

INTERNAL SECURITY**Border Infrastructure and Management**

Recently, the Ministry of Home Affairs has approved the continuation of the Central Sector Umbrella Scheme of "Border Infrastructure and Management" (BIM) over the 15th Finance Commission Cycle from 2021-22 to 2025-26, at a cost of Rs.13,020 crore.

What does BIM Envisage?

- The BIM scheme will help in the creation of infrastructure such as border fence, border flood lights, technological solutions, border roads and Border OutPosts (BOPs) and company operating bases to secure India's borders with Pakistan, Bangladesh, China, Nepal, Bhutan and Myanmar.
- It will strengthen the border infrastructure for improving border management, policing and guarding the borders. India's border with Pakistan is 3,323 km long, including about 775 km of the Line of Control. The length of the border is 4,096 km with Bangladesh, 3,488 km with China, 1,751 km with Nepal, 699 km with Bhutan, 1,643 km with Myanmar.

What are the other Initiatives to Secure Borders?

- **Vibrant Villages Programme:**

1. Border villages with sparse population, limited connectivity and infrastructure often get left out from the development gains. Such villages on the northern border will be covered under the new Vibrant Villages Programme, announced in the Budget 2022-23.
2. The activities will include construction of village infrastructure, housing, tourist centers, road connectivity, provisioning of decentralized renewable energy, direct to home access for Doordarshan and educational channels, and support for livelihood generation.
3. The move has been taken to counter the Chinese 'model villages' close to the LAC (Line of Actual Control).
4. It will be an improved version of the existing border area development programme.

- **The Border Area Development Programme:**

1. BADP was initiated in the border areas of the western region during the Seventh Five Year Plan (1985-90), for ensuring balanced development of border areas through development of infrastructure and promotion of a sense of security among the border population.
2. The programme aims to meet the special development needs of the people living in remote and inaccessible areas situated near the international border and to saturate the border areas with the essential infrastructure through convergence of Central/State/BADP/Local schemes and participatory approach.

- **Smart Fencing in India (CIBMS):**

1. Two pilot projects covering about 71 Kms on Indo-Pakistan Border (10 Kms) and Indo-Bangladesh Border (61 Kms) of Comprehensive Integrated Border Management System (CIBMS) have been completed.
 - CIBMS involves deployment of a range of state-of-the-art surveillance technologies — thermal imagers, infra-red and laser-based intruder alarms, aerostats for aerial surveillance, unattended ground sensors that can help detect intrusion bids, radars, sonar systems to secure riverine borders, fibre-optic sensors and a command and control system that shall receive data from all surveillance devices in real time.
 - BOLD-QIT (Border Electronically Dominated QRT Interception Technique) under CIBMS on the Indo- Bangladesh border in Dhubri district of Assam is also being used.

- **Border Road Organization:**

1. Founded in 1960, the organisation plays a major role in providing defense infrastructure including roads, bridges, highways, airports, tunnels, buildings and other such structures.
2. BRO. has constructed lifelines of over 53,600 km for the people of Sikkim, Arunachal Pradesh, Mizoram, Manipur, Nagaland, Tripura, Meghalaya, Ladakh, Jammu & Kashmir, Uttarakhand, Himachal Pradesh and Andaman & Nicobar Islands.

SCIENCE & TECHNOLOGY**National Supercomputing Mission**

Recently, the Indian Institute of Science (IISc) Bengaluru installed the supercomputer 'Param Pravega'. It has a supercomputing capacity of 3.3 petaflops. It has been installed under the government's National Supercomputing Mission.

- The National Supercomputing Mission is intended to indigenise the development and manufacturing of powerful computers.

What is a Supercomputer?

