

**DAILY
CURRENT
AFFAIRS
ANALYSIS**



LAKSHYA ACADEMY®

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1 –About the ASI to study less-known heritage temples in Tamil Nadu:

GS I

Indian Culture

- **Context:**

- To chart the development of the region's architecture, archaeologists from the Archaeological investigate of India (ASI) intend to investigate lesser-known but historically significant temples in Tamil Nadu.

- **Key information:**

- While the Chalukyas of Badami are said to have served as an inspiration for the cave temples in Mamallapuram, it is unknown how stone temples developed.
- According to an inscription found there, Pallava monarch Mahendravarman I is thought to have built the first construction in Tamil Nadu without using bricks, cement, lumber, or metal in the rock-cut cave temple at Mandagapattu in the modern Villupuram district.
- Temples in Tennessee have already been categorised according to dynasties, including Pallava, Chola, and Vijayanagara-era buildings.
- The Saivite Mutts (Adheenams), the Hindu Religious and Charitable Endowments (HR and CE) department, and villages around the state where brick and mortar temples were the norm until being replaced by stone temples are in charge of the majority of these lesser-known, unprotected, valuable temples.

- **Source** → *The Hindu*

2 – Details of the Pearl millet cultivation in India:

GS III

Indian Agriculture Issues

- **Context:**

- The study calls for a prompt modification of the classification rules controlling pearl millet growing zones, established in 1979, in light of changing weather patterns and changed agricultural goals.

- **Key information:**

- India currently divides its land into zones based on soil type and rainfall.
- A1 for Rajasthan's desert regions,
- North and Central India's semi-arid regions, and
- B for South India's semi-arid areas with dense soils.
- An important component of India's food security is pearl millet.
- The study calls for a prompt modification of the classification rules regulating the zones for pearl millet cultivation in light of changing weather patterns and shifting agricultural goals.
- The suggested modifications call for reassessing the A zone in light of changing climatic conditions.
- With the help of this new classification system, pearl millet output will be maximised, helping academics, policymakers, and farmers make more informed choices.

- **There are three distinct subzones inside the current A zone:**

- covering the states in North and Central India are G, AE1, and AE2.
- Gujarat is included in the G zone.
- East Rajasthan and Haryana are covered by AE1, and
- Uttar Pradesh is covered by AE2.
- The new zoning system designates 'AE1' as the centre of India's production of pearl millet, where ideal climate and soil conditions, together with enhanced pearl millet varieties, have resulted to considerable yield gains.
- 'AE2' demonstrates encouraging production improvement and better agricultural techniques, presenting potential for benefits focused on exports.
- Climate change has increased rainfall in the G zone, which may cause farmers to switch to cash crops and only grow pearl millet in the summer.

- **Source** → *The Hindu*

3 – About the World's most isolated tribes and their habitats:

GS II

Social Issues

- **Context:**

- There are currently more than 100 uncontacted tribes, and these communities desire isolation to maintain their lands, cultures, and way of life.

- **Tribal groups:**

- **India's Sentinelese:**

- Because of their ferocious opposition to outsiders, the Sentinelese are frequently referred to as the world's most remote community and as very reclusive people.
- These people, also known as the Sentinelese or North Sentinel Islanders, are still a mystery in terms of their native tongue, even to the Andaman tribes on neighbouring islands who are connected to them.
- Their current number is estimated to be between 50 and 200, and they survive by hunting and gathering, fishing from canoes, and utilising other conventional hunting techniques.

- **Papua New Guinea's Yaifo:**

- There may be up to 40 uncontacted tribes in Papua New Guinea, according to the records.
- These tribes primarily live a hunter-gatherer lifestyle and are occasionally linked to activities like cannibalism and headhunting.
- They have extremely little or no touch with the outer world.

- **Brazil's Kawahiva:**

- The Kawahiva people, also known as the "short people" or the "red head people" by neighbouring tribes, have possibly been forced to adopt a nomadic lifestyle in the recent decades due to deforestation in the Brazilian Amazon rainforest.
- They forage for food, build elaborate ladders to climb trees so they may collect honey, and hunt to survive.
- There are probably little more than 30 Kawahiva living there.

- **Peru's Mashco Piro:**

- According to sources, there are approximately 15 uncontacted tribes in Peru, among them the Mashco Piro, and they all face impending threats from the expanding forestry and oil industries.
- According to reports, the Mashco Piro typically kept their distance from strangers, but because of displacement, they have become more noticeable.
- Their traditional means of subsistence include hunting and gathering turtle eggs; the government calculates that there are less than 800 people living among them.

