## GOVERNMENT POLICIES

- ❖ **Drone Insurance Policy**
- ➢ **CONTEXT: The nascent drone insurance market in India is seeing a flurry of activity. After HDFC Ergo, ICICI Lombard, Bajaj Allianz, and Tata AIG, public sector New India Assurance has launched its unmanned aircraft system insurance.**
- ➢ **How big is the drone market in India?**
- • A recent report indicated that drones and allied component industries can boost India's manufacturing potential by approximately $23 billion by 2030. The report emphasised the need for innovative and competitive manufacturing capabilities and a strong action plan to help India become a global hub for drone manufacturing by 2030
- • India's drone manufacturing industry crossed annual sales of Rs 60 crore in FY 2021 and is expected to grow to Rs 900 crore by FY 2024.
- ➢ **Drone Categories**
- • Nano: Less than or equal to 250 grams.
- • Micro: Greater than 250 grams and less than or equal to 2 kg.
- • Small: Greater than 2 kg and less than or equal to 25 kg.
- • Medium: Greater than 25 kg and less than or equal to 150 kg.
- • Large: Greater than 150 kg.
- ➢ **Flying restrictions in India**
- • A micro drone may not fly higher than 60 metres above ground level (AGL) or faster than 25 metres per second.
- • A small drone may not fly higher than 120 metres above ground level or faster than 25 metres per second.
- • Drones that are medium or large must fly in compliance with the conditions outlined in the DGCA's Operator Permit.
- • Prohibited zones are completely off-limits, whereas restricted areas require prior approval from the DGCA.
- • Yellow (controlled airspace), Green (no permission required), Red (flying not permitted).
- ➢ **What is covered under drone insurance?**
- • Insurance players are now offering drone coverage within the framework set by the Insurance Regulatory and Development Authority of India (IRDAI).
- • **Participants:** It will cover large aircraft to solo flying gliders and it will be offered to drone owners, operators, and manufacturers.
- • **Policy coverage:** The policy covers physical damage to the aircraft and its theft.
- • It also provides cover for accidental physical injury to the third party and/or damage to their property due to the aircraft's operations.
- • It is designed to cover fixed wing, rotor wing and hybrid UAS that can be controlled remotely (with pilot intervention) or autonomous drones (without pilot intervention). These aircraft are generally deployed for military and non-military applications, including surveillance, geography and infrastructure inspections and aerial photography.
- • It will provide coverage for the replacement or repair, accidental loss of or damage to the UAS arising from the risks covered, including disappearance if the UAS is unreported after the commencement of Flight.
- • Third-party liability coverage: It will cover legal liabilities like bodily damage or property damage claims to third parties arising out of the usage and operation of drones.
- ➢ **What are the regulations in the sector?**
- • The Director General of Civil Aviation (DGCA) initially offered coverage to drones within a visual line of sight (VLOS) and during the day. However, the regulator changed the guidelines to offer coverage beyond VLOS. Insurance regulator IRDAI asked insurers to offer drone insurance coverage in February 2021.
- • Globally, drones are classified as 'aircraft' and aviation regulators have stepped in to regulate the sector. The Government of India has brought in policies (Drone Policy 1.0, 2018 and Drone Policy 2.0, 2019) which nudged the DGCA to come out with Regulations – Civil Aviation Regulation CAR 1.0, 2018 and recently, Draft Unmanned Aerial Vehicle Systems, 2020.
- ➢ **Way Forward**
- ➢ The aim is to Make India the drone hub of the world there is a need for innovative and competitive manufacturing capabilities and a strong action plan to help India become a global hub for drone manufacturing by 2030.
- ➢ Need of the hour is to generate a strong demand, increasing manufacturing, drawing investments and facilitating exports.
- ➢ The government is carving out drone corridors to facilitate delivery of cargo deliveries.

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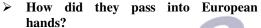
## IMPORTANT INTERNATIONAL AFFAIRS

❖ **Benin Bronzes**

➢ **CONTEXT: Germany has returned 20 Benin Bronzes that were looted in the 19th century to Nigeria at a ceremony that was held in Abuja, the country's capital, recently.**

• The return of these precious artefacts took place after Germany in July 2022 signed an agreement with Nigeria, pledging to transfer the ownership of around 1,100 Benin Bronzes.

