

28 August, 2023

SVAMITVA Scheme

Context: SVAMITVA Scheme by the Ministry of Panchayati Raj wins 2023 National e-Governance Gold Award for Citizen-Centric Tech Application.

- SVAMITVA Scheme is a Central Government effort for integrated property validation in rural India.
- The initiative employs advanced drone technology for mapping villages and validating property.
- This large-scale exercise covers all villages in the country, benefiting numerous rural property owners.
- Launched on April 24, 2020, coinciding with National Panchayat Day.
- The Ministry of Panchayati Raj (MoPR) is responsible for overseeing the scheme.

About the Scheme

- SVAMITVA stands for Survey of Villages and Mapping with Improvised Technology in Village Areas.
- The scheme's objectives will be executed through collaboration among the Revenue Department, Land Records Department, State Panchayati Raj Department, and the Nodal Ministry in each state.
- The scheme aims to offer a comprehensive property validation solution for rural India.
- Government authorities will issue SVAMITVA Property cards to landowners as part of the scheme.
- Demarcation of rural inhabited areas will be carried out using Drone Surveying technology and Continuously Operating Reference Station (CORS).
- This approach will allow homeowners to leverage their houses for loans and other financial needs.
- Over a span of 4 years (2020-2024), drone-based mapping will gradually cover all villages.
- The scheme's initial phase is applicable in 6 states: Haryana, Karnataka, Madhya Pradesh, Maharashtra, Uttar Pradesh, and Uttarakhand.
- The Central Government funds the scheme, allocating Rs 79.65 crores for the pilot phase.

Activities under the Scheme

- Continuous Operating Reference System (CORS) Establishment:
 - CORS is a network of reference stations that acts as a virtual base station.
 - Provides real-time access to high-accuracy network RTK corrections for precise positioning.
 - Offers centimetre-level horizontal positioning for accurate geo-referencing, ground truthing, and land demarcation.
- Large Scale Mapping with Drones:
 - Survey of India employs drone surveys to map rural inhabited areas.
 - Generates high-resolution and accurate maps to establish property ownership rights.
 - Data from these maps is used to issue property cards to rural household owners.
- Awareness Program:
 - s rural population about the surveying process and its advantages.
- Program Management Unit:
 - Setup at both National and State levels to oversee the scheme's implementation.
- Scheme Dashboard and Integration:
 - Develops and maintains a scheme dashboard.
 - Integrates drone survey spatial data and maps with the Ministry's spatial planning application.
 - Supports local-level planning based on this integrated data.

Objectives

- **Financial Stability:** Enables using rural land as an asset for loans and financial benefits.
- **Improved Land Records:** Addresses poor land division and records by creating accurate records.
- **Property Tax Calculation:** Helps determine property tax, benefiting Gram Panchayats or state treasury.
- **Effective Government Use:** Establishes survey infrastructure and GIS maps for government departments.
- **Supporting Development Plans:** Enhances Gram Panchayat Development Plan using GIS maps.
- **Dispute Resolution:** Helps settle legal and property disputes in rural areas.

6th Census Report on Minor Irrigation (MI) Schemes

Context: The 6th Census Report on Minor Irrigation (MI) Schemes has been released by the Ministry of Jal Shakti.

- Ministry of Jal Shakti released the 6th Census Report on Minor Irrigation (MI) Schemes.
- In the country, there are 23.14 million MI schemes: 21.93 million (94.8%) are Ground Water (GW), and 1.21 million (5.2%) are Surface Water (SW) schemes.
- Uttar Pradesh holds the most MI schemes, followed by Maharashtra, Madhya Pradesh, and Tamil Nadu.

Face to Face Centres



28 August, 2023

- Leading states in GW schemes include Uttar Pradesh, Maharashtra, Madhya Pradesh, Tamil Nadu, and Telangana.
- In SW schemes, Maharashtra, Karnataka, Telangana, Odisha, and Jharkhand have the highest share.
- Dug-wells, shallow tube wells, medium tube wells, and deep tube wells make up GW schemes, while SW schemes include surface flow and surface lift schemes.
- The 6th MI census saw an increase of around 1.42 million MI schemes compared to the 5th Census.
- Dug-wells have the highest share, followed by shallow tube-wells, medium tube-wells, and deep tube-wells.
- Private ownership accounts for 96.6% of all MI schemes, with 98.3% in GW schemes and 64.2% in SW schemes.
- The census collected data on the gender of MI scheme owners, revealing 18.1% are owned by women in individually owned schemes.
- 60.2% of schemes have a single source of finance, with 39.8% having more than one source.
- The 6th MI census was conducted under the "Irrigation Census" scheme, delayed by the Covid-19 pandemic.
- The report provides valuable insights for planners, policymakers, researchers, scientists, administrators, and those involved in irrigation and agricultural development in the country.

