

### India needs innovative strategies to eliminate TB

**Prelims:** General Studies Paper - 1  
Current events of national and international importance

**Mains:** General Studies - 2  
Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

#### 1. Why is Tuberculosis (TB) Still a Major Challenge?

**Tuberculosis (TB)** is an infectious disease caused by **Mycobacterium tuberculosis bacteria**. It mainly affects the lungs but can also affect other organs.

- Tuberculosis **kills more people every year than any other infectious disease**.
- There is **still no highly effective TB vaccine for adolescents and adults**.
- TB infection can remain silent (latent TB) for many years without symptoms.
- TB can **occur as Pulmonary TB (PTB) affecting lungs or Extrapulmonary TB (EPTB) affecting other organs**.
- EPTB is harder to diagnose, causes severe illness, and can be fatal.

#### 2. What are the Key Findings of the PreVenTB Trial?

- The trial **was conducted by the Indian Council of Medical Research (ICMR)** at 18 sites across India.
- **More than 12,700 household contacts** of TB patients participated.
- **VPM1002 showed 50.4% efficacy against Extrapulmonary TB (EPTB)**.
- **VPM1002 showed 64.6% efficacy against all TB forms in children** aged 6–14 years.
- **Immuvac showed more than 60% efficacy against EPTB in children** aged 6–10 years.

- **VPM1002** (Vakzine Projekt Management 1002) is a recombinant tuberculosis vaccine developed from the Bacillus Calmette–Guérin (BCG) vaccine to provide enhanced protection against TB.
- **Immuvac** (Mycobacterium indicus pranii – MIP, formerly Mycobacterium w/Mw vaccine) is an immune boosting developed by Cadila Pharmaceuticals that is being evaluated for tuberculosis prevention by boosting the body's immune response.

#### 3. Why are VPM1002 and Immuvac Important for India?

- They are the **first TB vaccine candidates to show protection against EPTB**.
- India currently **has no TB vaccination strategy beyond infancy**.
- VPM1002 is a single-dose vaccine based on a modified Bacillus Calmette–Guérin (BCG) platform.
- The **vaccine can be produced on a large scale at relatively low cost**.
- The findings support a possible future booster-dose TB vaccination programme for older children.

#### 4. What is Needed for India's TB Elimination Goal?

- **Early detection using improved diagnostic tools**, including detection of subclinical TB.
- **Preventive treatment for people** with latent TB infection.
- **Targeted vaccination of high-risk groups** such as household contacts and school-age children.
- **Nutritional support, as vaccine effectiveness was lower among people** with low Body Mass Index (BMI).

- A **combined strategy of diagnosis, treatment, vaccination, nutrition, and public health investment** is essential for TB elimination.

## Rubio fails to win India back for Washington

**Prelims:** General Studies Paper - 1  
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Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

### 1. Growing Trust Deficit in India–U.S. Relations

- Strategic experts in both **India** and the **United States** warn that **bilateral ties have weakened significantly since 2025**.
- India remains crucial for the U.S. **Indo-Pacific strategy**, competition with **China**, technological cooperation, and **supply chain security**.
- However, many Indian policymakers and scholars believe that **trust in Washington has eroded**, creating a long-term strategic challenge.

### 2. Major Reasons for the Deterioration

#### a) U.S.–Pakistan Closeness

- After **Operation Sindoor**, India sought to isolate Pakistan internationally.
- President **Donald Trump's** praise for Pakistan and its role in regional diplomacy was viewed in India as a **betrayal**.

#### b) Trade Disputes

- The U.S. imposed **50% tariffs on Indian exports**, among the highest of any country.
- An additional **25% tariff penalty** was imposed for **India's purchase of Russian oil**.
- These measures strengthened the **perception that India was being unfairly targeted**.

#### c) Neglect of the Quad

- Lack of **Quad leaders' summits** and reduced enthusiasm for Quad activities suggested declining U.S. commitment.
- India perceived that the U.S. was prioritising engagement with **China** over strengthening the **Quad**.

### 3. Marco Rubio's Visit Failed to Reassure India

- During his May 2026 visit, **U.S. Secretary of State Marco Rubio** made little progress on resolving trade disputes.
- His claim that India would purchase **\$500 billion worth of U.S. products** was disputed by Indian officials.
- Rubio avoided criticising **Pakistan-sponsored terrorism** and instead praised Pakistan's role in the **Iran crisis**.
- After returning to Washington, **Marco Rubio neither highlighted his India visit nor the Quad meeting during a Cabinet discussion**, and **President Trump also made no mention of India**.
  - ➔ This was seen in New Delhi as a sign that **India's strategic importance has declined in U.S. foreign policy priorities**, deepening concerns about the bilateral relationship.

### 4. Future of the Partnership

- Despite current tensions, both countries still share important interests:
  - ➔ **Free and open Indo-Pacific**
  - ➔ Cooperation in **AI, semiconductors, defence, and energy security**
  - ➔ Support for **democratic values amid rising authoritarianism**
- However, India and the U.S. are currently **less aligned** than they were a year and a half ago.

