

INTERNATIONAL RELATION**India's Trade with China**

India's trade with China in 2021 crossed USD125 billion with imports from China nearing a record USD100 billion, underlining continued demand for a range of Chinese goods, particularly machinery. This is when the relations hit a new low due to the prolonged standoff by the militaries in eastern Ladakh.

Key Points**India's Biggest Exports to China:**

- India's biggest exports to China in recent years were iron ore, cotton and other raw material-based commodities, which have seen a recovery in demand in China last year (2021).

India's Biggest Imports from China:

- India has imported large quantities of electrical and mechanical machinery, Active Pharmaceutical Ingredients (APIs), auto components and, over the past two years, a range of medical supplies from oxygen concentrators to Personal Protective Equipments (PPEs).

Growth in Bilateral Trade:

- The 43% year-on-year growth in bilateral trade with India was among the highest among China's major trading partners.
- Trade figures with China's top three trading partners showed growth of 28.1% with ASEAN (to USD 878.2 billion), 27.5% with the European Union (to USD 828.1 billion), and 28.7% with the United States, to USD 755.6 billion.

Trade Deficit with China:

- The trade deficit for India grew to USD 69.38 billion in 2021.
- India has been highlighting its concerns over the growing trade deficit with China for over a decade and calling on China to open its markets for India's IT and pharmaceutical products. Trade deficit refers to a situation where the country's import dues exceed the receipts from the exports.

Steps taken to Counter Dependence on China:

- Ban on Chinese apps.
- Increasing scrutiny of Chinese investments in many sectors, and a decision to keep Chinese companies out of 5G trials.
- The government has also made its prior approval mandatory for foreign investments from countries that share land border with India to curb "opportunistic takeovers" of domestic firms - a move which will restrict FDI from China.
- To cut import dependency on China for APIs (Active Pharmaceutical Ingredients), the government in March, 2020 approved a package comprising four schemes with a total outlay of Rs. 13,760 crore to boost domestic production of bulk drugs and medical devices in the country along with their exports.
- In 2020, the Ministry of Commerce and Industry identified 12 sectors - to make India a global supplier and cut import bills. These sectors are food processing, organic farming, iron, aluminium and copper, agro chemicals, electronics, industrial machinery, furniture, leather and shoes, auto parts, textiles, and coveralls, masks, sanitisers and ventilators.

Current Issues in India-China Relations**• Military Standoff in Eastern Ladakh:**

1. The border standoff between India's and China's armies began in May 2020 after a violent confrontation in the Pangong lake areas, and both sides have gradually increased their deployment by pouring in tens of thousands of soldiers and heavy weaponry.
2. On 12th January, 2022 the two sides met for the 14th round of Corps Commander-level discussions to end the standoff in the remaining territories, and they promised to meet again shortly.

• New Border Law:

1. China's new law on land borders has come into effect from the new year (2022).
2. The law states among other things that China abides by treaties concluded with or jointly acceded to by foreign countries on land boundary affairs.

• Renaming of several places in Arunachal Pradesh:

1. Several places in Arunachal Pradesh have been renamed recently by China as part of its claim on the Indian state.

2. India condemned the move on a global scale and the country has responded with a clear statement that assigning invented names would do no good and would not alter the facts that the places are a part of Arunachal Pradesh.

- **Bridge across Pangong Lake:** Recently, it was found that China is building a new bridge on Pangong Tso which will provide an additional axis to deploy troops faster between the north and south banks of the lake, and closer to the LAC (Line of Actual Control). The bridge is in their territory, and the Indian Army will have to factor this in its operational plans.

Way Forward

- To reduce the dependence of Chinese products, India needs to analyze imports from China, and develop the way forward.
- Further, based on the economic complexity model, the Indian government can formulate proper road maps through compartmentalizing them as per technology and innovation capabilities.

ECONOMY

National Technical Textiles Mission

Recently, the Ministry of Textiles cleared 20 strategic research projects worth Rs 30 crores in the areas of Specialty fibers and Geotextiles under the Programme 'National Technical Textiles Mission.'

Key Points

About:

- It was approved in 2020 by the Cabinet Committee on Economic Affairs (CCEA) with the aim to position the country as a global leader in technical textiles and increase the use of technical textiles in the domestic market.
- It aims at taking the domestic market size from USD 40 billion to USD 50 billion by 2024.

