

How will the end of the West Asian crisis affect India's economy?

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

Mains: General Studies - 2
Effect of policies and politics of developed and developing countries on India's interests

1. What is the issue?

- The **U.S. and Iran** have agreed to a preliminary **MoU**, leading to the reopening of the **Strait of Hormuz**.
- The reopening is expected to stabilize **global crude oil supplies** and lower oil prices.
- This offers relief to **India**, which imports over **90% of its crude oil**.
- However, **El Niño** and weak monsoon conditions continue to pose risks to economic growth.

Strait of Hormuz is a strategic maritime chokepoint connecting the **Persian Gulf** with the **Gulf of Oman** and the **Arabian Sea**, through which nearly **20% of global oil trade** passes.

El Niño is a periodic warming of sea surface temperatures in the central and eastern equatorial Pacific Ocean that weakens the **Indian Southwest Monsoon** and influences global weather patterns.

2. How could it affect India's economy?

- Lower **crude oil prices** can reduce **inflation** and improve **energy security**.
- Lower import bills may reduce the **Current Account Deficit (CAD)**.
- Higher **nominal GDP growth** could improve **tax revenues** and support fiscal stability.
- Agriculture may remain under stress due to **El Niño** and possible **fertilizer shortages**.

- Overall **GDP growth** may moderate despite favourable energy prices.

Current Account Deficit (CAD) is a situation where a country's **imports of goods, services, and transfers exceed its exports**, resulting in a net outflow of foreign exchange.

3. Why is the issue important?

- India imports more than **90% of its crude oil**, making it vulnerable to global disruptions.
- Petroleum demand continues to rise with increasing economic activity.
- Stable oil prices support **growth, price stability, and external sector resilience**.
- The crisis highlights the need to strengthen India's **long-term energy security**.

4. What measures are suggested?

- Build **strategic reserves** of **crude oil, fertilisers**, and other critical commodities.
- Diversify crude oil import sources** and reduce dependence on the **Strait of Hormuz**.
- Increase **domestic crude oil exploration** and **refining capacity**.
- Accelerate the transition to **renewable and alternative energy**, including **nuclear power**.
- Strengthen **irrigation**, ensure fertiliser availability, and review **crop-specific trade policies** to reduce agricultural risks.

How are India-Australia relations expanding beyond traditional ties?

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

Mains: General Studies - 2
Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

1. What is the issue?

- **Prime Minister Narendra Modi** is on his **third visit to Australia**, reflecting the growing importance of bilateral ties.
- India–Australia relations have evolved beyond the traditional “**Three Cs**” (**Commonwealth, Cricket, and Curry**).
- The partnership now spans **trade, defence, energy, education, technology, and innovation**.
- Both countries aim to deepen cooperation under the **Comprehensive Strategic Partnership (CSP)**.

Comprehensive Strategic Partnership (CSP) is a framework launched in **2020** to deepen India–Australia cooperation in **trade, defence, security, education, science, and technology**.

2. What are the key areas of cooperation?

- **Trade & Investment:** Implementation of the **India-Australia Economic Cooperation and Trade Agreement (ECTA)** and a target of **\$100 billion** bilateral trade by **2030**.
- **Defence:** Growing cooperation through **AUSINDEX, Malabar, Talisman Sabre**, and defence industry collaboration.
- **Energy:** Partnership in **renewable energy, green hydrogen, critical minerals, and civil nuclear cooperation**.
- **Education & Skills:** Australian university campuses in India, research collaboration, and skill development initiatives.
- **Technology & Innovation:** Cooperation in **AI, cybersecurity, semiconductors, space, and critical technologies**.

Economic Cooperation and Trade Agreement (ECTA) is a **free trade agreement** between **India and Australia**, effective from **December 2022**, aimed at boosting bilateral trade and investment.

3. Why is the partnership important?

- Strengthens cooperation in the **Indo-Pacific** region.
- Enhances **maritime security** and **defence interoperability**.

- Improves **supply chain resilience** for critical minerals and emerging technologies.
- Expands opportunities in **trade, investment, and clean energy**.
- Leverages the **Indian diaspora** to strengthen people-to-people ties.

4. What are the recent developments?

- The **ECTA** provides duty-free or preferential market access for several goods.
- Australia is increasing investments in India’s **digital infrastructure** and **AI-ready data centres**.
- Both countries are expanding cooperation through the **Quad, Indian Ocean Rim Association (IORA)**, and the **Supply Chain Resilience Initiative (SCRI)**.
- Cooperation is also growing in **sports, vocational training, and Pacific Island development**.

