

Booster shot to India-U.K. Relations**BOOSTER SHOT TO INDIA-U.K. RELATIONS**

PM Narendra Modi and his British counterpart Boris Johnson pushed for closing the negotiations for a Free Trade Agreement(FTA) by the end of the year.

Major Points

- They agreed to enhance cooperation in the defence sector:
 - The expanded defence and security partnership will help in protecting vital shared interests in the Indo-Pacific Region and will also help India strengthen its own domestic defence industry.
- **Open General Export Licence (OGEL):**
 - The U.K. will issue an Open General Export Licence (OGEL) to support greater defence and security collaboration in the coming decade.
 - The OGEL will reduce bureaucratic interference and shorten delivery time for India's defence procurement.
 - ❖ This is the first British OGEL in the Indo-Pacific region.

Indo-Pacific:

- India emphasised on maintaining a free, open, inclusive and rules-based order in the region and India welcomed the U.K.'s decision to join the Indo-Pacific Oceans Initiative.

India-UK Relations**About:**

- UK-India relationship is rooted in India's colonial history with the British and the relationship shared by both countries even after India's independence.
- The bilateral relationship was upgraded to a strategic partnership in 2004.

Political:

- They share a modern partnership which was upgraded to a strategic partnership in 2004.
- The UK supports India's proposal for permanent membership of the UNSC and is also an important interlocutor for India on global platforms.

Economic Engagements:

- **Trade:**
 - UK is among India's major trading partners and as per trade statistics of MoC&I, India's trade with the UK in 2017-2018 was US \$14.497 billion.
- **Investment:**
 - UK is the 4th largest inward investor in India, after Mauritius, Singapore and Japan with a cumulative equity investment of US \$26.09 billion (April 2000-June 2018), accounting for around 7% of all foreign direct investment into India. India continued to be the third largest investor in the UK and emerged as the second largest international job creator with Indian companies having created over 110,000 jobs in the UK.

Defence:

- In 2015, the two countries agreed to elevate their Defence relationship by establishing capability partnerships in strategic areas.
- The institutionalised dialogue to discuss defence cooperation viz. Defence Consultative Group Meeting, is held annually at Defence Secretary level.
- Ajeya Warrior (army-to-army biennial exercise), the Konakan (joint navy-to-navy annual exercise) and the Indradhanush (joint air-to-air exercise) happen between India and UK.

Education:

- Over the last 10 years, the relationship has grown substantially with the introduction of bilateral mechanisms such as the India-UK Education Forum, UK-India Education and Research Initiative (UKIERI), Joint Working Group on Education, Newton-Bhabha Fund and Scholarship schemes.

Science and Technology:

- Joint investment in UK-India research has grown from less than £1 million in 2008 to over £200 million.
- A India-UK Clean Energy R&D Centre with a focus on solar energy storage and a collaborative R&D programme in energy efficient building materials were announced.
- New research partnerships worth £80 million including a new Joint Strategic group on Antimicrobial Resistance (AMR) with a joint investment of up to £13 million have also been established.

Cultural Linkages:

- Cultural linkages between India and UK are deep and extensive, arising out of shared history between the two countries.
- There has been a gradual mainstreaming of Indian culture and absorption of Indian cuisine, cinema, languages, religion, philosophy, performing arts, etc.
- 2017 was celebrated as the India-UK year of Culture to mark the 70th anniversary of Indian independence.

Indian Diaspora:

- The Indian Diaspora in the UK is one of the largest ethnic minority communities in the country.
- As per the 2011 census, approximately 1.5 million people of Indian origin live in the UK equating to almost 1.8 percent of the population and contribute 6% of the country's GDP.

Roadmap 2030:

- The "Roadmap 2030" for India-UK future relations was launched during India-UK Virtual Summit for-
 - revitalised and dynamic connections between people;
 - re-energised trade, investment and technological collaboration that improves the lives and livelihoods of the citizens;
 - enhanced defence and security cooperation that brings a more secure Indian Ocean Region and Indo-Pacific and
 - India-UK leadership in climate, clean energy and health that acts as a global force for good.

