

## India's Techno Diplomacy - From Nehru to Modi

Indian Express

Paper - II  
(IR)

Whichever way one cuts it, there is no missing the centrality and intensity of technological cooperation in Prime Minister Narendra Modi's just-concluded visit to the United States. Technology has been at the centre of Modi's bilateral interactions with President Joe Biden, the minilateral summit of the Quad leaders, his interaction with the US CEOs, and the address to the United Nations Summit of the Future.

### How has technology diplomacy evolved in India?

- ❖ **1950s:** Nehru, alongside Homi Bhabha, built foundations for nuclear and space technology, with US support in the Green Revolution.
- ❖ **1970s:** Internal populism, bureaucratic hurdles, and anti-Americanism slowed progress. India's 1974 nuclear test led to increased external restrictions.
- ❖ **1980s:** Indira and Rajiv Gandhi renewed technological cooperation with the US, focusing on telecom and computing.
- ❖ **2014-present:** Modi's government revitalized efforts, especially in nuclear deals, AI, and semiconductors.

### What were the key challenges in previous India's technological phases?

- ❖ **Economic Populism and Bureaucratisation:** In the 1970s, India's focus on economic populism and the growing bureaucracy slowed technological progress.
- ❖ **Anti-Americanism:** Political sentiment turned against the US, reducing cooperation and affecting technology access.
- ❖ **Nuclear Test and Non-Proliferation:** India's 1974 nuclear test led to global restrictions under the non-proliferation regime, constraining technology diplomacy.
- ❖ **Private Sector Marginalisation:** The government sidelined India's private sector, limiting its role in technological advancements.
- ❖ **Brain Drain:** Indian scientists, frustrated by limited domestic opportunities, moved to the US, diminishing India's talent pool.

### How is the current phase of India's technology diplomacy different?

- ❖ **India's new focus:** The Modi government has put advanced technologies at the top of its agenda.
- ❖ **US-China rivalry:** The US is seeking capable partners like India to counterbalance China.
- ❖ **Global supply chains:** The US and India want to reduce dependence on China, leading to joint initiatives like the iCET (Initiative on Critical and Emerging Technologies).

### What are the outcomes of the current phase of technology diplomacy?

- ❖ **Wider technology cooperation:** Covers areas like semiconductors, AI, clean energy, biotech, and quantum computing.
- ❖ **Modernizing India's industrial base:** Focus on both civilian and military applications. **Supply chain rearrangements:** Efforts to reduce global dependence on China and build alliances with countries like the US, Japan, and Australia.
- ❖ **Initiative on Critical and Emerging Technologies (iCET):** Strengthening India-US defense and technology partnerships.
- ❖ **Digital and green technologies:** Prioritized under Modi's leadership, contributing to India's advancements in AI, semiconductors, and nuclear technology.

### What are the future challenges for India's technology sector?

- ❖ Despite progress, India still needs reforms in its science and technology sectors.
- ❖ Without addressing internal bureaucratic resistance, the outcomes of the current technology diplomacy phase could be limited.

#### Expected Question for Prelims

**Que. Consider the following statements with reference to the 18th Lok Sabha-**

1. India did not take any technical cooperation from America in the first 20 years after its independence.
2. The Modi government has kept advanced technology at the top of its agenda in relations with the US.

Which of the statements given above is/are correct?

- |                  |                     |
|------------------|---------------------|
| (a) Only 1       | (b) Only 2          |
| (c) Both 1 and 2 | (d) Neither 1 nor 2 |

**Answer : B**

#### Mains Expected Question & Format

**Que.:** "India currently gives technology diplomacy the most prominent place in its global relations." **Analyze this statement.**

#### Answer's Approach:

- ❖ Discuss India's technology diplomacy in the first part of the answer.
- ❖ In the second part, analyze the priority of the issue of technology in India's relations with other countries.
- ❖ Finally give a way forward.

**Note:** - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC mains examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.