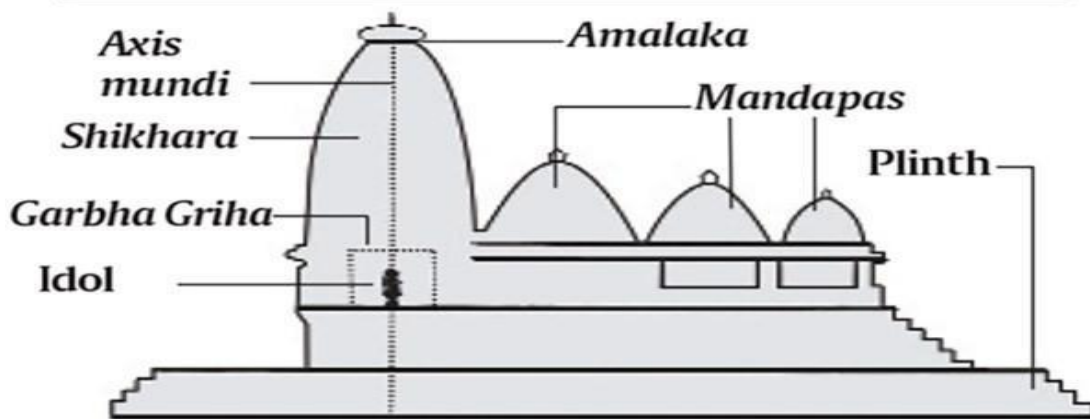


UPSC CURRENT AFFAIRS NOTES 22-01-2023

NAGARA STYLE AND RAM TEMPLE

BASICS OF THE NAGARA STYLE



Based on sketches from E B Havell's *The Ancient and Medieval Architecture of India*, 1915. Not a visual representation of Ayodhya's Ram temple.

The Nagara style of temple architecture, in which Ayodhya's Ram temple is being built, is a significant tradition with its roots in northern India.

Details

Emergence: Nagara style emerged around the fifth century CE during the late Gupta period in northern India.

Architects of Ayodhya's Ram Temple: Chandrakant Sompura and his son Ashish designed the Ram temple complex in the Nagara style.

Architectural Language

Debated Terminology: The term 'style' is debated, with some scholars, like Adam Hardy, referring to Nagara and Dravida as "the two great classical languages of Indian temple architecture."

Languages as Systems: Instead of styles, they are considered as architectural languages, providing a vocabulary and grammar for temple construction.



Distinctive Features of Nagara Style

Shikhara (Tower):

Towering Structure: Nagara temples have a raised plinth with a towering shikhara, representing a mountain peak.

Cosmological Symbolism: Shikharas symbolize the natural and cosmological order, such as Mount Meru in Hindu tradition.

Garbhagriha (Sanctum):

Sacred Inner Sanctum: The garbha griha is the most sacred part of the temple, housing the deity's idol.

Mandapa (Hall):

Pillared Halls: Temples often include one or more mandapas (halls) with pillars.

Five Modes of Nagara Architecture:

Valabhi and Phamsana: Associated with Early Nagara Style, influenced by wooden structures.

Latina: A single, slightly curved tower, emerged in the Gupta heartland and spread across northern India.

Shekhari: Features attached sub-spires or spirelets echoing the main shape.

Bhumija: Has miniature spires in horizontal and vertical rows, creating a grid-like effect.

Composite Latinas: Emerged from the tenth century onwards, giving rise to Shekhari and Bhumija styles.

Comparison with Dravida Style

Vimana vs. Shikhara: In Dravida style, the counterpart to the shikhara is the vimana, typically smaller than gopurams.

Gopurams: Dravida style features distinctive gatehouses or gopurams, while Nagara style lacks prominent boundary walls.

Hybrid Features of Ayodhya's Ram Temple

Innovations: The Ram temple in Ayodhya incorporates some hybrid features, like a 732m long wall, even though a traditional gopuram isn't built due to space constraints.

Wild Life (Protection) Licencing (Additional Matters for Consideration) Rules, 2024.



The Union Environment Ministry issued a notification titled: Wild Life (Protection) Licencing (Additional Matters for Consideration) Rules, 2024.

Introduction:

The central government has introduced revised rules governing wildlife trade licensing.

These rules specifically exclude certain species from the licensing process.

The regulations are outlined in the Wild Life (Protection) Licencing (Additional Matters for Consideration) Rules, 2024.

Categories Affected:

The revised guidelines have implications for stakeholders involved in the trade of snake venom, captive animals, trophy animals, and stuffed animals.

