



## India-Israel Sign Bilateral Investment Agreement (BIA)

[Source: PIB](#)

### Why in News?

**India and Israel** have signed a **fresh bilateral investment treaty**, making Israel the **first OECD country** to adopt India's new investment treaty model.

- This replaces the older version of BIT signed between **India and Israel in 1996**, which was terminated in 2017.

### What is a Bilateral Investment Agreement (BIA)?

- **About:** A [Bilateral Investment Agreement \(BIA\)](#) is a **legal agreement** between two countries to protect and promote investments in each other's territories.
  - BITs grant rights to investors, allowing them to seek remedies through **investor-state dispute settlement (ISDS) mechanisms**, or to home states, through state-to-state dispute settlement.
  - Recognized under **Article 38(1)(a)** of the **International Court of Justice** statute, as a **primary source of international obligations**.
- **India's BIT Evolution:** Old Model BIT (1993) replaced by New Model BIT (2015) and recent BITs signed with **Uzbekistan (2024), UAE (2024), and Kyrgyzstan (2025)**.
- **Key Feature of India- Israel BIT:**
  - **Investment Boost:** Expected to increase bilateral investments, currently worth around **USD 800 million**.
  - **Balanced Investor Protection:** The agreement safeguards investors against the risk of **government expropriation or nationalization of assets** and ensures that any such action must be accompanied by fair and prompt compensation.
  - **Dispute Resolution:** Includes an **arbitration-based mechanism** to settle disputes, promoting a stable investment environment.
  - **Transparency and Predictability:** Governments are required to maintain clear and predictable investment policies and regulations, reducing uncertainty and strengthening investor confidence.

### Model BIT 2015

- **Definition & Protection:** Defines an investment **as an enterprise that is constituted**, organized, and operated in good faith by an investor according to the domestic laws of the host country.
  - Requires **each party to provide full protection** and security to investments and investors.
  - Mandates that foreign investors be treated on par with domestic companies.
  - Limits the host country's ability to take control of foreign investments.
- **Exclusions Clause:** Excludes areas like government procurement, taxation, subsidies, compulsory licenses, and national security from BIT obligations
- **ISDS Mechanism:** Requires foreign investors to first exhaust local remedies for a minimum of **5 years** before resorting to the ISDS mechanism.

## How Has the Bilateral Relationship Between India and Israel Evolved Over Time?

- **Diplomatic Relation:** Though **India officially recognized Israel in 1950**, both countries established full diplomatic ties only on 29th January 1992.
- **Economic Ties:** Bilateral trade between **India and Israel reached USD 6.53 billion** (excluding defense) in FY 2023-24, with India maintaining a trade surplus.
- **Innovation & Technology:** Initiatives like the **India-Israel Industrial R&D and Innovation Fund (I4F) (2023-2027)** aim to foster joint research and technological advancements.
- **Regional Cooperation:** The **I2U2 Partnership**, involving India, Israel, the UAE, and the US, held its **first summit in 2022** to strengthen regional collaboration.
- **Defense Cooperation:** India is **one of the largest importers of weapons** from Israel, contributing to approx 40% of its annual arms exports.
  - The two countries have co-developed the **Barak-8 missile system**, and India conducts **regular port calls at Haifa, Israel**.
- **Cultural Exchange Programs:** Collaboration extends to cultural exchange programs, health and medical cooperation, and MoUs on agriculture and water resource management.





## What are the Key Challenges Faced by India's BIT framework, and Suggest Measures to Address Them?

Challenges	Suggested Measures
Lack of clarity in <b>terms like "investment" and customary international law (CIL)</b> leads to disputes.	Define terms like <b>"investment" and "CIL"</b> precisely to reduce legal ambiguities.
Delays in dispute resolution due to the requirement to exhaust local remedies.	Allow investors to choose between <b>local courts or international arbitration upfront.</b>
Exclusion of <b>Most-Favored-Nation(MFN)</b> and <b>Fair and Equitable Treatment (FET)</b> reduces investor confidence.	<b>Incorporate MFN and FET Provisions</b> with safeguards to prevent treaty shopping while ensuring non-discrimination.
<b>Exclusion from the ICSID Convention</b> limits enforcement options for foreign investors.	Become a <b>signatory to ICSID</b> to enhance investor confidence and provide a globally recognized dispute resolution mechanism.

