DAILY CURRENT AFFAIRS 02-08-2024

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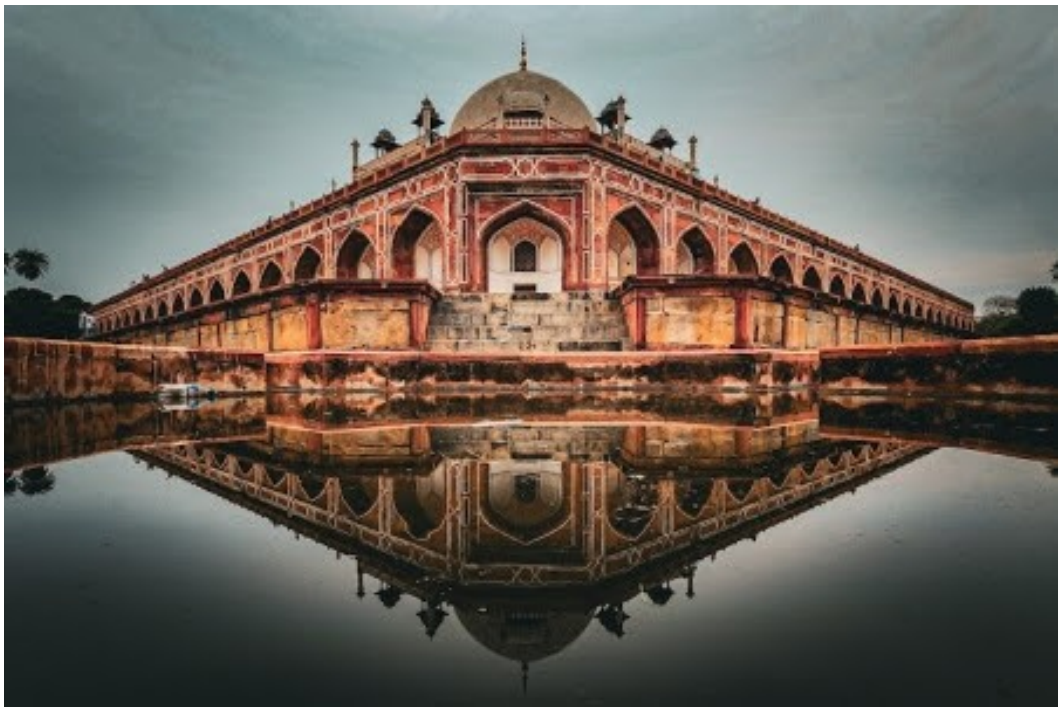
Humayun's Tomb

Syllabus: GS-1; Art and Culture

Context

- *The country's first sunken museum at the Humayun Tomb complex, a UNESCO World Heritage Site, in Delhi is all set to be inaugurated on July 29 2024.*
- *It will open for visitors from July 30 2024, a senior official of the Archaeological Survey of India (ASI) said.*



Sunken Museum

- *A sunken museum is a unique concept where* **art and history are showcased underwater.**
- *It's essentially an* **underwater gallery, often created by sinking statues or other structures into a body of water.**

Famous Example: Cancún Underwater Museum

- *One of the most famous examples of a sunken museum is the Cancún Underwater Museum in Mexico.*
- *This incredible project features hundreds of life-size sculptures submerged in the Caribbean Sea.*
- *The sculptures are designed to promote coral reef growth and attract marine life.*

India's First Sunken Museum

- *Interestingly, India also has its first sunken museum! Located at the Humayun's Tomb complex in Delhi, it's not underwater but rather built underground, resembling traditional water tanks (baolis).*
- *This museum showcases the history of Mughal emperor Humayun and the region.*

About

- *Humayun's Tomb is a significant historical and architectural landmark located in Delhi, India.*
- *It was commissioned by* **Empress Bega Begum** *in 1565 AD in memory of her husband, the* **Mughal Emperor Humayun**, *and was completed in 1572 AD.*
- *The tomb is a UNESCO World Heritage Site and is recognized for its stunning Mughal architecture, which influenced many subsequent structures, including the* **Taj Mahal.**

