8th Jan, 2025

1. India's GDP Growth Slows to 6.4% in FY25 GS 3 (Economy)

Why in News:

- o India's real Gross Domestic Product (GDP) is projected to grow at 6.4% in the financial year 2024-25 (FY25), marking a four-year low.
- o This slowdown is attributed to weak industrial and investment growth, according to the National Statistics Office (NSO).
- The forecast is below the Reserve Bank of India's (6.6%) and the government's estimate (6.5-7%) for the same period.

Some Key Economic Concepts:

- Gross Domestic Product (GDP): It is defined as the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period.
 - It measures the value of total output in the economy by tracking the total demand.

GDP = C + I + G + NX

Consumption (C): The biggest engine (56% of all GDP) is consumption demand from private individuals, technically known as Private Final Consumption Expenditure (PFCE).

Investment (I): The second-biggest engine (32%) is the investment demand generated by private sector businesses, also known as Gross Fixed Capital Formation (GFCF).

- Government (G): The third engine (11%) is the demand for goods and services generated by the government and is known as the Government Final Consumption Expenditure (GFCE).
- Net Exports (NX): This is calculated by subtracting Indian imports from the Indian exports.

Nominal vs Real GDP:

- Nominal GDP (GDP calculated using current market prices) is the actual observed variable. However, Real GDP (GDP calculated using constant 2011-12 prices, after taking away the effect of inflation) is a derived metric.
- Real GDP = Nominal GDP Inflation Rate. Inflation is the rate at which the value of a currency is falling and consequently the general level of prices for goods and services is rising.
- From the Budget-making perspective, nominal GDP is important. However, from the perspective of the common people, real GDP is what matters.
- Gross Value Added (GVA): It examines the amount of value added (in monetary terms) in various productive areas of the economy. It tracks the total output in the economy by looking at the total supply.

GDP vs GVA:

- GDP = (GVA) + (Taxes earned by the government) (Subsidies provided by the government). The difference between these two absolute figures will reveal the government's role in the process.
 - GDP > GVA, if the government generated more money from taxes than it spent on

Fiscal deficit:

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- A fiscal deficit is a shortfall in a government's income compared with its spending.
- It is essentially a marker of the health of government finances and tracks the amount of money that a government has to borrow from the market to meet its expenses.

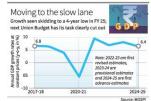
GDP growth projected to fall to four-year low at 6.4%

Vikas Dhoot

India's real Gross Domestic Product (GDP) is expected to rise at a four-year low pace of 6.4% in this finan-cial year, down from 8.2% in 2023-24, the National Statistics Office (NSO) said on Tuesday in its first ad-vance estimates of GDP for 2024-25.

2024-25. This implies that the country's economy, that grew 6% in the first half of this financial year, is ex-pected to rebound with a 6.8% surge in the second half.

half.
The real Gross Value Added (GVA) in the Indian economy is reckoned to rise 6.4% as well, relative to a 7.2% uptick in 2023-24. Just two of eight broad economic sectors are seen to Just two of eight broad eco-nomic sectors are seen to be clocking a higher growth than last year – Agriculture that is expect-ed to rise 3.8% from 1.4% last year, and Public Admi-nistration, Defence and



crease recorded in 2023-24. Manufacturing GVA growth is expected to near-ly halve from 9.9% in 2023-24 to 5.3% this year, while GVA in Mining and Quarry-GVA

broader worry is the SO's projection that gross ixed capital formation GECE) an indicator of

Constant Prices is estimat ed to attain a level o ₹184.88 lakh crore in the fi

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- For example,
 - subsidies.
 - **GVA > GDP**, if the government gave subsidies in excess of its tax collections.

• GDP Projections for FY25:

- Nominal vs. Real GDP:
 - Nominal GDP: Expected at ₹324 lakh crore (9.7% growth), translating to \$3.8 trillion at an exchange rate of ₹85 per USD.
 - Real GDP: Estimated at ₹184.9 lakh crore, 57% of nominal GDP, accounting for inflation effects.
- Factors behind the sluggish growth: (Economic slowdown drivers)
 - Cyclical slowdown: Indian economy faces a downturn in growth momentum over the past three quarters.
 - Key influences:
 - Strong base effect.
 - Impact of general elections.
 - Weak private sector capital expenditure (capex).
 - Monetary and fiscal tightening measures.

