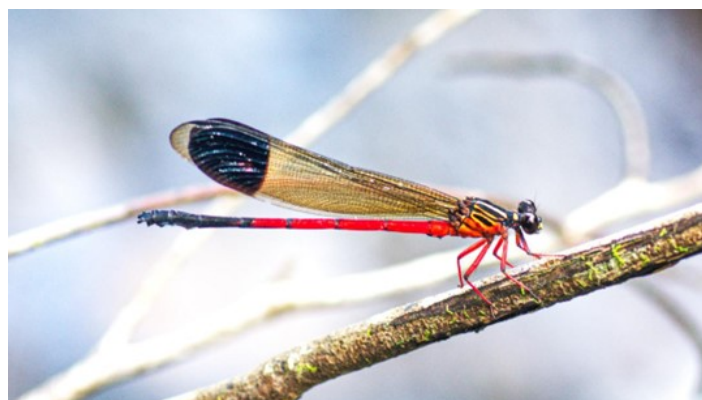
Why in News?

A group of researchers have discovered a new species of damselfly in the Wayanad landscape of the Western Ghats, Kerala.

Odonate species

- Odonate species, commonly known as dragonflies and damselflies, are a group of insects belonging to the order Odonata.
- Odonates are *predatory insects with 4 wings* and are known for their vibrant colors and agility in flight.
- **Suborders** - Anisoptera (dragonflies) and Zygoptera (damselflies).
 - **Dragonflies (Anisoptera)** - Typically, larger and more robust, with eyes that touch on top of the head and wings spread out at rest.
 - **Damselflies (Zygoptera)** - Usually slenderer, with eyes separated and wings folded together along the body at rest.
- **Ecological Importance**- Odonates play a crucial role in freshwater ecosystems as both predators and prey, helping to control populations of other insects, including mosquitoes.
- **Global Distribution**- While they are predominantly found in warmer regions, some species thrive in habitats as far north as Canada.

- It is Kerala's 191st recorded **odonate species**.
- **Family** - Euphaeidae.
- The team first observed the distinct morphotype of *Euphaea wayanadensis* at the **Kalindi River**, Thirunelli, in Wayanad district in 2013.
- **Morphology** - A longer black hind wing patch, broader and uninterrupted humeral and ante humeral stripes in males, and unique structural traits in the male genital vesicle.
- Genetic analysis also played a crucial role in confirming the species' status.
- **Habitat** - The species preferred fast-flowing streams with rocks and aquatic vegetation with evergreen and semi-evergreen tree growth on the banks to thrive.



Reference

Arctic Council

Prelims - Current events of International Importance.

Mains (GS II) - Global Groupings.

Why in News?

International observers have recently raised concerns about escalating tensions in the Arctic.

- It is an **intergovernmental forum** for cooperation and coordination on Arctic issues, including scientific research.
- **Formed in** - 1996 through the Ottawa Declaration.
- It promotes cooperation, coordination and interaction among the Arctic States, Arctic Indigenous peoples and other Arctic inhabitants on common Arctic issues.
- **Members (8)** - Canada, Denmark, Finland, Norway, Iceland, Russia, Sweden and the USA.
- These nations exercise sovereignty over the Arctic land and can also exploit resources within their Exclusive Economic Zones (EEZs).
- **Permanent Participants** - 6 organizations representing the indigenous people of the Arctic region.
- **Observer states (38)** - Other countries or national groups.
- **India** is currently an *Observer member* on the Arctic Council.
- All decision-making happens through consensus between the 6 members, and in consultation with the permanent participants.
- The 6 Working Groups carry out the Council's activities
 1. Arctic Contaminants Action Program
 2. Arctic Monitoring and Assessment Programme
 3. Conservation of Arctic Flora and Fauna
 4. Emergency Prevention, Preparedness and Response
 5. Protection of the Arctic Marine
 6. Environment Sustainable Development Working Group
- **Northeast Passage** - It is a maritime route through the Arctic along the northern coast of Eurasia, connecting the *Atlantic and Pacific Oceans*, primarily off the coast of northern Siberia (Russia).
- It's also known as the Northern Sea Route.
- **Strategic importance of Arctic Region - Natural Resources** - The region holds 13% of the world's undiscovered oil reserves and 30% of its untapped natural gas reserves.
- Beneath the frozen landscape lie untapped reserves of natural resources such as fossil fuels, rare earth elements, phosphates, and copper as well as lucrative fishing grounds.

