

**INTERNATIONAL RELATION****India and Canada to re-launch the CEPA**

Recently, India and Canada held the fifth Ministerial Dialogue on Trade & Investment (MDTI), where Ministers agreed to formally re-launch the negotiations for India-Canada Comprehensive Economic Partnership Agreement (CEPA) and also consider an Interim Agreement or Early Progress Trade Agreement (EPTA) that could bring early commercial gains to both the countries. Earlier, India and Australia announced that they are set to conclude an Interim Trade Agreement in March 2022 and a Comprehensive Economic Cooperation Agreement (CECA) 12-18 months thereafter.

**What are the Key Points?**

- The Interim Agreement would include high level commitments in goods, services, rules of origin, sanitary and phytosanitary measures, technical barriers to trade, and dispute settlement, and may also cover any other areas mutually agreed upon.
- The two sides emphasized cooperation in sectors such as pharmaceuticals and critical and rare earth minerals as well as in areas like tourism, urban infrastructure, renewable energy, and mining.
- Both countries agreed to undertake intensified work with respect to the recognition of Canada's systems approach to pest risk management in pulses and market access for Indian agriculture goods such as sweet corn, baby corn and banana etc.
- Canada also agreed to examine expeditiously the request for Conformity Verification Body (CVB) status to APEDA (Agricultural and Processed Food Products Export Development Authority) for facilitating Indian organic export products. A CVB is an organisation that has an agreement with the Canadian Food Inspection Agency under subsection 14(1) of the Canadian Food Inspection Agency Act to assess, recommend for accreditation and monitor certification bodies.
- The Ministers acknowledged the significance of establishing resilient supply chains in critical sectors and exchanged views on collaboration in this area.

**What is an Interim Trade Agreement?**

- An interim or early harvest trade agreement is used to liberalize tariffs on the trade of certain goods between two countries or trading blocs before a comprehensive FTA (Free Trade Agreement) is concluded.
- Government's emphasis on interim agreements may be tactical so that a deal may be achieved with minimum commitments and would allow for contentious issues to be resolved later.
- The problem, though, is that these early harvest schemes potentially target the low-hanging fruits, leaving the tougher goods and services for later.
- Early harvest agreements that do not graduate into full-scale FTAs are exposed to legal challenges from other countries that are members of the World Trade Organisation (WTO).
- It is often beneficial to negotiate the entire deal together, as an early harvest deal may reduce the incentive for one side to work towards a full FTA.

**What is CEPA?**

- It is a kind of free trade pact which covers negotiation on the trade in services and investment, and other areas of economic partnership.
- It may even consider negotiation on areas such as trade facilitation and customs cooperation, competition, and Intellectual Property Rights.
- Partnership agreements or cooperation agreements are more comprehensive than Free Trade Agreements.
- CEPA also looks into the regulatory aspect of trade and encompasses an agreement covering the regulatory issues.
- India has signed CEPAs with South Korea and Japan.

**What is India's Current Trade Relation with Canada?**

- India is Canada's 11th largest export market, and 12th largest trading partner overall. India's exports to Canada stood at USD 2.9 billion in 2020-21 as against USD 2.85 billion in 2019-20. Imports in 2020-21 were USD 2.68 billion as against USD 3.9 billion in 2019-20.
- Canada's commercial priorities in India are targeted at India's policy objectives and sectors where Canada has a comparative advantage. These priorities include:

1. Supporting India's energy security ambitions through increased exports of conventional and nuclear energy as well as clean and renewable energy technology,
2. Helping India meet its substantial urban and transportation infrastructure needs through provision of financing, equipment, technology and engineering services,
3. Enhanced education and skills training through greater collaboration between Canadian and Indian educational and technical skills institutions,
4. Commercial research and development to drive innovation in such sectors as information and communications technologies,
5. Increased exports of food products and fertilizers to support India's food security needs.

## **AGRICULTURE**

### **E-procurement of Crops**

The Haryana government has launched the Meri Fasal-Mera Byora e-procurement portal. Due to this portal, Haryana has become the first state in India where as many as 14 crops are procured at the Minimum Support Price (MSP). These crops include wheat, mustard, barley, gram, paddy, maize, bajra, cotton, sunflower, moong, groundnut, tur, urad and sesame.