• Other Economic Indicators for FY25:

- Sectoral performance:
 - Primary and secondary sectors:
 - Agriculture: GVA growth rises to 3.8% in FY25 (1.4% in FY24).
 - Manufacturing: GVA growth dips to 5.3% from 9.9% in FY24.
 - Electricity, gas, and utilities: Growth slows to 6.8% (7.5% in FY24).
 - Construction: Grows at 8.6% (9.9% in FY24).
 - Mining and quarrying: Grows at 2.9%, down from 7.1% in FY24.
 - Services: Estimated growth at 7.2%, led by public administration (9.1%).
 - Trade, hotels, and transport: Growth slows to 5.8% (6.4% in FY24).
 - Financial and professional services: Grows at 7.3% (8.4% in FY24).
 - Consumption and investment trends:
 - Private Final Consumption Expenditure (PFCE): Expected to grow at 7.3% (4% in FY24).
 - Gross Fixed Capital Formation (GFCF): Growth moderates to 6.4% from 9.0% in FY24.
 - Government spending and fiscal impact:
 - Government Final Consumption Expenditure (GFCE) growth rises to 4.1% in FY25 from 2.5% in FY24.
 - Lower nominal GDP growth (9.7%) compared to budget estimates may not significantly impact fiscal deficit targets.
- Challenges for Sustained Growth: Key engines of GDP showing sluggish growth.
 - o **Private consumption:** Slow CAGR of 4.8% since FY20 hinders growth.
 - o Government spending: Limited fiscal expansion since 2019 (CAGR of 3.1%).
 - o Investments: Stagnation in private and public sector capex since 2014 (CAGR of 5.3%).
 - Net exports: Persistent trade deficit, although narrowing in FY25.
- Implications and Way Forward:
 - Insights for policymakers:
 - The latest GDP data underscores a deceleration in economic growth.
 - While India has shown high growth rates post-pandemic, much of this was due to statistical base effects.
 - A closer look at long-term trends reveals real economic growth of less than 5% annually since
 FY20, far below the 7% average required to achieve developed country status by 2047.
 - Strategic interventions needed:
 - Boost private consumption to encourage investments.
 - Enhance public sector capex to revitalize economic growth.
 - Leverage rural demand and improve urban wage growth.
- Conclusion:
 - India's GDP growth trajectory in FY25 highlights pressing structural challenges.

• While government spending and rural demand offer some support, a holistic approach addressing consumption, investments, and trade is critical to sustaining long-term growth.

2. <u>China's 7.1 Magnitude Earthquake: Significance and Implications</u> GS 3 (Disaster Management)

• Why in News:

 On January 7, 2025, a powerful earthquake of magnitude 7.1 struck the Tibetan region of China and parts of Nepal.

 The epicentre was located approximately 10 km below the surface in Tingry County, Shigatse region, around 80 km north of Mount Everest.

By evening, reports
 confirmed at least 95
 fatalities, 130 injuries, and

126 killed, 188 injured as earthquake hits Tibet

Agence France-Presse BEIJING

A devastating earthquake in China's remote Tibet region killed at least 126 people on Tuesday, state media reported, with tremors also felt in neighbouring Nepal's capital Kathmandu and parts of India.

Around 188 people were injured as the earthquake struck the rural, high-altitude Tingri county, about 80 km north of Mount Everest, near China's border with Nepal.

The China Earthquake Networks Center measured the quake's magnitude as 6.8, while the U.S. Geological Survey reported it as 7.1.

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the destruction of hundreds of houses. Tremors were felt as far as Kathmandu (Nepal), Thimphu (Bhutan), and Kolkata (India).

Why Does the Location of the Earthquake Matter?