Quad is a strategic grouping of **India, Australia, Japan, and the United States** that promotes a **free, open, inclusive, and rules-based Indo-Pacific**.

Supply Chain Resilience Initiative (SCRI) is a trilateral initiative of **India, Japan, and Australia** to build **resilient, diversified, and secure global supply chains**.

Indian Ocean Rim Association (IORA) is an intergovernmental organisation of **23 member states** that promotes **economic cooperation, maritime safety, and sustainable development** in the Indian Ocean region.

On the method for caste enumeration

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

Mains: General Studies - 2
Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential.

1. What is the significance of the Census 2027 caste enumeration?

- The **Population Census 2027** will enumerate caste for the first time in Independent India.
- The **pre-test** began on 6 July 2026 in 16 States and Union Territories (UTs).
- An **open column** has been provided for respondents to record their caste.
- Apart from Scheduled Castes (SCs) and Scheduled Tribes (STs), **caste-wise data was last collected in the 1931 Census**.
- **Unlike the Socio-Economic and Caste Census (SECC), 2011**, which was conducted outside the purview of the Census, the 2027 census will be carried out with statutory backing.

2. What are the key features of the ongoing Census pre-test?

- **Conducted from 6–20 July 2026** to finalise the caste enumeration methodology.
- **Includes both enumerator-based** and self-enumeration.
- **Uses an open-ended caste column** for respondents.
- **Feedback from the pre-test** will determine the final questionnaire.
- It **assesses the feasibility and accuracy of caste data collection**.

3. What challenges were observed in the Socio-Economic and Caste Census (SECC), 2011?

- **Open-ended responses** produced over 46 lakh caste names.
- **Variations in surnames, sub-castes and spellings** created duplication.
- The 1931 Census recorded only 4,147 castes.
- Due to inconsistencies, **SECC 2011 caste data was not officially released for policy use**.
- The issue highlights the need for a standardised caste enumeration method.

4. Why has the Census exercise been delayed and what is the way forward?

- **Population Census 2021** was postponed due to the **COVID-19** pandemic.

- The Census is **conducted in two phases: Housing Listing Operations (HLO) and Population Enumeration**.
- The Government announced the Population Census 2027 on 4 June 2025.
- The reference date for population count is 12:00 a.m., 1 March 2027.
- The **final caste questionnaire will be prepared after stakeholder consultation** and pre-test feedback.

What does the lifting of gas curbs mean?

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Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

1. Why did India lift the emergency natural gas supply curbs?

- On **July 4, 2026**, the Government lifted emergency curbs imposed during the West Asia crisis.
- Decision **followed the ceasefire, negotiations, and resumption of shipping through the Strait of Hormuz**.
- The **Natural Gas (Supply Regulation) Order, 2026** was amended and omitted provisions that had prioritised sale of domestically produced natural gas and imported Liquefied Natural Gas (LNG).
- **Temporary priority allocation of domestic gas and imported LNG** was withdrawn.
- Normal gas supply to all sectors was restored.

2. Which sectors benefit from the restoration of gas supplies?

- **Major beneficiaries include refineries, City Gas Distribution (CGD) companies**, and industrial users.
- **Ceramic, petrochemical, sponge iron, and power sectors** can resume full operations.
- Hotels and commercial establishments **receive improved fuel availability**.
- Morbi's ceramic industry in Gujarat is expected to recover from earlier disruptions.

- **Industries can now operate at higher capacities** with affordable gas supplies.

3. Why is LNG important for India's economy?

- **Fertilizer plants are the largest consumers of natural gas** in India.
- **Around 30% of natural gas** is used in fertilizer production.
- **City Gas Distribution accounts for about 21%**, while the power sector uses around 13%.
- **Natural gas is converted into ammonia, the key input** for urea production.
- **Urea contains about 46% nitrogen, making LNG vital** for agricultural output.

4. What are India's long-term energy security priorities?

- India **has diversified crude oil imports from 27 to 41 countries**.
- LNG import terminals have been **significantly expanded**.
- **Pipeline and energy infrastructure** have been strengthened.
- The **government aims to build greater energy resilience** against global disruptions.
- This **experience has highlighted the importance of diversified energy sources** and strategic infrastructure.

KEYWORDS

Finerenone

- Finerenone is a **non-steroidal, selective Mineralocorticoid Receptor Antagonist (MRA)** used to treat chronic kidney disease (CKD) associated with type 2 diabetes.
- **Mineralocorticoid Receptor Antagonist is a class of drugs that blocks the action of the hormone aldosterone** (a hormone that regulates the body's salt, water, and potassium balance by acting on the kidneys).