- The portal is the testimony of increasingly adopting digital governance, as a means to improve farming and ensure enhanced income for farmers.

### **What are the Key Points of Portal?**

- The portal was started in the wake of the Covid-19 pandemic.
- In less than two years, 8.71 lakh or more than 80% of the total farmers in the state, registered on the portal in the rabi season.
- The portal seeks to provide an online sale facility, 81 mandis of the state have been linked with the e-NAM (electronic national agriculture market) portal. The eNAM platform offers a pan-India electronic trading portal that networks the existing APMC (Agricultural Produce Market Commodities) mandis to create a unified national market for agricultural commodities.

### **How are crops procured?**

- **Objective:** The Government policy of procurement of Foodgrains has broad objectives of ensuring MSP to the farmers and availability of food grains to the weaker sections at affordable prices.
  1. It also ensures effective market intervention thereby keeping the prices under check and also adding to the overall food security of the country.
  2. The procurement under Price Support is taken up mainly to ensure remunerative prices to the farmers for their produce which works as an incentive for achieving better production.
- **Nodal Agency:** Food Corporation of India, the nodal central agency of the Government of India, along with other State Agencies undertakes procurement of wheat and paddy under a price support scheme. Coarse grains are procured by State Government Agencies for Central Pool as per the direction issued by the Government of India from time to time.
- **Role of CACP:** Before the harvest during each Rabi / Kharif Crop season, the Government of India announces the Minimum Support Prices (MSP) for procurement on the basis of the recommendation of the Commission of Agricultural Costs and Prices (CACP).
- **Role of State Governments:** To facilitate procurement of food grains, FCI and various State Agencies in consultation with the State Government establish a large number of purchase centers at various mandis.

### **How e-Mandi Will Help Farmers?**

- **Monopoly of Middlemen:** With the existing infrastructure, the agricultural produce only reaches the nearest Agri market that is under the jurisdiction of the APMC (Agricultural Produce Market Commodities).
  1. After incurring the cost of traveling, packing, and sorting the produce, farmers arrive at the local mandis and wait to sell the perishable items.
  2. Farmers have to rely on local agents for the sorting, grading, and other essential agriculture processes, thus relying heavily on middlemen who are not always trustworthy or honest.
- **Detrimental to Farmers' Interest:** This undeclared monopoly that seems to exist is staggering the growth of goods and the free flow of the agricultural value chain and is also unjust to the local farmers and their livelihood.

### How Technology Can Help Agriculture?

- **Deployment of Modern Technology:** With the introduction of modern technology and digital machinery using techniques like artificial intelligence, blockchain, machine learning, climate-smart advisory, geo-tagging, and the internet of things, the agricultural sector has seen a substantial spike in the number of investors over the past few years. Recently, the Prime Minister has flagged off 100 Kisan drones in different cities and towns of India to spray pesticides in farms across India.
- **Benefits to Farmers:** Digital mandis are enabling farmers to directly negotiate with wholesale traders and other local traders, putting an end to the middlemen involved in the process who hamper their movement and freedom of choosing crop type, variety, and price point.

## GEOGRAPHY

### Tapi-Par-Narmada Link Project

Recently, some tribals have intensified their protest against the Par-Tapi-Narmada river linking project after it was mentioned in the budget speech (2022-23) of the finance minister.

#### What is the Background?

- These projects had been sanctioned in 2010, when a tripartite agreement was signed between the Union government, Gujarat and Maharashtra.
- The Finance Minister in her Budget Speech said that five river linking projects will be taken up after consensus among states.
  1. The projects are Damanganga-Pinjal, Par-Tapi-Narmada, Godavari-Krishna, Krishna-Pennar and Pennar-Cauveri.
  2. The Ken-Betwa is the first project under the government's National Perspective Plan for river inter-linking. The National River Linking Project (NRLP) formally known as the National Perspective Plan, envisages the transfer of water from water 'surplus' basins where there is flooding, to water 'deficit' basins where there is drought/scarcity, through inter-basin water transfer projects.

