

6. Short News –

Ancient Reservoir Unearthed on Elephanta Island

Context – A 1,500-year-old stepped reservoir has been unearthed on Elephanta Island by the Archaeological Survey of India.

About the stepped reservoir on Elephanta Island

1. Excavation Depth – Excavations have reached a depth of nearly five metres, exposing around 20 stone steps leading down to the reservoir.
2. Structure – The reservoir is a massive T-shaped structure measuring about 14.7 metres in length with widths of 6.7 and 10.8 metres, indicating advanced planning.
3. Construction Material – The steps are built using stone blocks transported from the mainland, highlighting logistical capability and resource mobilisation.
4. Water Management – The structure reflects sophisticated rainwater harvesting adapted to the island's rocky terrain where water runoff into the sea is high.

Recent Excavations from the Elephanta Island

1. Associated Structures – Findings include a brick structure possibly used as a textile dyeing vat, along with storage vessels and artefacts.
2. Artefacts – Terracotta figurines, glass and stone bangles, and beads of carnelian and quartz indicate a vibrant material culture.
3. Maritime Trade – About 3,000 amphorae sherds from the Mediterranean and torpedo jars from West Asia suggest extensive long-distance trade networks.
4. Anchors Evidence – Discovery of stone anchors further establishes Elephanta as an active node in ancient maritime trade routes.
5. Coins – Around 60 coins made of copper, lead, and silver provide crucial chronological and economic insights.
6. Dynastic Link – Several coins are attributed to Krishnaraja of the Kalachuri dynasty (6th century CE), based on distinctive iconography.
7. Significance – The discovery highlights Elephanta Island's role as both a centre of advanced hydraulic engineering and a hub of early historic trade interactions.

About the Elephanta Island

1. Location – Elephanta Island (Gharapuri) is located ~10 km off Mumbai coast in the Arabian Sea.
2. UNESCO Status – The Elephanta Caves were designated as a UNESCO World Heritage Site in 1987.
3. Historical Period – The caves date to 5th–8th century CE, associated with early medieval dynasties like Kalachuris and Chalukyas.
4. Religious Importance – The caves are dedicated to Lord Shiva, featuring iconic sculptures like the Trimurti (Maheshmurti).
5. Architecture – Known for rock-cut cave temples, pillared halls, and intricate basalt sculptures reflecting advanced craftsmanship.

Geophagy

Context – A study in 'Nature Scientific Reports' finds that the Barbary Macaques in Gibraltar practice geophagy as an adaptive response to digestive stress caused by tourist-fed junk food.

About Geophagy

1. Definition – Geophagy refers to the deliberate consumption of natural earth materials such as soil, clay, or mud by animals and, in some cases, humans.
 1. Soil acts as a binding agent that absorbs toxins, reduces acidity, and improves gut microbiota.
 2. Example – Amazon parrots consume clay at riverbanks ("clay licks") to obtain essential minerals and neutralise toxins.

2. Occurrence in Humans – Human geophagia is a form of pica – the craving and purposive consumption of non-food items.
 1. It is classified as an eating disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM) if not socially or culturally appropriate.
 2. It is most commonly reported among children and pregnant women.
3. Cultural and Adaptive Behaviour – It can function as an adaptive response to dietary or environmental stress.
 1. It may also be culturally embedded in certain societies and regarded as beneficial.
4. Context-Dependent Interpretation – Its classification as beneficial or harmful depends on the context, frequency of practice, and the individual's health status.
5. Nutritional Aspect – Geophagy is not always associated with mineral deficiency and may occur even in nutritionally adequate conditions.
6. Social Learning in Animals – In many species, geophagy is socially learned, with individuals acquiring the behaviour through observation and group transmission.

Key Findings of the Report

1. Diet Composition – Tourist-derived food constitutes about 18.8 per cent of the diet and is rich in calories, sugar, salt, and dairy but lacks essential minerals, causing nausea and diarrhoea.
2. Soil Types Consumed – Red soil (terra Rossa) accounts for 82.6 per cent of cases, while yellow and black soils account for 6.5 per cent each and tar for 4.3 per cent.
3. Temporal Link – In about 15% of cases, geophagy was observed shortly after the consumption of foods such as biscuits, ice cream, and bread.
4. Frequency – Geophagy occurs about 12 times per week, among the highest recorded in the Macaca genus.
5. Spatial Variation – Macaques in high-tourist zones such as Gibraltar Rock are 2.5 times more likely to consume junk food, while the Middle Hill group shows no geophagy.
6. Seasonal Pattern – Geophagy peaks in summer at 56.5 per cent and declines in winter to 39.1 per cent, aligning with tourist inflow.
7. Behavioural Nature – Around 90 per cent of events occur in the presence of other macaques, indicating strong social learning.
8. Supplementation Hypothesis – No significant increase during pregnancy or lactation, suggesting behaviour is not driven by nutritional demand alone.

