

**DAILY  
CURRENT  
AFFAIRS  
ANALYSIS**



LAKSHYA ACADEMY®

**14 OCTOBER 2023**

# 1 – About PUSA 44 Paddy Variety:

## GS III

### Indian Agriculture

- **Context:**

- The announcement made by the Chief Minister of Punjab regarding the prohibition of PUSA-44 paddy cultivation in the state starting from the upcoming year has gained attention in the news.

- **The following are important details:**

- At a certain juncture, this particular strain included approximately 70 to 80 percent of the overall land area dedicated to paddy farming within the state.
- PUSA-44 was established in the year 1993 by the Indian Council of Agricultural Research (ICAR), which is headquartered in Delhi.
- Following a successful harvest with a substantial yield, the decision was made to expand the cultivation area of PUSA-44 by employing seed multiplication techniques.
- By the conclusion of the 2010s, it had attained extensive appeal among agricultural practitioners throughout the Punjab region, including an estimated 70 to 80% of the land dedicated to the growth of paddy crops.
- Nonetheless, the Agriculture Department and Punjab Agricultural University, institutions that have consistently refrained from endorsing this practise from its inception, have recently intensified their efforts to dissuade farmers from engaging in it, citing concerns over the depletion of groundwater resources.
- In 2018, the Punjab government implemented a reduction in the area allocated to PUSA-44, resulting in a decrease to 18 percent of the total paddy area. However, in the subsequent year, there was a comeback, with the allocation for PUSA-44 increasing to 22 percent.

- **What is the rationale for the imposition of the ban?**

- PUSA-44 is classified as a long-duration cultivar, with a maturation period of approximately 160 days.
- This particular variety exhibits a longer growth cycle of approximately 35 to 40 days compared to other types, necessitating an additional 5-6 irrigation cycles.
- In light of Punjab's significant groundwater depletion and the limited availability of short-duration paddy varieties, the government has implemented a prohibition on the cultivation of this particular variety with the objective of conserving one month's worth of irrigation water.
- The cultivation of rice, a crop that requires significant amounts of water, is expanding in the state.

- A total of 102 out of the 141 agricultural development blocks in the state were designated as 'black zones', indicating that the pace of groundwater depletion surpassed the rate of recharge. Consequently, water in these areas was found at depths of 200 to 300 feet or even deeper, necessitating the use of deep tube wells for extraction.
- This particular variety is also recognised for its contribution to the persistent problem of stubble burning in the state.
- The residual straw or stubble of the rice crop cultivated during the Kharif season (spanning from July to October) is typically retained in the fields in preparation for the subsequent planting of winter crops during the rabi season (occurring from November to March).
- In order to prepare their fields for the cultivation of the upcoming season's crops, farmers engage in the practise of stubble burning.
- The conjunction of specific wind patterns and many contributing elements is responsible for the heightened levels of air pollution observed in the majority of northern regions of India during the winter season.
- *Source → The Hindu*

## 2 – Indigenization of Defence Sector:



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GS II

### Defence related issues

- **Context:**
- The announcement of the fifth Positive Indigenisation List of 98 goods by the Defence Minister of India has been reported in the press. This list outlines the procurement of these items by the three Services from domestic sources, following a staged approach and according to set timetables.
- **The following are important details:**
- The aforementioned list places particular emphasis on the practise of import substitution for components of significant systems, in addition to the ongoing development of crucial platforms, weapon systems, sensors, and munitions.
- During the plenary session of "Swavlamban 2.0," a two-day seminar organised by the Naval Innovation and Indigenisation Organisation (NIIO):
- A total of 76 challenges were initiated within the framework of the 10th Defence India Start-up Challenges (DISC-10) and DISC 10 PRIME of Innovations for Defence Excellence (iDEX).

