



Pliosaur Skull

[Source: IDR](#)

A **massive pliosaur skull (lived 145 million years ago)** has been discovered embedded in the **Jurassic Coast cliffs in Dorset, England.**

- The skull was discovered on a cliff near **Kimmeridge Bay** along the **Jurassic Coast**, a [UNESCO World Heritage Site](#).
 - The Jurassic Coast, on England's southern coast, is one of the **world's most renowned fossil hotspots.**
- The skull has a prominent **cranial crest, an elongated jawline**, and a bite force stronger than that of a **Tyrannosaurus rex.**
 - **Tyrannosaurus rex** was a **large carnivorous dinosaur** that lived during the **Late Cretaceous period (68-66 million years ago).**
- Pliosaur were **top predators** of the **Jurassic oceans** and among the deadliest **marine reptiles** in history.
 - **Jurassic oceans** refer to the **vast marine environments** that existed during the **Jurassic period (199.6 million to 145.5 million years ago).**
- Possible **sensory pits and a parietal eye** suggest **advanced hunting adaptations**, similar to modern **crocodiles.**

Read More: [Dinosaurs and UNESCO Global Geoparks Tag](#)

Reappearance of South American Tapir

[Source: NYP](#)

The **South American tapir** (Lowland tapirs) has been spotted in the **Cunhambebe State Park** (Brazil's Costa Verde region) for the first time in **100 years.**

- The last confirmed sighting was in **1914** in the **Serra dos Orgaos National Park** in **Rio de Janeiro, Brazil.**
- **About Tapir:** It is the **largest land mammal in South America** and has **short legs** and a **rounded body**, with a kind of **flexible trunk.**
 - They are **herbivores.**
 - Known as a "**forest gardener**," the tapir aids **seed dispersal**, and creates **natural trails** that allow **sunlight to reach the forest floor**, enhancing biodiversity.
 - **IUCN Status:** Endangered.
 - South American tapirs are **one of four species** of tapir alongside the **Baird's tapir, mountain tapir and Malayan tapir** found in the forests of **Central and South America** as well as **Southeast Asia.**



Lowland Tapir

Tapirus terrestris



Baird's Tapir

Tapirus bairdii



Mountain Tapir

Tapirus pinchaque



Malayan Tapir

Tapirus indicus

Aravali Safari Park Project

[Source: TH](#)

Haryana's proposed [Aravali Safari Park](#), featuring **wildlife enclosures, hotels, and restaurants**, faces debate over its impact on **ecology, groundwater, and wildlife conservation**.

- **About Aravali Safari Park Project:** It is envisioned as the **world's largest safari park (approx 10,000 acres)** and aims to support **eco-tourism and compensatory afforestation**.
 - Inspired by **UAE's Sharjah Park**, it is planned for **compensatory afforestation** to mitigate the **loss of 26,000 acres** of tropical forests in [Great Nicobar](#).
 - It will only be developed in areas where **forest density is less than 40%**.
 - [Forest \(Conservation\) Act, 1980](#) was amended in **2023** to bring it under the 'forest' activity, and allowing **zoos** to be built in **forest areas**.
- **About Aravalis:** It is the **oldest fold mountain range** in the world and runs **diagonally (northeast to southwest)** across **Gujarat, Rajasthan, Delhi, and Haryana** for about **690 km**.
 - It plays a crucial role in **preventing desertification** eastwards and **recharging groundwater**.
 - The **hidden limb** of the Aravallis, extending from **Delhi to Haridwar**, separates the drainage of the **Ganga and Indus rivers**.
 - Its highest peak is **Guru Shikhar** on **Mount Abu** (Rajasthan) at **1,722 metres**.



Read More: [Critical Threats Facing the Aravallis](#)

DeepSeek AI

Source: [TH](#)

Chinese AI startup DeepSeek has launched **generative AI** models (known as **DeepSeek**) that rival global leaders like OpenAI, Google, and Meta while **offering competitive performance at a significantly lower cost.**

DeepSeek:

