

**INTERNATIONAL RELATION****Iran Israel Conflict: Its Impact on the World, and India's Stand**

- Recently, Iran carried out a series of air strikes on Israel using 200-300 drones and ballistic missiles.
- Iran called the attack Operation True Promise.
- This is for the first time Iran has openly and directly attacked Israel. Before this, Israel had always alleged that Iran attacked through its proxy terrorist organizations Hamas, Hezbollah and Houthi rebels.
- The Iranian government also declared a prohibition on all vessels associated with the Zionist regime from navigating in the Oman Sea and the Persian Gulf.

**Iran Israel Conflict and Its Impact on the World****Economic Implications:**

- High Oil Prices: The immediate impact will be higher oil prices.
- Crude oil, already trading near six-month highs, may cross \$100 per barrel if tension worsens.
- Disruptions to Supply-Chain: An all-out war will cause supply chain disruptions as Iran will execute its threat to shut down the Suez Canal.
- Threat of High Inflation: All this will push inflation up just when developed countries are looking to reduce interest rates. Global economic growth could fall below the 3.1% that the International Monetary Fund has projected for 2024.

**Challenge for International Diplomacy:**

- This Iran Israel Conflict might impact the Iran nuclear deal talk. Also, any further escalation could hamper peace processes in the region, with countries prioritizing national security concerns over diplomatic resolutions.

**Impact on Global Political Alignments:**

With the involvement of the US in support for Israel, there may be shifts in international relations such as Russia and China might support Iran.

**Regional Destabilization:**

- Both Israel and Iran hold significant importance in the region, and any escalation between them would destabilize regional stability.
- Other countries such as Syria, Lebanon and Saudi Arabia could be drawn into a broader conflict.

**India's Relations with Both Nations & Position**

**Important Ally:** India has very difficult choices at the moment as both Iran Israel are important to India for its national interests.

**India's Position:** It wants there should be "immediate de-escalation" and "step back from violence" and "return to the path of diplomacy" is, therefore, crucial to its national interest.

**India Iran Relations**

- Historical Relation: India-Iran Relations back to the ancient times of Indus Valley civilization and trade between the coast of southern Iran and India through the Persian Gulf and the Arabian Sea.
- Political Dimension: Signed a friendship treaty on 15 March 1950. The Tehran Declaration was signed that shared a vision for an "equitable, pluralistic and co-operative international order."
- Geo-Strategic Location: Iran's unique geographical position provides India access to Central Asia, Afghanistan, and Eurasia markets.
- Energy Security: Iran ranks 2nd globally in terms of gas reserves, presenting an opportunity for fuel diversification, decarbonization and share of gas in India's energy mix until 2030.
- Economic Ties: Bilateral trade was US\$2.5 bn in 2022, reflecting an increase of 48% from 2021.
- Indian Exports: Sugar, man-made staple fibers, electrical machinery and artificial jewelry.
- Indian Imports: Dry fruits, chemicals and glassware.
- Iran included India in the list of countries whose citizens will not require a visa to travel.
- People-to-people and Cultural Ties: The Indian Cultural Centre was established in 2013 and renamed the Swami Vivekananda Cultural Centre (SVCC) in 2018 and India recently decided to include Farsi as one of the nine classical languages under the New Education Policy.
- Oil Supplier: Iran has been one of the major suppliers of crude — which has suffered setbacks due to US sanctions.
- Shared Common Concern of Terrorism: Besides, both countries have shared concerns on terrorism emanating from Pakistan and Afghanistan.
- Chabahar Port: Iran has gained strategic importance for India wherein India is operationalising Iran's Chabahar Port as part of a Tripartite agreement between Iran, Afghanistan, and India.
- It acts as a gateway to Afghanistan and Central Asia — since Pakistan denies land transit to Indian goods.

**India Israel Relations**

- Strengthening of Relations: The India Israel relationship has appreciably strengthened in recent years. Mr. Modi became the first Indian Prime Minister to visit Israel and Mr. Netanyahu has twice traveled the other way.