Conclusion

Subsequent to the unveiling of FTA, the two nations should proactively and regularly engage with each other, for deliberating on the scope and coverage of the trade deal.

IMPORTANT FACTS FOR PRELIM**1. Europa Moon**

Recently, a team of researchers from Stanford University concluded that Jupiter's icy moon Europa is a prime candidate to find life in this solar system.

Major Points

- It is noted that there might be an abundance of water pockets beneath formations called double ridges.
- The double ridges are most common on Europa's surface and are similar to those seen on Earth's Greenland ice sheet.

About Europa

- Europa is named for a woman who, in Greek mythology, was abducted by the god Zeus – Jupiter in Roman mythology.
- Europa orbits Jupiter every 3.5 days and is locked by gravity to Jupiter, so the same hemisphere of the moon always faces the planet.
- Jupiter's moons Io, Europa, and Ganymede.
- Europa is slightly smaller than Earth's moon and its diameter is about one-quarter that of the Earth.
- Even though Europa has a very thin oxygen atmosphere, it is considered one of the most promising places in the solar system to find present-day environments that are suitable for life beyond the Earth.
- It is also believed that underneath Europa's icy surface the amount of water is twice that on Earth.

Mission:

- NASA is expected to launch its Europa Clipper in 2024. The module will orbit Jupiter and conduct multiple close flybys to Europa to gather data on the moon's atmosphere, surface and its interior.

2. DefConnect 2.0

The Defence Minister of India inaugurated DefConnect 2.0 organised by Innovations for Defence Excellence, Defence Innovation Organisation (iDEX-DIO).

About DefConnect 2.0

- It is a one-day event to bring together start-ups, big companies and armed forces personnel to boost indigenous innovation in the defence sector.
- The event will attract a large number of innovators and investors from the country's leading industries in the defence sector.
- It will provide a unique opportunity for innovators associated with iDEX-DIO to showcase their capabilities, products and state-of-the-art-technologies to the target audience of the industry leaders.

3. Reusable Launch Vehicle

ISRO is aiming to carry out a landing experiment (LEX), a critical component of the Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme, in the next few days.

About Reusable Launch Vehicle

Meaning:

- A reusable launch system is a launch system that allows for the reuse of some or all of the component stages.
- The vehicle returns to earth intact after a mission.

The experiment:

- RLV-LEX involves taking an unmanned, winged prototype to an altitude of about 2.3 km to 2.4 km on a helicopter and releasing it to land.
- It must travel the distance autonomously, gain velocity, maintain control and come in like any typical aircraft, touching down with the rear wheels first.

Phases:

- The first in the series of experimental flights is the hypersonic flight experiment (HEX) followed by the landing experiment (LEX), return flight experiment (REX) and scramjet propulsion experiment (SPEX).

Benefits of RLV:

- Cheaper access to space is what makes an RLV attractive: A major hurdle in space exploration is the prohibitive cost, which can be slashed if the launch vehicle is a reusable one.

Challenges of RLV:

- Extra weight: Reusable stages weigh more than equivalent expendable stages. This is unavoidable due to the supplementary systems, landing gear and/or surplus propellant needed to land a stage.
- Refurbishment: After the launcher lands, it may need to be refurbished to prepare it for its next flight. This process may be lengthy and expensive. The launcher may not be able to be recertified as human-rated after refurbishment.

RLV Orbital re-entry Experiment (ORE):

- ISRO is working on ORE.
- In ORE, a wing body called Orbital Reentry vehicle (ORV) will be taken to an orbit by an ascent vehicle derived from the existing GSLV and PSLV stages and stay in orbit for a stipulated period, re-enter and land in a runway autonomously with a landing gear.

