

**DAILY  
CURRENT  
AFFAIRS  
ANALYSIS**



LAKSHYA ACADEMY®

**23 MAY 2024**

# 1 - Agreement on Migration and Mobility between Italy and India:

## GS II

### International Issues

- **About:**

- The agreement is expected to improve people-to-people relations between Italy and India while enhancing collaboration on matters pertaining to irregular migration.
- It promotes collaboration and exchange by facilitating movement for a range of groups, including businesspeople, skilled workers, students, and young professionals.

- **Important clauses:**

- Indian students wishing to pursue post-academic or vocational training in Italy and gain professional experience are eligible to apply for a 12-month temporary residency.
- Workers' Reserved Quotas: Under the current Flows Decree, the agreement specifies quotas for both seasonal and non-seasonal Indian workers, with a reserved quota range spanning the years 2023–2025.
- The annual "Flow Decree" (Decreto Flussi) issued by the Italian government establishes the cap on the number of non-EU nationals who are permitted to work and conduct self-employment in Italy.

- **Execution:**

- Unless discontinued, the agreement will automatically renew for a further five years.
- Its implementation will be overseen by a Joint Working Group (JWG), which will meet on a regular basis to assess progress and suggest helpful measures for efficient execution.

- **About:**

- Jutting out of southern Europe into the Adriatic, Tyrrhenian, Mediterranean, and other waterways is the boot-shaped peninsula known as Italy.

- **Associated Nations:**

- Italy shares international boundaries with Austria, France, San Marino, Slovenia, the Holy See (Vatican City), and Switzerland.
- Albania, Algeria, Croatia, Greece, Libya, Malta, Montenegro, Spain, and Tunisia are among the countries with whom Italy shares sea boundaries.

- Republic is the type of government.
  - Rome is the capital.
  - Currency: Euro
  - Principal Mountains: Apennines and Alps
  - Principal Rivers: Tiber, Po, Adige, and Arno
- **What Other Fields Does Italy and India Cooperate in?**
- **Historical Connections:**
    - Italy and India are young nations with long histories. Italian port cities played a significant role in the spice trade as trading hubs.
    - In the thirteenth century, the Venetian trader Marco Polo visited India as part of his eastern journeys and produced a report on his adventures.
  - **Political:**
    - India and Italy established diplomatic ties in 1947.
    - Italy and India upgraded their connection to a Strategic Partnership in March 2023.
  - **Financial:**
    - In 2022–2023, the two nations' bilateral commerce was valued at USD 14.25 billion.
    - Italy ranks among India's top five EU trading partners.
    - The primary products that India ships to Italy are iron ore, leather, textiles, motor vehicles, chemicals, jewels, and jewellery in addition to ready-made clothing.
    - Italy is a major importer of engineering goods, machine tools, metallurgical products, and general and speciality machinery.
  - **Safety:**
    - A forum called the India-Italy Military collaboration Group (MCG) was created to strengthen defence collaboration between the two nations.
  - **Source → The Hindu**

## **2 - Beneficiaries of the Viksit Bharat Sankalp Yatra Are Added to PM-Kisan:**

### **GS II**

#### **Government Policies and Interventions**

- **What is the Bharat Sankalp Yatra of Vikasit?**
- **About:**
  - It's a national programme to increase awareness through outreach initiatives in order to reach government scheme saturation. of India, encompassing all Nagar Panchayats, Urban Local Bodies, and Gramme Panchayats.
  - With the active participation of numerous Ministries and Departments of the Government of India, State Governments, and the Central Government, the campaign is being launched using a whole of government strategy. Institutions and Organisations.
- **Goals:**
  - Reach out to those who are less fortunate and who qualify for different programmes but have not yet benefited from them.
  - distributing information and raising awareness of programmes.
  - interaction with government programme beneficiaries through their sharing of personal narratives and experiences.
  - enrollment of prospective recipients using information gathered during the Viksit Bharat Sankalp Yatra.
- **What is the PM-Kisan, or PM Kisan Samman Nidhi Yojana?**
- **About:**
  - It was introduced to help land-holding farmers with their financial demands.
  - It started operating in December 2018.

- **Benefits to the finances:**

- Farmers' families nationwide receive a financial reward of Rs 6000/-per year, paid into their bank accounts in three equal installments every four months via the Direct reward Transfer (DBT) system.

- **The Scheme's Scope:**

- The programme was originally designed to assist Small and Marginal Farmers (SMFs) with holdings of up to two hectares of land; however, its purview was expanded to include all landholding farmers.

- **Finance and Execution:**

- The Indian government provides all of the money for this central sector scheme.
- The Ministry of Agriculture and Farmers Welfare is in charge of carrying it out.

- **Goals:**

- to augment the small- and marginal-farmers' financial needs in order to purchase different inputs that would guarantee healthy crops and yields that are appropriate for the expected farm revenue at the end of each crop cycle.
- to keep them safe from moneylenders so they can continue their farming endeavours and avoid them becoming victims of such costs.

- **PM-KISAN App for Mobile:**

- The Ministry of Electronics and Information Technology worked with the National Informatics Centre to create and design it.

- **Module for Physical Verification:**

- As per the guidelines specified under the system, a yearly physical verification of 5% of the beneficiaries is required.