Ministry:

- A Mission Directorate is operational in the Ministry of Textiles.

Components: It will be implemented for four years starting from 2020-2021 and has four components-

1. **First component:** It will focus on research, development and innovation with an outlay of Rs. 1,000 crores.
 - ✓ The research will be at both fiber level and application-based in geo, agro, medical, sports and mobile textiles and development of biodegradable technical textiles.
 - ✓ Research activities will also focus on the development of indigenous machinery and process equipment.
- **Second component:** It will be for the promotion and development of the market for technical textiles.
- **Third component:** It will focus on export promotion so that technical textile exports from the country reach from Rs 14,000 crores to Rs 20,000 crores by 2021-2022 and ensure 10% average growth every year till the Mission ends. An export promotion council for technical textiles will be set up.
- **Fourth component:** It will focus on education, training and skill development. The Mission will promote technical education at higher engineering and technology levels related to technical textiles and its application areas.

Scenario of Technical Textile:

- The growth of technical textiles in India has gained momentum in the past five years, currently growing at an 8% per annum rate. It is aimed to hasten this growth to 15-20% range during the next five years.
- The current world market is USD 250 billion and India's share in it is USD 19 billion.
- India is an aspiring player with USD 40 billion in this market (8% Share). The biggest players are the USA, western Europe, China and Japan (20-40% share).

Initiatives Related to Technical Textile:

- **Production Linked Incentive (PLI) Scheme for Textiles Sector:** It aims to promote the production of high value Man-Made Fiber (MMF) fabrics, garments and technical textiles.
- **Harmonized System of Nomenclature (HSN) Codes for Technical Textile:** In 2019, Government of India dedicated 207 HSN codes to technical textiles to help in monitoring the data of import and export, in providing financial support and other incentives to manufacturers.
- **100% FDI under Automatic Route:** The Government of India allows 100% Foreign Direct Investment (FDI) under automatic route. International technical textile manufacturers such as Ahlstrom, Johnson & Johnson etc have already initiated operations in India.

- **Technotex India:** It is a flagship event organized by the Ministry of Textiles, in collaboration with Federation of Indian Chambers of Commerce & Industry (FICCI) and comprises exhibitions, conferences and seminars with participation of stakeholders from across the global technical textile value chain.
- **Amended Technology Upgradation Fund Scheme:** To improve exports and indirectly promote investments in textile machinery.

SCIENCE & TECHNOLOGY

Web 3.0

The concept of Web3, also called Web 3.0, used to describe a potential next phase of the internet, created quite a buzz in 2021.

Key Points

About:

- World Wide Web, which is also known as a Web, is a collection of websites or web pages stored in web servers and connected to local computers through the internet.
- These websites contain text pages, digital images, audios, videos, etc. Users can access the content of these sites from any part of the world over the internet using their devices such as computers, laptops, cell phones, etc.
- Web 3.0 is a decentralized internet to be run on blockchain technology, which would be different from the versions in use, Web 1.0 and Web 2.0.
- In Web3, users will have ownership stakes in platforms and applications unlike now where tech giants control the platforms. Gavin Wood, founder of Ethereum, a block chain technology company, used the term Web3 first in 2014 and in the past few years many others have added to the idea of Web3.

Previous Versions:

- **Web 1.0:**
 - A. Web 1.0 is the world wide web or the internet that was invented in 1989. It became popular from 1993. It lasted until 1999.
 - B. The internet in the Web 1.0 days was mostly static web pages where users would go to a website and then read and interact with the static information.
 - C. Even though there were e-commerce websites in the initial days it was still a closed environment and the users themselves could not create any content or post reviews on the internet.
- **Web 2.0:**
 - A. Web 2.0 started in some form in the late 1990s itself though 2004 was when most of its features were fully available. It is still the age of Web 2.0 now.
 - B. The differentiating characteristic of Web 2.0 compared to Web 1.0 is that users can create content.
 - C. They can interact and contribute in the form of comments, registering likes, sharing and uploading their photos or videos and perform other such activities.
 - D. Primarily, a social media kind of interaction is the differentiating trait of Web 2.0.