- **About:** DeepSeek is a **free AI-powered chatbot** similar to **ChatGPT**, providing text-based assistance via **web, mobile, and API**.
 - Deepseek (AI firm) was founded by **Liang Wenfeng** in **May 2023** that specialises in **open-source [Large Language Models \(LLMs\)](#).**
- **Recent Advanced Models:** DeepSeek-V3 excels in **coding, translation, and writing**, while DeepSeek-R1 outperforms OpenAI's o1 in reasoning, math, and logic.
- **Different With Other AI Models:**
 - **Open-Source Advantage:** Unlike **proprietary models** (OpenAI, Google), DeepSeek allows **cost-effective AI adoption without licensing fees.**
 - **Advanced Architecture:** Uses **Mixture-of-Experts (MoE)** for specialized tasks and **Multi-Head Latent Attention (MLA)** for **efficiency, reducing training and deployment costs.**
 - **Reinforcement Learning:** Enhances reasoning through **trial-and-error learning**, enabling **efficient distillation of large models.**
 - **Real-Time Computation:** DeepSeek-R1 displays reasoning in real time, outperforming **OpenAI's o1** in math, coding, and general knowledge.

Artificial Intelligence(AI)

AI is the simulation of human intelligence in machines programmed to think and learn like humans, capable of problem-solving, reasoning, and adapting to new information.

AI Timeline - Major Milestones

- 1950s** Turing Test Proposed; First AI Programs Developed
- 1956** Dartmouth Conference Coins "Artificial Intelligence"
- 1960s** Eliza Chatbot Created; Early Neural Networks Emerge
- 1996** Deep Blue - a Chess-Playing Program
- 2012** Deep Learning Breakthrough in Image Recognition
- 2014** Generative Adversarial Networks (GANs) Introduced
- 2020** GPT-3 Demonstrates Advanced Language Generation
- 2022** Chatgpt Launches, Bringing Conversational AI to Masses
- 2023** Generative AI Boom; Major Tech Companies Release AI Models



Applications of AI

- ↳ **Healthcare:** Personalised medicine
- ↳ **Finance:** Algorithmic trading
- ↳ **Transportation:** Autonomous vehicles
- ↳ **Marketing & Customer Service:** Targeted advertising, chatbots
- ↳ **Education:** Adaptive learning systems, personalised tutoring
- ↳ **Agriculture:** Crop monitoring
- ↳ **Cybersecurity:** Threat detection
- ↳ **Energy:** Smart grid management, consumption forecasting

Concerns

- ↳ Deepfakes & misinformation
- ↳ Algorithmic bias
- ↳ Automation & job displacement
- ↳ Privacy issues
- ↳ Data ownership & liability issue
- ↳ Ethical decision-making complexes

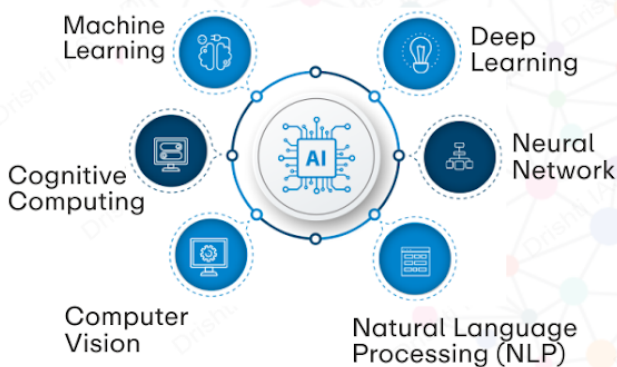
Regulating AI

- ↳ **Global Partnership on AI (GPAI)** launched in 2020
- ↳ **Bletchley Declaration (2023):** Enhance Global Collaboration on AI
- ↳ **G20 New Delhi Leaders' Declaration (2023):** Harnessing AI responsibly for good and for all
- ↳ **Hiroshima AI Process (2023)** by G7

India and AI

- ↳ **National Strategy For AI 2018**
- ↳ **AI For All:** Self-learning online program
- ↳ **GPAI Summit 2023** hosted by India
- ↳ **IndiaAI Mission 2024**
- ↳ **US India Artificial Intelligence (USIAI) Initiative:** AI cooperation in critical areas
- ↳ **AIRAWAT** (AI Research, Analytics and Knowledge Assimilation Platform): Supercomputer

KEY COMPONENTS OF AI



Read more: [Artificial Intelligence \(AI\)](#)

India-Qatar Strategic Partnership

For Prelims: [Gulf Cooperation Council](#), [Liquefied Natural Gas](#), [Gulf](#), [Za'ir-Al-Bahr](#)

For Mains: India-Qatar Bilateral Relations, Mutual significance of India and Qatar, India's Role in West Asia