- **Victims of Militancy:** Both India and Israel share similar enemies in Islamist extremists, and both enduring terrorist attacks from self-declared holy warriors.
- **Enhancement of Cooperation:** Security and intelligence co-operation began to grow between India and Israel. Gradually, political and diplomatic relations became deeper.
- Israel became a vital source of defense equipment and intelligence co-operation for India.
- **India's Stand during Hamas Attack:** In this attack, India stands in solidarity with Israel.
- **Strategic Importance:** India has a very deep strategic relationship with Israel, especially in the context of defence and security partnership.
- The two sides have strong concerns about extremism and terrorism, as both have suffered during the 26/11 Mumbai terror attacks.
- Israel supported India during times of crisis, including the Kargil war in 1999.
- **Defence Importance:** India shares one of the best relationships with Israel in the current times which is operative in multiple domains with a special focus on provision of high-technology equipment to the defence forces.
- Israel has also emerged as a major defence supplier, along with the US, France and Russia.
- Israel constituted an important ally for provision of the defence equipment, especially till the time India achieves self-reliance through indigenous means in the defence domain.
- It is therefore essential that Israel does not get involved in an intense war with Iran as it is already battling Hamas and Hezbollah.

#### **India's Strategic Decisions on Grouping:**

- **Association with Abraham Accords:** India associated itself with the reorientation of the geopolitics of the Middle East following the Abraham Accords.
- **Abraham Accords:** These are a series of agreements signed in 2020 between Israel and several Arab states, marking a historic shift in diplomatic relations in the Middle East.
- **I2U2:** Joined the "I2U2" (India, Israel, the United Arab Emirates and the United States).
- **IMEC:** Recently, India announced IMEC (India-Middle East-Europe-Economic Corridor).
- **An India-Middle Eastern Economic Co-operation initiative** whose trade route would go from India through Saudi Arabia to the Israeli port of Haifa.

#### **Recently taken Actions:**

- **Freedom of Navigation:** India and Israel discussed the freedom of navigation for ships going through the Bab-el-Mandeb strait, which faced a threat from Yemen's Houthi rebels.
- **Operation Prosperity Guardian:** It is a multinational security initiative launched by the US to counter the growing number of attacks against Israel-bound international traffic.
- **Coalition includes** the U.K., Bahrain, Canada, France, Italy, the Netherlands, Norway, Spain, and Seychelles, apart from the U.S.

#### **Challenges for India amid the Iran Israel Conflict**

- **Remain Unaffected:** India has strategic ties with both Iran and Israel and for decades, it has been able to balance between the two sides. But if the conflict widens, it would be difficult for it to maintain an ambivalent position.
- **Concerning Consequences:** An escalation between the two countries has direct and tangible consequences for India, mainly on three accounts: its people, its economic interests and strategic needs.
- **Impact on People:** There are about 18,000 Indians in Israel and about 5,000-10,000 Indians in Iran, about 90 lakh people are living and working in the Gulf and West Asia region. Any conflict that expands will end up posing a risk to the Indian community that is based in the region. Example: India asked its citizens not to travel to Israel and Iran.
- **Impact on Strategic Needs:** India has invested in a strategic relationship with major Arab countries, Iran, and Israel. India has been working in this region to push for the India-Middle-East-Europe Economic corridor, which has strategic as well as economic benefits for India.
- An escalating conflict could adversely impact the consensus that has been built.
- **Impact on Economic Interests:** Though imports from Russia have increased, Arab states account for two-thirds of India's oil needs. Higher oil prices will push up inflation and delay any interest rate cuts critical to boost GDP growth.
- Sensex and Nifty fell due to escalating Iran Israel conflict, making investors risk-averse.

#### **Way Forward**

- India needs to engage with Israel more as Iranian actions have been initiated as a consequence of the Israeli attack on an Iranian complex in Damascus, Syria.
- India must proactively engage with the USA, Iran, Russia, and Israel to ensure that this conflict is contained.
- India has to make all-out efforts so that Iran does not get involved in a sustained conflict with Israel as it will mean a conflict with the USA which has already started emerging in this region of the world.
- **Focus on Development:** India has to discuss with Israel to establish defence manufacturing facilities in India which will meet the needs of India, Israel and also other friendly countries.