- Geographical and Cultural Context:
 - **Epicentre Location**: Tingry County lies in the Shigatse region of Tibet, a high-altitude area averaging 4-5 km above sea level and home to about 800,000 residents.
 - Cultural Significance: Shigatse is an important spiritual hub, housing the Panchen Lama of Tibetan Buddhism.
 - **Tourism Impact**: Tingry serves as a gateway to Mount Everest. Although tourist numbers are lower in winter, the earthquake led to the suspension of tourist activities in the region.
- Proximity to Critical Infrastructure:
 - Lhasa Terrane: The earthquake occurred in the Lhasa terrane, a tectonic fragment crucial for geophysical studies and development projects.
 - Mega Dam Project: The region hosts China's ambitious Yarlung Tsangpo River dam project, the world's largest hydroelectric initiative, designed to generate 300 billion kWh annually.
 - Concerns for India: The Yarlung Tsangpo becomes the Brahmaputra River in Arunachal Pradesh and Assam, raising concerns about potential impacts on water availability and flow.
- Environmental Sensitivity:
 - The **Himalayan region**, often called the "**third pole**," holds vast water reserves in its rivers, glaciers, and lakes, supporting millions of people
 - Earthquakes can trigger:
 - River course changes: Past earthquakes have altered major river systems, like the Ganga in India
 - Glacial instability: Potential flooding due to destabilized glaciers and lakes.

• Causes of the Earthquake:

- Tectonic Dynamics:
 - Plate Collision: The Himalayas were formed 50 million years ago when the Indian plate collided with the Eurasian plate.
 - Ongoing Tension: The Indian plate continues to push northward at a rate of 60 mm/year, causing stress and periodic seismic activity.
- Historical Seismic Activity:
 - Since 1950, the Lhasa terrane has recorded 21 earthquakes of magnitude 6 or higher.
 - **Notable Event**: A **6.9 magnitude earthquake** struck near Mainling in 2017, highlighting the region's vulnerability.

Predictive Studies:

- Geologists monitor fault lines to anticipate potential earthquakes.
- For example, studies predicted the devastating **2015 Nepal earthquake**, observing that the fault involved experienced significant events roughly **80 years apart**.

• Implications of the Earthquake:

- Humanitarian Impact:
 - Casualties: Loss of life and injuries underscore the urgent need for disaster preparedness in highrisk areas.
 - Displacement: Many residents have lost homes, requiring long-term rehabilitation efforts.

Environmental Risks:

- Hydrological Changes: Earthquakes can disrupt river systems and increase flood risks.
- Climate Sensitivity: Destabilized glaciers could accelerate regional warming impacts.

Regional Tensions:

• India-China Relations: The proximity of the earthquake to the Yarlung Tsangpo-Brahmaputra basin raises concerns about water security and cross-border cooperation.

Key Takeaways:

- Geological Importance: Understanding the dynamics of the Indian and Eurasian plates is essential to predicting future seismic activity.
- o **Infrastructure Concerns**: Large-scale projects like the Yarlung Tsangpo dam need rigorous risk assessments to mitigate environmental and geopolitical impacts
- O Disaster Preparedness: Regional governments must enhance early warning systems and preparedness measures to minimize the human and economic toll of such disasters.

Conclusion:

- The 7.1 magnitude earthquake in Tibetan China highlights the interconnectedness of geological, environmental, and geopolitical factors in the Himalayan region.
- Beyond immediate relief efforts, a long-term focus on seismic research, sustainable development, and international cooperation is crucial to safeguarding the region and its people.

3. Sonobuoys

GS 2 (International Relations)

Why in News: India and the U.S. have announced a significant collaboration aimed at enhancing Undersea
 Domain Awareness (UDA) for the Indian Navy through the co-production of U.S. sonobuoys. This collaboration is

the latest in a series of defense technology partnerships between the two countries, responding to growing concerns over China's expanding naval presence in the Indian Ocean Region (IOR).

• Key Highlights:

- Partnership Development: The Ultra Maritime (UM), a U.S.-based leader in undersea warfare capabilities, and Bharat Dynamics Limited (BDL), an Indian stateowned defense company, will co-produce sonobuoys for the Indian Navy.
- The project is aligned with the S.-India Initiative on Critical and Emerging Technologies (ICET), launched in May 2022, and will adhere to "Make in India" principles by manufacturing these sonobuoys both in the U.S. and India

India, U.S. to jointly manufacture interoperable sonobuoys for Navy



 Technology Focus: The collaboration will focus on developing sonobuoy technologies tailored for the unique acoustic environment of the Indian Ocean. This will include solutions for wide-area search and multi-static active solutions, enhancing the ability to detect submarines and underwater threats.

