

India reaffirms Commitment to Glacier Preservation at the High-Level International Conference on Glaciers' Preservation

The conference was organised in **Dushanbe (Tajikistan)** in collaboration with **UNESCO** and **World Meteorological Organisation (WMO)**.

Why Glaciers are Important?

- **Freshwater Reservoirs:** Only 3% of Earth's water is fresh, and two-thirds is frozen in glaciers.
- **River Ecosystem:** E.g. **Hindu Kush Himalayas (HKH)** (~54,000 glaciers) contribute ~ 40% of **Indus River** system's flow.
- **Natural archives of Earth's climate:** Store records up to **800,000 years**, aiding in understanding **warming & cooling cycles**.
- **Monsoon Regulation:** Temperature difference between Himalayan glaciers & Indian Ocean **pulls South West monsoon**.

Initiatives Taken

- **India**
 - ⊕ **National Mission for Sustaining the Himalayan Ecosystem (NMSHE)** - a key component of India's **National Action Plan on Climate Change (NAPCC)**.
 - ⊕ **Centre for Cryosphere and Climate Change Studies:** For monitoring of glaciers in Indian Himalayan Region.
 - ⊕ **Disaster preparedness:** E.g. **Glacial Lake Outburst Flood (GLOF)** risk mapping.
- **Global**
 - ⊕ Declared **International Year of Glaciers Preservation, 2025** (by **UNESCO** and **WMO**) & **Decade (2025–2034) of Action for Cryospheric Sciences**.
 - ⊕ **Paris Agreement:** To limit the temperature increase to **1.5°C** above pre-industrial levels.
 - ⊕ **International Centre for Integrated Mountain Development (ICIMOD):** Intergovernmental institution to preserve **HKH**.



IndiaAI mission gets boost as compute capacity tops 34,000 GPUs

Expanded capacity under the mission will provide a common computational AI platform for training and inference, crucial to developing indigenous foundational models tailored to the Indian context.

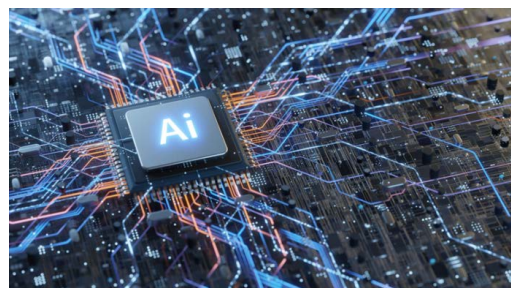
About IndiaAI Mission

- **Launch:** 2024 by Ministry of Electronics and Information Technology (MeitY).
- **Aim:** To foster AI innovation by democratizing computing access, enhancing data quality, and developing indigenous AI capabilities.
- **Implementing agency:** IndiaAI, under MeitY.
- **7 Pillars:**
 - ⊕ **IndiaAI Compute:** Recent addition of 15,916 GPUs to the existing 18,417 empanelled GPUs.
 - ⊕ **IndiaAI Innovation Centre:** Three AI Centres of Excellence in Healthcare, Agriculture, and Sustainable Cities established in New Delhi.
 - ⊕ **IndiaAI Dataset platform:** 367 datasets have already been uploaded to AI Kosh.
 - ⊕ **IndiaAI Application development initiatives:** Sarvam-1 AI Model, a large language model optimised for Indian languages.
 - ⊕ **IndiaAI Startup Financing:** Selection of three new startups for building India's own Foundation Model.
 - ⊕ **IndiaAI FutureSkills**
 - ⊕ **Safe & Trusted AI**

Challenges:

- **Huge Investments required** in computing infrastructure.
- **Narrow focus on developing large language models (LLMs)** risks sidelining other promising areas of AI research.
- **Safety, transparency, and bias** as other models have been criticised for bias.
- **High Carbon Emissions:** The Paris summit raised the pitch for low-energy computing AI systems.

Conclusion: The need of the hour is to promote ethical and responsible AI development. For this, state-funded AI safety institutes can be setup.