Architectural Significance

- **Design and Style:** *The tomb was designed by Mirak Mirza Ghiyas, a Persian architect chosen by Bega Begum. It is a synthesis of Persian and Indian architectural styles. The structure is built with red sandstone and features white marble inlays.*
- **Garden Tomb:** *Humayun's Tomb is one of the earliest examples of a garden tomb in the Indian subcontinent, incorporating the charbagh (four gardens) layout. This Persian-style garden is divided into four quadrants by water channels, symbolizing the four rivers of paradise in Islamic belief.*
- **Central Dome***: The main structure is crowned with a magnificent double dome, which stands 42.5 meters high. The dome is flanked by small canopies (chhatris) and the building itself is perched on a high, wide platform with arched cells.*
- **Symmetry and Proportion:** *The tomb's design is noted for its perfect symmetry and balanced proportions. The central chamber, which houses Humayun's cenotaph, is octagonal in shape and surrounded by smaller chambers that are interconnected by corridors.*

Cultural and Historical Importance

- **Dynastic Tomb:** *Humayun's Tomb set a precedent for subsequent Mughal mausoleums. It became a dynastic tomb as several other Mughal rulers and family members were later buried here.*
- **Influence on Later Architecture:** *The design of Humayun's Tomb greatly influenced the development of Mughal architecture. The use of grandiose gardens, intricate decorative elements, and the combination of Persian and Indian styles became hallmarks of later Mughal constructions, including the Taj Mahal.*

- **Restoration and Conservation***: Over the centuries, the tomb experienced periods of neglect and deterioration. However, significant restoration efforts have been undertaken, particularly in the 20th and 21st centuries, to preserve its grandeur. The Aga Khan Trust for Culture, in collaboration with the Archaeological Survey of India, has played a pivotal role in the restoration efforts.*

Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

Syllabus: GS-2; Government policies and Interventions

Context

- *Under the Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) which concluded on March 31 2024, 47.8 million people in rural households were certified as digitally literate, the ministry of electronics and information technology informed the Lok Sabha in a written response.*

About

- *The Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) is an initiative launched by the Government of India to promote* **digital literacy in rural areas.**
- *The scheme aims* **to empower rural citizens with the knowledge and skills to operate computers and digital devices, access the internet, and utilize e-governance services.**

Objective

- *The primary goal is to make six crore rural households digitally literate by providing them with training on how to operate a computer or digital device (like tablets and smartphones), browse the internet, access government services, and undertake digital transactions.*

Target Beneficiaries

- *The scheme focuses on one member from every eligible household, particularly women, Scheduled Castes (SC), Scheduled Tribes (ST), Below Poverty Line (BPL) households, differently-abled individuals, and minorities.*

Training Duration

- *The training program under PMGDISHA spans 20 hours, spread over 10 to 30 days, covering various aspects of digital literacy, including basic computer operations, internet navigation, and e-payment systems.*

Implementation Agencies

- *The program is implemented through accredited training centers, which include* **Common Service Centers (CSCs),** *government schools, and other organizations involved in digital literacy activities.*

Certification

- *Upon successful completion of the training, participants are awarded a certificate of digital literacy, validating their skills and knowledge.*

Significance

- **Bridging the Digital Divide:** *PMGDISHA plays a crucial role in bridging the digital divide between urban and rural areas, ensuring that rural populations are not left behind in the digital revolution.*
- **Empowerment and Inclusion:** *By making digital tools accessible to rural citizens, the scheme promotes social inclusion and empowers individuals to participate in the digital economy, enhancing their quality of life.*
- **Economic Growth***: Digital literacy can drive economic growth by improving access to information, services, and opportunities, thus fostering entrepreneurship and innovation in rural areas.*
- **Improved Governance:** *With more people able to access e-Governance services, the scheme helps improve the efficiency and transparency of government services.*
- **Financial Inclusion:** *By promoting digital payments and financial literacy, PMGDISHA supports the government's vision of a cashless economy and enhances financial inclusion.*