- India has to come up with its 'process fixation' in totality to promote its indigenisation drive and to counter the threat from China and Pakistan in addition to its emerging obligations in the new world order.

**ECOLOGY AND ENVIRONMENT**

**World Earth Day 2024**

- World Earth Day is celebrated annually on April 22nd to support environmental conservation efforts.
- World Earth Day, also known as International Mother Earth Day, is a globally recognised event dedicated to raising awareness and promoting the sustainability of our planet.

**About World Earth Day 2024**

- World Earth Day 2024 Theme: The theme for Earth Day 2024 is "Planet vs. Plastics."
- This theme emphasizes the need for collective action to repair and heal the planet's ecosystems, combat climate change, and preserve biodiversity.
- Significance: World Earth Day holds significance as a global initiative to raise awareness about environmental issues and inspire action.
- It serves as a reminder that everyone has a shared responsibility for the health of the planet and that corporations, governments, communities, and individuals must work together to achieve this goal.

**Origin of World Earth Day**

- Background: The concept of World Earth Day can be traced back to the late 1960s, which saw a surge in public debate over environmental issues.
- Rachel Carson's book *Silent Spring* (1962) and the Santa Barbara oil spill (1969) raised awareness about environmental destruction.
- **Acceptance of Idea:** However, it was first accepted in the USA when the UN **officially acknowledged it in 1972** after peace activist **John McConnell** proposed the idea of **celebrating a day in honor of the Earth and peace.**
- It began from Gaylord Nelson, a US senator, who sought to **infuse the energy of student anti-war protests** with an emerging public consciousness about air and water pollution" during this time.
- He recruited activist Denis Hayes to **organize campus teach-ins and scale the idea to a broader public.**
- The duo chose April 22 as the date — then a weekday falling between Spring Break and Final Exams to maximize student participation.

**Goals Laid for Environment Protection on World Earth Day 2024**

- Reducing Plastic Production: On this World Earth Day 2024, EARTHDAY.ORG renewed its commitment aiming for a 60% reduction in plastic production by 2040 to safeguard both human and planetary health. For this, it has outlined several key objectives:
  - Raising Awareness: The campaign prioritizes spreading awareness about the detrimental effects of plastic on human and environmental health.
  - It calls for increased research into the health implications of plastic exposure and advocates for transparency in sharing findings with the public.
  - Phasing Out Single-Use Plastics: It aims to rapidly eliminate single-use plastics by 2030.
  - It seeks to embed this commitment within the United Nations Treaty on Plastic Pollution by 2024, ensuring global cooperation in tackling this pressing issue.
- Investing in Innovation: It emphasizes the importance of investing in innovative technologies and materials to pave the way for a plastic-free world.

**EARTHDAY.ORG:**

About: Growing out of the first World Earth Day in 1970, EARTHDAY.ORG is the world's largest recruiter to the environmental movement, working with more than 150,000 partners in over 192 countries to drive positive action for our planet.

Mission: It's mission is to diversify, educate and activate the environmental movement worldwide.

**Indian Government initiatives aligned with World Earth Day:**

- Green Credit Program: Under this, participants can earn Green Credits for a wide range of activities that promote environmental sustainability.
- Global Biofuel Alliance: Under India's G20 presidency, the India-led initiative was launched to promote sustainable biofuel usage, offer technical assistance to national biofuel programs worldwide, and enable the exchange of policy practices.
- International Solar Alliance (ISA): India established ISA with France in 2015 to attract \$1 Tn of investment in solar projects by 2030 in solar-rich countries, thereby increasing access to clean energy.
- Lifestyle for Environment: It promotes an eco-friendly lifestyle centered around mindful and purposeful use, rather than thoughtless and wasteful consumption.