- **Paraguay's Ayoreo:**

- The Ayoreo people, who may be the last uncontacted indigenous people on the continent, live in seclusion within the Chaco, South America's largest forest outside of the Amazon.

- Unknown numbers of Ayoreo people still wander the jungle as nomads.
- **Brazil's Awa:**
 - Out of the Awá's estimated 600 members, only about 100 still live as nomads in the Amazon rainforest along the Brazil-Peru border, making them the most endangered tribe on the earth.
 - They are constantly in threat from illegal logging and wildfire.
 - Another tribe, the Guajajara, have stepped up as "Forest Guardians" to defend them in response to this severe situation.
- **Philippines' Palawan:**
 - About 40,000 Palawan people live in the southern parts of the Philippines' Palawan Island.
 - Those who are inside remain alone and have little contact with the outside world.
 - They engage in shifting cultivation, regenerating the forest as they relocate their farms, but in recent years, strip and open-pit mining have become a concern.
- *Source → The Hindu*

4 – Details of Operation Polo:

GS III

Internal Security

- **Context:**
 - Operation Polo's 75th anniversary was recently observed.
- **Key information:**
 - The Indian Army launched Operation Polo on September 13, 1948, as a military operation to integrate the princely state of Hyderabad.
 - Since India's independence on August 15, 1947, the Nizam of Hyderabad has been hesitating to join the country.
 - Sardar Vallabhbhai Patel, the home minister at the time, referred to the military operation in Hyderabad state as "Police Action," and the Nizam's soldiers submitted to the Indian Army by September 18.
- **The history of Operation Polo:**

- Mir Osman Ali Shah, the Nizam of Hyderabad, wanted to retain his realm apart and keep it from joining either India or Pakistan after independence.
- India and the Nizam agreed to a standstill in November 1947.
- This essentially meant that until a solution to the impasse was found, the status quo would be maintained between the Indian dominion and the Hyderabad state.
- The agreement was struck with the understanding that the terms in effect at the time of signing would remain in effect for a year during which the Indian government would have no jurisdiction over Hyderabad.

- **Operation Polo's needs:**

- Hyderabad, one of the most populous and prosperous states, was located in the Deccan and had 17 districts, including Aurangabad (now in Maharashtra) and Gulbarga (now in Karnataka).
- The majority of people in the landlocked state were Hindu, and its Muslim rulers controlled practically all of the state's administrative functions.
- Although there being no shared border with Pakistan, the Nizam had every intention of developing friendly ties with that nation.
- The standstill agreement negotiated with India was used by the Nizam's administration in Hyderabad to expand the size of its irregular militia, known as Razakars.

- **The following factors led to the operation's quick launch:**

- The Razakars' abuses against the state's primarily Hindu populace,
- Their aggressive behaviour along state borders through border raids,
- Pakistan has been approached, and
- the desire to form an independent nation.

- **When did the soldiers of Hyderabad give up?**

- On September 17, the Nizam of Hyderabad declared a cease-fire.
- The city of Hyderabad gave up on September 18.
- For his contribution to Operation Polo, Havildar Bachhitar Singh received the first Ashoka Chakra of Independent India posthumously.

- **Source → *The Hindu***

5 - Climate phenomena and food security:

GS III

Indian Agriculture

- **Context:**

- This year in India, there have been a number of disruptive weather and climatic occurrences that have highlighted the intricacy of our precipitation system.

- **India's climatic phenomena:**

- **Western Disturbance:**

- The Western Disturbance, which often transports much-needed moisture from European waters to the western Himalaya and parts of northern India in the winter and spring, was present.
- In keeping with its name, the Western disturbance continued to be active well into the summer, nipping at the southwest monsoon's heels.
- Our development efforts in the mountains and floodplains have prompted questions about their viability and resilience in light of the extensive infrastructure damage and human casualties caused by landslides and flooding in the western Himalaya and northern India.

- **a phase of El Nino:**

- Winter precipitation from the Western Disturbance is predicted to become weaker and change to more intense rain episodes as a result of climate-linked warming.
- If this occurs later in the summer, the results will be very worrying.
- Then there was evidence that the quasi-periodic El Nio Southern Oscillation (ENSO), which affects the southwest monsoon, was entering an El Nio phase.

- In the eastern and central tropical Pacific Ocean, ENSO is a phenomenon.