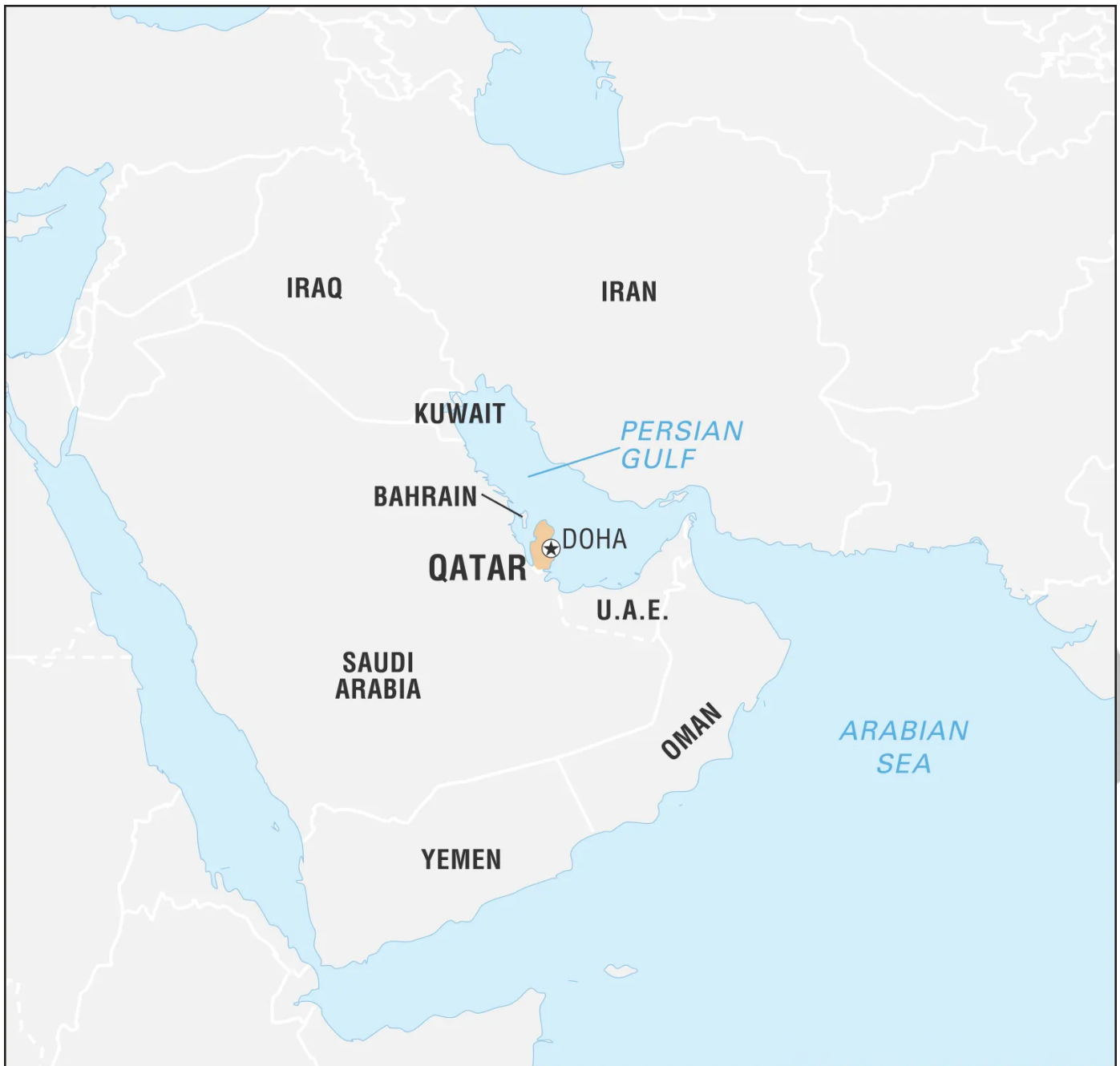
[Source: TH](#)

Why in News?

Sheikh Tamim Bin Hamad Al Thani, the Amir of Qatar, visited India to **enhance bilateral ties, focusing on trade, energy, and investment.**

- Both nations committed to doubling trade to **USD 28 billion** and increasing Qatari investment in India.





What are the Key Highlights of the Visit?