• The German decision came amid renewed calls worldwide for western museums and nations to return artefacts plundered during the colonial period to their countries of origin.

• Earlier in October 2022, the prestigious Smithsonian Museum returned 29 Benin Bronzes to Nigeria after launching an institution-wide review of its practices and ethical code.

➢ **What are the Benin Bronzes?**

• From intricately decorated cast plaques to animal and human figurines, the Benin Bronzes are a group of over 3,000 sculptures and artworks from the ancient Kingdom of Benin in present-day Nigeria, which dates back to at least the 16th century. These historical pieces were looted by British colonial forces during their infamous raid on Benin City in 1897.

• Several of these pieces had been specially commissioned for the kings or Obas, and Queen Mothers of the kingdom. These artefacts provide insight into the culture of the Benin Kingdom as well as its relationships with neighbouring states. Some of these pieces also point to the kingdom's relationship with Europeans.

➢ **How did they pass into European hands?**

• In 1897, after seven British delegates were killed on their way to Benin City for a trade mission, the British launched a retaliatory military expedition which ultimately resulted in the city being captured. The Benin Royal Palace was partially destroyed and looted — thousands of artefacts were taken back to Great Britain.

• Since then, the items have been scattered around the world. Nigerian historians and activists have long been trying to get them back.

• The 20 Benin Bronzes returned by Germany recently include an 18th-century throne stool and a sculpture commemorating a Benin Oba (king). These items will be displayed in a pavilion, which is being built in Benin City, next to the under-construction Edo Museum of West African Art.

➢ **Why did Germany decide to return the artefacts?**

• The call for returning the Benin Bronzes got momentum after French President Emmanuel Macron in a historic speech during his visit to Burkina Faso in 2017 promised to return stolen or looted artefacts to their countries of origin.

• It was followed by another crucial moment when the Humboldt Forum (inaugurated in 2021, the museum in Berlin is dubbed as Germany's equivalent to the Louvre or the British Museum ) came under intense criticism for its ownership of looted art and other artefacts, including about 500 Benin Bronzes.

• In February 2019, in response to rising pressure from the global art community, then German Chancellor Angela Merkel invited a small number of historians and experts to discuss restitution. This culminated in the setting of certain guidelines for repatriating colonial-era artefacts that specified that all the wrongfully acquired objects should be returned to their rightful owners.

• In 2021, Germany signed a Memorandum of Understanding with Nigeria, after several rounds of negotiation, and later came to an official agreement to return more than 1,000 Benin Bronzes that were on display in the country's museums. On the occasion of announcing this agreement in July 2022, the European nation gave back two Benin Bronzes, including a head of a king, dating from the 18th century, and an intricately designed 16th-century plaque.

• After the transfer of 20 more of the artefacts on December 20, it is expected that many more will reach Nigeria by 2023. According report, some of the Benin Bronzes will stay in Germany on long-term loans.

➢ **Which other looted artefacts have countries demanded to be returned?**

• There have been repeated demands for the return of the Koh-i-Noor diamond, one of the largest and perhaps the most storied diamonds in the world, which was taken away by the British East India Company in 1849 and is now part of the British crown jewels.

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- The other well-known example is the Rosetta stone. Currently displayed at the British Museum, it is an ancient Egyptian stone that features the inscriptions that formed the basis of Egyptology itself. The stone was discovered by the army of Napoleon Bonaparte near the town of Rashid (Rosetta) in 1799 during the emperor's campaign to conquer Egypt. It was passed on to the British after they defeated the French in 1801.

## PRELIMS

### 1. Facial Recognition Technology

➢ **CONTEXT: Minister of State for Electronics and Information Technology, Shri Rajeev Chandrasekhar in a written reply to a question in Rajya Sabha gave information about facial recognition technology and manages data related to such technology.**

➢ **About**

- Facial recognition is an algorithm-based technology which creates a digital map of the face by identifying and mapping an individual's facial features, which it then matches against the database to which it has access.
- In the Automated Facial Recognition System (AFRS), the large database (containing photos and videos of peoples' faces) is used to match and identify the person.
- Image of an unidentified person, taken from CCTV footage, is compared to the existing database using Artificial Intelligence technology, for pattern-finding and matching.