### Conclusion:

The recent **BIT signed with Israel** underscores this evolving strategy, as Israel becomes the first OECD country to adopt India's new treaty model. This agreement aims to boost trade and investment by providing greater certainty and protection for investors while maintaining India's right to regulate.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims

Q. The term "two-state solution" is sometimes mentioned in the news in the context of the affairs of (2018)

- (a) China
- (b) Israel
- (c) Iraq
- (d) Yemen

Ans: (b)

### Mains

Q. "India's relations with Israel have, of late, acquired a depth and diversity, which cannot be rolled back." Discuss (2018)

## Recurring Flood in Punjab

**For Prelims:** [Rivers of Punjab](#), [BBMB](#), Dhussi bundhs, [IPCC AR6](#), [MSP](#), [C-FLOOD system](#), [BHUVAN platform](#), [Krishi Vigyan Kendras](#).

**For Mains:** Causes of Floods in Punjab, Role of Governance and Infrastructure, Measures for [Sustainable](#) Flood Management.

[Source: IE](#)

## Why in News?

Punjab ([land of five rivers](#)) is facing **one of its worst floods** in 40 years, with **all 23 districts affected**, 3.8 lakh people impacted, and over **11.7 lakh hectares of farmland destroyed**.

- This has raised debates on the continuous and large-scale flooding in Punjab and related issues.

## What are the Causes of Flooding in Punjab?

### Natural Causes

- **Heavy Monsoon Rains:** Intense rainfall in catchment areas (Himachal, J&K, Punjab), amplified by [cloudbursts](#), leads to sudden river swelling.
- **Geographical Vulnerability:** Punjab is drained by **three perennial rivers—Ravi, Beas, and Sutlej**—along with the seasonal Ghaggar and smaller tributaries (choes).
  - These rivers make the state fertile (producing ~20% of India's wheat and 12% of rice from 1.5% of landmass), earning it the title **"food bowl of India"**, but also prone to floods.
  - **Past major floods occurred in 1955, 1988, 1993, 2019, and 2023.**
- **Climate Change:** Altered weather patterns, with intense and erratic rainfall, have transformed the monsoon from an **agricultural ally to a destructive force**, as per [IPCC AR6](#) findings.

### Human-Induced Factors

- **Dam Management Issues:** Bhakra (Sutlej), Pong (Beas), and Thein/Ranjit Sagar (Ravi) dams release water during heavy rains (45% excess rainfall in 2025), often without timely coordination and timely warnings.
  - In 2025, **unprecedented inflows (20% higher than 2023 at Pong)** led to sudden releases, flooding downstream areas.
- **Inadequate Flood Cushion:** The **Bhakra Beas Management Board (BBMB)** is criticized for **maintaining high reservoir levels** in July–August for irrigation and power, **leaving little buffer for heavy rains in August–September.**
- **Barrage Failures:** In August 2025, two gates of Madhopur Barrage on Ravi failed after sudden dam releases.
- **Weak Embankments (Dhussi Bundhs):** Poor maintenance and illegal mining have weakened flood protection structures.
  - **Failure to implement a 2024 flood-preparedness guidebook** led to unmaintained canals, and clogged drainage systems obstructing natural water flow.
- **Governance Gaps: Lack of coordination between Centre-controlled BBMB, Punjab's irrigation authorities, and disaster response agencies.**
  - Poor drainage systems in southern Punjab's Malwa region, coupled with incessant local rainfall, have caused severe waterlogging.
- **Unregulated Development:** Illegal construction on floodplains and riverbanks, coupled with deforestation, has reduced natural flood buffers.
  - The [Supreme Court and National Green Tribunal](#) noted illegal tree felling as a contributor to floods and landslides.