**PRELIM FACT**

**1. Exercise Poorvi Lehar 2024**

- The Indian Navy conducted Exercise **Poorvi Lehar** on the East Coast under the Operational Control of the Flag Officer Commanding-in-Chief, Eastern Naval Command.

- Preparedness for Maritime Security: The Exercise offered lessons to participating forces operating under realistic conditions, thus, enhancing their readiness to respond effectively to maritime security challenges in the region.
- Enhancing the Indian Navy's Combat Readiness: The exercise was conducted in multiple phases, including combat training and the successful conduct of various firings during the weapon phase, towards reaffirming the Indian Navy's capability to deliver ordnance on target.
- Inter-Service Collaboration: The exercise witnessed the participation of assets from IAF, Andaman and Nicobar Command, and Coast Guard indicating a very high degree of interoperability amongst the Services.

## **2. Unique ID for organ donation**

- The Union Health Ministry has recently issued the directive to eliminate commercial dealing in organs, especially those involving foreign citizens.
- NOTTO-ID for both the donor and the recipient-All organ transplants, whether from a living or deceased donor, will receive a unique National Organ and Tissue Transplant Organisation (NOTTO) ID for both the donor and recipient.
- Role of the hospitals-To prevent illegal organ trading, hospitals need to create this ID using the NOTTO website ([www.notto.mohfw.gov.in](http://www.notto.mohfw.gov.in)).
- Role of state government-They need to enhance monitoring and stop malpractices, especially with organ transplants involving foreigners. Local authorities should scrutinize more closely.
- Regular inspection-State authorities have to monitor registered hospitals performing transplants to ensure quality and proper follow-up for donors and recipients. Any violation of the Transplantation of Human Organs and Tissues Act (THOTA), 1994 and its rules will be investigated.

## **National Organ and Tissue Transplant Organisation (NOTTO)**

- It is a National level organisation set up under Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.
- It is established under the Transplantation of Human Organs (Amendment) Act 2011.
- It would serve as the central hub for coordinating and connecting nationwide activities related to organ and tissue procurement, distribution, and donation/transplantation registry in India.
- It lays down policy guidelines and protocols for various functions.
- It handles the dissemination of information to all concerned organisations, hospitals and individuals.

## **3. Llama 3**

- Meta Platforms, the parent company of Facebook, Instagram, and WhatsApp, has introduced its most capable Large Language Model (LLM), the Meta Llama 3.
- It stands for Large Language Model Meta AI. This is a family of LLMs introduced by Meta AI in February 2023. The first version of the model was released in four sizes — 7B, 13B, 33B, and 65 billion parameters. According to reports, the 13B model of Llama performed better than OpenAI's GPT-3, despite GPT-3 having 135 billion parameters.
- Meaning of parameter-It is a measure of the size and complexity of an AI model. Generally, a larger number of parameters implies that an AI model is more complex and powerful.
- It's said to be the most advanced model, showing big improvements in performance and AI abilities.
- It is based on the Llama 2 architecture which has been released in two sizes, 8B and 70B parameters. Both sizes include a base model and a fine-tuned version that is specifically designed to improve performance on certain tasks.
- The instruction-tuned version is made for enhancing AI chatbots that are designed to engage in conversations with users.
- All Llama 3 models handle context lengths of up to 8,000 tokens. Having more tokens means users can input more content or prompts, and the model can respond with more content. This enables more interactions and better handling of complex inputs compared to Llama 2 or 1
- At present, Meta AI is available in English across the US on WhatsApp.
- It can be used on Facebook, Instagram, WhatsApp, Messenger, and the web. It's easily accessible for developers since Meta has integrated the LLM into the Hugging Face ecosystem.
- It has the ability to engage in conversations and respond to posts directly on the Facebook feed.

## **4. Summit of the Future 2024**

- UN Secretary-General Guterres highlights Multilateral Development Banks (MDB) reform as a key theme at the upcoming Summit of the Future during UNGA, praising the Indian G20 presidency's efforts.
- About the Summit: The Summit of the Future 2024 is a flagship event organized during the annual high-level UN General Assembly meeting in September. It focuses on key global issues, with a particular emphasis on reforming multilateral development banks (MDBs) to address contemporary challenges like poverty and climate crisis.