➢ **Working:**

- The facial recognition system works primarily by capturing the face & its features through the camera and then using various kinds of software to reconstruct those features.
- The captured face along with its features is stored into a database, which can be integrated with any kind of software that may be used for security purposes, banking services, etc.

➢ **Uses:**

- 1:1 verification: The facial map is obtained for the purpose of matching it against the person's photograph on a database to authenticate their identity. For example, 1:1 verification is used to unlock phones.
- 1: n identification: The facial map is obtained from a photograph or video and then matched against the entire database to identify the person in the photograph or video. Law enforcement agencies such as the Delhi Police usually procure FRT for 1: n identification.

➢ **Need:**

- Authentication: It is used for identification and authentication purposes with a success rate of almost 75%.
- Force Multiplier: In India, where there are just 144 constables per 1 lakh citizens, this can act as a force multiplier. It neither requires too much manpower nor regular upgradation.
- Hence, this technology coupled with the present manpower in place can act as a game-changer.

### 2. Startup India Seed Fund Scheme

➢ **CONTEXT: 656 Startups Supported by Approved Incubators under Startup India Seed Fund Scheme (SISFS), this information was provided by Minister of State in the Ministry of Commerce and Industry, Shri Som Parkash in reply to a parliamentary question.**

➢ **Startup India**

- The Startup India endeavour of the Government of India envisages creating a robust Start-up ecosystem in the nation for fostering invention and equipping opportunities for developing entrepreneurs.
- The Hon'ble Prime Minister unveiled an Action Plan with 19 action matters for the Startup India initiative on January 16, 2016.
- This Action Plan laid a pathway for designing a facilitative ecosystem for Startups in India.
- Henceforth, many exercises have been essayed to promote Startups.
- Startup India Seed Fund Scheme (SISFS) is one such scheme that delivers economic aid to early-stage startups.

➢ **About Startup India Seed Fund Scheme**

- Easy availability of finances is critical for entrepreneurs at the early steps of the evolution of an enterprise.
- Funding from angel investors and experience capital enterprises becomes open to startups only after the evidence of the conception has been delivered.
- Also, banks provide loans only to asset-backed applicants. It is paramount to provide seed funding to startups with ingenious ideas to lead proof-of-concept trials.
- DPIIT has created Startup India Seed Fund Scheme (SISFS) with effect from 1st April 2021, a corpus of Rs. 945 crores to deliver a financial contribution to startups for Proof of Concept, prototype development, product trials, market entry, and commercialization.

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- It will sustain an estimated 3,600 entrepreneurs through 300 incubators in the following 4 years.
- The Seed Fund will be paid to qualified startups through suitable incubators across India.

➢ **Objectives**
- The Indian startup ecosystem suffers from capital inadequacy in the seed and 'Proof of Concept' growth phase.
- The capital needed at this set usually presents make-or-break circumstances for startups with good business ideas.
- Many innovative business concepts fail to take off due to the scarcity of this vital capital needed early for proof of concept, prototype development, product trials, market entry and commercialisation.
- Seed Fund proposed to such promising subjects can have a multiplier impact in the verification of business visions of multiple startups, leading to employment generation.

➢ **Components**
- An Experts Advisory Committee (EAC) has been formed by Department for Promotion of Industry and Internal Trade (DPIIT), which will be accountable for the overall execution and monitoring of the Startup India Seed Fund Scheme.
- The EAC will assess and select incubators for distribution of Seed Funds, monitor progress, and take all required actions for efficient utilisation of funds towards the completion of pursuits of the Startup India Seed Fund Scheme.
- 3600 Startups anticipated profiting from SISFS
- 300 Virtual Incubators to be facilitated for sustaining startups
- INR 945 crore corpus split over 4 years, starting FY2021-22, to be spent through suitable incubators
- Year-round 'Call for Applications' for Incubators and Startups
- No obligatory physical incubation and Startups can apply to 3 incubators simultaneously
- PAN-India startup agenda