## What are the Key Challenges in Punjab's Flood Management?

### Governance Issues

- **Centralized Control:** The major centrally controlled **dams prioritizes irrigation and power over flood management**, leaving Punjab with limited influence.
  - The **2022 amendment allowing non-Punjab/Haryana officers in top BBMB** posts has



further **strained state-Centre relations**.

- **Reactive Approach:** Governments often **respond post-flood rather than investing in preventive measures** like embankment strengthening or desilting.

#### Infrastructure Deficiencies

- **Weak Embankments:** Illegal sand mining and poorly maintained drainage systems exacerbate waterlogging, particularly in southern Punjab.
- **Underinvestment:** Strengthening **embankments and desilting rivers require Rs 4,000-5,000 crore**, which remains unaddressed due to funding constraints.
- **Climate Variability:** **Increasingly erratic monsoons and extreme rainfall events, driven by climate change, challenge existing flood management strategies.**

### What are the Impacts of the Floods in Punjab?

- **Agricultural Devastation:** Over **4 lakh acres of farmland submerged**, with crops like paddy and basmati rice facing quality issues, potentially fetching prices below **MSP**.
  - Post-flood challenges include **land erosion, silt deposition, and difficulties in sowing new crops**, threatening Punjab's role as India's food bowl.
- **Economic Fallout:** **Farmers face financial hardship due to crop losses** and degraded land, exacerbating existing agricultural debt.
  - Infrastructure damage, including roads and irrigation systems, requires significant repair costs, straining state resources.
- **Public Health Crisis:** **Floodwaters, particularly from polluted rivers like Buddha Dariya in Ludhiana, have caused "black floods,"** carrying **industrial pollutants** and untreated waste, risking **outbreaks of cholera, typhoid, hepatitis A, dengue, and malaria**.
  - Long-term groundwater contamination and soil degradation pose environmental threats.
- **Social and Humanitarian Impact:** Several **people were evacuated**, but displaced families face **challenges in accessing food, shelter, and safety**, with particular risks for women and children.

### What Measures Can be Taken?

- **Scientific Dam Management:** Revise **BBMB "rule curves"** (storage and release policies) **to include climate forecasts** and ensure adequate flood cushion.
- **Strengthening Embankments:** Invest in **dhussi bundhs** (earthen embankments), prevent illegal mining (through satellite monitoring), and modernise drainage networks.
- **Integrated Flood Management:** Improve **Centre-State coordination on dam releases**; establish transparent communication channels.
  - Adopt the **C-FLOOD system for village-level forecasting** and integrate it with meteorological and hydrological data via **NRSC's BHUVAN platform**.
- **Community-Centric Preparedness:** Expand flood forecasting, digital alerts, and village-level disaster plans **and adoptive capacity building through Krishi Vigyan Kendras**.
  - Implement **Zero Casualty Approach** through local monitoring, early warning, and mock drills.
- **Climate-Resilient Infrastructure:** Build urban drainage systems, **restore wetlands, and undertake river desilting** to absorb excess flows.
  - Integrate climate models into flood forecasting to anticipate extreme rainfall events.
  - Promote **flood-resistant crops** and diversify agriculture to **reduce dependency on flood-prone Kharif crops**.

### Conclusion

Punjab's geography makes it inherently flood-prone, but poor dam management, weak embankments, and

governance lapses convert natural hazards into human-made disasters. A shift towards **scientific water regulation, resilient infrastructure, and transparent governance** is essential to safeguard lives, agriculture, and Punjab's role as India's food bowl.

#### Drishti Mains Question

Q. Punjab faces recurrent floods despite being drained by perennial rivers. Discuss the natural and human-induced causes of flooding in Punjab and suggest measures for effective flood management.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### **Prelims:**

Q. With reference to the Indus river system, of the following four rivers, three of them pour into one of them which joins the Indus directly. Among the following, which one is such a river that joins the Indus direct?