Irrigation Schemes in India

- **PMKSY-AIBP and CAD&WM:**
 - During 2016-17, 99 ongoing major/medium irrigation projects and 7 phases were included under PMKSY-AIBP with CAD&WM.
 - No new projects have been added since 2016 under this scheme.
- **PMKSY-HKPP-SMI:**
 - PMKSY-HKPP's Surface Minor Irrigation (SMI) sub-component included 1,321 schemes from 2018-21.
- **PMKSY-HKPP-RRR of Water Bodies:**
 - PMKSY-HKPP's Repair, Renovation, and Restoration of Water Bodies (RRR) sub-component covered 395 water bodies from 2018-21.
- **PMKSY-HKPP-Ground Water (GW):**
 - Since 2019, 15 projects were approved under PMKSY-HKPP's Ground Water (GW) sub-component during 2018-2021.
- **PMKSY-Per Drop More Crop (PDMC):**
 - PMKSY-Per Drop More Crop covered 32.697 lakh hectare under micro-irrigation in this period.
- **PMKSY-Watershed Development Component (WDC):**
 - Department of Land Resources initiated 6,382 projects under PMKSY-WDC.
- **Special Package for Irrigation Projects in Maharashtra:**
 - A special package for financial assistance was launched in July 2018 by the Government of India.
 - This addresses agrarian distress by completing 83 Surface Minor Irrigation (SMI) projects and 8 Major/Medium irrigation projects in drought-prone areas of Maharashtra by 2023-24.

B20 Summit

Context: B20 Summit concluded on 27th of August.

- The Business 20 (B20) serves as the official G20 dialogue forum with the global business community.
- The Confederation of Indian Industry (CII) has been formally chosen by the Government of India to lead and host B20 during India's G20 presidency.
- Established in 2010, B20 is a prominent Engagement Group within G20, involving companies and business organizations.
- B20 leads the process of uniting global business leaders to present their views on global economic and trade governance.
- It speaks collectively on behalf of the entire G20 business community.
- The theme of the event is "R.A.I.S.E." which stands for Responsible, Accelerated, Innovative, Sustainable, and Equitable Businesses.
- The gathering is witnessing participation from more than 1,500 delegates representing approximately 55 countries.
- Inclusiveness, particularly in terms of inviting the African Union to the G20, is a significant focus.
- Mutual trust, lessons from the Covid-19 pandemic, and India's role as the "pharmacy of the world" were emphasized.

Aims and Approach

- B20 aims to offer concrete policy recommendations to the G20 on priorities set by each rotating presidency to foster economic growth and development.
- Task Forces (TFs) and Action Councils (ACs) form the foundation of B20's work, tasked with generating consensus-based policy suggestions.

Face to Face Centres



28 August, 2023

Key Themes under B20's Inception Meeting

- Climate Change and Sustainable Practices:
 - change is a prime focus of India's G20 presidency.
 - The LIFE Mission (Lifestyle For Environment) emphasizes sustainable lifestyles to combat climate change.
- Inclusive Growth via MSMEs:
 - Accelerated and inclusive growth is envisioned through Micro, Small and Medium Enterprises (MSMEs), which are global growth engines.
 - The Indian government aims to increase MSME contribution to GDP from 18% to 25-30%.
- Reforming Multilateral Institutions:
 - Strengthening multilateral institutions like IMF and World Bank is crucial to address emerging challenges, including the Covid-19 pandemic.
- Empowering Women-Led Development:
 - Promoting women's involvement to boost socio-economic progress.

B20's Task Forces and Action Councils

- **Task Forces:** B20 operates through 7 Task Forces covering digital transformation, tech and innovation, resilient trade and investment, global economic recovery financing, and more.
- **Action Councils:** B20's Action Councils are devoted to environmental, social, governance aspects for businesses, and supporting the African continent's business integration.

