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Challenges in Deciphering Harappan Script

Why in News?

Recently, the scholars have struggled to solve many subproblems to decipher the Harappan writing system.

- **Challenges –** Deciding if set of symbols actually represent a writing system.
- *Devising appropriate procedures* to isolate or segment the stream of symbols into a sequence of single signs.
- *Reducing the set of signs* to the minimal set by forming (its alphabet, syllabary, or inventory of signs) by identifying all allographs.

> ***Allograph*** *is the different representations of the same character in different typefaces. It is the same sign written in a variant form, for example a printed 'a' and a cursive 'a'*

- Assigning to each symbol their specified value, whether phonetic or otherwise.
- Trying to match these values to a specific language.
- **No multilingual inscriptions** – IVC had robust trade links with the contemporaneous Mesopotamian Civilisation whose cuneiform script was deciphered but there isn't any multilingual inscriptions found.

> *The most famous multilingual inscription is the* ***Rosetta Stone****, which contains a decree passed during the reign of Ptolemy V in 196 BCE in 3 scripts: Greek, demotic (a later ancient Egyptian script), and hieroglyphics.*

- **Unknown Script and/or Language** – The Indus script is under the category of 'an unknown script writing an unknown language'.

3 basic categories of undeciphered scripts/languages
• An unknown script writing a known language. • A known script writing an unknown language. • An unknown script writing an unknown language.

- **Insufficient material evidences –** Although some 3,500 seals have been identified till date, given that each seal has on average only 5 characters inscribed, it isn't sufficient to decipher the script.
- This general paucity of information has made it difficult to decipher its script.

> *The Tamil Nadu Chief Minister has announced a **$1 million prize** for deciphering the script of the Indus Valley Civilisation.*

Reference

The Indian Express| Challenges in Deciphering Indus Script

Related News

100 years of Discovery of Harappan Civilisation

Connection between Harappan and the Vedic Age

Savitribai Phule

Why in News?

Every year on January 3, people celebrate Savitribai Phule Jayanti.

- **Background** – A Dalit woman from the Mali community from Naigaon village in Maharashtra.
- **Education** – She is the ***1st Indian woman teacher***.
- She and her husband Jyotirao Phule open a school for girls in Pune, in 1848 and this became the ***country's 1st girls' school***.
- During her tenure, she established 17 schools across the nation.
- **Social reforms** – She advocated inter-caste marriages, widow remarriage, and eradication of child marriage, sati and dowry systems, among other social issues.
- **Balhatya Pratibandhak Griha** – A childcare centre for the protection of pregnant widows and rape victims.
- **Satyashodhak Samaj** *('Truth-seekers' society')* – It was setup in 1873 by both of them.
- It is a platform open to all, irrespective of their caste, religion or class hierarchies, with the sole aim of bringing social equity.
- **Literary works** – She published her 1st collection of poems, called *Kavya Phule ('Poetry's Blossoms'),* at the age of 23 in 1854.
- She published Bavan Kashi Subodh Ratnakar ('The Ocean of Pure Gems'), in 1892.
- Matushri Savitribai Phlenchi Bhashane va Gaani (S'avitribai Phule's speeches and songs'), and her letters to her husband have also been published.
- Her Marathi poetry promoted ideals such as equality, liberty, humanism, and the significance of education.
- **Recognition** – In honour of her great work towards women's education, January 3 is observed as ***Women's Education Day***.