Government making Women-led Development as Pivot of Governance: Prime Minister

While addressing the Women Empowerment Maha Sammelan organized on the 300th birth anniversary of Lokmata Devi Ahilya Bai, PM said that government has made **Women-led Development** the foundation of national progress.

Women's Development vs. Women Led Development

Aspect	Women's Development	Women-led Development
Core Philosophy	Women as passive recipients of welfare.	Women as active agents and drivers of change.
Primary Focus	Providing services to women.	Empowering women to lead development.
Role of Women	Beneficiaries needing support.	Change-makers and decision-makers.
Approach	Top-down delivery of schemes. e.g., Providing Shelter assistance	Bottom-up participation and leadership. e.g., Providing Property Entitlements

Significance of Women-led development to the society

- **Economic Empowerment:** Advancing gender equality could potentially lead to a **30% increase in India's GDP**. (NFHS)
- **Gender equity:** Women in leadership positions can serve as role models and help shift societal norms about gender roles and capabilities.
 - ⊕ e.g., recent leadership of **Col. Sophia Qureshi** and **Wing Commander Vyomika Singh** in **Operation Sindoor**.
- **Inclusive growth:** It channelizes potential of women for actively shaping and driving economic, social, and political progress at all levels of governance.
 - ⊕ **>80% artisans** in Khadi Sector are women, **>50% of persons practicing sericulture** are women.

Landslide causes loss of lives in Northeast and Karnataka

A landslide refers to any form of **mass wasting characterized by movement of rocks, soil, or other debris downhill assisted by gravity**.

- Landslides are generally classified by **type of movement** (slides, flows, spreads, topples, or falls) and **type of material** (rock or debris).

Causes of Landslide

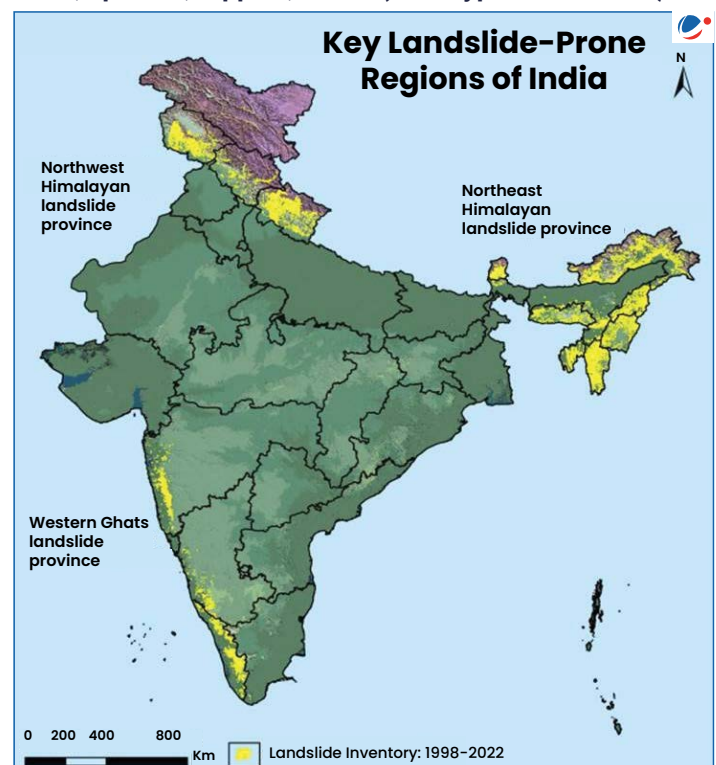
- **Natural Causes:** Groundwater pressure, Earthquake, Volcanic eruptions, heavy rains, etc.
- **Anthropogenic causes:** Deforestation, cultivation, and construction, Vibrations from machinery or traffic, tunnelling, etc.