- Under the iDEX (Innovations for Defence Excellence) initiative, there are five problem statements pertaining to Fauji.
  - Furthermore, the INDUS X initiative introduced two challenges as part of the INDUS-X Mutual Promotion of Advanced Collaborative Technologies (IMPACT) programme.
- **The indigenisation list comprises the following items:**
    - The subject of discussion pertains to a technologically advanced ground-based military vehicle designed for combat operations involving infantry forces.
    - Articulated all-terrain vehicles (ATVs) are a type of vehicle that possess the capability to traverse various terrains.
  - **There exist various classifications of unmanned aerial vehicles (UAVs):**
    - The medium-range precision kill system for artillery refers to a technology that enables accurate targeting and engagement of targets at intermediate distances using artillery platforms.
    - The purpose of this study is to evaluate the test equipment utilised for the guided weapon system of T-90 S/SK tanks.
  - **Radar systems:**
    - The subject of interest pertains to the provision of armour plates for the cabin nose area of the Mi-17 helicopter.
    - The development of an automated mobile test system for the OSA-AK-M air defence system is being pursued.
    - The utilisation of gravity rollers in the context of the Mi-17V5 helicopter and its associated applications.
    - The P-8I and MiG 29-K aircraft are equipped with flares.

### **3 – Transplantation of Uterus:**

#### **GS III**

#### **Biotechnology related issues**

- **Context:**

- In recent news, a group of medical professionals in the United Kingdom successfully performed the inaugural uterine transplant procedure in the country.
- **What is the medical procedure known as a uterine transplant?**
- In contrast to heart or liver transplants, uterine transplants do not possess the same life-saving nature.
- In contrast, these procedures bear resemblance to limb or skin transplants, as they contribute to enhancing the overall well-being of patients.
- Uterus transplantation procedures have demonstrated efficacy in addressing the reproductive needs of women who experience uterine absence or dysfunction.
- India is among a limited number of nations that have achieved a favourable outcome in the field of uterine transplantation.
- The success of a transplant is assessed by surgeons using a three-stage process.
- During the initial stage of pregnancy, medical professionals proceed with the transfer of cryopreserved embryos, which have been prepared through the process of in vitro fertilisation, into the uterus of the recipient.
- Similar to pregnancies following organ transplants in women, there exists an increased susceptibility for uterine rejection, spontaneous abortion, intrauterine mortality, low birthweight, or early birth.
- The ultimate phase of achieving achievement is undoubtedly the attainment of a successful childbirth.
- One of the primary concerns that arise in this context are the challenges that need to be addressed
- **Adverse consequences associated with pharmaceutical substances:**
- In order to mitigate the risk of transplant rejection, the receiver must adhere to a regimen of immunosuppressive medications.
- The medications are carefully chosen to ensure that they do not pose any risk to the development of the foetus at any point.
- Immuno suppressants are associated with adverse consequences, such as renal damage and bone marrow toxicity.
- Additionally, there is an increased susceptibility to the development of diabetes and cancer.
- Due of these aforementioned factors, it becomes necessary to perform a subsequent removal of the uterus.
- **There is a significant financial burden associated with this:**
- It is advisable for the recipient to undergo regular postoperative consultations with medical professionals for a minimum duration of ten years subsequent to the surgical removal of the uterus. These follow-up appointments are crucial in monitoring and identifying any potential long-term adverse effects associated with the administration of immunosuppressant medications.

- *Source → The Hindu*

## 4 – Sammakka Sarakka University:

### GS II

#### Education related issues

- **Context:**

- The reason for the prominence of a certain topic in current news coverage is:
- The approval for the establishment of the Sarakka Central Tribal University in Telangana's Mulugu district was granted by the Union cabinet.
- **The narrative surrounding Sammakka and Sarakka:**
- According to historical accounts, it is believed that Sammakka was wedded to Pagididda Raju, a prominent feudal leader of the Kakatiya dynasty, which had dominion over the Warangal region in the Deccan.
- The individual in question possessed a family consisting of two female offspring, referred to as Sarakka or Saralamma and Nagulamma, as well as one male offspring named Jampanna.
- During the conflict with the regional authorities over taxation, Saralamma perished, while Sammakka retreated to the nearby hills, leading the local indigenous population to speculate that she underwent a transformation into a scarlet receptacle.
- Mulugu has a biennial celebration known as the Sammakka Saralamma Jatara, which is widely regarded as one of the largest congregations of indigenous communities globally.
- The event serves as a commemoration of the historical conflict between a mother-daughter combination during the 13th century, who engaged in resistance against the imposition of taxes on the Koya people by local rulers.
- The Jatara, also known as yatra or pilgrimage, commences at Medaram, where the Koya priests officiate the rites in adherence to their customary practises and traditions.
- Throughout the years, the Sammakka Saralamma Jatara has evolved into a significant Hindu religious festival, comparable in scale to the renowned Kumbha Mela. It is widely considered that the Sammakka Saralamma Jatara garners the highest attendance of devotees among all festivals in the country.
- According to estimates, the festival witnessed an attendance of approximately 8 million individuals in 2008, which subsequently increased to 10 million in 2012.
- The event is commonly known as the Kumbh Mela among indigenous communities.