References

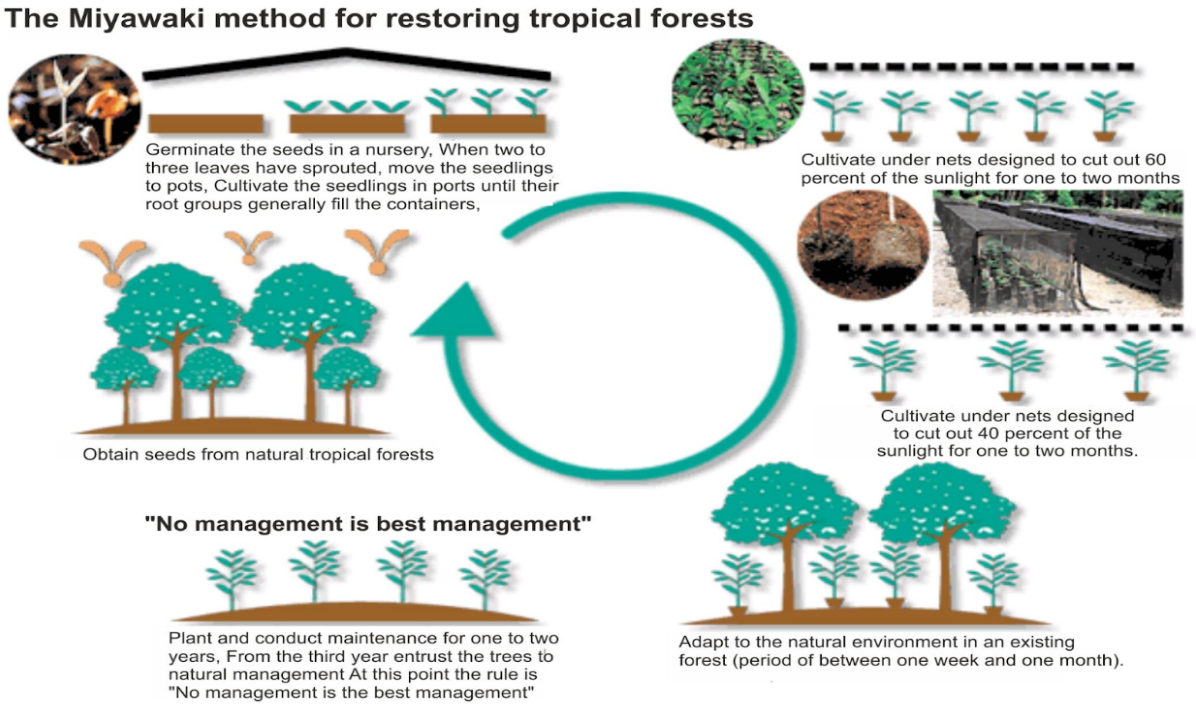
1. Business Standard| Women Education Day
2. The Indian Express| Savitribai Phule's Contribution

Miyawaki technique

Why in News?

In preparation for Mahakumbh 2025, dense forests have been developed at various locations across Prayagraj, to ensure pure air and a healthy atmosphere for the millions of devotees expected to visit the city.

- **Miyawaki Foresting** – An ecological engineering technique of afforestation, involves planting a diverse range of *native tree species in a small area*, which then grow into a ***dense, multilayered forest***.
- **Developed by** – *Japanese botanist Akira Miyawaki* in 1970s.
- **Aim** – To create a self-sustaining forest, with a high level of biodiversity and to restore degraded land and combat climate change.
- **Process** – It involves planting *trees and shrubs close* to one another to accelerate their growth.
- Plants ***grow 10 times faster*** with this technique, making it a practical solution for urban areas.
- A completely *maintenance-free*, wild and native forest *after the 1st 3 years*.
- **4 steps of Miyawaki foresting technique**
  - Initial survey of the locality
  - Collection of the seeds
  - Preparation of planting sites
  - Planting.



Miyawaki Technique is also known as ***Pot Plantation Method****.*

- **Benefits** – *Up to 30 times more dense* than conventional plantations.
- Up to 30 times better *noise and dust reduction*.

- Up to 30 times *better Carbon-dioxide absorption* as compared to a monoculture plantation.
- It is highly effective in the establishment of *urban forests* as well as converting unproductive wastelands into ecological and socially beneficial productive lands.

The Prayagraj Municipal Corporation has utilized the Japanese Miyawaki technique over the past 2 years to establish multiple oxygen banks, which have now transformed into lush green forests. It also contributed to improving air quality, playing a crucial role in environmental conservation.

Reference

PIB| Green Mahakumbh using Miyawaki Technique

Schemes and programmes of Ministry of Agriculture & Farmers Welfare

PM Kisan Samman Nidhi

• **Launched** – On 24th February 2019.
• PM-KISAN is a central sector scheme to supplement the financial needs of land-holding farmers.
• **Financial benefit** – Of Rs. 6,000/- per year in 3 equal instalments every 4 months is transferred into the bank accounts of farmers' families.
• **Direct Benefit Transfer (DBT) mode** – PM-KISAN is one of the largest DBT schemes in the World.