Tur dal

Syllabus: GS-3; Agriculture

Context

- *The shipments of* **Tur/Pigeon peas** *from Nacala Port in Mozambique, disrupted by an "anti-India" group, have resumed after the Ministry of Consumer Affairs raised the issue with the* **Ministry of External Affairs and the Indian High Commissioner** *there persuaded the matter with the local authorities.*

About

- *Tur dal, also known as pigeon pea, is a staple legume in many Indian households.*
- *It is known by various names such as arhar dal, tuvar dal, or red gram.*
- *This legume is prized for its high nutritional value and is a crucial ingredient in Indian cuisine, especially in the preparation of dal, sambhar, and various other dishes.*

Botanical Information

- *Scientific Name: Cajanus cajan*
- *Family: Fabaceae*
- *Origin: Believed to have originated in India, where it has been cultivated for over 3,500 years.*

Nutritional Profile

- *Tur dal is* **highly nutritious and provides a rich source of protein, dietary fiber, and essential vitamins and minerals.**
- *A typical nutritional profile per 100 grams of cooked tur dal includes:*
  - *Calories: Approximately 343 kcal*
  - *Protein: 22 grams*
  - *Carbohydrates: 63 grams*
  - *Dietary Fiber: 15 grams*
  - *Fat: 1.5 grams*
- **Vitamins and Minerals***: Rich in B vitamins, particularly folate, and also contains iron, magnesium, phosphorus, potassium, and calcium.*

Health Benefits

- **High Protein Content:** *Tur dal is an excellent source of plant-based protein, making it a crucial part of vegetarian and vegan diets.*
- **Rich in Fiber***: The high fiber content aids in digestion, helps in maintaining bowel health, and can prevent constipation.*
- **Heart Health:** *The presence of potassium and magnesium in tur dal helps regulate blood pressure and support heart health.*
- **Rich in Folate***: Folate is essential for fetal development during pregnancy and helps in the production of red blood cells.*
- **Weight Management***: Low in fat and high in protein and fiber, tur dal can be a helpful addition to weight management diets.*

Climate and Soil Requirements

- **Climate:** *Pigeon pea thrives in tropical and subtropical climates. It requires warm weather and can tolerate drought conditions due to its deep root system.*
- **Temperature***: Optimal growth occurs between 18-30°C.*
- **Rainfall***: Requires 600-1000 mm of rainfall annually, but can survive with as low as 350 mm.*
- **Soil:** *Prefers well-drained, loamy soils with a pH of 5.5 to 7.5. It can grow in a range of soils, including poor and marginal lands.*
- **Cultivation:** *Tur dal is a hardy crop that can thrive in semi-arid regions. It requires a warm climate and is typically sown in the early monsoon season. It grows well in well-drained loamy soils.*
- **Harvesting:** *The crop is usually ready for harvest in 3-5 months, depending on the variety and growing conditions.*

Economic Importance

- *Tur dal is not only vital for nutrition but also for the agricultural economy.*
- *India is the largest producer and consumer of tur dal.*
- *The crop supports the livelihood of millions of farmers, especially in states like* **Maharashtra, Karnataka, Madhya Pradesh, and Uttar Pradesh.**

Cultural Significance

- *Tur dal holds cultural significance in Indian cuisine and traditions.*
- *It is often used in various festive and religious dishes.*
- *The dal also symbolizes prosperity and is considered an essential part of the diet in many regions.*

Hoolock Gibbon

Syllabus: GS-3: Wildlife in India.