Need of Web 3.0:

- In Web 2.0, most of the data in the internet and the internet traffic are owned or handled by very few companies ex. Google.
- This has created issues related to data privacy, data security and abuse of such data.
- There is a sense of disappointment that the original purpose of the internet has been distorted.

Significance of Web 3.0:

- **Decentralized and Fair Internet:** Web3 will deliver a decentralized and fair internet where users control their own data.
- **Eliminates Intermediaries:** With block chain, the time and place of the transaction are recorded permanently. Thus, Web3 enables peer to peer (seller to buyer) transactions by eliminating the role of the intermediary. This concept can be extended to
- **Decentralization and Transparency:** The spirit of Web3 is Decentralized Autonomous Organization (DAO).
 1. DAO is all about the business rules and governing rules in any transaction are transparently available for anyone to see and software will be written conforming to these rules.
 2. With DAO, there is no need for a central authority to authenticate or validate.

Way Forward

- Web3 is in its very initial days and there is no consensus if it will take off like Web 1.0 or Web 2.0 did. There is much skepticism from top tech brains in the industry and the academic community that Web3 does not solve the problems it purports to solve.
- Web3 will require deviation from the current architecture where there is a front-end, middle layer and back-end.
- Web3's architecture will need backend solutions for handling block chain, persisting and indexing data in block chain, peer to peer communications and so forth.
- Similarly, the middle layer, also called the business rules layer, will need to include handling block chain-based backend.

PRELIMS FACT

Desh Ke Mentor Programme: Delhi Government

Recently, the National Commission for Protection of Child Rights (NCPCR) suggested that the Delhi government suspend its flagship 'Desh ke Mentor' Programme till "the time when all the loopholes pertaining to the safety of the children are overhauled.

National Commission for Protection of Child Rights

- NCPCR is a statutory body set up in March 2007 under the Commissions for Protection of Child Rights (CPCR) Act, 2005.
- It is under the administrative control of the Ministry of Women & Child Development.
- The Commission's mandate is to ensure that all laws, policies, programmes, and administrative mechanisms are in consonance with the child rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child.
- It inquires into complaints relating to a child's right to free and compulsory education under the Right to Education Act, 2009.
- It monitors the implementation of Protection of Children from Sexual Offences (POCSO) Act, 2012.

Key Points

About:

- It was launched in October 2021, aiming at connecting students in classes IX to XII with voluntary mentors.
- People between the ages of 18 and 35 can sign up to be mentors through an app created by a team at the Delhi Technological University and will be connected with students based on mutual interests.
- The mentorship entails regular phone calls for a minimum of two months, which can optionally be carried on for another four months.
- The idea is for the young mentors to guide students through higher education and career options, preparation for higher education entrance exams, and dealing with the pressure of it all.
- So far, 44,000 people have signed up as mentors and have been working with 1.76 lakh children.

Concerns Raised by NCPCR:

- Assigning children to a mentor of the same gender as them does not necessarily assure their safety from abuse.
- Lack of police verification of the mentors.
- A psychometric Test is not a full proof assessment of a person in terms of potential threat to any child.
- Limiting interactions to phone calls also does not ensure the safety of children since "child related crime can be initiated through phone calls as well."
- The responsibility and accountability of preventing children from such situations lies with the Department. The consent of parents cannot be used as a cushion in case of any untoward incident.

DAILY ANSWER WRITING PRACTICE

Qns. Montreal Protocol's accomplishments are unprecedented and it continues to provide an inspiring example of what international cooperation at its best can achieve. Elaborate. (150 words, 10 marks)

Ans:

Introduction

The Montreal Protocol on Substances that Deplete the Ozone Layer is the landmark multilateral environmental agreement that regulates the production and consumption of nearly 100 ozone depleting substances (ODS). The Montreal Protocol sits under the Vienna Convention for the Protection of the Ozone Layer. It phases down the consumption and production of the different ODS in a step-wise manner, with different timetables for developed and developing countries. Developing and developed countries have equal but differentiated responsibilities, but most importantly, both groups of countries have binding, time-targeted and measurable commitments.