- (a) Chenab
- (b) Jhelum
- (c) Ravi
- (d) Sutlej

Ans: (d)

- The Jhelum joins the Chenab near Jhang in Pakistan.
- The Ravi joins the Chenab near Sarai Sidhu.
- Satluj is joined by the Chenab in Pakistan. Thus, Satluj receives the collective drainage of the Ravi, Chenab and Jhelum rivers. It joins the Indus a few kilometres above Mithankot.

### **Mains:**

Q. Flooding in urban areas is an emerging climate-induced disaster. Discuss the causes of this disaster. Mention the features of two major floods in the last two decades in India. Describe the policies and frameworks in India that aim at tackling such floods. (2024)

Q. The interlinking of rivers can provide viable solutions to the multi-dimensional inter-related problems of droughts, floods, and interrupted navigation. Critically examine. (2020)

Q. Account for the huge flooding of million cities in India including the smart ones like Hyderabad and Pune. Suggest lasting remedial measures. (2020)

## CP Radhakrishnan Elected as Vice President

[Source: Tol](#)

### Why in News?

**CP Radhakrishnan** has been elected as **India's 15th Vice President**, defeating former Supreme Court Judge **B Sudershan Reddy** in the election following the resignation of **Jagdeep Dhankhar**.

In the election Radhakrishnan secured 452 votes, while Reddy garnered 300 votes with a high voting turnout of 98.2%.

CP Radhakrishnan

- He **served as the Governor** of Jharkhand, Telangana, Puducherry, and Maharashtra. An **agriculturist and industrialist by profession**, he is the **third leader from Tamil Nadu to hold the position of Vice President**.
- He was also a two-term member of the Lok Sabha from Coimbatore.

## What are Key Facts About the Vice President (VP) of India?

- **About: VP** is the **second-highest constitutional authority** in India, following the President (Article 63).
- **Election & Eligibility:** Elected by **MPs from both Houses of Parliament** via proportional representation. The VP must be at least 35 years old, an Indian citizen, and **qualified for Rajya Sabha membership**.
- **Term & Vacancy:** Serves a **five-year term**, with the possibility of continuing until a successor is elected.
- **Primary Role:** As the **ex-officio Chairman of the Rajya Sabha**.
  - In the President's absence or vacancy, they act as President (Article 65).
- **Removal:** Can be **removed by a resolution in the Rajya Sabha** and approval from the Lok Sabha, with a 14-day notice (Article 67).

## Some Unique Facts About Office of Vice President of India

- Only **Dr. S. Radhakrishnan** (1st & 2nd VP, elected unopposed both times) and **Mohammad Hamid Ansari** (13th & 14th VP, 2007–2017) have served two consecutive terms.
- Apart from **S. Radhakrishnan**, **M. Hidayatullah (7th VP)** and **Dr. Shankar Dayal Sharma (9th VP)** were also elected unopposed.
- **Krishan Kant (10th VP, 1997–2002)** was the first and only Vice President to die while in office.
- **Justice Mohammad Hidayatullah** is the only person in Indian history to have served as **Chief Justice of India, Acting President, and Vice President**.



# Vice-President of India

Occupies the second highest office in the country after President



## Origin

Modelled on the lines of the American Vice-President

## Const. Provisions

Article 63-71

## Election

Indirectly elected by an electoral college

*This electoral college consists of the elected members of LS and RS + nominated members of RS but not the members of State LAs (unlike electoral college for Presidential election)*



*The power of conducting elections to the office of VP rests with the ECI (Article 324)*

## Qualification

Citizen of India - at least 35 years of age

## Term of Office

5 years; eligible for re-election

## Removal from Office

- VP may resign
- Removal by a effective majority of RS (all the then members) and LS agreeing to it (simple majority)
  - Resolution for removal is introduced only in RS
- Constitution mentions no ground for removal

## Powers

- Ex-officio Chairman of RS - Powers and functions similar to the LS Speaker
- Acts as President (max 6 months) - when a vacancy occurs in his office

*This is different from the office of American VP who succeeds to the Presidency when the office falls vacant*

*When acting as the President, VP does not perform the functions of the Chairman of RS*



Drishti IAS



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# Great Indian Bustard and Phosphate Rock Mine

[Source: IE](#)

## Why in News?

The **Union Environment Ministry's Expert Appraisal Committee (EAC)** has approved an **Environmental Impact Assessment (EIA)** for the **Birmania Rock Phosphate Mine**, which is proposed to be developed in the **potential habitat area** of the **Great Indian Bustard (GIB)** in **Jaisalmer, Rajasthan**.