- **Elevation to Strategic Partnership:** Qatar and India have upgraded their bilateral relations to a **strategic partnership**, aiming to deepen cooperation in various sectors, including trade, investment, energy, and security.
- **Target for Bilateral Trade:** India and Qatar have set an ambitious target to double bilateral trade from **USD 14 billion to USD 28 billion by 2030**.
- **Qatar's Investment Commitment:** Qatar's **sovereign wealth fund** has invested USD 1.5 billion in India and committed an additional USD 10 billion in sectors like infrastructure, renewable energy, and emerging technologies such as **artificial intelligence (AI)** and **machine learning**.
- **Avoidance of Double Taxation:** A **Revised Agreement for Avoidance of Double Taxation** was also exchanged, which will foster economic and financial collaboration.
- **Status of a Free Trade Agreement (FTA):** Both nations discussed the **possibility of a FTA**.
 - Negotiations are ongoing for an FTA between India and the **Gulf Cooperation Council (GCC)**, which includes Qatar.
- **Infrastructure:** Discussed the operationalization of **India's Unified Payment Interface (UPI)** in Qatar and the expansion of Qatar National Bank's presence in India through **GIFT (Gujarat International Finance Tec-City) City**.

- **Israel-Palestinian Conflict:** India reaffirmed its support for a **two-state solution**.

Why is Qatar Important for India?

- **Energy Cooperation:** In FY 2022-23, Qatar was India's largest **Liquefied Natural Gas (LNG)** supplier, providing over 48% of total LNG imports, and the top **liquefied petroleum gas (LPG)** supplier, accounting for 29% of LPG imports.
 - This stable and uninterrupted energy partnership is vital as **India transitions to cleaner energy** sources and reduces reliance on **coal**, helping meet both climate goals and growing energy demands.
- **Strategic Cooperation:** Qatar is a key partner in **India's Look West policy** (converted to "**Link and ACT West**"), strengthening ties with the **GCC countries**, including the UAE, Saudi Arabia, Oman, and Kuwait, to enhance **energy security and trade**.
- **Geopolitical Significance:** Qatar's role as a **mediator** in key geopolitical issues, like **Afghanistan** and the **Israel-Palestine conflict**, allows India to engage in regional matters indirectly.
 - Qatar's close ties with the **US on Middle East peace efforts**, also offer India a platform for engagement with the US on regional issues.
- **Counterterrorism Cooperation:** India and Qatar share common interests in **combating terrorism and extremism**, with Qatar's strategic location enabling India's collaboration on **counterterrorism and maritime security** in the **Gulf** (as the Gulf region fulfilled 55.3% of India's total crude oil demand in 2022-23).

India-Qatar Bilateral Relations

- **Defense Cooperation:** India-Qatar defense ties include training, naval visits, biennial **Doha International Maritime Defence Exhibition and Conference (DIMDEX)** participation, and the bilateral maritime exercise **Za'ir-Al-Bahr** (Roar of the Sea).
- **Trade:** Bilateral trade between India and Qatar in 2023-24 stood at USD 14.08 billion, with India's exports at USD 1.7 billion and imports at USD 12.3 billion.
 - India is among the **top three largest export destinations** for Qatar (along with China and Japan) and among the top three sources of Qatar's imports (along with China and the US).
 - Qatar primarily exports **LPG, LNG, chemicals, petrochemicals, and aluminium to India**, while India exports a variety of goods, including cereals, iron, steel, textiles, and machinery.
- **Investment:** Over **15,000 Indian companies operate in Qatar**, with USD 450 million invested by Indian firms.
- **Cultural Cooperation:** Regular cultural exchanges occur under the **2012 Cultural Cooperation Agreement**, with Qataris admiring India's diversity. The year 2019 was celebrated as **India-Qatar Year of Culture**.
- **Indian Community:** Over 835,000 Indians reside in Qatar, forming the largest expatriate community (27% of the population).

Drishti Mains Question:

How do India's engagements with Qatar and other Gulf countries align with its "Link and Act West" policy? Evaluate the role of West Asia in India's economic and strategic interests.

UPSC Civil Services Examination, Previous Year Question

Prelims

Q. Which of the following is not a member of 'Gulf Cooperation Council'? (2016)

- (a) Iran
- (c) Oman
- (b) Saudi Arabia
- (d) Kuwait

Ans: (a)

Mains

Q. The question of India's Energy Security constitutes the most important part of India's economic progress. Analyse India's energy policy cooperation with West Asian countries. **(2017)**

PDF Reference URL: <https://www.drishtias.com/current-affairs-news-analysis-editorials/news-analysis/20-02-2025/print>