Landslide Vulnerability in India

- According to **Landslide Atlas of India by ISRO**, India is considered among the **top four landslide-prone countries** globally.
- Excluding snow covered areas, **approximately 12.6 per cent of the country's geographical land area** (0.42 million sq km) is prone to landslides (refer map).
- The **Northwest Himalayas** contribute- **66.5%** of landslides in India, followed by the **Northeast Himalayas -18.8%** and the **Western Ghats - 14.7%**.

Mitigation Strategies

- **National Landslide Risk Management Strategy guidelines 2019:** It addresses **hazard mapping, monitoring and early warning system** etc.
- **Landslide Risk Mitigation Scheme (LRMS) by NDMA:** It provides **financial support for site specific Landslide Mitigation Projects**.
- **National Landslide Susceptibility Mapping (NLSM):** To create a dynamic **Geodatabase for India**.



60th anniversary of Pandit Deendayal Upadhyaya Ji's philosophy of 'Integral Humanism'

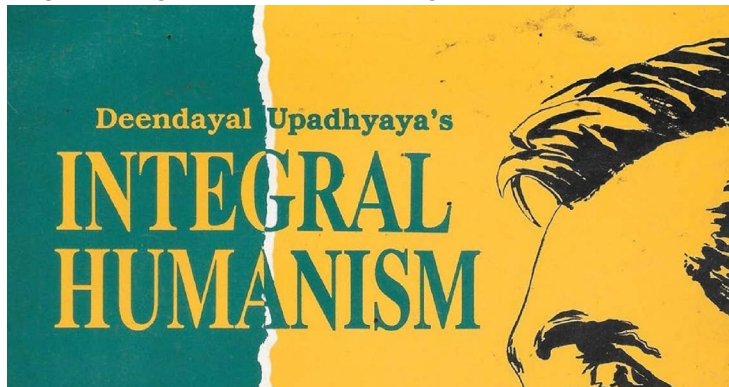
Born on September 25, 1916, Pandit Deendayal Upadhyaya ji gave the **Theory of Integral Humanism** to have uniquely Indian Ideas guiding the country post-independence.

What is Integral Humanism (Ekatma Manavvad)?

- Based on the following three principles; Primacy of whole, Supremacy of Dharma and Autonomy of society.
- It talks about **Unity and Harmony, Equal importance to the body, mind, intellect, and the soul**: All four must be nourished for a truly meaningful life.
 - ⊕ It says that **every country has its own culture and societal central idea which has been termed as Chiti** and every society has **some peculiarities which could be identified as Virat**.

Contemporary Relevance of Integral Humanism

- **Participatory Governance**: Be it a family, an institution or a government, all are expected to be run in a systematic manner.
- **Self-reliant and Decentralised economic model** with villages as the focal point of development.
- **Policy Making: Concept of Antyodaya** and the idea of welfare of all in Indian tradition.
- **Sustainable use**: To balance the use of labour, natural resources and capital so that we can provide a life of dignity to every human being.
- **Environmental Justice**: Promotes sustainable consumption of natural resources and **Principles of Deep Ecology**.
- **Cultural Heritage**: It advocates for **preserving and promoting India's cultural heritage**.



Israel becomes First Country to shoot down enemy Drones with Laser Weapon

This unprecedented breakthrough occurred during the **ongoing conflict in Gaza** where Israel Air Force's Aerial Defense Array used the **prototype laser air defences** to reach a significant milestone in **modern warfare**.

- It is described as an **adapted version of the Iron Beam system**.

What is Iron Beam?

- Also known by its **Hebrew name Magen Or**.
- Developed by **Rafael Advanced Defense Systems**.
- It is a 100kW class **High Energy Laser Weapon System (HELWS)**.
 - ⊕ HELWS are a type of **Directed Energy Weapon (DEW)**.
 - ◆ DEWs use concentrated energy from electromagnetic or particle technology, rather than kinetic energy, to degrade or destroy targets.