## What are the Key Facts Related to the Great Indian Bustard?

- **About:** GIB is one of the heaviest flying birds in the world, and mainly found in Rajasthan's Thar Desert, with small populations in Gujarat, Maharashtra, Karnataka, and Andhra Pradesh.
  - GIB is one among four bustard species found in India, **alongside the Lesser Florican, Bengal Florican, and Macqueen's Bustard**.
  - GIB is **omnivorous and vulnerable** to power line collisions due to **lack of frontal vision**.
- **Ecological Significance:** GIB is considered a **keystone species**, acting as an indicator of the health of grassland ecosystems and reflecting the overall pulse of grassland biodiversity.
- **Protection Status:**
  - Wildlife Protection Act, 1972: Schedule I
  - IUCN: Critically Endangered
  - CITES: Appendix I
- **Main Threats:**
  - **Loss of Habitat** due to development activities such as **mining, industry, wind turbines**, and the expansion of related infrastructure.
    - Due to their narrow frontal vision and large size, GIBs are vulnerable to collisions with power lines. A 2020 study by the Wildlife Institute of India found that 18 GIBs die each year due to power line strikes.
  - **Pollution:** Exposure to **pesticide-contaminated feed** poses a risk to GIBs and threatens their survival..
  - **Hunting and poaching:** GIBs are hunted for their meat, feathers, and other body parts, despite legal protections.
  - **Slow reproductive rate:** Grazing, recreation, and tourism disrupt the nesting and foraging habitats of the GIB, affecting their populations.
- **Conservation Efforts:**
  - **National Bustard Recovery Plan:** The Bustard Recovery Program focuses on the conservation of the GIB, the Lesser Florican, with other bustard species in India including the Bengal Florican and Macqueen's Bustard.
    - The recovery efforts began in 2013 and evolved into the **Bustard Recovery Project in 2016**, initially planned for five years (2016-2021) but now extended until 2033.
    - There are around 140 Great Indian Bustards and fewer than 1,000 Lesser Floricans remaining in the wild (As of 2024).
    - The project is led by the **Wildlife Institute of India** and funded by the **National Compensatory Afforestation Fund Management and Planning Authority (CAMPA)**, with partner agencies.
    - The main objectives of the program include conservation breeding to secure ex-situ

populations, applied research to identify critical conservation areas and threats to their survival, and capacity building to strengthen protection laws and raise awareness.

# Great Indian Bustard



Supreme Court constituted a seven-member committee to find a balance between conservation measures for the Great Indian Bustard (GIB) and efforts to generate renewable energy in the same regions.

## Threats:

- ⚡ Collision with power transmission lines
- 🔫 Hunting
- 🏠 Habitat loss

## Generally Found in:



**100 cm or 1 metre**  
Height

**15-18 kg**  
Weight

- State Bird of Rajasthan
- Flagship Grassland Species
- Protection Status



## What is Phosphate Rock?

- **About:** It refers to **any rock containing high phosphorus content**, used mainly for agricultural fertilizers.
  - It is an **essential element** that provides **vital nutrients to plants**, supporting their growth and development.
- **Formation:** Phosphate rock is a **sedimentary rock formed millions of years ago** through the accumulation of organic matter on the ocean floor.
  - Most phosphate rock is mined using **surface mining methods**, including **open-pit, dragline, and excavator mining**.
- **Distribution:** The major reserves of phosphate rock are found in regions including **Africa, North America, Kazakhstan, and the Middle East**.
  - The largest deposits are located in Morocco, which is also a leading global producer of phosphate.
  - **In India**, phosphate rock is primarily produced in Rajasthan and Madhya Pradesh.
- **Uses of Phosphate Rock:**
  - The most significant use of phosphate rock is in the **production of phosphate fertilizers for agriculture**.