Agriculture Infrastructure Fund (AIF)

• **Launched** – In 2020 with an allocation of Rs 1 lakh crore.
• It is a *Central Sector Scheme*.
• **Aim** – To provide medium to long-term debt financing for post-harvest management and community farming infrastructure projects.
• **Interest subvention** – Of 3% per annum on loans up to Rs 2 crore for up to 7 years.
• **Credit guarantee coverage** – For loans up to Rs 2 crore through the CGTMSE scheme.

Farmer Producer Organization Scheme

• **Launched** – On 29th February 2020.
• A *Central Sector Scheme* for Formation & Promotion of 10,000 FPOs.
• The Ministry of Agriculture & Farmers Welfare oversees its *implementation through 14 agencies*, including NABARD, SFAC, NAFED and others.

Namo Drone Didi Scheme

• **Launched** – On 30 November 2023.
• Namo Drone Didi is a *central sector scheme* aiming to *empower women-led Self-Help Groups (SHGs)* by equipping them with drone technology to provide agricultural services.
• It provides for *providing rental services* to farmers for agriculture purpose (application of liquid fertilizers and pesticides for the present).
• In 2023-24, 500 drones were procured (from own resources) and distributed by Lead Fertilizer Companies (LFCs).
• The scheme also offer sustainable business opportunities, with SHGs earning at least Rs 1 lakh annually.

Per Drop More Crop (PDMC)

• **Launched** – In 2015-16.
• PDMC scheme aims to *enhance water use efficiency* at the farm level through *micro-irrigation technologies* like Drip and Sprinkler systems.
• Initially implemented under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), it is *now part of Rashtriya Krishi Vikas Yojana (RKVY)* from 2022-23.
• **Financial assistance** – Of 55% to small and marginal farmers, and 45% to others, for micro-irrigation installation.
• From 2015-16 to 2024-25 (December 2024), approximately 95 lakh hectares have been covered.

Pradhan Mantri Fasal Bima Yojana (PMFBY)

• **Launched** – In 2016.
• PMFBY provides comprehensive *coverage against crop losses* due to natural calamities and unforeseen weather events.
• Over Rs 1.70 lakh crore in claims have been paid under the scheme.
• **DigiClaim** – Introduced in Kharif 2023, ensures transparency in claims by directly transferring payments to farmers via the National Crop Insurance Portal using the PFMS platform.
• The *Krishi Rakshak Portal (KRPH)* and a *dedicated toll-free helpline (14447)* have been set up for efficient grievance redressal, allowing farmers to track complaints and ensuring resolution within a specified timeframe.

e-NAM Platform

• eNAM is a *pan-India electronic trading portal* which networks the existing APMC mandis to create a unified national market for agricultural commodities.
• **Small Farmers Agribusiness Consortium (SFAC)** – Is the lead agency for implementing eNAM under the aegis of Ministry of Agriculture and Farmers' Welfare, Government of India.

Digital Agriculture Mission

• **Announced** – In the *Union Budget 2023-24*, the government announced the *development of Digital Public Infrastructure (DPI) for agriculture*, further augmented in the 2024-25 Budget.
• **Comprehensive data on farmers** – Including demographic details, land holdings and crops sown, integrating state and central government data for innovative, farmer-centric services.
• **3 key Digital Public Infrastructure (DPI)** – AgriStack, Krishi Decision Support System (DSS) and Soil Profile Mapping.
• **AgriStack** – Will create digital IDs for 11 crore farmers and launch a nationwide Digital Crop Survey.
• **DSS** – Will integrate geospatial data on crops, soil, weather, and water, while soil profile maps will cover 142 million hectares.

Soil Health & Fertility Scheme of Rashtriya Krishi VikasYojana (RKVY)

• **Launched** – On 19th February 2015.
• The Soil Health Card (SHC) and Soil Health Management (SHM) programs assist state governments in issuing SHCs to farmers.

National Mission on Natural Farming (NMNF)

• **Launched** – On November 25, 2024.
• Promote *natural farming* in mission mode across the country as a standalone *Centrally Sponsored Scheme*.



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