#### What is the Par-Tapi-Narmada River Linking Project?

- Par Tapi Narmada Link proposes to transfer water from the water surplus regions of Western Ghats to the water deficit regions of Saurashtra and Kutch (Gujarat).
- The link project includes seven reservoirs proposed in north Maharashtra and south Gujarat.
- The water from the seven proposed reservoirs would be taken through a 395 km long canal to take over a part of the command of the on-going Sardar Sarovar Project (on Narmada), while irrigating small enroute areas. The seven dams proposed in the scheme are Jheri, Mohankavhali, Paikhed, Chasmandva, Chikkar, Dabdar and Kelwan.
- This would save Sardar Sarovar water which will be used to extend irrigation in Saurashtra and Kutch region.
- The link mainly envisages construction of seven dams, three diversion weirs, two tunnels, 395 km long canal, 6 power houses and a number of cross-drainage works.

#### What will be the Benefits of the Project?

- Besides providing irrigation benefits to the enroute command and Narmada command, the link will generate hydropower of the order of 93.00 Mkw through the power houses installed at four dam sites.
- The reservoirs will also provide flood relief to the people residing in downstream areas.

#### What do we know about Narmada River?

- Narmada is the largest west flowing river of the peninsular region flowing through a rift valley between the Vindhya Range on the north and the Satpura Range on the south.
- It rises from Maikala range near Amarkantak in Madhya Pradesh.
- It drains a large area in Madhya Pradesh besides some areas in the states of Maharashtra and Gujarat.
- The river near Jabalpur (Madhya Pradesh) forms the Dhuandhar Falls.
- There are several islands in the estuary of the Narmada of which Aliabet is the largest.
- Major Tributaries: Hiran, Orsang, the Barna and the Kolar.
- The major Hydro Power Projects in the basin are Indira Sagar, Sardar Sarovar etc.

#### What do we know about the Tapi River?

- Another important westward flowing river originates from the Betul district of Madhya Pradesh in the Satpura ranges.
- It flows in a rift valley parallel to the Narmada but is much shorter in length.
- Its basin covers parts of Madhya Pradesh, Gujarat and Maharashtra.

**What do we know about the Par River?**

- Par River is a river in Gujarat with its source near wadpada village in Nashik Maharashtra.
- It flows into the Arabian Sea.

**What is the Inter-Linking of Rivers Programme?**

- **Aim:**The InterLinking of Rivers programme (ILR) programme is aimed at linking different surplus rivers of the country with deficient rivers so that the excess water from surplus regions could be diverted to deficient regions.
- **Need:**
  1. **Reducing Regional Imbalance:** India depends on monsoon rains that are erratic as well as regionally imbalanced. Interlinking of rivers will reduce the amount of surplus rain and river water which flows into the sea.
  2. **Irrigation for Agriculture:** Interlinking can provide a solution to the rain-fed irrigation problems of Indian agriculture through the transfer of surplus water to deficit regions.
  3. **Reducing Water Distress:** This can help in mitigating the effect of drought and floods to a certain extent.
  4. **Other Benefits:** Hydropower generation, Round the year navigation, Employment generation, Ecological benefits as dried up forests and lands will be replenished.
- **Challenges:**
  1. **Environmental Costs:** The project threatens to obstruct the natural ecology of rivers.
  2. **Climate Change:** In interlinking systems, it is assumed that the donor basin has surplus water that can be made available to the recipient basin. The whole concept goes for a toss if this basic assumption goes haywire for any system due to climate change.
  3. **Economic Costs:** It is estimated that river interlinking will be a huge fiscal burden on the Government.
  4. **Socio-Economic Impact:** It is estimated that the network of canals extending to about 15000 km would displace about 5.5 million people, mostly tribals and farmers.

**Way Forward**

India needs to conserve every drop of water, reduce wastage, equitable distribution of resources and at the same time enhance groundwater. So the small scale simple things have to be tried.

Local solutions (like better irrigation practice) and watershed management, should be focused on.

The government should alternatively consider the National Waterways Project (NWP) which “eliminates” friction between states over the sharing of river waters since it uses only the excess flood water that goes into the sea unexploited.

