Today's Prelims Topics

Meghalaya's Demand for Special Provisions

Context

A regional party in Meghalaya has proposed bringing the state under the purview of Article 371 to help resume rat-hole coal mining. **Rat-hole mining** has been **banned since April 2014** by the **National Green Tribunal (NGT)** due to environmental and safety concerns.

Meghalaya's Current Situation

- Meghalaya has **Autonomous District Councils (ADCs)** under the **Sixth Schedule**, which gives limited autonomy to tribal regions.
- Due to this, the **NGT ban on rat-hole mining remains enforceable** despite ADCs having control over land and resources.

What is Article-371 ?

- **Article 371** provides **special provisions** for certain states in India to address **regional concerns, cultural preservation, and economic development**.
- These provisions vary **from state to state.**
- Article 369 appears in **Part XXI** of the Indian Constitution, titled **'Temporary, Transitional and Special Provisions'.**
- It extends to **11 states**, six of them are from the Northeast, where the provisions aim to preserve tribal culture.

State	Special Provisions
Maharashtra & Gujarat (Article 371)	• Provides special provisions for the development of tribal communities in these states, ensuring greater representation and welfare policies for Scheduled Tribes.
Nagaland (Article 371A)	• Protects land, resources, and Naga customary laws. • No Parliamentary law related to religion, social practices, administration of civil & criminal justice or land & resource ownership applies unless approved by the Nagaland Legislative Assembly.
Assam (Article 371B)	• Provides for the creation of special committees within the Assam Legislative Assembly to address tribal issues in the state.
Manipur (Article 371C)	• Ensures special safeguards for the hill areas and tribal interests through a Hill Areas Committee in the Manipur Legislative Assembly.
Andhra Pradesh & Telangana (Article 371D & 371E)	• Grants special provisions for equitable opportunities in public employment and education. • Establishes a special tribunal for resolving disputes related to government jobs and university admissions. Article 371E also allows for the establishment of a Central University in Andhra Pradesh by law.

Mizoram (Article 371F)	● Similar to Nagaland—protects Mizo customary laws, land, and religious & social practices. ● Parliament cannot pass laws on these matters unless approved by the Mizoram Legislative Assembly.
Arunachal Pradesh (Article 371G)	Special provision with respect to the state of Arunachal Pradesh
Goa (371I)	Special provision with respect to the state of Goa

How Would Article - 371 Help Meghalaya ?

- **Bypass Central Laws on Mining:** Meghalaya could **regulate mining independently**, similar to Nagaland.
- **Reduce NGT's Control:** NGT's **blanket ban on rat-hole mining may not apply**, allowing controlled mining.
- **Empower Autonomous District Councils (ADCs): Land and resource control would be exclusive to local communities**, reducing state intervention.
- **Preserve Local Culture and Economy:** Coal mining is a major economic activity for locals and an Article 371 provision could protect traditional economic practices.

Source:

- The Hindu - Article 371

Astronomers Discover the Biggest Radio Jet in the Early Universe

Context

Scientists have found **the largest radio jet ever seen in the early universe**, coming from a **quasar.**

About Quasars

- A **quasar** (short for **"quasi-stellar object"**) is an **extremely bright and active galaxy** with a **supermassive black hole** at its center.
- The black hole is surrounded by a **huge disk of gas and dust** that gets pulled in by gravity.
- As this material falls toward the black hole, it **heats up and emits enormous amounts of energy**, making quasars some of the **brightest objects in the universe**.
- A single quasar can **outshine an entire galaxy** with billions of stars. Some quasars are **thousands of times brighter than the Milky Way**.
- **Powerful Radio Jets (Sometimes Present):**
    - Some quasars **shoot out jets of charged particles** moving at nearly the **speed of light**.
    - These jets emit **radio waves**, which scientists can detect with **radio telescopes**.

What is a Radio Jet?

- A **radio jet** is a stream of **high-energy particles** shooting out from a **supermassive black hole** at the center of a galaxy.
- These jets move at **nearly the speed of light** and can extend across **hundreds of thousands of light-years**.
- They release **radio waves,** which scientists can detect using radio telescopes.

Why Haven't We Seen These Jets Before?

- Scientists **expected** that radio jets in the early universe would be **hidden** by the Cosmic Microwave Background (CMB), which is leftover radiation from the Big Bang.
- This jet is so **extreme and bright t**hat it was still visible, even though it's incredibly far away.