- A supercomputer is a computer that performs at or near the currently highest operational rate for computers.
- Generally, PETA FLOP is a measure of a Supercomputer's processing speed and can be expressed as a thousand trillion floating point operations per second.
 1. FLOPS (floating point operations per second) are typically used to measure the performance of a computer's processor.
 2. Using floating-point encoding, extremely long numbers can be handled relatively easily.
- Supercomputers are primarily designed to be used in enterprises and organizations that require massive computing power. For example: weather forecasting, scientific research, intelligence gathering and analysis, data mining etc.
- Globally, China has the maximum number of supercomputers and maintains the top position in the world, followed by the US, Japan, France, Germany, Netherlands, Ireland and the United Kingdom.
- India's first supercomputer was PARAM 8000.
- PARAM Shivay, the first supercomputer assembled indigenously, was installed in IIT (BHU), followed by PARAM Shakti, PARAM Brahma, PARAM Yukti, PARAM Sanganak at IIT-Kharagpur, IISER, Pune, JNCASR, Bengaluru and IIT Kanpur respectively.
- In 2020, PARAM Siddhi, the High-Performance Computing-Artificial Intelligence (HPC-AI) supercomputer, achieved global ranking of 62nd in Top 500 most powerful supercomputer systems in the world.

What is the National Supercomputing Mission?

- In 2015, the National Supercomputing Mission was launched to enhance the research capacities and capabilities in the country by connecting them to form a Supercomputing grid, with National Knowledge Network (NKN) as the backbone. The NKN project is aimed at establishing a strong and robust Indian network which will be capable of providing secure and reliable connectivity.
- It supports the government's vision of 'Digital India' and 'Make in India' initiatives.
- The Mission is being jointly steered by the Department of Science and Technology (DST) and the Ministry of Electronics and Information Technology (MeitY). It is implemented by the Centre for Development of Advanced Computing (C-DAC), Pune, and the IISc, Bengaluru.
- **The mission was planned in three phases:**
 1. Phase I looking at assembling supercomputers,
 2. Phase II looking at manufacturing certain components within the country.
 3. Phase III where a supercomputer is designed by India.
- An indigenously developed server platform called 'Rudra' is being tried out in a pilot system, with an interconnect for inter node communication called Trinetra also having been developed.

INTERNATIONAL RELATION

Secretariat for 2023 G20 Summit

Recently, the Union Cabinet set in motion the process to build a Secretariat that will look after the affairs of organising the G20 summit in 2023.

- India will steer the international body as its President from 1st December 2022 to 30th November 2023, which will lead to the G20 summit to be hosted here.
- The Secretariat will be functional till February 2024. It will also enable long term capacity building, including knowledge and expertise, for India's leadership on global issues in multilateral fora.
- Indonesia assumed the Presidency of G20 in December, 2021.

What is G20?

It is an informal group of 19 countries and the European Union (EU), with representatives of the International Monetary Fund and the World Bank.

It does not have a permanent secretariat or Headquarters.

The membership comprises a mix of the world's largest advanced and emerging economies, representing about two-thirds of the world's population, 80% of global Gross Domestic Product (GDP), 80% of global investment and over 75% of global trade.

Its members are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the EU.

Each G20 country is represented by its Sherpa, who plans, guides, implements, etc. on behalf of the leader of their respective country. Current Commerce and Industry Minister is the current “G20 Sherpa” of India.

G20 members



How G20 Evolved?

- The Global Financial Crisis (2007-08) cemented G20's reputation as the premier crisis management and coordination body.
- The US, which held the G20 Presidency in 2008, elevated the meeting of the Finance Ministers and Central Bank Governors to Heads of State, resulting in the first G20 Summit.
- The Summits in Washington DC, London, and Pittsburgh set the scene for some of the most durable global reforms: Blacklisting states in an effort to tackle tax evasion and avoidance, provisioning stricter controls on hedge funds and rating agencies, making the Financial Stability Board an effective supervisory and watchdog body for the global financial system, proposing stricter regulations for too-big-to fail banks, refraining members from imposing new barriers to trade etc.
- By the time Covid-19 struck, the G20 had wandered off from its original mission and G20 lost its focus. G20 reinvented itself by widening its agenda to include issues such as climate change, jobs and social security issues, inequality, agriculture, migration, corruption, terror financing, drug trafficking, food security and nutrition, disruptive technologies, and meeting the sustainable development goals.
- In recent times, G20 members have made all the right commitments after the pandemic, but there is little to show in action.
 1. At the Riyadh Summit in October 2020, they prioritised four things: fighting the pandemic, safeguarding the global economy, addressing international trade disruptions, and enhancing global cooperation.
 2. The Italian Presidency in 2021 had focused on three broad, interconnected pillars of action — People, Planet, Prosperity — vowing to take the lead in ensuring a swift international response to the pandemic.
- Despite millions of deaths, the G20 members have refused to give the legal backing to manufacture vaccines in developing countries.