**PRELIMS FACT**

**Missile Misfires**

Recently, India acknowledged that “technical malfunction led to the accidental firing of a missile” which landed 124 km inside Pakistan’s territory. It was speculated that it was a test of one of India’s top missiles, BrahMos, jointly developed with Russia.

**What are the Provisions for Testing Missiles?**

- Under the pre-notification of flight testing of ballistic missiles agreement signed in 2005, each country must provide the other an advance notification on the flight test it intends to take for any land or sea launched, surface-to-surface ballistic missile.
- Before the test, the country must issue Notice to Air Missions (NOTAM) or Navigational Warning (NAVAREA) to alert aviation pilots and seafarers, respectively.
- Also, the testing country must ensure that the launch site is not within 40 km, and the planned impact area is not within 75 km of either the International Boundary (IB) or the Line of Control (LoC). The planned trajectory should not cross the IB or the LoC and must maintain a horizontal distance of at least 40 km from the border.
- The testing country must notify the other nation “no less than three days in advance of the commencement of a five day launch window within which it intends to undertake flight tests

of any land or sea launched, surface-to-surface ballistic missile”.The pre-notification has to be “conveyed through the respective Foreign Offices and the High Commissions”.

**What is Notice to Air Missions ( NOTAMs )?**

- A NOTAM is a notice containing information essential to personnel concerned with flight operations but not known far enough in advance to be publicized by other means.

**What is a Navigational Warning Service (WWNWS)?**

- The World Wide Navigational Warning Service (WWNWS) was established in 1977 for the promulgation of information on worldwide hazards to navigation for international shipping.
- Navigational warnings provide early information of important incidents which may constitute a danger to navigation.
- Many navigational warnings are of a temporary nature, but others remain in force for several weeks and may be succeeded by Notice to Mariners (NMs).

**What is Brahmos Missile?**

- BrahMos is a joint venture between the Defence Research and Development Organisation of India (DRDO) and the NPOM of Russia. BrahMos is named on the rivers Brahmaputra and Moskva.
- It is a two-stage (solid propellant engine in the first stage and liquid ramjet in second) missile.
- It is a multiplatform missile i.e it can be launched from land, air, and sea and multi capability missile with pinpoint accuracy that works in both day and night irrespective of the weather conditions.
- It operates on the "Fire and Forgets" principle i.e it does not require further guidance after launch.
- Brahmos is one of the fastest cruise missile currently operationally deployed with speed of Mach 2.8, which is nearly 3 times more than the speed of sound.

**DAILY ANSWER WRITING PRACTICE**

**Qns. Phygital education – a hybrid of physical and digital education systems is a good way forward to improve learning outcomes in the country but enabling infrastructure needs to be put in place for it to be a success. Discuss. (250 words)**

**Introduction**

Covid-19 pandemic made us look into the new way of imparting education that is through “blended learning”. Phygital Education or Blended learning in simple words is the amalgamation of physical learning and digital learning.

**Body****Why phygital education could be a good way forward ?**

- Phygital education has been most sought out in the recent times as there is a considerable drop seen students’ interest in learning new things dwindling more than ever.
- This is seconded with insanely high amount of dropout rates being witnessed by educational institutions worldwide.
- The world is evolving today at a breakneck pace and so are the demands to survive in it.
- Phygital education is a kind of learning that not only helps students upskill their soft skills but also explore different career paths to be prepared for tomorrow.
- Phygital learning has the capability to ditch the monotony of regular schooling by reforming education.
- It has the opportunity to foster a lucrative environment that inspires each student to take strides of innovation by upskilling and birthing the much-needed inquisitiveness in them towards everyday learning.
- Gamification of learning a much optimistic way of making students master difficult to grasp concepts has been possible because of phygital education. This approach is especially helpful for young learners who have a shorter attention span and have a natural love for gaming.
- It provides a new edge to the tedious everyday wearisome learning by motivating students as it uses video game design and game elements in traditional learning environments.
- The outcome- maximized enjoyment and engagement in capturing the interest of learners and inspiration added in them to continue learning.