Context:

- *Oil and gas exploration proposed in Hoollongapar Gibbon Wildlife Sanctuary.*

Gibbons Overview

Description:

- *Smallest and fastest of all apes*
- *Inhabit tropical and subtropical forests in Southeast Asia*
- *Known for high intelligence, distinct personalities, and strong family bonds*
- *Represent one of the 20 gibbon species worldwide*

Population and Habitat

- *Hoolock gibbons: Approximately 12,000 individuals*
- *Forested areas of Northeast India, Bangladesh, Myanmar, and Southern China*

Gibbon Species in India

Species Present:

1. **Eastern Hoolock Gibbon (Hoolock leuconedys)**
2. **Western Hoolock Gibbon (Hoolock hoolock)**

Recent Genetic Study:

- *Conducted by the Centre for Cellular and Molecular Biology (CCMB) in Hyderabad*
- *Revealed that only one species of gibbon exists in India*
- *Debunked the earlier belief of separate eastern and western species based on coat color*
- *Genetic divergence of populations occurred approximately 1.48 million years ago*
- *Divergence from a common ancestor estimated at around 8.38 million years ago*

Threats

General Threats to All Gibbon Species:

- *High risk of extinction due to conservation challenges*
- *Significant decline in populations and habitats over the past century*
- *Restricted to tropical rainforests*

Specific Threats in India:

- *Habitat loss due to deforestation for infrastructure projects*

Conservation Status

International Union for Conservation of Nature's (IUCN) Red List:

- **Western Hoolock Gibbon:** *Endangered*
- **Eastern Hoolock Gibbon:** *Vulnerable*

Legal Protection:

- *Both species are listed on Schedule 1 of the Indian (Wildlife) Protection Act 1972*

The State of the World's Mangroves 2024 Report

Syllabus: GS-3: Environment – Mangrove Forests.

Context:

- *Report was released on World Mangrove Day (observed annually on 26th July).*

Key Highlights

- **Geographical Distribution***:*
    - *Southeast Asia holds about one-third of the world's mangroves, with Indonesia alone comprising 21%.*
    - *West and Central Africa follow as significant regions.*
- **Threat Status***:*
    - *Half of the global mangrove provinces are listed as threatened (IUCN Red List).*
    - *Critical endangerment noted in the Lakshadweep archipelago and Tamil Nadu coast.*

Drivers of Mangrove Loss

- **Climate Change***: Rising sea levels and intensified storms.*
- **Industrial Activities***: Expansion of shrimp aquaculture (notably in Andhra Pradesh, West Bengal, Gujarat).*
- **Agricultural Conversion***: Loss due to oil palm plantations and rice cultivation, with a 43% reduction between 2000-2020.*

Benefits of Mangroves

- **Biodiversity***: Home to over 5,700 plant and animal species in Indian mangroves.*
- **Carbon Sequestration***: Stores an average of 394 tonnes of carbon per hectare.*
- **Coastal Protection***: Reduces flood depths by 15-20%, and up to 70% in some areas.*
- **Nutrient-Rich Seafood***: Provides fish and seafood rich in protein, omega-3 fatty acids, vitamins (D, B12), and minerals (iron, zinc).*
- **Water Quality Improvement***: Filters pollutants and traps sediments.*

About Mangroves

- **Habitat***: Found along coastlines in salt marshes, tidal creeks, mud flats, and estuaries.*
- **Ecological Range***: Salt-tolerant plant communities in tropical and subtropical intertidal zones.*
- **Climate***: Thrive in areas with high rainfall (1,000-3,000 mm annually) and temperatures between 26°C and 35°C.*
- **Distribution in India***: West Bengal has the largest mangrove cover in the country (as per the India State of Forest Report, 2021).*

Initiatives for Mangroves

India

- **Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI)***: Aims to enhance mangrove conservation and provide economic benefits to local communities.*
- **Sustainable Aquaculture in Mangrove Ecosystem (SAIME)***: Focuses on promoting sustainable aquaculture practices within mangrove areas.*

Global

- **Mangrove Breakthrough by GMA (Global Mangrove Alliance)***: Aims to advance mangrove conservation and restoration efforts globally.*
- **Mangrove Alliance for Climate***: Headed by UAE, in partnership with Indonesia, focusing on leveraging mangrove ecosystems to combat climate change.*