- The sonobuoys produced under this partnership will be designed for interoperability, allowing them to be used seamlessly by the S. Navy, the Indian Navy, and other allied countries' naval assets, including P-8, MH-60R, and MQ-9B Sea Guardian aircraft.
- While India already operates the American sonobuoys from the P-8I maritime surveillance and antisubmarine warfare aircraft, the fresh deal is for the MH-60 Romeo helicopters, also procured from the US.
- The sonobuoys are a mix of active and passive capabilities, and are expendable, meaning they are meant for use only once.
- Use of sonobuoys would make these aircraft more potent in carrying out anti-submarine warfare as they raise the probability of detection of enemy submarines.
- There are three types of sonobuoys the Indian Navy is procuring:
 - AN/SSQ-53G high-altitude anti-submarine warfare (HAASW) sonobuoys
 - AN/SSQ-62F HAASW
 - AN/SSQ-36

About Sonobuoys

- Sonobuoys are advanced devices that play a critical role in tracking submarines and monitoring underwater activity, particularly in deep seas and oceans.
- Sonobuoys are expendable, electro-mechanical acoustic sensors that relay underwater sounds emitted from ships and submarines.
- They remain active for about 24 hours and help in detection, classification and prosecution of adversarial ships and submarines.
- A naval helicopter or fixed-wing aircraft generally drops sonobuoys in a pattern.
- They are dropped in canisters and are deployed automatically upon impact with water.
- An **inflatable system** with a **radio transmitter** remains on the surface for communication with the ship or aircraft tracking it while sensors descend below the surface to predetermined depth.
- It then relays acoustic information back to those monitoring them. A group of sonobuoys deployed in a pattern can find out the exact location of the submarine which then can be tracked by other systems.

4. BHARATPOL portal launched GS 2 (Governance)

Why in News:

Union Home Minister Amit Shah inaugurated the 'Bharatpol' portal on January 7, developed by the CBI to enhance international police cooperation.

The portal serves as a broadcast hub for real-time action against transnational crimes, enabling central and state law enforcement agencies to connect efficiently with Interpol and expedite investigations.

What is Interpol?

Ph: 9100791003

About

- Full Name International Criminal Police Organisation.
- Interpol is the radio-telegraph code for the organisation.
- Interpol is an international police organisation made up of 196 member countries.
- It does not work under UN.
- It has enjoyed a special role that of Permanent Observer at the United Nations - since 1996.
- It was founded in 1923 and is headquartered at Lyon France.

Functions of Interpol

Bharatpol to aid in nabbing fugitive criminals 'wherever they hide': Home Minister

The Hindu Bureau

Union Home Minister Amit Shah on Tuesday inaugu-rated the Bharatpol portal, which aims to provide pol-ice and security agencies in India with a seamless connect to Interpol, the in-ternational police ternational

ternational opolico organisation.

He said criminals committing crimes in India and fleeing to other countries had evaded the reach of Indian laws for years. However, with the implementation of modern systems such as Bharatpol, such criminals could now be brought within the ambit of justice.

Mr. Shah said the new criminal law enabled the

Mr. Shah said the new criminal law enabled the prosecution of fugitive cri-minals through trials in ab-sentia and, with the capa-bilities of Bharatpol, fugitives could be brought to justice "wherever they hide".

He said the new law



would simplify the process of extraditing convicted criminals to India

criminals to India.

He urged the Central Bureau of Investigation (CBI) to take the lead in implementing Bharatpol and ensuring widespread training in its use at the grass-roots level. The portal has been developed by the CBI.

The five key modules of Bharatpol — Connect, Interpol notices, Referenores, Referenores

Bharatpol – Connect, In-terpol notices, References, Broadcast, and Resources – provide a technological platform to support all In

s, the He

extension of Interpol's Na-tional Central Bureau (NCB-New Delhi). The sys-tem would ensure quick and structured transmis-sion of requests for Inter-pol notices, enabling a scientific mechanism to swiftly locate criminals from India and across the

- It is not a police force in the traditional sense—its agents are not able to arrest criminals.
- It is more of an information-sharing network, providing a way for national police forces to cooperate effectively and tackle international crime ranging from human trafficking and terrorism to money laundering and illegal art dealing.
- Sharing of information is done by issuing colour-coded notices in four languages English,
 Spanish, French, and Arabic.
- The organization operates centralised criminal databases that contain fingerprint records, DNA samples and stolen documents

What is Bharatpol?