What is India's Potential for the G20 Presidency?

- As a founding member of the G20, India has used the platform to raise issues of vital importance and those that impact on the most vulnerable around the world. But due to the rising toll of unemployment rates and poverty in the domestic portion, it's hard to take the lead effectively.

- India has set a strong example as the only country among G20 nations that is on track towards meeting what it had promised in 2015 Paris Agreement in terms of being the only 2 degree Celsius compatible country and is much ahead as compared to other G20 countries in terms of fulfilling this commitment.
- Concurrently, India's leadership role in delineating the success of India-France led International Solar Alliance is globally well acclaimed as a turning point intervention in mobilising resources towards promoting research and development in renewable energy.
- Also, the vision of 'Self Reliant India (Atmanirbhar Bharat)' initiative is expected to play a transformational role for "New India" in the global paradigm as an important and reliable pillar of world economy and global supply chains in the aftermath of Covid -19 crisis.
- India's endeavour of establishing the Coalition for Disaster Resilient Infrastructure, comprising nine of the G20 nations amongst others provides new dimensions of leadership in the global growth process.

Way Forward

- G20 needs leaders with impeccable global credentials. With India to assume the Presidency in 2022 it has the opportunity to restore the world's faith in multilateralism.
- The emerging economies, along with the US, must make equitable vaccine rollout and patent waiver the number one priority for G20.
- The G20 must strengthen the partnership with international organisations such as the IMF, the OECD, the WHO, the World Bank and the WTO, and delegate them the task of monitoring progress.

PRELIMS FACT

Exercise Eastern Bridge VI

Recently, the Indian Air Force (IAF) and the Royal Air Force of Oman began a five-day bilateral exercise at the Jodhpur air force station. The exercise is named Eastern Bridge VI, as is in its sixth edition. The exercise seeks to promote professional interaction, exchange of experiences and enhancement of operational knowledge, besides strengthening bilateral relations between the two countries.

- The Exercise Eastern Bridge V was held in October 2019 at the Air Force Base Masirah, Oman.

What is Oman's Strategic Significance for India?

About:

- Oman is India's closest defence partner in the Gulf region and an important anchor for India's defence and strategic interests. Oman is at the gateway of Strait of Hormuz through which India imports one-fifth of its oil imports.
- Defence cooperation has emerged as a key pillar for the robust India-Oman strategic partnership. Defence exchanges are guided by a Framework MOU which was recently renewed in 2021.
- Oman is the only country in the Gulf region with which all three services of the Indian armed forces conduct regular bilateral exercises and staff talks, enabling close cooperation and trust at the professional level.
 1. Naseem Al-Bahr is the naval exercise conducted between both the countries.
 2. AL Nagah is the joint exercise between the armies of two countries.
 3. Eastern Bridge is the joint exercise between the air forces of two countries.
- Oman also provides critical operational support to Indian naval deployments in the Arabian sea for anti-piracy missions.
- Oman also actively participates in the Indian Ocean Naval Symposium (IONS).
- India has supplied rifles to Oman. Also, India is considering setting up a defence production unit in Oman.

Access to Port of Duqm in Oman:

- In a strategic move to expand its footprint in the Indian Ocean region, India has secured access to the key Port of Duqm in Oman for military use and logistical support.
- This is part of India's maritime strategy to counter Chinese influence and activities in the region.

- The Port of Duqm is situated on the southeastern seaboard of Oman, overlooking the Arabian Sea and the Indian Ocean.
- It is strategically located, in close proximity to the Chabahar port in Iran. With the Assumption Island being developed in Seychelles and Agalega in Mauritius, Duqm fits into India's proactive maritime security roadmap.