Body

Montreal protocol: Accomplishments of the most successful global climate treaty

- The Montreal Protocol mandated the complete phase-out of CFCs and other ozone-depleting substances (ODS), which it has successfully managed to do in the last three decades.
- The protocol was adopted in 1987, becoming the only United Nations treaty to be ratified by its 198 member-states.
- The Montreal Protocol has led to the phase-out of 99 per cent of ozone-depleting chemicals in refrigerators, air-conditioners and many other products.
- From 1989–2013, the protocol's ban on certain chemicals reduced cumulative CO2-equivalent emissions by 135 billion tons.
- This effort has led to the healing of the ozone layer hole which, in turn, protects humans, economies, and ecosystems.
- Researchers believe that the size of the ozone hole has shrunk by around 4 million sq. km since 2000 and is not as deep as it used to be, thanks to the collective efforts of nations to cut the use of chlorofluorocarbons and other dangerous gases.
- At projected rates, Northern Hemisphere and mid-latitude ozone will heal completely by the 2030s. The Southern Hemisphere will follow in the 2050s and Polar Regions by 2060.
- The Montreal Protocol offers a model of a successful environmental treaty that brought nations together to act swiftly on protecting the ozone layer.
- In 2016, Nations that were party to the protocol got together in Kigali, Rwanda, to discuss the phasing down of hydrofluorocarbons (HFCs) as the next step towards addressing ozone depletion, also necessary to curb global warming.
- Kigali Amendment to Montreal Protocol came into effect in 2019.

Key takeaways from Montreal protocol which acts as an example for other global initiatives

- **Comprehensive negotiations:** From the start, negotiation relied heavily on leadership and innovative approaches. Much negotiation was held in small, informal groups. This enabled a genuine exchange of views and the opportunity to take some issues on trust, such as the subsequent development of the Multilateral Fund. The people negotiating the treaty also included scientists, which lent credibility.
- **Universal consensus:** The Montreal Protocol is the only universal UN Agreement, signed by 196 states and the EU. It has more signatories than any other international agreement or body, including the United Nations itself.
- The Montreal Protocol also called for Multilateral Fund, established in 1990, which was "basically money contributed by developed countries and renewed periodically that paid developing countries and developing country industries to make the switches to the new generations of chemicals,
- **The idea of using trade policy as a punishment mechanism:** Due to this readily definable cause and effect relationship, the Montreal Protocol was able to establish strong enforcement provisions as well as strong commitments.
- **Adjustment provision:** The science was not definite at the time of adoption of the Montreal protocol, so the negotiators developed a highly flexible instrument which could increase or decrease controls as the science became clearer. This flexibility meant the protocol could be amended to include stricter controls: more ozone-depleting substances added to the control list and total phase-out, rather than partial phase-out, called for.
- Developing countries are given more time to comply with the phase out decisions, and also they receive funding from the Multilateral Fund to facilitate compliance with the Protocol's provisions.

Conclusion

The Montreal Protocol provides us with a good model of the future, showing a successful execution of international environmental policy. Sure, the Montreal Protocol differs from the Paris Agreement, but we can only stand to gain from studying the former's success. There's still time to reach a manageable and sustainable future, but to do that, we must pull out all the stops. That includes learning from our past.

DAILY QUIZ

Q1. The Gaza Strip, a self-governing territory in Western Asia, shares land borders with:

1. Israel
2. Egypt
3. Lebanon

Select the correct answer using the code below:

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

Q2. Consider the following statements about the Indo-Lanka Accord:

1. It is popularly referred to as the Indira-Jayewardene Accord.
2. It was signed in 1987 on the pretext of the Civil War in Sri Lanka.

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

Q3. Consider the following statements about the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) Scheme:

1. It is a Central Sector scheme with 100% funding from Government of India.
2. Under the scheme, the fund will be directly transferred to the bank accounts of the beneficiaries.
3. The definition of family for the scheme is husband, wife and minor children.

Which of the statements given above is/are correct?

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

Q4. Consider the following statements about National Mission for Clean Ganga (NMCG):

1. It is the implementation wing of National Ganga Council (NGC).
2. It has a two tier management structure.
3. It is chaired by Prime Minister of India.

Which of the given above statements is/are correct?

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

Q5. What is common to the places known as Padiyendhal, Alampadi and Kombaikadu?

- a. Ancient cave paintings**
- b. Water reservoirs
- c. Community protected areas (forests)
- d. Recently discovered rare earth elements deposits