Startup 20 under Indian G20 Presidency

- **Importance of Startups:**
 - Startups are catalysts for innovative economic recovery and growth worldwide.
- **Startup20 Initiative:**
 - Under India's G20 presidency, Startup20 is the inaugural engagement group for startups.
 - It brings together stakeholders to collectively voice the needs and potential of the global startup ecosystem.
- **India's Vibrant Startup Ecosystem:**
 - India boasts over 80,000 startups and 106 unicorns, making it the world's third-largest startup ecosystem.

NEWS IN BETWEEN THE LINES

Parboiled Rice



What is Parboiled Rice?

Parboiled rice, also known as converted rice, is a type of rice that undergoes a partial precooking process while still in its inedible husk.

Steps: Soaking, steaming, drying, husking before milling.

Benefits:

- Improved texture, longer shelf life, health advantages.
- More fiber, protein than white rice.
- Less stickiness, fluffy cooked kernels.
- Preserves rice fat, preventing rancidity.

Nutritional Profile:

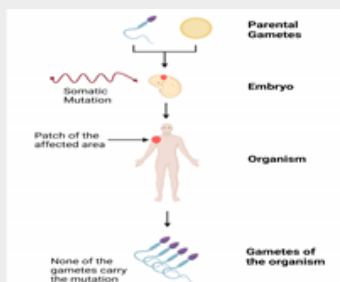
- Retains more thiamine, niacin than white rice.
- Less nutritious than brown rice.

Cooking: Takes slightly longer than regular white rice.

Application:

- Common in Asia and Africa.
- Enhanced texture, shelf life, nutritional value.
- Export Duty: 20% export duty imposed recently.

Somatic Mutations



About Somatic Mutations:

- Somatic mutations are genetic changes occurring after birth during an individual's life.
- Result from errors in DNA replication or exposure to mutagens.

Cancer Connection:

- Somatic mutations drive cancer initiation and growth.
- Some mutations accelerate cell division, leading to tumor formation.

Mutational Signatures:

- Cancers exhibit distinct mutation patterns, known as mutational signatures.
- These signatures aid in identifying and diagnosing specific cancer types.

Early Detection and Treatment:

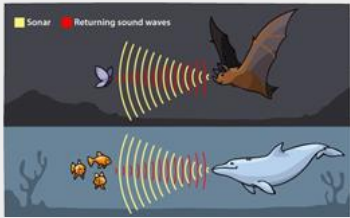
- Specific mutations in blood can signal early cancer presence.
- Understanding mutations helps tailor targeted therapies.

Immune Response: Immune cells use somatic changes to produce diverse antibodies.

Face to Face Centres



28 August, 2023

Echolocation 	About Echolocation? - Echolocation is a technique used by animals and devices to perceive their surroundings through sound waves. - Objects in the environment reflect emitted sound waves, providing information to the emitter. - By interpreting echo patterns, animals and devices "see" their surroundings through sound. Animal Echolocation: - Bats, dolphins, whales, certain birds and even the tenrec utilize echolocation. - Animals emit high-frequency sound pulses for navigation, hunting, communication and object detection. - Dolphins locate objects underwater and bats navigate and hunt in the dark using echolocation. Technological Adaptation: Sonar and Radar: - Sonar (sound navigation and ranging) is a technology inspired by echolocation. - Sonar aids underwater navigation, communication and fish finding. - Radar (radio detection and ranging) uses radio waves to detect and track objects in aviation, weather forecasting and military applications. Human-Developed Applications: - Engineers have harnessed echolocation principles for practical applications. - Smartphone apps use echolocation to map rooms, assisting visually impaired individuals in navigating their surroundings.
Crew-7 Mission 	What is the Crew-7 Mission? Crew-7 mission involved four astronauts from different countries launching aboard a SpaceX rocket from NASA's Kennedy Space Center. Objective: - The Crew-7 mission aimed to replace the previous crew that had been residing on the ISS since March. - The new crew members would stay on the ISS for the next six months. Composition: - Four astronauts from four different nations launched aboard SpaceX rocket to the ISS. - The multinational crew consisted of Jasmin Moghbeli (USA), Andreas Mogensen (Denmark), Satoshi Furukawa (Japan) and Konstantin Borisov (Russia). Scientific Experiments and Research: - During their stay on the ISS, the Crew-7 astronauts were tasked with conducting over 200 science experiments and technology demonstrations. - The research conducted would have implications for future space missions, including those to the Moon and Mars.
Alai Darwaza 	Architectural Gem - Alai Darwaza: Alai Darwaza is a historical structure situated at the southern end of the Qutub complex in Delhi. Built by Alauddin Khilji: Constructed during Alauddin Khilji's reign in Delhi, part of his plan to expand Quwwat-ul-Islam mosque. Gateway to Grand Mosque: Alai Darwaza was intended to be one of four gateways for the expanded mosque, showcasing grand design. Innovative Architecture: Material Fusion: Unique for using red and white marble together, a pioneering approach. Local Elements: Incorporated local symbols like lotus buds as decorative elements. Dome Innovation: Early example of true dome with arched architecture principles. Islamic Principles: Employed Islamic construction and ornamentation principles. Conservation Efforts: - Over time, it suffered from cracks, chipped carvings, and weathering. - Archaeological Survey of India (ASI) initiated conservation work to restore intricate carvings. Historical Significance: - First building to use Islamic principles in India. - Reflects innovation in architectural design during the Delhi Sultanate era.
Place in News Denmark	Denmark's justice minister has recently announced plans to implement a ban on the burning of religious texts, including the Quran, Islam's holy book. Denmark: (Capital: Copenhagen) Political Boundaries: Denmark shares its political boundaries with Germany to the south, Sweden to the east across the Oresund Strait and has a maritime boundary with Norway to the northwest in the North Sea. Legislation Aim: - Ban burning of religious texts, including Quran. - Prevent disrespectful treatment of significant religious objects in public spaces. Trigger: Incidents of Quran burnings in Denmark and Sweden. 