Source:

- The Hindu - Quasars

Aero India 2025

Context

The U.S. will showcase some of its most advanced military aircraft at Aero India 2025.

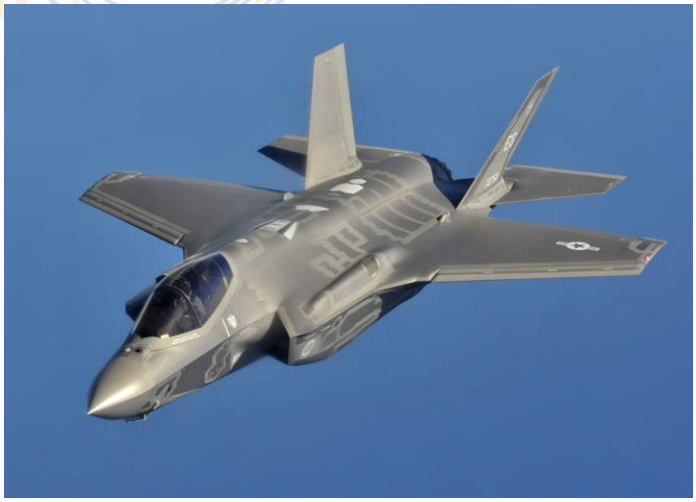
About Aero India

- Aero India is **Asia's biggest aerospace and defense exhibition**, held every **two years in Bengaluru, India**.
- It is organized by the **Defence Exhibition Organisation (DEO), Ministry of Defence**.
- **Aero India 2025:**
  - **Location:** Yelahanka Air Force Station, Bengaluru.
  - **Participants:** Defence companies, government officials, and military leaders from **India and over 50 countries**.
  - **Focus Areas:**
    - Fighter aircraft and unmanned aerial vehicles (UAVs).
    - Defense electronics, avionics, and radar systems.
    - Military technology and aerospace innovation.
- **U.S. Participation at Aero India 2025:** The **United States** will showcase advanced aircraft like the F-35, F-16, B-1 bomber, and KC-135 refueling aircraft.

List of 5th Generation Fighter Jets

- F-35 Lightning 2 & F-22 Raptor - USA
- Sukhoi Su-57 - Russia
- **HAL AMCA (Under Development) - India**
  - **Currently India does not possess a 5th generation fighter jet.**
- Chengdu J-20 - China.

F-35 Lightning II



- It is a **fifth-generation** multirole stealth fighter jet developed by **Lockheed Martin** for the **U.S. military and allied nations**.
- It is designed for air superiority, ground attack, reconnaissance and electronic warfare missions.
- **Key Features of the F-35: (Also Features of 5th Generation Fighter Jets)**
  - **Stealth Technology**: Jet's radar-absorbing coating and shape reduce detection by enemy radar.
  - **Advanced Avionics**: It is equipped with **AESA radar, data fusion and AI-based systems** for enhanced situational awareness.
  - **Supersonic Speed**: Capable of reaching **Mach 1.6** (1,960 km/h).
  - **Sensor Fusion**: Integrates data from multiple sources for **better targeting and defense**.
  - **Electronic Warfare Capabilities**: It can jam enemy radar and communication systems.

UPSC PYQ

Q. Consider the following aircraft : **(2024)**

1. Rafael
2. MiG-29
3. Tejas MK-1

How many of the above are considered **fifth generation fighter aircraft?**

(a) Only one
(b) Only two
(c) All three
(d) None

Answer: D

Source:

- **The Hindu - U.S. aircraft to be a major draw at Aero India**

Role of the SRY Gene

Context

Recent studies from Italy and the USA have reported rare cases of biological females carrying the SRY gene, challenging the traditional understanding of sex determination.

What Determines the Sex of a Baby?

- Sex determination is the biological process that decides whether a baby develops as a male or female, influenced by genetic and hormonal factors.
- The sex of a baby is determined by the **SRY (Sex-determining Region Y) gene**, which is located on the **Y chromosome**.
- If an embryo has an **SRY gene**, it develops as a **male**.
- If the **SRY gene is absent**, the embryo follows the **default female pathway**.
- In rare cases, individuals with **two X chromosomes (XX) can have the SRY gene** and develop male characteristics.

How Does the SRY Gene Work?