➢ **Process of the SISFS**
- Department for Promotion of Industry and Internal Trade (DPIIT) has created an Experts Advisory Committee (EAC) to conduct and survey the Startup India Seed Fund Scheme.
- The EAC will choose qualified incubators who will be delivered grants of upto Rs 5 Crores each.
- In turn, the designated incubators will provide startups with up to Rs 20 lakhs for verification of Proof of Concept, prototype development, and product trials to startups.
- Moreover, up to Rs 50 lakhs shall be delivered to the startups for market entry, commercialization, or scaling up through exchangeable debentures or debt-linked instruments.
- Explicit guidelines of the Startup India Seed Fund Scheme are open on the Startup India portal.
- It is expected that the startups that obtain support at their early stages shall form substantial employment possibilities for everyone.

3. **'KAVACH' System**
➢ **CONTEXT: Minister of Railways, Communications and Electronic & Information Technology, Shri Ashwini Vaishnaw in a written reply to a question in Rajya Sabha gave information about the implementation of KAVACH system**
- Indian Railways has indigenously developed an automatic train protection system rechristened as 'Kavach' (Train Collision Avoidance System), to prevent accidents due to human error resulting in Signal Passing at danger and over-speeding.
- Keeping in view the complexities involved in implementation, which require all Rolling Stock, way side stations and track to be equipped with 'Kavach', it has been decided to implement 'Kavach' in a phased manner. So far, 'Kavach' has been deployed for 1,455 Route Kms on South Central Railway with 77 nos. of locomotives. Currently, 'Kavach' work is in progress on Delhi-Mumbai & Delhi –Howrah corridors (3000 route Kms).

➢ **About**
- Since 2012, the railway system has been working on a self-protection program known as Train Collision Avoidance System (TCAS), that has since been renamed Kavach, which means "armour."
- KAVACH is an anti-collision system designed in India to efficiently minimize train fatalities.
- This anti-collision mechanism minimises the possibilities of a mistake to a one-in-10,000-year margin.
- As part of the improved technology, radio frequency equipment is put on rail tracks, signalling devices on railway tracks, and train motors to constantly transmit messages back and forth in real time to show that the route upon which the train is running is clear of obstacles.

➢ **What makes the new technology different from Indian Railways' previous system?**
- Since 2002, Indian Railways has already been employing the 'Raksha Kavach' anti-collision system.

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- While the former technology is still in operation in many Indian Railways trains, the upgraded system will be developed throughout all trains within the next five years.
- The new Kavach program includes everything from railway stations to signalling devices and even train types, whereas the previous system or auxiliary warning system solely operates on specific trains and locomotives.
- The new framework is more precise in transmitting signals to trains and is quicker because it operates in real time.

## ANSWER WRITTING

**Q. What are the main bottlenecks in upstream and downstream process of marketing of agricultural products in India?**

Agriculture is the backbone of the Indian economy. Even, with the growth of other sectors, agriculture still continues to play a dominant part in the overall economic scenario of India. Agricultural marketing is mainly a state entitlement with the Central Government providing support under central sector schemes. The upstream process of agricultural marketing includes inputs to agriculture like seeds, machinery, and technology and the downstream process includes the food processing industry.

However, there are still many challenges in upstream and downstream process of agricultural marketing:

- In the upstream process, lack of coverage of reform policies is one of the main hindrances in addressing the issues of agricultural marketing. For example, only some States have adopted the Agricultural Produce and Livestock Marketing (APLMA) Act fully.
- Contract farming has been taken out of the Agricultural Produce Marketing Committee (APMC) domain, citing conflict of interest and this creates lacunae in the upstream as well as downstream process.
- Another downstream bottleneck is flawed MSP provision which forces the private traders to buy produce at or above MSP or penalizing for not doing so, which can kill the private markets for agricultural produce.
- There should be effective provision of procurement by the State and its agencies with the involvement of local institutions like Primary Agricultural Credit Societies (PACS) and producer companies as it effects sourcing activities and purchasing activities in upstream and downstream process.
- Most disappointingly, Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Act, 2017 (APLMA, 2017) ignores the vexed issue of the role of Arthiyas (commission agents or CAs) in the APMCs and maintains them as central agents in the system. This effects the whole agricultural marketing process.

However, with some reforms like the removal of entry barriers, involvement of other stakeholders and electronic settlement of sales, the process of marketing of agricultural products can be improved.