## Incomplete truce: On the Israel–Lebanon ceasefire

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### 1. What is the significance of the new Israel–Lebanon ceasefire?

- The new ceasefire could **remove a major obstacle to U.S. diplomatic efforts** aimed at securing a preliminary agreement with Iran.

- It follows Iran's decision to **suspend talks with the U.S.** in protest against Israel's escalation in Lebanon.
- The intervention highlights **U.S. prioritisation of a broader regional deal**, particularly concerning Iran's nuclear programme and maritime access.

## 2. What role has the U.S. played in the ceasefire process?

- U.S. President Donald Trump undertook **direct diplomatic intervention**, including persuading Israel to halt escalation and engaging with Hezbollah representatives.
- The U.S. had earlier been negotiating with Iran on a **memorandum to reopen the Strait of Hormuz and lift port blockades**, indicating larger strategic stakes.
- The ceasefire reflects a **stopgap diplomatic arrangement** to revive stalled U.S.-Iran negotiations.

## 3. What are the limitations and weaknesses of the ceasefire agreement?

- The agreement is **fragile and incomplete**, as it does not address the root causes of the conflict.
- Hezbollah, a **key party to the conflict**, was not formally included in negotiations despite being central to the fighting.
- The terms are **asymmetrical**, requiring Hezbollah to stop attacks without demanding reciprocal concessions from Israel.
- Israel has a **record of violating ceasefires**, including continued strikes in Gaza despite truce agreements.

## 4. What are the challenges for achieving a lasting peace in Lebanon?

- Hezbollah has stated it will **cease hostilities only if Israel withdraws from southern Lebanon**, which Israel has not committed to.
- Israel has made its **deepest incursions since 2000**, with no clear withdrawal roadmap.
- The Lebanese government is **not directly controlling Hezbollah**, complicating state-level negotiations.
- A durable peace requires **credible guarantees from Israel, withdrawal from occupied territories, and inclusion of all stakeholders** in negotiations.

## KEYWORDS

### Registrar General and Census Commissioner of India (RG&CCI)

- The Registrar General and Census Commissioner of India (RG&CCI) is the **head of the Office of the Registrar General of India under the Ministry of Home Affairs.**
- **Established in 1949**, the office is responsible for **conducting the decennial Census and compiling demographic data on India's population.**
- It **administers the Civil Registration System (CRS) and oversees the implementation of the Registration of Births and Deaths Act, 1969.**
- The RG&CCI **conducts demographic and linguistic surveys, including the Linguistic Survey of India**, to assess the country's social and cultural diversity.
- The **post is generally held by a senior IAS officer of Joint Secretary rank**, who serves as both Registrar General and Ex-Officio Census Commissioner of India.

### Nicobarese

- The Nicobarese are an **indigenous tribal community inhabiting the Nicobar Islands in the Bay of Bengal.**
- They **belong to the Mongoloid ethnic group and constitute the largest tribal population in the Nicobar Islands.**
- The Nicobarese are organized into six territorial groups: Car Nicobar, Chowra, Teressa-Bompoka, Central Group, Southern Group, and Shompen.
- Their **traditional social organization is based on a patriarchal joint family system known as Tuhet.**
- Under the Tuhet system, resources such as land, coconut plantations, and pigs are owned collectively rather than by individuals.
- The **Nicobarese are recognized as a Scheduled Tribe (ST) in the Andaman and Nicobar Islands**, but they are **not classified as a Particularly Vulnerable Tribal Group (PVTG).**

**National e-Governance Service Delivery Assessment (NeSDA)**

- The **Department of Administrative Reforms and Public Grievances (DARPG)** has launched the **National e-Governance Service Delivery Assessment (NeSDA) 2025 Portal**.
- **NeSDA** is a **biennial assessment framework** that evaluates the **effectiveness and citizen-centricity of e-governance service delivery** across the country.
- It serves as a **benchmarking tool** to improve **online public service delivery** and promote **best practices** among **States, Union Territories, and Central Ministries/Departments**.
- It also helps identify **service gaps**, strengthen **governance mechanisms**, and enhance the **citizen experience** in accessing government services online.

**Places in news**

**Sea of Azov**

- It is a **shallow, semi-enclosed sea** located in **Eastern Europe**, bounded by **Ukraine to the northwest and southwest** and **Russia to the east and north**.
- It connects to the **Black Sea via the narrow Strait of Kerch**, making it a **highly sensitive geopolitical choke point** for regional maritime security and trade.
- Known as **one of the shallowest seas in the world**, it has an **average depth of about 7 meters**, creating **unique ecological conditions** and limiting navigation of **deep-draft cargo vessels**.
- The sea receives **significant freshwater inflows from rivers like the Don and Kuban**, resulting in **low salinity levels** and making it **prone to freezing during winter**.
- It has recently emerged as a **critical conflict zone**, with **drone strikes targeting cargo vessels** sailing under **international flags such as Belize and Palau**.