- **What Difficulties Does PM-Kisan Face?**

- **Required Elements and Aadhaar Connection:**

- Farmers now have difficulties in meeting these requirements due to the complexity of the mandated land seeding laws and the obligation to connect Aadhaar with operational bank accounts.
- Access to PM-Kisan benefits may be impeded for farmers, particularly those residing in distant areas, by technological difficulties in meeting the Aadhaar linking and land planting requirements.

- **Outreach and Awareness:**

- It's possible that a large number of eligible farmers are still ignorant of the PM-Kisan programme or lack enough knowledge of the application procedure.
- Outreach programmes may find it difficult to connect with every member of the farming community, especially in isolated or marginalised areas, despite best efforts.

- **Accessibility of Technology:**

- Farmers' capacity to interact with the online processes necessary for PM-Kisan enrollment and compliance may be hampered by disparities in technological access, particularly smartphones and internet connectivity.

- **The Way Ahead:**

- For simplicity and efficiency, conduct a thorough evaluation of the Aadhaar linking requirements and the obligatory land seeding laws.
- Make use of technology to develop platforms that are easy to use for smooth compliance.
- Create community-based engagement initiatives to assist farmers who are at risk.
- Work together with NGOs, agricultural services, and local government to find and assist qualified farmers who are not aware of PM-Kisan benefits.

- **Source → *The Hindu***

### 3 - ISRO's X-ray polarimeter satellite:

#### GS II

#### Science and Technology

- **What is an XpoSat, or X-ray polarimeter satellite?**
- **Goal:**
  - XPoSat is intended to investigate X-ray polarisation in the medium X-ray band, providing information on the geometry and radiation mechanisms of astronomical sources.
  - Understanding the physics underlying these celestial bodies depends on this research.
- **Payloads:**
  - POLIX (Polarimeter Instrument in X-rays) and XSPECT (X-ray Spectroscopy and Timing) are the two primary payloads carried by the satellite.
  - About forty brilliant celestial sources will be observed by POLIX, while XSPECT will investigate the electromagnetic spectrum produced by various materials.
- **Progress:**
  - Completely constructed by the Raman Research Institute and the UR Rao Satellite Centre of ISRO, two Bengaluru-based organisations, XPoSat's construction started in 2008 and a formal agreement was inked with ISRO in 2015.
- **Worldwide Setting:**
  - As far as X-ray polarisation in the medium X-ray band is concerned, XPoSat is just the second mission in the world. Launched in 2021, NASA's Imaging X-ray Polarimetry Explorer (IXPE) was the first space agency mission of its kind.
- **Contribution of the Nation:**
  - After the 2015 launch of AstroSat and the recently launched solar mission Aditya-L1, XPoSat will be India's third space-based observatory. Its launch is regarded as a major advancement in Indian space science and astronomy.

- **How Will X Ray Study Celestial Objects and What Does It Mean?**

- Electromagnetic radiation with a wavelength of 0.01 to 10 nanometers is known as X-rays.
- An electric field and a magnetic field vibrating perpendicular to one another define electromagnetic radiation.
- The orientation of these two fields as the radiation travels across space is referred to as electromagnetic radiation polarisation.
- When X-rays scatter, they can become polarised. Additionally, polarised X-rays are generated when a magnetic field bends the path of a charged particle travelling quickly.
- Astronomers can learn about the direction and intensity of magnetic fields in astronomical objects by measuring the polarisation of X-rays with equipment such as POLIX. This in turn offers important new understandings of the properties and dynamics of pulsars, the areas surrounding black holes, and other X-ray-emitting cosmic events.

- *Source → The Hindu*

## 4 – Details of Lithium Reserves in India



LAKSHYA ACADEMY®

GS I

### Geography Issues

- **What is the lithium atom?**
- **About:**
  - An alkali mineral known as "white gold" is lithium. It is the lightest metal in the periodic table, a delicate, silvery-white metal.
- **Principal attributes:**
  - Elevated Reactivity
  - Minimal Density
  - Superior Electrochemical Characteristics
- **Top Producers and Occurrence:**
  - Minerals such as lepidolite, petalite, and spodumene naturally contain lithium.



- Lithium metal or its derivatives are produced by refining the recovered material from these minerals.
- China, Argentina, Chile, and Australia are the world's leading producers of lithium.
- Australia led the globe in the production of lithium mines in 2022. China came in third, followed by Chile.
- A vast lithium deposit believed to contain 18 million tonnes of lithium was recently found beneath the Salton Sea in California, United States.
- **Uses:**
  - Batteries: Rechargeable batteries, which power computers, cellphones, electric cars, and other gadgets, depend on lithium as a key component.
  - Glass and ceramics: Glass and ceramics are strengthened with lithium compounds to increase their heat resistance and durability.
  - Medicine: Mood stabilisers like lithium are used to treat bipolar disorder.
  - Lubricants: High-pressure and high-temperature applications employ lithium greases.
- **Lithium reserves in India:**
  - **Lithium finds increased dramatically in 2023:**
    - Large reserves (estimated at 5.9 million tonnes) discovered in the Salal-Haimna areas of the Reasi district in Jammu and Kashmir.
    - There are other reserves in the Jharkhand regions of Giridih and Koderma.
    - However, India has put up two blocks of lithium for auction: one in J&K and another in Chhattisgarh. The majority of India's domestic needs, in areas such as the production of lithium-ion batteries and other energy storage solutions, are fully supplied by imports. The estimated value of the import bill is ₹24,000 crore.
- **Source → The Hindu**