- Every human has **23 pairs of chromosomes.**
- The **first 22 pairs (1-22)** are the same in males and females.
- The **23rd pair is the sex chromosomes**:
    - **Females (XX)**: Receive one **X chromosome from the mother** and one **X from the father**.
    - **Males (XY)**: Receive an **X chromosome from the mother** and a **Y chromosome from the father**.
- **Role of SRY in Male Development:**
    - The **Y chromosome contains the SRY gene**, which triggers the formation of **testes**.
    - The **testes produce testosterone**, leading to the development of **male sexual characteristics**.
    - If the **SRY gene is non-functional** (due to a mutation), an **XY embryo develops ovaries instead of testes**, becoming a **biological female**.

SRY Gene in XX Individuals (Rare Cases)

- Rarely, a **mutation** can transfer the **SRY gene from the Y chromosome to the X chromosome**. This process is called **translocation**.
- If a sperm carrying an **SRY-positive X chromosome** fertilizes an egg, an **XX baby is born with the SRY gene**.
- **What Happens to XX Individuals with the SRY Gene?**
    - **Most cases**: They develop as **males** because the SRY gene triggers testis formation. However, these males are **sterile** since other **Y chromosome genes required for sperm production** are missing.
    - **Rare cases**: Some XX individuals with the SRY gene develop as **biological females**.

Source:

- The Hindu - STY Gene

Tea Tribes & Tea Cultivation

Context

The West Bengal government has allowed **30% of tea garden land** to be used for purposes other than tea cultivation. Unions and opposition are criticizing the move, stating that it threatens indigenous groups/ Tea Tribes.

About Tea Tribes

- Tea Tribes are **indigenous and migrant communities** mainly working in tea plantations, particularly in Assam and West Bengal.
- Many tea tribes are **descendants of Adivasis** brought from **Jharkhand, Chhattisgarh, Odisha and Andhra Pradesh** by the British during the **19th century** to work in tea plantations.
- They form a **significant portion** of the tea garden workforce.
- Despite their contribution to the tea industry, they face **poverty, illiteracy, low wages and poor living conditions**.
- **Major Tea Tribe Communities:** Munda, Oraon, Santhal, Kora, Gond, Kharia, Lohar, Bhumij.
-

About Tea

- Tea is one of the **oldest and most widely consumed beverages** in the world.
- It is made from the **leaves of the Camellia sinensis plant**.
- **Climatic conditions required:**
    - **Temperature: 20°C to 30°C** (Ideal for growth).
    - **Rainfall: 150-300 cm** annually (well-distributed).
    - **Altitude:** Grows well in **hilly regions (600-2000 m above sea level)**.
    - Tea plants are **sensitive to frost**.
- **Soil Requirements:**
    - **Well-drained loamy soil** with good aeration.
    - Rich in organic matter and iron content.
- Tea plantations use **shade trees** to protect plants from excessive sunlight.
- **Top Producing Countries:** (1) China (2) India (3) Kenya (4) Sri-Lanka
- **Top Tea Producing States:** (1) Assam (2) West Bengal (3) Tamil Nadu (4) Kerala (5)Karnataka.
    - **Other Tea producing states:** Tripura, Arunachal Pradesh, Himachal Pradesh, Meghalaya, Mizoram, Sikkim, Manipur and Nagaland.

UPSC PYQ

Q. Consider the following States: **(2022)**

1. Andhra Pradesh
2. Kerala
3. Himachal Pradesh
4. Tripura

How many of the above are generally known as tea-producing States?

(a) Only one State
(b) Only two States
(c) Only three States
(d) All four States

Answer: D

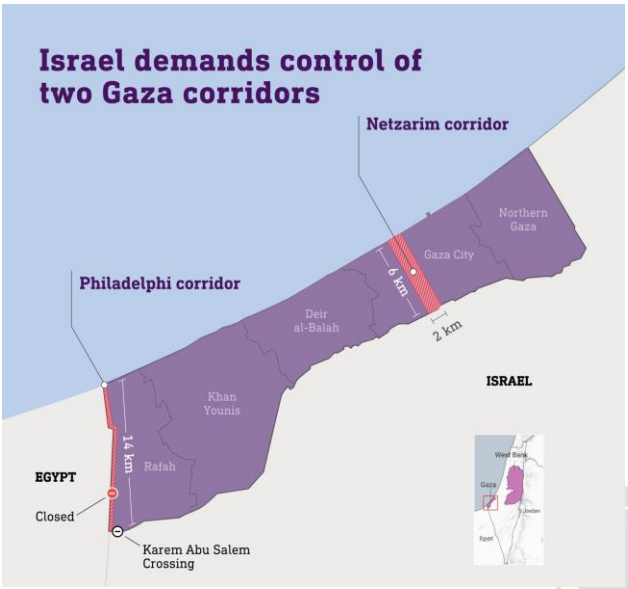
Source:

- The Hindu - Tea Garden

Places in News

Netzarim Corridor

- Recently Israeli forces withdrew from a key Gaza corridor, as part of Israel's commitments under a truce deal with Hamas.



- It is a **narrow strip of land** in the **Gaza Strip**, near **Gaza City**.
- It **connects central Gaza** to the **southern region**, serving as a key transport and strategic link.
-

Source:

- The Hindu - Gaza Corridor

News in Shorts

Indian companies keen on Diriyah Giga project

- Several Indian companies such as Tata Group and Oberoi Hotels are keen to invest in Diriyah**.**

About Diriyah

- **Diriyah** is a **USD 63.2 billion** real estate and tourism **Giga project** in **Saudi Arabia**, located on the **outskirts of Riyadh**.
- It is being developed as the **"City of Earth"**, with an emphasis on **heritage, luxury, and tourism**.
- The project is **backed by the Public Investment Fund (PIF)** of Saudi Arabia.
- It includes the **UNESCO World Heritage Site of At-Turaif**, the historic birthplace of the modern Saudi kingdom.

Saudi Arabia's Vision 2030 includes several Giga projects, such as:

- **NEOM (The Line, Oxagon, Trojena)** – Futuristic smart city.
- **Red Sea Project** – Luxury tourism and hospitality.
- **Qiddiya** – Entertainment city.
- **Diriyah** – Cultural and heritage city.

Source:

- Indian Express - Giga Project

IMO GreenVoyage2050 Programme

- **Nine countries** have been selected as **partners for 2025** under the **International Maritime Organization's (IMO) GreenVoyage2050 programme**.
- This is a **technical cooperation programme** supporting the **implementation of the 2023 IMO GHG Strategy** to reduce greenhouse gas (GHG) emissions in the **maritime sector**.
- **National Action Plans for GHG Reduction: Five countries** will receive assistance to develop **national action plans** to reduce **GHG emissions from shipping**:
    - **Bangladesh, Egypt, Ghana, Mexico and Nigeria**.

2023 IMO GHG Strategy

- The International Maritime Organization (IMO) adopted the 2023 IMO GHG Strategy to accelerate efforts to reduce greenhouse gas (GHG) emissions from international shipping.
- This strategy **updates and strengthens** the earlier **2018 IMO GHG Strategy** to align with the **Paris Agreement's temperature goals**.

Key Targets and Goals

- **Long-Term Net Zero Goal:** Net zero GHG emissions from international shipping by 2050.
- **Milestone Emission Reduction Targets**
    - **By 2030** → Reduce total GHG emissions by **at least 20% (aiming for 30%)**.
    - **By 2040** → Reduce total GHG emissions by **at least 70% (aiming for 80%)**.
- **Fuel-Specific Targets:**
    - **By 2030** → At least 5% (aiming for 10%) of energy used in international shipping must be from zero or near-zero GHG emission sources.

Source:

- The Hindu - Green voyage

Creation of South Coast Railway (SCoR) Zone

- The Union Cabinet approved the **creation of the South Coast Railway (SCoR) Zone** with ex post facto approval.
- **SCoR** becomes the **18th railway zone of Indian Railways.** It is carved out from the East Coast Railway (ECoR) and South Central Railway (SCR).
- The new railway zone was created **under the Andhra Pradesh Reorganisation Act, 2014**, which led to the formation of **Telangana**.