Management

1. Feeding Regulation – Authorities provide fruits, vegetables, and water at designated sites and prohibit tourists from feeding macaques.

Significance

1. Human Impact – Demonstrates strong influence of tourism and anthropogenic food on wildlife diet and behaviour.
2. Adaptive Behaviour – Shows geophagy as both a functional and culturally transmitted adaptation.
3. Ecological Insight – Highlights the interaction of ecological pressures and social learning in shaping primate foraging.
4. Future Research – Calls for integration of chemical, microbiome, and long-term behavioural studies to understand persistence and transmission of geophagy.

About Barbary Macaque

1. Geographical Distribution – They are found in Gibraltar and the Atlas Mountains of Morocco and Algeria.
 1. It is the only wild primate in Europe.
2. Classification – Old World monkey belonging to the genus 'Macaca'.
3. Habitat – It inhabits diverse environments, including cedar, fir and oak forests, grasslands, thermophilous scrub, rocky vegetated ridges etc.

4. Physical Features – Tailless monkey with thick fur adapted to colder climates and a robust, medium-sized body.
5. Alloparental care – In this monkey species, both males and females actively carry, groom, and protect infants that are not their own.
6. Conservation Status – They are listed as Endangered by the International Union for Conservation of Nature (IUCN).

UNESCO Chair on Gender Inclusion

Context – UNESCO, in collaboration with Symbiosis Skills and Professional University (SSPU), has established Asia's first UNESCO Chair on Gender Inclusion and Skill Development at Pune during the second edition of the International Conference on Women Leading the Future of Work.

Key Highlights

1. Industry-Integrated Skilling – Employability-focused training model linking skill development with industry needs.
2. Sunrise Sectors – Training in robotics, automation, semiconductor technology, advanced manufacturing, and defence technology.
3. Scale of Training – Around 10,000 underprivileged girls trained in future skills.
4. Employment Outcome – High placement rate with trainees receiving job offers after course completion.
5. Nodal Ministry – Ministry of Skill Development and Entrepreneurship.

Significance

1. First in Asia – It is the first UNESCO Chair in Asia focusing on gender inclusion and skill development.
2. Alignment with UNESCO Goals – It aligns with UNESCO's priorities on inclusive education, gender equality, and future workforce readiness.

About the UNESCO Chair on Gender Inclusion

1. Nature of Initiative – The UNESCO Chair on Gender Inclusion and Skill Development is an international academic initiative aimed at promoting gender inclusion in education and skill development systems.
2. Programme Basis – It is established under the UNESCO UNITWIN (University Twinning and Networking) / UNESCO Chairs Programme (1992), which promotes global academic cooperation and knowledge sharing.

World Intellectual Property Day

Context – On World Intellectual Property Day, the Minister of Commerce and Industry announced major IP reforms to boost sports innovation and manufacturing.

About the World Intellectual Property Day

1. Date – Celebrated every year on 26 April.
2. Theme – IP and Sports – Ready, Set, Innovate.
3. Origin – Established in 2000, marking the entry into force of the WIPO Convention (1970) to promote global IP protection.
4. Purpose – To raise awareness about the role of intellectual property (IP) in fostering innovation and creativity.
5. Organised By – Observed under the aegis of World Intellectual Property Organization, a specialized agency of the United Nations.
6. Focus Areas – Highlights importance of patents, copyrights, trademarks, and designs in economic growth, technology transfer, and cultural development.

Key IP Reforms Announced

1. Fee Waiver for Sports IP – A 3-year fee waiver on all sports-related IP registrations was announced to boost innovation.

2. Promotion of IP Ecosystem – Government will provide facilitation support under existing schemes to help innovators, students, and artisans file and secure IP rights.
3. GI Tag & Kashmir Willow – The GI-tagged Kashmir willow bat was highlighted as a symbol of India's craftsmanship and IP strength, with emphasis on global promotion.
4. Innovation & IP Strategy – Promoted the vision – “Innovate, Patent, Produce, prosper” to convert ideas into IP assets and leverage global markets via FTAs.
5. Hackathon Launch – Launched Viksit Bharat Digital Matrix 2026 Hackathon (DPIIT + IIT Delhi) focused on smart wearables and IP-driven innovation.
6. CSR & Infrastructure Push – Encouraged use of CSR funds for sports infrastructure like open gyms and facilities in remote areas.
7. Sports Policy Support – Aligned with Sports Policy 2025, focusing on grassroots development, inclusivity, and infrastructure expansion.