- The positive-phase Indian Ocean Dipole (IOD), an ocean-atmosphere event in the Indian Ocean Dipole, may counteract the effects of an El Nio on the southwest monsoon.
- According to dynamic regression models, ENSO and the IOD's combined influence account for 65% of the southwest monsoon's inter-annual variability over the course of many decades.

- **Food security and El Nino:**

- **Water of two sorts is essential to agriculture:**

- In contrast to blue water, which is the water in rivers, lakes, reservoirs, and groundwater, green water is soil moisture that is absorbed by food and cash crops from rain and eventually evaporates into the atmosphere.
- Aside from being a source of water for drinking and industrial use, blue water is the foundation for irrigation in agriculture and helps rivers retain their biological flow.
- **El Nino's impact on agriculture:**
- **Rainfed agriculture is impacted by the El Nio and other climate phenomena in a variety of ways:**
 - postponing the onset of rain
 - negative impact on sowing
 - Extreme heat may have a negative impact on soil moisture and plant growth.
- The majority of India's cultivated land is dependent on green water, not blue water, despite investments in dams, reservoirs, and irrigation systems.
- On average, 3,268 litres of water per person per day are needed in India for our daily diet, which includes cooking oil and a variety of dishes, according to regional variation.
- This footprint contains 75% green water, highlighting the significance of rainfed agriculture for the security of our food supply.
- Numerous important crops require green water to varying degrees, even in locations that are irrigated.
- For instance, 35% of the irrigation water used to irrigate rice fields during the kharif season is green water.
- At this time, green water is also very important for several staple crops, including maize, soybean, peanuts, and tur dal.
- India's soybean production decreased by 28% from the 2013–2022 average during the El Nio year of 2015–2016.
- **The northeast monsoon and El Nino:**
 - The destiny of the rabi crops sown in winter and the overall water security will be partially determined by the blue water stock in our reservoirs and groundwater at the end of the southwest monsoon.
 - Green water from southeast India's northeast monsoon and the Western Disturbance in the north will both make substantial contributions.
 - The rabi crops in 2024 will heavily rely on irrigation or blue water during the summer.
 - According to studies, an El Nio presided over 43% of the severe rainstorms that occurred during the northeast monsoon (including the devastating floods that hit Chennai in 2015).
 - Our water, food, and ecological security depend on the highlands of central India, which span 36 districts in the states of Madhya Pradesh, Chhattisgarh, and Maharashtra. These areas are emerging as climate change hotspots.

- **Long-lasting uncertainty:**

- Some climate scientists relate the decrease in monsoon precipitation since the 1950s to the lessening of the land-sea temperature gradient brought on by sea surface warming.
- However, signs of more frequent strong rainstorms and increasing heat and moisture stress on people and ecosystems are consistent with theories about how warming will affect the atmosphere's ability to hold water and speed up the hydrological cycle.
- These occurrences interact more and more with infrastructure and land uses that are hydrologically incompatible, increasing hazard exposure and susceptibility.
- The observed changes in precipitation have not been replicated by regional or global climate models, increasing the uncertainty of estimates for the future.

- **Moving ahead:**

- We should base our adaptation strategies on the assumption that current trends will continue, including more frequent severe rain, summer heat and moisture stress, and decreased monsoon precipitation in some regions of the nation.
- In some places of India, overall rainfall may rise as global warming continues, but the proportion of intense rain events may rise as well.
- With millets being the preferred crop, there is currently a focus on lowering reliance on water-intensive crops in agriculture and food security.
- By switching to less water-intensive crops, we may make our food systems less susceptible to natural events like El Nio.
- With these changes in crops, according to one estimate, more than 30% of blue water might be preserved, with some gains in protein and minerals but a tiny decrease in calories.
- However, conserving water in this way could not always contribute to replenishing our depleted aquifers or reestablishing biological flows in our rivers.
- If suitable rules are not in place, new demands for the water that was saved quickly appear.

- **Several modifications and alternative agricultural methods are currently available. They consist of:**

- switching to millets and different types of the major grains.
- Farmer recommendations to transition to crops with faster growth cycles.

- **Conclusion:**

- The well-being of 1.4 billion people will be greatly influenced by how society and governance respond to the water and climate change crisis, which links food, water, and ecological security through diversifying our agro-food systems, a reduction in reliance on blue water, revitalising our rivers, and sustainable water-sharing between humans and nature

- *Source* → *The Hindu*



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