Divisions Under South Coast Railway (SCoR) Zone

- The new railway zone will cover **a major part of Andhra Pradesh**, along with portions of **Telangana and Tamil Nadu**.
- The following divisions will be included:
    - **Vijayawada Division** (from South Central Railway).
    - **Guntur Division** (from South Central Railway).
    - **Part of Waltair Division** → renamed **Visakhapatnam Division** under SCoR.
- The **remaining part of Waltair Division** will form a **new division headquartered at Rayagada, Odisha**, under the **East Coast Railway**.
- Waltair Division is a major revenue-generating division due to its freight traffic linked to the mining and steel industries of **Odisha and Chhattisgarh.**

Source:

- Indian Express- New Railway Zone

Editorial Summary

Budgetary Allocation For Scientific Research and Development (FY 25-26)

Context

The Union Budget 2025-26 includes significant allocations for scientific research and development.

Reasons for Allocations

- **Nuclear Energy Mission:** The government has allocated **₹20,000 crore** for a Nuclear Energy Mission to support **research and development of small modular reactors (SMRs)**, with a goal to operationalize at least **five indigenously developed SMRs by 2033**.
    - This initiative aims to **boost India's energy security and shift towards cleaner power** while maintaining grid stability.
    - The plan is to **reach 100 GW of nuclear capacity by 2047**, backed by reforms to encourage private sector involvement in nuclear projects.
- **Research, Development, and Innovation Initiative**: The budget includes a substantial allocation to the Research, Development, and Innovation initiative, intending to **boost private sector-led research.**
    - This is part of the Department of Science and Technology (DST)'s expected expenditure, with an **overall budgetary increase to ₹23,290 crore for DST schemes**.
    - The initiative builds on efforts announced in July 2024 to drive private sector-led research.
- **Deep Tech Fund**: A Deep Tech Fund of Funds has been introduced to **promote next-generation start-ups in the country.**
- **PM Research Fellowship Scheme**: The budget proposes 10,000 fellowships under the Prime Minister's Research Fellowship scheme over the next five years to **support research at IITs and IISc.**
- **National Geospatial Mission**: The Union Budget also introduced a National Geospatial Mission with an outlay of Rs 100 crore for 2025-26.
    - The mission aims to **"develop foundational geospatial infrastructure and data"** and will be funded under the **Pradhan Mantri Gati Shakti, or the National Master Plan for Multi-modal Connectivity.**

Issues and Implications

- **Absorption Capacity:** A key concern is whether the massive investments can be effectively absorbed, given the historical challenges in translating funding into tangible results.
- **Infrastructural Support:** India still lacks essential infrastructure, such as chipsets, semiconductor fabs, a skilled engineering workforce, and a strong innovation ecosystem, which are crucial to capitalize fully on these investments.
- **Private Sector Participation**: India's R&D landscape has suffered from **low private sector participation, with only 36% contribution.**
    - The success of the new initiatives depends on incentivizing private innovation and ensuring long-term engagement from industry leaders.
- **Implementation Gap:** There is a widening gap between **policy announcements and actual implementation,** as seen in the discrepancy between the allocated and actual spending in research-related initiatives.
- **Small Modular Reactors:** SMRs are mostly still under development and have not been deployed commercially anywhere in the world.

- Although a few are currently under construction in various countries like China, Russia, and Argentina, and some pilot projects are operational with limited capacity.

Conclusion

While the **massive boost in R&D funding** is a **positive step**, its success depends on **overcoming structural challenges, ensuring private sector participation, and building essential research infrastructure**. Without these measures, India risks **falling short of its ambitious scientific and technological goals**.

Source: **The Hindu: A gift horse's teeth**

What does the budget offers for Railways

Context

The Union Budget 2025-26 allocated ₹2.52 lakh crore for Indian Railways (IRs), the same as the revised allocation for the previous fiscal year.

Facts

- The **Railway Budget** was introduced in **1924**, following the recommendations of the **Acworth Committee (1921)**.
- In 2017**, the Railway budget was merged with the General Budget**.
    - This decision was based on the recommendations of a committee headed by Bibek Debroy, a member of NITI Aayog, and a separate paper on 'Dispensing with the Railway Budget.'
    - Prior to 2017, the Railway Budget used to **be presented separately** a few days ahead of the Union Budget.