**Challenges in Phygital education**

- **Majority colleges in rural areas:** The latest All India Survey on Higher Education (2019-20) report shows that 56% of the 42,343 colleges in India are located in rural areas and 78.6% are privately managed.
- **Poor internet penetration:** Internet penetration in India is only 45% as of January 2021. This policy will only worsen the existing geographical and digital divide resulting in the exclusion of a large number of rural students.
- **All-round development hampered:** Phygital learning leaves little room for the all-round formation of the student that includes the development of their intelligent quotient, emotional quotient, social quotient, physical quotient and spiritual quotient.
- **Dropout rates might increase:** Blended learning mode assumes that all students who enter the arena of higher education have similar learning styles and have a certain amount of digital literacy to cope with the suggested learning strategies of BL. This is far from true.
- Education in India is driven by a teacher-centred approach. Expecting these students to switch over quickly to collaborative and technology-enabled learning will be stressful for them. It may increase the existing dropout rate in higher education.

### Way forward

- **Equity in access:** The government should ensure equity in access to technology and bandwidth for all HEIs across the country free of cost.
- **Hassle-free access to students:** building their digital literacy through simple, concise learning modules on how to operate a device and engage with a digital platform. Providing on-call support with minimum wait time via call centres, chatbots, etc, will help them overcome teething issues.
- **Digital training for teachers:** Massive digital training programmes must be arranged for teachers.
- **Appointment of new teachers:** Even the teacher-student ratio needs to be readjusted to implement BL effectively. This may require the appointment of a greater number of teachers.
- **Curriculum design:** The design of the curriculum should be decentralized and based on a bottom-up approach. Curriculum frameworks need to be developed that encourage the creation of competency-based micro modular courses.
- Also, switching over from a teacher-centric mode of learning at schools to the BL mode at the tertiary level will be difficult for learners. Hence, the government must think of overhauling the curriculum at the school level as well.
- **More power with state governments:** More power in such education-related policymaking should be vested with the State governments.
- **Periodic feedback and discussion:** Finally, periodical discussions, feedback mechanisms and support services at all levels would revitalize the implementation of the learning programme of the National Education Policy 2020 and BL. It'll lead to the realization of three fundamental principles of education policy: access, equity and quality.
- The government of our country actively endorsing and initiating steps in the field of Phygital learning makes us believe more in the fact that it is here to stay in India and is the future of learning.
- The government's vision of a digital university to reach all students across the country, with its promise of personalized teaching at the doorstep, should be considered a landmark step in Indian education.

### Conclusion

Phygital education has the potential to transform education in India. It is the future because it contextualizes and reimagines education. Blended education opens up immense opportunities for capacity building among frontline workers. It holds high empowerment potential because it can enable adults, especially women, resume education. Phygital education can serve as an engine of economic growth and a transformative force that empowers every Indian.

### DAILY QUIZ

- Q1. What is/are the advantage/advantages of implementing the 'National Agriculture Market' scheme?
1. It is a pan-India electronic trading portal for agricultural commodities.
  2. It provides the farmers access to nationwide market, with prices commensurate with the quality of their produce.

Select the correct answer using the code given below:

- a. 1 only

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

Q2. Which of the following factors/policies were affecting the price of rice in India in the recent past?

- 1. Minimum Support Price
- 2. Government's trading
- 3. Government's stockpiling
- 4. Consumer subsidies

Select the correct answer using the code given below:

- a. 1, 2 and 4 only
- b. 1, 3 and 4 only
- c. 2 and 3 only
- d. 1, 2, 3 and 4**

Q3. The Narmada river flows to the west, while most other large peninsular rivers flow to the east. Why?

- 1. It occupies a linear rift valley.
- 2. It flows between the Vindhyas and the Satpuras.
- 3. The land slopes to the west from Central India.

Select the correct answer using the codes given below:

- a. 1 only**
- b. 2 and 3
- c. 1 and 3
- d. None

Q4. With reference to Agni-IV Missile, which of the following statements is/are correct?

- 1. It is a surface-to-surface missile.
- 2. It is fuelled by liquid propellant only.
- 3. It can deliver one-tonne nuclear warheads about 7500 km away.

Select the correct answer using the code given below:

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

Q5. In the context of the Indian defence, what is 'Dhruv'?

- a. Aircraft-carrying warship
- b. Missile-carrying submarine
- c. Advanced light helicopter**
- d. Intercontinental ballistic missile