- **The political and social significance:**

- In light of the significant attendance at the Samakka-Sarakka Jathara, it was officially designated as a state festival in 1996.
- Prior to 1998, the exclusive means of transportation to access Medaram, the location of the event, was limited to the utilisation of bullock carts.
- However, in 1998, the state government, specifically the undivided Andhra Pradesh, undertook the construction of a road that was suitable for motor vehicles.
- Subsequently, the Sammakka Sarakka Jathara has attained global recognition as one of the most renowned tribal festivals, attracting a substantial congregation of approximately 15 million devotees from diverse tribal and non-tribal backgrounds. Participants hailing from regions such as Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Odisha, Maharashtra, Karnataka, and Jharkhand actively engage in this festivity.
- The celebration garners consistent involvement from both the Ministry of Tribal Affairs and the state government of Telangana.
- The Ministry of Tourism, as a component of the Tribal Circuit within the Swadesh Darshan Scheme, has allocated a sum of Rs. 75.88 crore for the comprehensive advancement of a tribal circuit encompassing Mulugu-Laknavaram-Medavaram-Tadvai-Damaravi-Mallur-Bogatha Waterfalls, which includes the revered Sammakka-Sarakka temple.
- The Ramappa Temple, designated as a UNESCO World Heritage Site, is situated approximately 15 kilometres away from the town of Mulugu.
- *Source → The Hindu*

## **5 – About Wagh Nakas:**

### **GS II**

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

- **Context:**

- The Cultural Affairs Minister of Maharashtra has entered into a memorandum of understanding (MoU) with the Victoria and Albert Museum in London. The objective of this agreement is to facilitate the repatriation of the renowned wagh nakh, belonging to Chhatrapati Shivaji Maharaj, to the state of Maharashtra.
- **The wagh nakh refers to a traditional weapon originating from India:**



- The wagh nakh, colloquially known as "tiger claws," is a mediaeval dagger characterised by its claw-like design. This weapon was widely utilised throughout the Indian subcontinent.
- The weapon was constructed with the intention of being worn either over the knuckles or concealed beneath the palm. It comprised of a glove or a bar, to which four or five curved blades were attached.
- The object in question served as a means of personal protection or covert assault, possessing the capability to effortlessly penetrate both skin and flesh.

• **What role does the wagh nakh play in the mythology of Chhatrapati Shivaji Maharaj?**

- One notable historical instance showcasing the utilisation of the wagh nakh is found in the narrative recounting the demise of Afzal Khan at the hands of Shivaji.
- Khan served as a military commander inside the Adil Shahi Sultanate of Bijapur.
- Afzal Khan, having achieved notable accomplishments in the southern regions, was appointed by the Sultan to lead a formidable military force with the objective of suppressing the Maratha figurehead.
- During the encounter, Khan, under the pretence of embracing him, made an attempt to stab the Maratha leader.
- However, Shivaji, utilising his protective armour, effectively reacted against his opponent Khan by employing the wagh nakh, a weapon that resulted in the evisceration of Khan.

• **By what means did the wagh nakh find its way to London?**

- The armament was introduced to the United Kingdom by James Grant Duff (1789-1858), an official of the East India Company.
- From 1818 to 1822, Duff served as the Company Resident, often known as the political agent, of the Satara State.

• **What are the reasons for the resurgence of the wagh nakh?**

- The colonisers transported invaluable relics of historical and cultural worth to Europe, either as plunder or as mementos.
- The act of presenting gifts to Europeans by indigenous was characterised by a dynamic of subjugation rather than voluntary selection, as exemplified by the gift bestowed upon Grant Duff by the Peshwa.
- Museums around Europe and the Western world have a plethora of artefacts that were obtained via colonial exploitation. In recent times, there has been an escalating movement advocating for the repatriation of these relics to their respective areas of origin.
- The Indian government has formally requested the repatriation of the Koh-i-noor diamond, which is currently housed among the Crown Jewels of the British monarchy, based on these justifications.



- The current possession of the wagh nakh is temporary, as it is on loan and will be returned to the Victoria and Albert Museum after a period of three years.
- *Source* → *The Hindu*



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