This marks the first substantial revision since the rules in 1983.

Previous Rules (1983):

Under the rules from 1983, licenses for trading in wildlife were prohibited for species listed in Schedule I or Part II of Schedule II under the Wildlife Protection Act 1972.

Exceptions were allowed in exceptional cases, subject to the prior approval of the central government.

Background (2022 Amendments):

In 2022, amendments to the Wildlife Protection Act led to the merging of four schedules of wild animals into two, reducing the total from six to four.



Schedule I now includes animals requiring utmost protection, while Schedule II comprises species needing comparatively lower protection.

The categories under Schedule II encompass birds, reptiles, mammals, and amphibians.

Schedule IV is dedicated to species to be protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Global Context:

The World Wildlife Report 2020 highlights a global issue, revealing that about 6,000 species of flora and fauna were seized globally from 1999-2018, underscoring the challenges in combating illegal wildlife trade.

Wild Life (Protection) Licencing (Additional Matters for Consideration) Rules, 2024

Revised Licensing Rules (2024):

Earlier rules restricted licences for trading in Schedule I and Part II of Schedule II species.

New notification lifts restrictions on Schedule II species but maintains them for Schedule I species.

Factors for consideration in the licensing process include:

The capacity of the applicant, including facilities, equipment, and the feasibility of business premises.

The source and manner in which supplies would be obtained.

The number of existing licenses in the relevant area.

The potential implications on hunting or trade of the concerned wild animals.

Modification Unexplained:

The rationale behind the modification, especially the lifting of restrictions on Schedule II, remains unexplained.

Lack of clarity on the government's decision to alter licensing rules.

Conclusion:

The revised rules aim to bring transparency and efficiency to the wildlife trade licensing process. However, **the lack of clarity on the removal of restrictions on Schedule II species raises questions.**



The considerations for license issuance emphasize the government's commitment to evaluating the impact on wildlife and trade, showcasing a nuanced approach.

Way Ahead

Review of Schedule II Species:

Conduct a transparent review to explain the rationale behind lifting restrictions on Schedule II species.

Ensure alignment with conservation goals and international commitments.

Stakeholder Consultation:

Facilitate inclusive consultations with wildlife experts and stakeholders to gather diverse perspectives.

Use feedback to inform decision-making and ensure balanced outcomes.

Scientific Evaluation:

Commission scientific studies to assess the conservation status of affected species.

Use evidence-based findings to guide licensing decisions.

Capacity Building:

Invest in training wildlife authorities for effective implementation.

Enhance skills in species identification, monitoring, and law enforcement.

Incentives for Conservation:

Introduce incentives for positive contributions to conservation efforts.

Recognize and reward sustainable practices aligned with conservation goals.

Legislative Alignment:

Ensure alignment with existing wildlife protection laws and international conventions.

Harmonize regulations for a cohesive legal framework.

Implementing these steps will contribute to a balanced approach in regulating wildlife trade, fostering conservation while addressing stakeholder needs.



Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme

Rs 17,490 crore has been set aside for the Strategic Interventions for Green Hydrogen Transition (SIGHT) programme, to bolster domestic electrolyser manufacturing, green hydrogen production.

About Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme

It is a subcomponent of National Green Hydrogen Mission.

Aim: To bolster domestic electrolyser manufacturing and green hydrogen production.

In the initial stage, two distinct financial incentive mechanisms were proposed with an outlay of ₹ 17,490 crore up to 2029-30:

Incentive for manufacturing of electrolysers

Incentive for production of green hydrogen.

Depending on the markets and technology development, specific incentive schemes and programmes will continue to evolve as the Mission progresses.

Implementing agency: **The Solar Energy Corporation of India (SECI) would be the implementing agency responsible for the scheme's execution.**

What is National Green Hydrogen Mission?

It is implemented by the Ministry of New and Renewable Energy with an outlay of ₹ 19,744 crore from FY 2023–24 to FY 2029–30.

The overarching objective of the Mission is to make India a global hub for the production, usage, and export of Green Hydrogen and its derivatives.

The expected outcomes of the mission by 2030, are as follows:

India's Green Hydrogen production capacity is likely to reach 5 MMT per annum, contributing to reduction in dependence on the import of fossil fuels. Achievement of Mission targets is expected to reduce a cumulative ₹ 1 lakh crore worth of fossil fuel imports by 2030.

This is likely to leverage over ₹8 lakh crore in total investments and create over 6 lakh jobs.