- **Alternative sea routes** - The melting of Arctic sea ice has also prompted interest into the alternate trade routes like Northeast Passage and Northwest passage by passing suez canal.
- **Geopolitical interests** - Unlike Antarctic, Russia, the United States (Alaska), Canada, Denmark (Greenland), Norway, Iceland, Finland, and Sweden have their military bases in the Arctic.
- **Lacks legal safeguards** - Unlike the Antarctic, which is environmentally protected by a dedicated international treaty, the Arctic lacks similar legal safeguards and is primarily governed by the UN Convention on the Law of the Sea (UNCLOS).

Reference

[The Hindu | Why are tensions high in the Arctic?](#)

Gantenerumab, drug on early-onset Alzheimer's disease

Prelims - *General Science.*

Mains (GS III) - *Achievements of Indians in science & technology.*

Why in News?

A recent study found that gantenerumab, experimental drug reduced the build-up of amyloid plaques one of the hallmarks of Alzheimer's disease in the brain.

Alzheimer's disease

- It is a progressive **neurodegenerative disorder** that primarily affects memory and thinking skills, eventually leading to a loss of the ability to perform simple tasks.
- It is the most common cause of dementia, and is characterized by the abnormal buildup of proteins in the brain, forming plaques and tangles that disrupt brain cell function.
- Alzheimer's disease is usually associated with old age. But around 5%-10% of all Alzheimer's cases occur in people under the age of 65.
- **Early-onset Alzheimer's disease** - It progresses more rapidly and often strikes people in the prime of their lives.
- Early-onset Alzheimer's is often linked to genetic mutations in 3 specific genes.
- These mutations cause the brain to produce excessive amounts of amyloid beta, a protein that clumps together to form plaques.
- These plaques disrupt brain function, leading to memory loss.

Gantenerumab

- **Recent Trial** - Gantenerumab is an experimental drug, initially discontinued but has now shown promise in new clinical trials.
- The recent clinical trial was a randomised, placebo-controlled study to evaluate gantenerumab's effects on people with early-onset Alzheimer's.

- Researchers monitored changes in the participants' cognitive abilities, and also used brain imaging and blood biomarkers.
- **Gantenerumab** - It is a type of antibody called a monoclonal antibody, designed to target and remove amyloid plaques in the brain through a subcutaneous administration.
- **Developed by** - Hoffmann-La Roche.
- It works by binding to amyloid plaques, promoting their clearance through a process called phagocytosis, where microglia (brain's immune cells) engulf and remove the plaques.
- The drug works by engaging microglial cells. Microglia constantly monitor the brain for damage and remove harmful substances, including amyloid beta.
- However, in people with Alzheimer's disease, microglia often fail to clear plaques efficiently.
- Gantenerumab enhances this natural defense mechanism by tagging amyloid plaques, making them easier for the microglia to recognize and break down.

Reference

[The Indian Express | Early-onset Alzheimer's drug](#)

One Liners 05-04-2025

History, Art and Culture

Gorkha Community

Recently, the Ministry of Home Affairs (MHA) convened a meeting to resolve issues related to the Gorkha community.

- **Gorkha Community** - It is a group of ethnic communities of people who speak *Nepali language*, which is included in the 8th schedule of the Indian Constitution.
- **Distribution** - They are *residents of Nepal and Indian states* like Assam, Sikkim, West Bengal, Uttarakhand and other parts of the country.
- **Sub-castes:**
 - Bahuns (Brahmins), Chhetry, Bhujel, Tamang, Magar, Rai, Limbu, Gurung, Pradhan, etc.

New Chola Inscription

A new inscription pertaining to Rajaraja Chola, has been discovered recently.

- **Discovered at** - Somagiri hills at Melavalavu in *Madurai, Tamil Nadu*.
- **Time period** - It dated back around 1,000 CE.
- **Honorific title** - The inscription begins with the *title Raja Mummudichola*, a unique salutation found in this region, known as the Pandya country.
- **Information** - It mentions about capturing and ruling of the area by a military commander called *Viranarana Pallavarayan*.
- Malaiyappa Sambu, who cut the steps on the rock to reach a ledge where a temple had been constructed.