- Originating from the Our Common Agenda report, it emphasizes renewing trust and solidarity across nations and generations. Member States aim to create a Pact for the Future, reaffirming the UN Charter, reinvigorating multilateralism, and agreeing on solutions to current and future challenges.

**What are MDBs?**

MDBs are international financial institutions (e.g., World Bank Group and the Asian Development Bank) aiding developing countries with financial and technical assistance to foster economic development and reduce poverty. Recommendations by the independent expert group on MDB's Reform (during India's G20 presidency) include tripling annual lending levels by 2030, adopting a triple mandate for MDBs to eliminate extreme poverty, and modernizing funding models.

**5. Ethylene oxide in Indian Spices**

- Following red flags raised by food regulators in Hong Kong and Singapore regarding the presence of a cancer-causing ingredient in certain Indian spice products from some brands, the Indian government has ordered food commissioners to collect samples of spices from all manufacturing units in the country.
- The harmful substance, **ethylene oxide**, has been classified as a 'Group 1 carcinogen' by the International Agency for Research on Cancer.
- Ethylene oxide is banned for use in food items in India.
- Ethylene oxide, primarily used as a sterilizing agent and insecticide, poses health risks including irritation of the eyes, skin, nose, throat, and lungs, as well as potential long-term effects on the central nervous system and carcinogenic properties.

**ANSWER WRITTING**

**Q. What is meant by 'Western Disturbances' which are often attributed as the reason behind many unexpected weather patterns in India during the previous decade? Explain their formation and the consequences they bear on the economic landscape of India?**

Western Disturbances are a significant meteorological phenomenon that has increasingly influenced India's weather patterns over the past decade. Originating from the Mediterranean region, these disturbances play a crucial role in shaping the climatic conditions, especially in the northern parts of India.

**What are Western Disturbances?**

Western Disturbances (WDs) are low-pressure systems that originate over the Mediterranean Sea and Western Asia. They are essentially extratropical storms that bring sudden winter rain and snow to the northwestern parts of the Indian subcontinent. These systems are carried eastwards by the high-altitude westerly jet streams and, upon encountering the Himalayas, result in significant weather changes.

**Formation of Western Disturbances**

The formation of Western Disturbances is linked to the cyclogenesis in the Mediterranean region. This process involves the development or strengthening of cyclonic circulation in the atmosphere. The disturbances are formed due to the interaction between the warm water bodies of the Mediterranean Sea and the cooler landmass of Eurasia. These systems are then steered towards India by the subtropical westerly jet stream.

**Consequences on the Economic Landscape of India**

- **Agriculture:** Western Disturbances are crucial for the rabi crop in India. The winter precipitation provided by these disturbances is beneficial for wheat, mustard, and other rabi crops. For instance, in states like Punjab and Haryana, which are major wheat producers, the yield is significantly dependent on the moisture provided by WDs. Conversely, unseasonal WDs can damage crops, impacting agricultural output and farmer income.
- **Water Resources:** The snowfall in the Himalayas, a result of WDs, is a vital source of water for the rivers in Northern India. This snowmelt feeds rivers in the summer, crucial for irrigation, drinking purposes, and hydroelectric power generation. For example, the Indus and Ganges river basins heavily rely on this snowmelt.
- **Tourism:** In regions like Himachal Pradesh and Jammu & Kashmir, WDs bring snowfall that is pivotal for the tourism industry, particularly for winter sports. Destinations like Shimla and Gulmarg see a surge in tourism due to snowfall, boosting the local economy.
- **Unseasonal Rain and Damage:** However, unseasonal or intense WDs can lead to heavy rains, causing flash floods and landslides, especially in hilly areas. This can result in extensive damage to infrastructure and property, as seen in the flash floods in Uttarakhand in recent years.
- **Climate Change Impact:** The changing patterns and intensities of WDs, attributed to climate change, pose a challenge to predictability in agriculture, water resource management, and disaster preparedness.