Addressing the challenges of the agricultural market is complex, yet doable, as the doubling of farmers' income cannot come without developing a thriving market of agriculture. Hence, it is high time that focus must shift from agricultural production to agricultural marketing.

## MCQs

1. The identity platform 'Aadhaar' provides open "Application Programming Interfaces (APIs)". What does it imply?
   1. It can be integrated into any electronic device.
   2. Online authentication using iris is possible.
   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

2. With reference to the KAVACH, consider the following statements:
   1. It is an indigenously developed ATP system by DRDO in collaboration with Indian Railway.
   2. It is meant to provide protection by preventing trains to pass the signal at Danger (Red) and avoid collision.
   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

3. In addition to fingerprint scanning, which of the following can be used in the biometric identification of a person?
   1. Iris scanning      2. Retinal scanning      3. Voice recognition
   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**

4. Consider the following statements with reference to Startup India Seed Fund Scheme
   1. The startup which has received monetary support under any other Central or State Government scheme would be eligible under this scheme.
   2. The scheme was launched by the Department for Promotion of Industry and Internal Trade (DPIIT).

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Select the correct statement using the codes given below

a) 1 only           **b) 2 only**           c) Both 1 and 2           d) Neither 1 nor 2

5. Consider the following pairs
   1. Koh-i-Noor diamond  - India
   2. Rosetta stone - Turkey
   3. Benin Bronzes – Kenya

   Which of the above pairs is/are correctly matched?

   **a) Only one pair**                    b) Only two pairs
   c) All the three pairs              d) None of the above pairs

6. Consider the following statements with respect to Minimum Support Price (MSP):

   1. MSP is computed on the basis of the recommendations made by the Commission for Agricultural Costs and Prices (CACP).
   2. Currently Copra is covered under the MSP.
   3. MSP for food grains is always kept necessarily higher than the market price of the grains.

   Which of the statements given above is/are correct?

   a) 1 only           **b) 1 and 2 only**           c) 2 and 3 only           d) 1, 2 and 3

7. Consider the following statements about National Company Law Appellate Tribunal (NCLAT):
   1. It is a quasi-judicial body established under the Companies Act 2013
   2. A company can approached the National Company Law Appellate Tribunal (NCLAT) challenging the Competition Commission of India's order on unfair business practices
   3. An appeal against the orders passed by NCLT can be made only in Supreme Court

   Which of the above statements is/are correct?

   a) 1 and 3 only        b) 2 and 3 only        **c) 1 and 2 only**        d) 3 only

8. Recently a study shows that U.P. and T.N. struggle with encroachment in Centrally protected monuments, sites with reference to protection of centrally protected monuments, sites consider the following statements
   1. The ASI regulates construction around the protected monuments through the Ancient Monuments and Archaeological Sites and Remains (Amendment) Act, 2010.
   2. The Act prohibits construction within 100 metres of a protected monument.
   3. Recent Proposed amendments seek to do away with the ban on construction within 100 metres of a monument and only regulate construction within 100-200 metres, under the Act that protects monuments and sites over 100 years old.

   Which of the above statement/s is/are correct?
   a) 1 and 2 only
   b) 2 and 3 only
   c) 1 and 3 only
   **d) 1,2 and 3**

9. Recently Nasal COVID vaccine developed by Bharat biotech made available as booster dose, with reference to this consider the following
   1. Unlike Covaxin, which is an activated coronavirus, iNCOVACC is droped in nasal.
   2. iNCOVACC is an adenovirus-vectored vaccine with a prefusion stabilised spike protein.

   Which of the above statement given above is/are not correct?

   **a) 1 only**
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

10. Recently government has decided to provide vaccines for the prevention of cervical cancer to girls aged between 9 and 14 years through their schools, with reference to this consider the following statements
    1. Prevention through vaccination is one of the pillars of the global strategy adopted by the World Health Organisation (WHO) for the elimination of cervical cancer.
    2. The Human Papilloma Virus (HPV) is linked to the majority of cervical cancers.

    Which of the above statements is/are correct?

    a) 1 only
    b) 2 only
    **c) Both 1 and 2**
    d) Neither 1 nor 2