- Some phosphate rock is used to create **calcium phosphate nutritional supplements for animals.**
- Pure phosphorus derived from phosphate rock is **used to make chemicals for industrial applications.**
- India is heavily reliant on imports for this **raw material, with approximately 90% of its phosphate rock** needs being met through imports.

### **PYQs:**

Q1. Which one of the following groups of animals belongs to the category of endangered species? (2012)

- (a) Great Indian Bustard, Musk Deer, Red Panda and Asiatic Wild Ass.
- (b) Kashmir Stag, Cheetal, Blue Bull and Great Indian Bustard.
- (c) Snow Leopard, Swamp Deer, Rhesus Monkey and Saras (Crane)
- (d) Lion-tailed Macaque, Blue Bull, Hanuman Langur and Cheetal

**Ans: A**

Q2. With reference to India's Desert National Park, which of the following statements are correct? (2020)

1. It is spread over two districts.
2. There is no human habitation inside the Park.
3. It is one of the natural habitats of Great Indian Bustard.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**Ans: C**

## **Himachal Pradesh Declared 'Fully Literate' State**

**Source: IE**

The declaration was made on the occasion of **International Literacy Day** on 8th September, under the **ULLAS program**.

- Himachal Pradesh has become the **fourth state to achieve full functional literacy**, joining **Tripura, Mizoram, and Goa** in this significant milestone.
- In June **2024**, Ladakh was declared the **first Union Territory** to be fully literate.
- Himachal Pradesh literacy rate has reached **99.30%**, exceeding the **national benchmark of 95%**, which the Ministry of Education considers equivalent to full literacy (100%).

### **ULLAS Program**

- **ULLAS (Understanding Lifelong Learning for All in Society)** Nav Bharat Saaksharta Karyakram, is a **centrally sponsored scheme** being implemented from 2022 to 2027.
- It is also known as the **New India Literacy Programme (NILP)** targets non-literate adults **aged 15 and above**.



- It aims to provide **literacy, digital literacy**, and critical life skills such as **financial literacy**.
- It has enrolled over **3 crore learners and 42 lakh volunteers**, with 1.83 crore learners having completed **foundational literacy assessments** with a 90% success rate.
- The program now offers materials in **26 Indian languages**, emphasizing inclusive literacy.

## National Literacy Landscape

- According to the **Office of the Registrar General of India**, a person **aged 7 years or older** who can read and write with understanding in any language is **considered literate**.
- **Functional literacy** refers to **an individual's** capability to use **reading, writing, and numerical skills** in everyday tasks that contribute to personal growth and community participation.
- According to the **PLFS 2023-24**, India's **overall literacy rate is 80.9%**.

Read more: [Akhil Bharatiya Shiksha Samagam and ULLAS Initiative](#)

## ZAPAD Exercise 2025

[Source: PIB](#)

The Indian Armed Forces contingent has departed for Russia to take part in the **Joint multilateral military exercise ZAPAD 2025**, which will be held in **Nizhniy, Russia**.

- The Indian Army contingent is led by a battalion of the **Kumaon Regiment**, along with troops from other arms and services, comprising personnel from the **Indian Army, Air Force, and Navy**.

## ZAPAD Exercise

- **About:** The Zapad exercise series, which began during the Soviet era, has been conducted by Russia since 2009.
- **Objective:**
  - The main focus is **to enhance military cooperation, improve interoperability**.
  - **To** provide a platform for participating nations **to exchange tactics and techniques** in conventional warfare and counter-terrorism operations.
  - The exercise will focus on joint **company-level** operations in open and plain terrains.
  - To **integrate emerging technologies** and **improve joint operational capabilities in a multinational combat environment**.