DAILY ANSWER WRITING PRACTICE

Qns. A new free trade agreement (FTA) between India and the UAE can provide further fillip to the ever-growing relations in trade, diaspora and cultural contacts between the two countries. Analyse. (250 words)

Introduction

India has embarked on a new free trade agreement (FTA) journey with UAE with renewed zeal and vigour. India and UAE signed an FTA which is set to reduce tariffs for 80 per cent of goods and give zero duty access to 90 per cent of India's exports to the UAE. The agreement, which is expected to come into effect in about 60 days, is expected to boost annual bilateral trade to \$100 billion within 5 years of its adoption, up from about \$60 billion currently.

Body

India-UAE trade relations

- The India-UAE total trade merchandise has been valued at S.\$52.76 billion for the first nine months of the fiscal year 2021-22, making the UAE India's third largest trading partner.
- The aim is to boost bilateral merchandise trade to above U.S.\$100 billion and services trade to U.S.\$15 billion in five years.
- With India's newfound strength in exports as the country is on the verge of creating history by reaching the figure of U.S.\$400 billion of merchandise export, a trade agreement with an important country such as the UAE would help sustain the growth momentum.
- As we are witnessing a big turnaround in manufacturing, the UAE would be an attractive export market for Indian electronics, automobiles, and other engineering products.

India-UAE FTA: Benefits

- **Investment flow:** A trade agreement is also an enabler for two-way investment flows. The UAE's investment in India is estimated to be around S.\$11.67 billion, which makes it the ninth biggest investor in India. On the other hand, many Indian companies have set up manufacturing units either as joint ventures or in Special Economic Zones for cement, building materials, textiles, engineering products, consumer electronics, etc.
- **Huge market:** Many Indian companies have also invested in the tourism, hospitality, catering, health, retail, and education sectors. As both the UAE and India are aggressively pursuing FTAs with several important countries, not only companies from these two countries but also multinational companies from other geographies too would find the UAE and India an attractive market to invest.
- **Strategic location and access:** As part of the GCC, the UAE has strong economic ties with Saudi Arabia, Kuwait, Bahrain, and Oman, meaning the UAE shares a common market and a customs union with these nations. Under the Greater Arab Free Trade Area (GAFTA) Agreement, the UAE has free trade access to Saudi Arabia, Kuwait, Bahrain, Qatar, Oman, Jordan, Egypt, Iraq, Lebanon, Morocco, Tunisia, Palestine, Syria, Libya, and Yemen.
- **Diversifying the economy:** Although the UAE has diversified its economy, 'the hydrocarbon sector remains very important followed by services and manufacturing.

Limitations

- The UAE tariff structure is bound with the GCC, and the applied average tariff rate is 5%. Therefore, the scope of addressing Non-Tariff Barriers (NTBs) becomes very important.
- The reflection of NTBs can be seen through Non-Tariff Measures (NTMs) which have mostly been covered by Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT). The UAE has 451 SPS notifications.
- Most of the notifications are related to consumer information, labelling, licensing or permit requirements and import monitoring and surveillance requirements.
- These compliances pose a challenge for Indian exporters.

Conclusion

This FTA with the UAE will pave the way for India to enter the UAE's strategic location, and have relatively easy access to the Africa market and its various trade partners which can help India to become a part of that supply chain, especially in handlooms, handicrafts, textiles and pharma.

DAILY QUIZ

Q1. Consider the following statements regarding Motion of Thanks:

1. It is addressed by the Prime Minister of India.
2. It must be passed in both the House.

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 only**
- c. Both 1 and 2
- d. Neither 1 nor 2

Q2. The Justice Puttaswamy case is a landmark case of the Supreme Court of India that mainly deals with

- a. Uniform Civil Code
- b. Reservations in Jobs
- c. Right to privacy**
- d. Abolition of Untouchability

Q3. Consider the following statements about Electoral Bonds:

1. The electoral bonds are interest-free bearer instruments used to donate money anonymously to political parties.
2. The electoral bonds are available for purchase for 10 days in the beginning of every quarter.
3. The bonds will be issued in multiples of Rs 500 and Rs 1000.

Which of the statements given above is/are correct?

- a. 1 and 2 only**
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Q4. Consider the following statements about the Indus Water Treaty:

1. It is a water-distribution treaty between India and China.
2. It was signed in Delhi on 1960.

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2**

Q5. The term "Quantum key distribution" is used in the context of:

- a. Digital security infrastructure
- b. Secure communication method**
- c. Internet of things
- d. None of the above