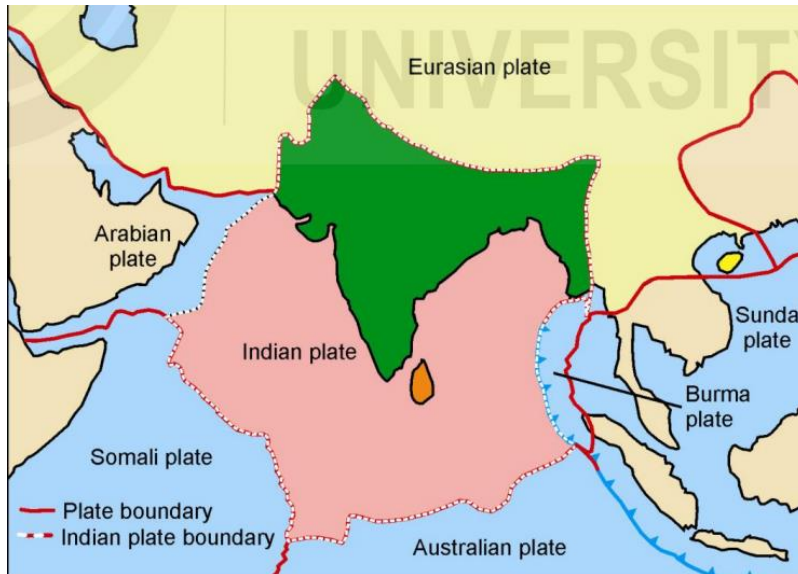
Nearly 50 MMT per annum of CO₂ emissions are expected to be averted through the production and use of the targeted quantum of Green Hydrogen.

It has a provision for supporting pilot projects for low-carbon steel, mobility, shipping, and ports.

The Mission provides allocations for various sub-components of the Mission such as SIGHT, Pilot projects, R&D etc. to fund specific selected projects.

There is no State-wise allocation made under the Mission.

INDIAN TECTONIC PLATE



Indian tectonic plate is breaking into two. It's happening beneath Tibet. This revelation was presented at the American Geophysical Union conference in San Francisco and offers a fresh perspective on the **colossal Himalayan mountain range's formation**.

For decades, geologists have known that the Himalayas owe their towering presence to the collision of the Indian and Eurasian continental plates.

This process, which began around 60 million years ago, has been likened to the crumpling of a car's hood in a head-on collision, with the Indian plate being driven beneath its northern neighbour by the currents of molten rock within the Earth's mantle.

Over time, this tectonic interaction has thrust the Eurasian land mass skyward, creating the planet's highest elevations.

Recent Findings

The latest analysis challenges previous assumptions about the subduction of the buoyant Indian plate. Rather than sinking smoothly into the mantle's depths, the seismic data suggests a more complex scenario where the plate is delaminating.

The dense base of the Indian plate is peeling away and descending into the mantle, while its lighter top portion continues to scrape just beneath the Eurasian plate.

This new model of tectonic activity was pieced together by a team led by Ocean University of China geophysicist Lin Liu.

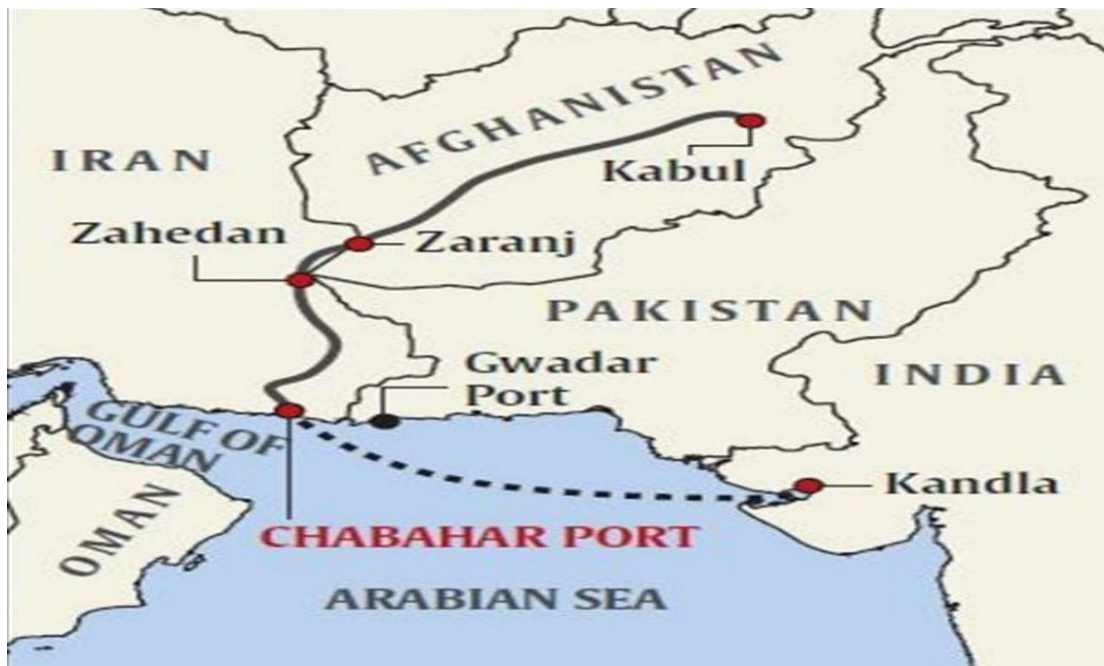
By combining 'up-and-down' S-wave and shear-wave splitting data from 94 broadband seismic stations across southern Tibet with 'back-and-forth' P-wave data, the researchers have provided a nuanced view of the subterranean dynamics at play.