DAILY ANSWER WRITING PRACTICE

Q1. Examine the factors behind increasing cases of farmer suicides. What are the policy measures that are needed to prevent them? (150 words)

Introduction

The National Crime Records Bureau (NCRB) data reveals that 3,58,164 people engaged in the farming profession have committed suicide in India from 1995 to 2019. Several socio-economic factors have enabled an environment vulnerable to distress in the agricultural belts of the nation. Unable to cope with mounting debt and the inability to take care of their families, many choose to end their lives.

Body

Factors behind increasing cases of farmer suicides

- Plummeting incomes, mounting debt, and high interest rates (particularly of non-institutional sources) have pushed the peasantry towards deprivation
- The high debt burden was the primary reason behind 75% of farmer suicides.
- Large chunk of persons were underemployed or disguisedly unemployed during 2016–17 in Punjab.
- The mismatch between farm inputs and output prices, crop failures, and unfavourable terms of trade between prices paid and received by the farmers have contributed fairly to declining farm incomes.

Cost of cultivation:

- The MSP of wheat and paddy increased at the rate of 2% per annum while the cost of cultivation increased at the rate of 7.9% during the last one and a half decades.
- With a growth rate of around 1.6% (during 2012–17) and the stress on natural resources, the farm sector is trapped in a vicious circle of crisis. Expectedly, small farmers are the worst sufferers.
- Due to the declining water table, the cost of irrigation structures has increased as the farmers have to replace centrifugal pumps by costly submersible pumps.
- The farmers are being exploited by traders and dealers providing them spurious seeds and agrochemicals.
- Agriculture in Punjab suffers from mono-crop culture of mainly wheat and paddy. With this cropping pattern, farming itself is becoming an unviable occupation, due to rising fixed and variable input costs, and low remuneration leading to falling profit margins.

Cost of inputs:

- Variable costs increase due to rising prices of inputs like fertilisers, pesticides, weedicides, diesel etc.
- Fixed costs like installation and deepening of submersible pumps due to the dipping water table increase the financial woes of farmers.
- For a small and marginal farmer, it is economically unviable to make such investments, especially by borrowing from informal sources at high rates of interest

Data Anomaly:

- Existing studies have analysed the intensity of farmer suicides in isolation, i.e. without comparing farmer suicides with those by other professionals

Policy measures needed to prevent farmer suicides

- The “Scheme for Debt Swapping of Borrowers” should be made more effective for converting the non-institutional debt into institutional debt.
- The AMSCs should be set up at every village to provide custom-hiring services to small farmers on a priority basis.
- Quality farm inputs like seed, fertilisers, and pesticides must be supplied to the farmers at subsidised prices.
- Rationalisation of subsidies, especially in favour of small farmers may control appreciating farm costs and making small farming viable.
- For alternative employment, the Mahatma Gandhi National Rural Employment Guarantee Scheme should be effectively implemented by ensuring stipulated annual employment of 100 days, rather than the existing 30 days, to each family in the state.
- Identifying and developing crop niches that will encourage allied activities in appropriate agro-climatic zones of the state, and developing cooperative primary processing and marketing units for crops and activities in these zones can help improve the economic well-being of the farmers.
- Effective irrigation facilities should be provided. Drip and sprinkle irrigation should be popularized. Canals should be built to reach deep into villages.
- Using Information technologies and electronic media (like DD Kisan channel) to spread awareness about government schemes and monsoon predictions.
- Skill Development of farmers, so that they can develop alternative sources of income. Government should initiate alternative employment generation programmes.
- Land pooling, where lands of small farmers can be pooled into a larger piece, and benefits can be maximized.
- Effective implementation of various government schemes like pradhan mantri krishi sinchai yojana, pradhan mantri fasal bima yojana and Soil Health Card scheme neighbours believe in its nuclear doctrine through effective confidence building measures.

DAILY QUIZ

1. “Kuril island “ recently in news is a disputed territory between

a) India and Indonesia	b) Russia and Ukraine
c) China and Japan	d) Russia and Japan
2. In the recent context ; “Cost disease” a term related to which of the following

a) Refers to increase in price even demand and supply match correctly
b) Refers to the increase in the wages of certain labourers even though their productivity or skill level has not risen commensurately