Key Points and Financials

- **Capital Expenditure**: ₹2.65 lakh crore, including ₹2.52 lakh crore from general revenues, ₹200 crore from the Nirbhaya Fund, ₹3,000 crore from internal resources, and ₹10,000 crore from extra-budgetary resources.
- **Revenue Targets**: Projected income of ₹3.02 lakh crore from passenger services, freight, and other sources, up from the revised estimate of ₹2.79 lakh crore in 2024-25.
    - **Passenger services:** Targeted revenue of ₹80,000 crore, a 13.2% growth.
        - The likely revenue from passenger segment was kept at Rs 92,800 crore, **up 13%** from Rs 82,000 crore in the revised estimates for FY25.
    - **Goods revenue:** set at ₹1.8 lakh crore, a 7% increase from the previous year. On freight, the Budget is targeting a 4% hike to Rs 1.88 trillion.
- **Internal and Extra-Budgetary Resources (IEBR):** Retained at ₹13,000 crore for 2025-26, the same as the previous year, but significantly lower than the ₹52,783 crore allocated in 2023-24.
- **Operating Ratio**: Targeted at 98.43% for 2025-26, compared to 98.9% in the revised estimates for 2024-25.
    - This means the national transporter will be spending ₹98.43 for every ₹100 that it will be earning

Focus and Initiatives

- **Infrastructure Development:** Funds will be used for track expansion, procurement of rolling stock, electrification, signaling enhancements, and station modernization.
- **Safety:** Emphasis on safety-related initiatives with an enhanced budget allocation of ₹1,16,514 crore.
- **Electrification:** Aim to achieve 100% electrification by the end of FY 2025-26.
- **New Vande Bharat trains:** 200 more Vande Bharat trains would be introduced.

Achievements and Targets:

- **Freight Loading:** Indian Railways achieved an all-time high freight loading of 1,588 MT in FY 2023-24, up from 1095 MT in 2014-15, with a goal of 3,000 MT by 2030.
- **Total Receipts:** Achieved an all-time high of ₹2,56,093 crore in 2023-24 and generated a net revenue of ₹3,260 crore to supplement Capex.

Points of Concern

- **Stagnant Capex:** The capital expenditure remaining unchanged for the second consecutive year has been viewed as a disappointment.
- **Underwhelming Returns:** Despite significant investment over the last decade, returns are underwhelming.
    - Freight traffic is growing at just over 2%, and passenger revenue remains below pre-COVID levels.
- **Kavach Implementation:** Slow progress in expanding Kavach coverage beyond the initial rollout of 1,465 km near Secunderabad.
- **Project Delays**: Delays in major projects such as the Western Dedicated Freight Corridor and the Mumbai-Ahmedabad High-Speed Rail. The transformation of the New Delhi station into a world-class hub has been stuck in re-tendering for nearly a decade.
- **Electrification Issues:** Concerns that the electrification spree has outpaced necessity, rendering approximately 5,000 diesel locomotives idle or underutilized.
    - Also, much of the electricity powering IR still comes from fossil-fuel-based plants

Source: **The Hindu: What does the Budget offer Railways?**

Detailed Coverage

From Brain Drain to Brain Gain

Context

India has become the **largest source of international students in the U.S**.; with a record-breaking **3,31,602 students enrolled in 2023-24**, according to the Open Doors Report 2024.

Challenges in Transforming India into a Global Education Hub

- **Funding Constraints:** Indian universities rely heavily on tuition fees (80% of revenue in private institutions) and government grants (90% in public institutions), while globally, tuition contributes only 15-20% (Open Doors Report 2024).
    - Over the past decade, India's education spending has hovered between 3% and 4% of GDP while **US allocated 6%** of its total GDP, **China allocated 6.13%** of its GDP to education during the same period (World Bank Data 2023).
- **Quality Disparities:** Only **2 Indian universities** (IIT Bombay, IIT Delhi) feature in the **QS World University Rankings 2025 Top 200**.
    - Outdated curricula, poor student-faculty ratios (26:1 in India vs. 16:1 in the US), and low research output hinder quality.
- **Research and Innovation Gaps:** India's research and development investment stands at **only 0.64% of GDP** while **China (2.4%), Germany (3.1%), South Korea (4.8%) and the United States (3.5%)**.
- **Faculty Shortages:** India has a shortage of faculty members in higher education.
- **Regulatory Bottlenecks:** Lengthy approval processes and limited autonomy restrict Indian universities from innovating and forming global partnerships.
- **International Perception:** India attracts only **50,000 international students**, while the US hosts **10 lakh**, the UK **6 lakh**, and Australia **6.5 lakh**.