Polity & Governance

New Website of Ministry of Jal Shakti

A new website of Ministry of Jal Shakti (Department of Water Resources, River Development and Ganga Rejuvenation) was launched recently.

- **Objective** - To align to cohesive digital ecosystem across all Ministries/Department.
- It is in Digital Brand Identity Manual (DBIM) format.
- **DBIM** - It acts as a style guide and outlines the visual, textual, and experiential elements necessary to bring harmonization to the digital platforms of the Government of India.
- **Significance** - It is in full compliance with the latest DBIM and Guidelines for Indian Government Websites (GIGW) 3.0.
- **Features** - Unified interface, consistent branding, technology standardization, digital excellence and accessibility.

Social Issues

Dharti Aaba Tribepreneurs 2025

Recently, the Ministry of Tribal Affairs (MoTA) inaugurated Dharti Aaba Tribepreneurs 2025.

- **Launched by** - Ministry of Tribal Affairs
- It is transforming tribal entrepreneurship, paving the way for self-reliant, sustainable, and innovative enterprises.
- **Objective** - To emphasis Bhagwan Birsa Munda vision by creating sustainable opportunities for Scheduled Tribe (ST) entrepreneurs and startups.
- To redefine the tribal startup landscape and contribute to a more inclusive and resilient economy.

Agriculture

Water Resource Census Application

Water Resource Census application was launched recently.

- **Launched by** - Ministry of Jal Shakti.
- **Objective** - To build a comprehensive and reliable database in the irrigation sector for effective planning and policymaking including water use efficiency, water budgeting etc.
- To enhance data accuracy and reducing the time required for conduct of census.
- **Census schemes**
 - The 7th Minor Irrigation Census
 - 2nd Census of Water Bodies
 - 1st Census of Springs
 - 1st Census of Major and Medium Irrigation Projects.

Reservoir Storage Monitoring System (RSMS) Portal

Web based Reservoir Storage Monitoring System (RSMS) Portal was launched recently.

- **Launched by** - Ministry of Jal Shakti.
- **Aim** - To monitor the live storage Capacity data of 161 important reservoirs of country.
- **Features** - All required data analysis and generating maps, tables, graphs etc. including issuing the final bulletin shall be done automatically once the data is entered in the portal.
- If required, general public can get information about the storage status of any reservoir and download the bulletin from the portal.

Environment

Cyphoderus Bihariensis

Scientists from Kolkata Zoological Survey of India (ZSI) discovered a new species of *Collembola* in Bihar.

- **Collembola** - It is a *soil-dwelling micro-arthropod*.
- **Scientific name** - *Cyphoderus Bihariensis* (named after the state 'Bihar' where it was found)
- It belongs to the multidentati species group, marking the **1st record** of this group in the country.
- **Morphology** - It has minute body size, lack of eyes, and the presence of a furcula (a jumping organ).

Science

Third Launch Pad (TLP)

Recently, the Union Cabinet approves the establishment of Third Launch Pad (TLP).

- **Location** - *Sriharikota*.
- It is expected to be completed *within 4 years*.
- **Need** - Next Generation Launch Vehicle (NGLV) is under development, which is *about 90 m tall* with a maximum lift-off mass of *1000 tonne*.
- Existing launch pads at Sriharikota is *not designed* to launch this class of vehicles.
- **Features** - Foundation support & servicing requirements for future augmentation supports the launches of India's Crewed Lunar mission.

Endometriosis

A recent study finds, traumatic experiences and genetics may increase endometriosis risk.

- **Endometriosis** - It is a *chronic and systemic inflammatory disease* where uterine endometrial-like *tissue grows outside the uterus*.
- **Symptoms** - Debilitating pelvic pain before and during menstruation, or during intercourse.
- **Causes** - Infertility and digestive issues such as painful bowel movements.
- **Spread** - Globally, it affects a staggering *10%-15% of female individuals* of reproductive age.

Miscellaneous

Mundi-Cut Passport

Recently, it was found that 'mundi-cut' passports were used to illegally send people abroad from Mumbai.

- It is a one of the *fake passports*, which is entirely forged and changed by an agent.
- **Mundi cut (photo change) Passport** - A legitimate passport purchased from the original holder, where the *photograph of original holder is replaced with photograph of illegal migrant*.
- The *personal details remain same* of the original holder.
- It is considered as a safest way by the criminals for the illegal migration.