The findings indicate that the Indian slab is neither gliding along nor crumpling uniformly but is undergoing a dramatic structural separation.

Some sections of the plate appear relatively intact, while others are fragmenting approximately 100 kilometers below the surface, allowing the base to deform into the Earth's fiery core.

This seismic investigation aligns with geological models based on helium-3 enriched spring water and patterns of fractures and earthquakes near the surface. Together, these pieces of evidence paint a picture of tectonic turmoil deep beneath the Himalayas.

Chabahar Port Development





External Affairs Minister S Jaishankar discussed a long-term cooperation framework for Chabahar port with Iranian Minister Mehrdad Bazrpash.

Strategic Location:

Chabahar, at the Gulf of Oman's mouth, is Iran's first deepwater port, strategically located for global oceanic trade.

Positioned west of the Iran-Pakistan border, it competes with China's Gwadar port to the east in Pakistan.

Strategic Importance for Iran and India:

Helps Iran counter Western sanctions.

Offers India an alternative route bypassing Pakistan, vital for trade with Afghanistan and Central Asia.

Part of the proposed International North-South Transport Corridor (INSTC).

India's Involvement (Nature and Timeline):

Cooperation initiated in 2002 during President Khatami's visit to India.

Part of a roadmap for strategic cooperation signed with Prime Minister Vajpayee.

Gained significance as India sought alternative routes due to a hostile Pakistan after Partition.

Chabahar Port Development Progress:

Two distinct ports: Shahid Beheshti and Shahid Kalantari.

India's investment is limited to Shahid Beheshti.

Trilateral agreement signed in 2016; first phase inaugurated in December 2017.

IPGL (India Ports Global Limited) involved in the development; four phases are planned for Shahid Beheshti.

Challenges in Development:

Traditionally slow progress in regional infrastructure projects by India.

Geopolitical roadblocks, especially strained US-Iran relations, have been a major reason for delays.



Recent Developments and Future Outlook:

Despite challenges, India has allocated funds and assistance, signalling commitment.

The pace of development is impacted by the uncertain US-Iran ties and regional geopolitical volatility.

Challenges include susceptibility to American sanctions, uncertainties in Afghanistan, and perceived incompatibility with the Belt and Road Initiative (BRI).

The success hinges on active diplomacy and efficient project implementation.

MULTIVITAMINS

The recent study on multivitamins and memory, specifically from the Cocoa Supplement and Multivitamin Outcomes Study (COSMOS), suggests potential benefits for older adults in preventing memory loss.

The recent study, known as the Cocoa Supplement and Multivitamin Outcomes Study (COSMOS), focused on adults aged 60 and older, aiming to investigate whether daily multivitamin supplementation could have benefits for memory and cognitive function.

Study Highlights

Study Design: The study involved over 21,000 older adults as part of the COSMOS trial, with a subset of 573 participants taking cognitive tests in person.

Multivitamins and Memory: Adults aged 60 and older who took a daily multivitamin for two years scored higher on memory and cognitive tests compared to those who took a placebo.

Potential Benefits: The study suggests that multivitamins could be a safe, affordable, and accessible approach to protecting cognitive health in older adults.

Cognitive Improvement: Participants in both the multivitamin and placebo groups showed cognitive improvement over two years, but the multivitamin group exhibited a slightly greater gain, particularly in memory assessments.

Consistent Findings: Results were pooled with two prior COSMOS investigations, totalling over 5,000 participants, showing consistent

improvement in cognitive scores for those who took multivitamins compared to those who received a placebo.