Impact by Transforming Educational Institutions

- **Economic Growth:** Indian students spent **$47 billion abroad in 2022**, expected to rise to **$70 billion by 2025**.
    - Retaining even **25%** of these students could boost India's economy by **$17 billion annually**.
- **Employment Generation:** Expansion in education and research could create **5 million new jobs** by 2030.
- **Soft Power & Diplomacy:** By attracting international students, India could enhance global influence, as seen in **China's success in drawing 5 lakh students annually**.
- **Reduced Brain Drain:** India loses **over 1 lakh students annually to the US**, with 65% staying abroad after graduation. Strengthening domestic institutions can reverse this trend.
- **Global Talent Attraction:** If India increases international student intake to **5 lakh by 2035**, it can become a regional education hub like Singapore and Australia.

Recent Announcements in Union Budget 2025-26

- **Increased Allocation for Education:** ₹1.28 trillion, a **6.5% increase** from ₹1.20 trillion in 2024-25.
- **Focus on IIT Infrastructure Expansion:** Five IITs established post-2014 will be expanded to **accommodate 6,500 more students**, addressing the rising demand for quality engineering education.
- **Establishment of National Centres of Excellence: Five National Centres of Excellence (CoEs)** will be set up to **equip youth with global skills**.
    - These centers will provide **advanced training** in future-ready skills, improving India's workforce competitiveness.
- **Centre of Excellence in AI for Education: ₹500 crore investment** to establish a **Centre of Excellence in AI for Education**.
    - Focus areas:
        - **AI-driven personalized learning**
        - **Automated assessments & skill mapping**
        - **Integration of AI in pedagogy** to modernize curricula and teaching methods.
- **Strengthening Digital Learning & Connectivity: Expansion of Atal Tinkering Labs (ATLs)** to promote hands-on innovation in schools.
    - **Improved broadband connectivity** in government schools to **bridge the digital divide**, especially in rural areas.
- **Skill Development and Vocational Training:** Special focus on **upskilling and reskilling youth** to align with global job markets.
    - Skill India programs will be **integrated with emerging technologies** like AI, blockchain, and robotics.
- **Subsidized K-12 Education Loans & Process Streamlining:** Steps to **streamline education loans** and **provide subsidies for K-12 students**, ensuring affordability and accessibility.

What Needs to Be Done?

- **Diversify Funding:** Increase endowments and research grants to form **30-35% of university revenue**, reducing reliance on tuition and government funding.
    - Provide **tax incentives** to encourage corporate and alumni contributions.
- **Enhance Autonomy:** Implement **National Education Policy (NEP) 2020** reforms to grant universities greater control over academic decisions.
- **Strengthen Research & Innovation:** Increase R&D spending from **0.7% to 2% of GDP**.
    - Establish **at least 10 globally competitive research universities** by 2035.
- **Upgrade Infrastructure:** Build **100 world-class universities** and upgrade **existing IITs/NITs** with state-of-the-art facilities.
- **Improve Faculty Quality:** Introduce global faculty exchange programs and offer competitive salaries to attract top talent.
- **Streamline Regulations:** Simplify approval processes for new courses, foreign collaborations, and industry partnerships.
- **Boost Global Visibility:** Launch international branding campaigns to position Indian universities as world-class institutions.

Sources:

- The Hindu: From brain drain to brain gain
- The Hindu: India's R&D funding, breaking down the numbers
- Business standard: Budget 2025: India's education Budget grows, but lags behind global trends
- Hindustan Times: What will it take for India to attract international students?

Value Addition

- **Urban Development Allocation in Budget 2025-26 (Urbanisation- GS 1):** The **total outlay for urban development** in the **2025-26 Union Budget** stands at **₹96,777 crore**, an increase from the **₹82,576.57 crore** allocated in the **2024-25 Budget**.
    - **Cuts in Key Centrally Sponsored Schemes (CSS):**
        - **PMAY (Urban)** faced a drastic **cut**, with its allocation reduced from ₹30,170.61 crore to ₹13,670 crore in the Revised Estimate (RE) for 2024-25.
        - **AMRUT and Smart Cities Mission** allocations fell below ₹10,400 crore, with almost **no new funds for the Smart Cities Mission**.
        - **Swachh Bharat Mission (Urban)** retained ₹5,000 crore, but RE shows only ₹2,159 crore was spent—a **56% underutilization.**

Octroi was a **local tax** levied by municipal authorities on **goods entering a city or town** for consumption, sale, or use.