Face to Face Centres



28 August, 2023

	Response: Widespread outrage and calls for ban in Nordic countries. Physical Features: Peninsula: The Jutland Peninsula extends from continental Europe into the North Sea and the Baltic Sea. It forms the western part of Denmark. Islands: Numerous islands surround the Danish mainland, including Zealand, Funen, Lolland and Bornholm. These islands contribute to Denmark's unique geography. Baltic and North Seas: Denmark's coastal areas are influenced by the Baltic Sea to the east and the North Sea to the west. These bodies of water contribute to the nation's maritime heritage.
Personality in News Jayanta Mahapatra	Jayanta Mahapatra (22nd October 1928- 27th August 2023) Academic Pursuits: ➤ Mahapatra initially pursued a career in academia, starting as a physics lecturer. ➤ He taught at various government colleges across Odisha. Emergence as a Poet: ➤ He discovered his passion for poetry and literature in his later years. ➤ Mahapatra transitioned from a physics lecturer to an acclaimed poet. Literary Contributions: ➤ His debut collection of poems, "Close the Sky, Ten by Ten," marked his entry into the literary world. ➤ Authored a total of 27 poetry books, with seven in Odia and the rest in English. ➤ Notable works include "Indian Summer" and "Hunger," which achieved the status of classics in modern Indian English literature. Awards and Honors: ➤ He received the Sahitya Akademi Award in 1981 for English poetry "Relationship," showcasing his literary excellence. ➤ He received the prestigious Padma Shri award in 2009, recognizing his literary achievements.



POINTS TO PONDER

- ❖ What are the non-germ cells of the body called? – Somatic Cells
- ❖ Which institution plans to set up 'Research Analyst Administration and Supervisory Body (RAASB)'? – SEBI
- ❖ The African Union has suspended which country until 'the effective restoration of constitutional order'? – Niger
- ❖ Which institution is to support Ministry of Development of North Eastern Region, including fast-tracking progress on SDGs? – UNDP
- ❖ Which country is the host of 'World Water Week 2023' event? – Sweden

Face to Face Centres

DELHI MUKHERJEE NAGAR: 9205274741, 42 | **LAXMI NAGAR :** 9205212500, 9205962002 | **RAJENDRA NAGAR:** 9205274743 | **UTTAR PRADESH PRAYAGRAJ:** 0532-2260189, 8853467068 | **LUCKNOW (ALIGANJ):** 0522-4025825, 9506256789 | **LUCKNOW (GOMTI NAGAR):** 7234000501, 7234000502 | **GREATER NOIDA:** 9205336037, 38 | **KANPUR:** 7887003962, 7897003962 | **GORAKHPUR :** 7080847474, 9161947474 | **ODISHA BHUBANESWAR:** 9818244644/7656949029



dhyeyaias.com