Read More: [Major Military Exercises of India](#)

## International Conference on Space 2025

[Source:PIB](#)

**India** inaugurated the **International Conference on Space 2025**, highlighting the country's ambitious space goals, its evolving space strategy, and its future role in **global space exploration**.

- Theme: ***Harnessing Space for Global Progress: Innovation, Policy, and Growth.***

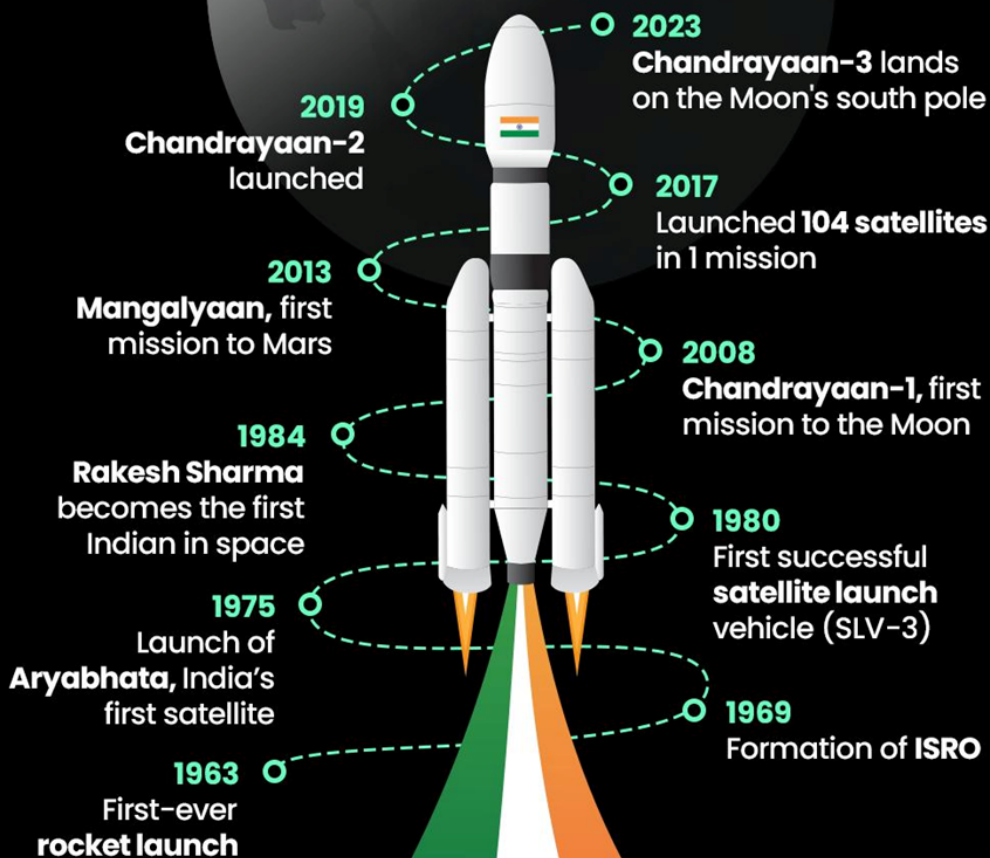
## India's Major Space Ambitions

- To establish a [Bharatiya Space Station](#) by 2035 and send an **Indian astronaut to the Moon by 2040**.
- Future exploration missions to **Mars, Venus, and asteroids** are part of the roadmap.
- The [Gaganyaan human spaceflight programme](#) is being developed as a priority.
- India's **international collaborations** include the [NASA-ISRO NISAR mission](#) with the United States and the upcoming **Chandrayaan-5 mission** with Japan, showcasing space as a platform for global engagement.

## Recent Achievements in India's Space Journey

- Success of [Chandrayaan-3](#), making India the **first country to land near the lunar south pole**
- **Group Captain Shubhanshu Shukla** became the **first Indian Air Force officer** to travel to the International Space Station.

# MILESTONES IN INDIAN SPACE EXPLORATION



Read more: [NISAR mission](#)