Memory Boost Estimate: The researchers estimated that the memory boost observed in individuals taking multivitamins corresponded to a theoretical two-year reduction in brain ageing.

Expert Caution and Critiques

Modest Benefits: Experts not involved in the trial caution that the benefits observed are relatively modest and may not necessarily lead to tangible improvements in daily life.

Interpretation Challenges: Some experts challenge the interpretation of the data, expressing concerns about the method used to conclude a two-year reduction in cognitive ageing.

Need for Further Research: Experts emphasize the need for more research on multivitamins, especially in diverse groups, to understand who might benefit and why.

Importance of Nutrient Deficiency: Suggestions that gain may be driven by individuals lacking specific nutrients important for brain health, such as vitamin B12, vitamin D, and zinc.

Recommendations and Conclusions

Multivitamins for Specific Groups: While multivitamins may be useful for those with conditions affecting nutrient absorption, most healthy individuals may not need them.

Not a Memory Improvement Recommendation: Some experts express reservations about recommending multivitamins solely for memory improvement based on this data.

Prioritize Dietary Approaches: Emphasis on meeting nutritional requirements through dietary approaches as a priority for maintaining brain health.

Multivitamins

Multivitamins are dietary supplements containing a blend of essential vitamins, minerals, and sometimes other nutrients.

They come in various forms, from tablets and capsules to gummies and liquids, and can be tailored to specific needs, like gender, age, or health conditions.

The primary purpose of multivitamins is to fill nutritional gaps in our diet.

They provide essential vitamins and minerals that may be lacking due to factors like poor food choices, medical conditions, or certain medications.

The effectiveness of multivitamins for healthy individuals is a subject of ongoing debate. Large-scale studies have shown mixed results, with some suggesting no significant overall benefits for preventing chronic diseases like cancer or heart disease. However, certain groups, like pregnant women, older adults, and people with dietary restrictions, may benefit from targeted supplementation.

Great Indian Bustard

The Supreme Court recently directed the Centre to come clean on its plans to save the critically endangered Great Indian Bustard.



About Great Indian Bustard

It is a bustard found on the Indian subcontinent.

Scientific Name: Ardeotis nigriceps

It is among the heaviest of the flying birds.

Distribution: The species has a current viable population of 100- 150 individuals in India and mainly survives in the Thar Desert of Rajasthan that holds about 100 individuals.

Habitat: It inhabits dry grasslands and scrublands.

Features:

It is a large bird with a horizontal body and long, bare legs, giving it an ostrich-like appearance.

The sexes are roughly the same size, with the largest individuals weighing 15 kg (33 pounds).



It can easily be distinguished by its black crown on the forehead, contrasting with the pale neck and head.

The body is brownish, and the wings are marked with black, brown, and grey.

They breed mostly during the monsoon season, when females lay a single egg on open ground.

Lifespan: 12-15 years

These birds are opportunist eaters. Their diet ranges widely depending on the seasonal availability of food. They feed on grass seeds, insects like grasshoppers and beetles, and sometimes even small rodents and reptiles.

Conservation Status:

IUCN Red List: Critically Endangered

Wildlife (Protection) Act, 1972: Schedule 1

CITES: Appendix 1

Q1) What is CITES?

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement between governments that aims to ensure that international trade in wild animals and plants does not threaten their survival. CITES was adopted in 1973 and entered into force in 1975. Although CITES is legally binding on the Parties— in other words, they have to implement the Convention—it does not take the place of national laws.

Bureau of Police Research and Development

Recently, the Bureau of Police Research and Development (BPRD) has warned users of different scams perpetrated through messaging platform WhatsApp.

About Bureau of Police Research and Development

It was set up in 1970 under the Ministry of Home Affairs by replacing the Police Research and Advisory Council.

Objectives

To identify the needs and problems of the police in the country.

To undertake research projects and studies, and suggest modalities to overcome problems and challenges and meet the needs and requirements of the police.



It was also mandated to keep abreast of the latest developments in the fields of science and technology, both in India and abroad, with a view to promoting the use of appropriate technology in police work.

It is also assisting the States in modernization of the State Police Forces and Correctional Administration.

The Bureau was established with the following two divisions initially;
Research, Statistics & Publication and Development

On the recommendations of the Gore-Committee the bureau created a Training Division in 1973.

More recently, the BPR&D has also been entrusted with the responsibility of anchoring and coordinating the work of the National Police Mission .

The Gore Committee on Police Training was appointed by the Indian Government in 1971 and has identified shortcomings and needs of the law enforcement training programs of State police forces.