Western Disturbances, while beneficial for certain aspects of the Indian economy, especially agriculture and tourism in the northern regions, also pose challenges due to their unpredictable nature and potential for causing natural disasters. Understanding and predicting these disturbances are essential for effective planning and mitigation strategies. The need for robust weather forecasting systems and sustainable agricultural practices becomes paramount in light of the changing climate and the pivotal role played by Western Disturbances in India's economic and ecological systems.

**MCQs**

1. Consider the following statements:  
Statement-I: Israel has established diplomatic relations with some Arab States.  
Statement-II: The 'Arab Peace Initiative' Mediated by Saudi Arabia was signed by Israel and Arab League.  
Which one of the following is correct in respect of the above statements?  
a) Both Statement-I and Statement-II are correct and Statement II is the correct explanation for Statement-I  
b) Both Statement-I and Statement-II are correct and Statement II is not the correct explanation for Statement-I  
**c) Statement-I is correct but Statement II is incorrect**  
d) Statement-I is incorrect but statement-II is correct
2. Which of the following statements regarding Ethylene Oxide is/are incorrect:  
1. Ethylene oxide is a non- flammable substance which is used as a chemical in a range of industrial processes.  
2. Ethylene Oxide is used to control insects in some stored agricultural products.  
3. Ethylene oxide is also used in antifreeze and polyester production.  
Select the correct option using the code given below:  
**a) 1 only**  
b) 1 and 3 only  
c) 1,2 and 3  
d) 2 and 3 only
3. Which of the following statements about cholera is true?  
(a) Cholera is caused by a virus.  
**(b) Cholera is transmitted through contaminated food and water.**  
(c) Cholera symptoms include high fever and cough.  
(d) Cholera is easily treated with antibiotics.
4. The terms "INC-2 and INC-4" are mentioned in the news sometimes, are associated with the  
(a) International conventions on Chemical weapons  
(b) WTO's committee focused on promoting global trade agreements  
(c) WHO's committee overseeing global health initiatives  
**(d) None of the above**
5. Consider the following statements:  
1. BrahMos is a short-range ballistic missile developed by India.  
2. BrahMos is primarily designed for underwater launch.  
3. BrahMos has a maximum speed of Mach 2.  
How many of the above statements are correct?  
a) Only one  
b) Only two  
c) All three  
**d) None**
6. The Global Alliance for Incinerator Alternatives (GAIA) is an initiative of the  
a) FAO  
b) UNEP  
c) IUCN  
**d) None**
7. Consider the following statements:  
1. In India, solar and wind park development is currently subject to Environmental and Social Impact Assessments.  
2. There is no established mechanism in India to ensure fair compensation for small and medium landowners leasing their land for renewable energy projects.  
Which of the statement(s) given above is/are correct?  
a) 1 only  
**b) 2 only**  
c) Both 1 and 2  
d) Neither 1 nor 2
8. Which one of the following terms is used to describe the practice of combining solar energy generation with traditional farming on the same land, allowing for dual land use and improved resource efficiency?  
**a) Agrivoltaics**  
b) Agroforestry  
c) Agrobiotechnology  
d) Agroecology
9. If the Reserve Bank of India adopts a tight monetary policy, which one of the following is the likely immediate impact on household net financial savings?  
a) Increase due to higher interest rates on savings  
**b) Decrease due to higher borrowing costs**  
c) No change, as monetary policy does not affect savings  
d) Increase due to higher disposable income
10. Consider the following statements:  
1. In RCTs, participants are randomly allocated into two or more groups to receive different interventions.  
2. RCTs are primarily used to study the prevalence of diseases in a population.  
3. RCTs are qualitative research methods that rely on in-depth interviews.  
How many of the above statements are correct regarding the Randomized Control Trials (RCTs)?  
**a) Only one**  
b) Only two  
c) All three  
d) None