Background - CBI as Interpol Liaison for India

- The Central Bureau of Investigation (CBI), functioning as the National Central Bureau (NCB-New Delhi) for Interpol in India facilitates connections between Indian law enforcement agencies and those in 195 countries.
- Currently, coordination happens through letters, emails, and faxes, often causing delays in investigations.

About Bharatpol

- Bharatpol, developed to streamline international cooperation, addresses delays by making police collaboration more seamless.
- It enables real-time assistance for criminal investigations.
- The portal was introduced in response to the rise in transnational crimes such as cybercrime, financial crimes, online radicalisation, organised crimes, drug trafficking, and human trafficking.
- These crimes demand instant international coordination.

Key features of Bharatpol portal

- Unified Platform for Law Enforcement
 - Bharatpol connects the CBI (NCB-New Delhi) with all law enforcement authorities in India, including SPs and CPs, ensuring seamless integration.

Simplified Request Mechanism

 Frontline police officers can easily request international assistance from 195 Interpol member countries using standardised templates

Rapid Information Dissemination

The portal enables the CBI to quickly share criminal intelligence and inputs from Interpol member countries with law enforcement



agencies across India.

Enhanced Utilisation of Interpol Notices

• Bharatpol simplifies drafting requests for Red Corner Notices and other Interpol notices, aiding in global tracking of crimes, criminals, and illicit assets.

Capacity Building and Training

• The portal offers access to documents, templates, and training resources, improving the skills of frontline officers in conducting international investigations.

Key modules of Bharatpol

- Connect: Enables Indian law enforcement agencies to function as an extension of Interpol's NCB-New Delhi.
- It ensures quick, secure, and structured transmission of requests for Interpol Notices and aiding in the swift location of criminals globally.

- INTERPOL Notices: Facilitates streamlined requests for Interpol Notices to enhance international crime tracking
- **Broadcast:** Provides real-time access to requests for assistance from Interpol's member countries.
- References: Organises and manages references for international investigations.
- Resources: Simplifies the exchange and management of documents and training materials for efficient international collaboration.

5. Pravasi Bharatiya Divas (PBD)

GS 1 (Art and Culture)

Why in News: Pravasi Bharatiya Divas (PBD) is celebrated annually on January 9th to honor the significant contribution of the Overseas Indian community in the development of Pravasi Bharativa Divas India.

About the day

- o The day marks the return of Mahatma Gandhi to India from South Africa on January 9, 1915, which was a pivotal moment in India's freedom struggle.
- Gandhi's return is seen as the beginning of the movement that transformed India, and celebrating this day recognizes the role of the Indian diaspora in shaping the country's present and future.
- Role of the Diaspora: The date also highlights the role of the **Indian diaspora** in India's freedom struggle and their ongoing contribution to the nation's development in the postindependence era. The diaspora has played an integral part in sectors such as business, technology, and policy-making, contributing to India's global stature.
- to begin today in Odisha Over 3,000 delegates from 70 Trinidad and Tobago Presiden

- To mark this day, the tradition of celebrating Pravasi Bharatiya Divas (PBD) started in 2003. 1st PBD Convention was organised on 9 January 2003 to mark the contribution of the overseas Indian community to the development of India.
- Since 2015, under a revised format, Pravasi Bharatiya Divas is celebrated once in every two years.
- 18th Pravasi Bharatiya Divas Convention 2025:
 - Dates: 08-10 January 2025
 - Location: Bhubaneswar, Odisha
 - Theme: "The Diaspora's Contribution to a Viksit Bharat" (A Developed India). The theme emphasizes the critical role of the Indian diaspora in shaping a prosperous and developed India, highlighting their contributions in various domains like technology, economy, and culture.