- It **reduces inflammation and fibrosis (scarring) in the kidneys and heart**.
- Finerenone **slows the progression of CKD and reduces the risk of kidney failure, cardiovascular death, and hospitalization due to heart failure**.
- Compared to older steroidal MRAs such as Spironolactone, **finerenone causes fewer hormonal side effects, though hyperkalemia (high blood potassium)** remains an important adverse effect to monitor.

UDISE+ (Unified District Information System for Education Plus)

- UDISE+ (Unified District Information System for Education Plus) is an **Educational Management Information System (EMIS)** under the Department of School Education & Literacy, Ministry of Education.
- It **serves as a national digital platform for collecting real-time data on school infrastructure, students, and teachers from all recognised schools** (pre-primary to higher secondary).
- Every **onboarded school is assigned a unique 11-digit UDISE code** for online data entry, updating, and monitoring.
- UDISE+ **maintains data through three integrated modules: School Profile & Facilities, Student Module (using PEN – Permanent Education Number), and Teacher Profile**.
- The **data is validated at block, district, State, and national levels, supporting educational planning, policy formulation, and monitoring of school education across India**.

ASTRA Mk-1

- **Astra Mk-1 is India's first indigenously developed Beyond Visual Range Air-to-Air Missile (BVRAAM)**, designed by the Defence Research and Development Organisation (DRDO) and manufactured by Bharat Dynamics Limited (BDL).

- It is equipped with **mid-course inertial guidance**, an **active radar seeker**, and **Electronic Counter-Countermeasure (ECCM)** capabilities, enabling it to engage enemy aircraft in **all-weather conditions**.
- The missile has a **range of 80–110 km** (depending on launch conditions) and can achieve speeds of up to **Mach 4.5**.
- It has been integrated with frontline fighter aircraft such as the **Su-30MKI**, **LCA Tejas**, and **MiG-29**, significantly enhancing India's air combat capability.
- Recently, Astra Mk-1 was in the news after **Indonesia** became the **first foreign country to procure the missile**, marking India's first export of an **indigenously developed BVRAAM** and highlighting its growing **defence manufacturing capability**.



Namo Bharat Rapid Rail (RRTS)

- The **Namo Bharat Rapid Rail** or **Regional Rapid Transit System (RRTS)** is **India's first semi-high-speed regional commuter rail network**, implemented by the **National Capital Region Transport Corporation (NCRTC)**.
- It is designed to operate at a **maximum speed of 160 km/h**, providing high-speed connectivity between **Delhi and major cities in the National Capital Region (NCR)**.
- **Phase I** comprises three corridors: **Delhi–Ghaziabad–Meerut** (operational), **Delhi–Gurugram–SNB–Alwar**, and **Delhi–Panipat–Karnal**.

- The system uses the **European Train Control System (ETCS) Hybrid Level 3**, enabling safe, high-frequency operations, and is integrated with **Delhi Metro**, **Indian Railways**, and **bus terminals** for seamless multimodal transport.
- The project promotes **Transit-Oriented Development (TOD)**, reduces travel time and emissions, generates employment, and supports balanced regional urbanisation under the **Make in India** initiative.

Mission Drishti

- Mission Drishti is the **world's first OptoSAR Earth observation satellite**.
- **OptoSAR (Optical + Synthetic Aperture Radar)** integrates **optical imaging and SAR into a single payload**, enabling all-weather, day-and-night Earth observation.
- It **has been developed by GalaxEye Space Solutions**, a Bengaluru-based spacetechnology startup.
- The **satellite fuses Multispectral Imaging (MSI) and Synthetic Aperture Radar (SAR) data to produce high-resolution, intelligence-grade imagery**.
- Mission Drishti is designed to support defence and intelligence, disaster management, agriculture, infrastructure monitoring, and environmental surveillance.
- Recently Drishti lost communication during its Launch and Early Orbit Phase (LEOP) after a geomagnetic solar storm disrupted a critical onboard system.

Places in News

Mangi Dam

- The Mangi Dam in Pakistan is being constructed on the Khost River, near Mangi village in Harnai District.
- It aims to supply 8.1 million gallons per day (MGD) of potable water to Quetta to address chronic water scarcity.
- The dam is situated on the Chappar Rift, a seismically active zone with geological and engineering challenges.
- The project has faced delays due to funding constraints, security concerns, and administrative issues in Balochistan.
- The project is significant for Pakistan's water security and highlights the challenges of developing infrastructure in drought-prone and conflict-affected regions.