6. V Narayanan Appointed as the New Head of ISRO **GS 3 (Science and Tech)**

- Why in News: V Narayanan has been appointed as the new head of the Indian Space Research Organisation (ISRO). He will take over from \$ Somanath, who served as the ISRO chairman from 2022.
- **Important Contributions**
 - o Joined ISRO in 1984: With nearly four decades of experience in space technology, Narayanan began his career at ISRO in 1984.
 - His early contributions were in the Solid Propulsion area, specifically with Sounding Rockets, Augmented Satellite Launch Vehicles (ASLV), and Polar Satellite Launch Vehicles (PSLV) at the Vikram Sarabhai Space Centre (VSSC).

Shift to Cryogenic Propulsion: In 1989, Narayanan transitioned to the Cryogenic Propulsion area at the Liquid Propulsion Systems Centre (LPSC). This was a pivotal shift in his career, leading to crucial advancements in the propulsion systems used in space launches.

Leadership at LPSC:

- Director of LPSC (2018): Under his leadership, LPSC developed 164 propulsion systems for 41 launch vehicles and supported **31 spacecraft missions**
- GSLV Mk III & C25 Cryogenic Project: Narayanan was the Project Director for the C25 Cryogenic Project, which developed the C25 Stage — a critical component for the GSLV Mk III vehicle, a significant achievement for ISRO's rocket capabilities.

V. Narayanan, spacecraft and rocket propulsion expert, appointed ISRO Chairman

Expertise: Narayanan is widely recognized for his expertise in rocket propulsion and spacecraft propulsion systems, both of which are critical for ISRO's mission success.

7. Draft Digital Personal Data Protection Rules, 2025 **GS 2 (Governance)**

Why in News: The draft Digital Personal Data Protection Rules, 2025, have been introduced to enforce the Digital Personal Data Protection Act passed over a year ago. This marks a significant step towards enforcing the fundamental right to informational privacy, affirmed by the Supreme Court in the landmark 2017 case of Justice K.S. Puttaswamy vs. Union of **India.** However, concerns persist about the secrecy surrounding the rule-making process.

Enabling Data Privacy Protections

- Data Collection Transparency: The proposed rules mandate online services to clearly communicate the purpose of data collection to users, ensuring transparency in digital interactions.
- Child Data Safeguarding: Special provisions are included to safeguard children's personal data, addressing growing concerns about privacy in the digital realm.
- Data Fiduciary Obligations: The rules outline procedures to follow in case of personal data breaches, holding data fiduciaries accountable for securing user information.

Institutional Design and Government Exemptions

- Data Protection Board of India (DPBI): The draft rules propose the establishment of the DPBI, which will play a crucial role in addressing disputes and ensuring compliance with data protection laws.
- Government Exemptions: Guidelines are provided for government agencies to be exempt from some provisions of the Act, raising concerns over potential oversight issues.
- Institutional Challenges: Despite proposals for the DPBI, concerns about the institutional design remain unresolved, and it may not be realistic to address these through subordinate legislation alone.

Concerns Over Secrecy and the Consultation Process

- Lack of Transparency: The government's continued secrecy in the rule-making process raises concerns, as it limits public participation and stakeholder involvement.
- Need for Open Deliberation: An open and transparent consultation process is crucial for balancing the interests of both industry and the general public, promoting better outcomes.
- Public Confidence at Risk: If the government does not improve transparency and act promptly, it risks losing the public's trust in its commitment to safeguarding privacy and user data.

Data protection rules may be refined further to protect children: Vaishnaw

New Delhi: The Digital Personal Data Protection (DPDP) Rules will be refined further to connect children with technology while saving them from harms in the digital space, IT Minister Ashwini Vaishnaw said on Tuesday.

While speaking to reporters. the minister said the rules will evolve based on the learning from their implementation

"We will refine it (DPDP Rules) further to take the power of technology to children while saving them from many harm," Vaishnaw said.

The government issued draft DPDP Rules 2025 on January 3 and these are open for public consultation till February 18, 2024.

According to the draft rules, digital platforms can process data of a child only after taking consent from verifiable guardian or parents.

The verification can be done using voluntarily provided details of identity and age, or through a virtual token issued by an entity entrusted by law or by the Centre or state governments to maintain details of a person.

Vaishnaw said the token system has been successful in various cases such as verification in case of Aadhaar-based transactions. "The tokens will be temporary and limited to one transaction after which it will be destroyed automatically," he