- The system can **neutralize multiple threat types** including **RAM (Rockets, Artillery, and Mortars), Cruise missiles, UAVs (drones) etc.**

Key Benefits of HELWS

- **Precision**: Neutralizes aerial threats with **pinpoint accuracy at ranges of up to 10 km** ensures **minimal collateral and environmental damage**.
- **Interoperability**: Can easily integrate with variety of platforms and systems as **part of a multilayered defense system** or can be operated as a **standalone system**.
- **Cost efficient**: Almost zero cost per intercept.
- **Other**: Engaging target at the **speed of light**, protects military forces and civilian populations, etc.

Limitations of HELWS

- **Thermal Constraints**: Limited magazine depth due to overheating; the system must pause after successive shots to **cool down**.
- **Weather Sensitivity**: Can't function well in heavy cloud cover and other inclement weather.

Other DEW Systems

- **USA**: High Energy Laser with Integrated Optical-dazzler and Surveillance (**HELIOS**) system; Directed Energy Maneuver-Short Range Air Defense (**DE M-SHORAD**) system.
- **China**: **Hurricane-3000** and **Silent Hunter**.
- **UK**: **DragonFire**, Radio Frequency Directed Energy Weapon (**RFDEW**).
- **Russia**: **Peresvet** laser.
- **India**: Integrated Drone Detection and Interdiction System (**IDD&IS**) **Mk2A** by DRDO.

Also In News



Personality Rights

The Delhi High Court has passed an order **protecting the personality rights**, and publicity rights of the founder of Isha Foundation.

About Personality Rights

- In India Personality Rights have **not been defined under any statute**.
- **Generally they are of two types**: Right to publicity (U/A 19) and Right to Privacy (U/A 21).
- In its most basic sense, it could be **understood to mean the right of an individual to protect and control their image, name and identity**.
- **Personality Rights are protected under**: Trademark Act, 1999, Copyright Act, 1957.



Operation Shield

Mock drills were conducted in States and Union territories adjoining the western border under 'Operation Shield'.

About Operation shield

- **Objective**: To assess and strengthen the **country's readiness in the face of possible external threats**.
- The drill is designed to simulate various **emergency scenarios, such as enemy air raids, drone intrusions, missile strikes, and mass evacuations**.
- It will include **silent and general recall** of civil defence volunteers, evacuation drills, and **emergency communication exercises**.



Gaza Humanitarian Foundation

UN officials have alleged that the newly created agency, backed by the U.S. and Israel, is an 'aid-washing' initiative is meant to mask the starvation of Palestinians

About Gaza Humanitarian Foundation:

- A charity that was founded in 2025 in legal form "Stiftung" in Switzerland.
 - ⊕ It gives grants in topics such as healthcare, humanitarian & disaster relief, non-profit & charitable and others.
- It is not a UN Body.

Concerns:

- Violation of principles of impartiality, neutrality, humanity, and independence in aid distribution.
- Aid must never be politicised or weaponised.



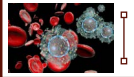
Asian Development Bank

ADB commits \$10 billion to boost India's urban development and metro expansion.

- ADB will also assist with India's Urban Challenge Fund, boosting private investment.

About Asian Development Bank (ADB)

- Supports inclusive, resilient, and sustainable growth across Asia and the Pacific.
- Present Members: From 31 members at its establishment in 1966 to 69 members—of which 50 are from within Asia and the Pacific and 19 outside.
- Headquarter: Manila, Philippines.
- ADB's five largest shareholders (As of 31 December 2023): Japan and the USA (each with 15.6% of total shares), China (6.4%), India (6.3%), and Australia (5.8%).



Acquired Immunity

Chief Scientist of the World Health Organization said that there is no reason to fear COVID-19 due to the immunity people have acquired over the last few years.

About Acquired immunity

- Also known as adaptive immunity, it is a type of immunity that develops after exposure to a specific antigen, such as a pathogen or vaccine.
- As against innate immunity (present from birth), it is learnt when a person's immune system encounters foreign invaders and antigens.
- Is also called specific immunity because it tailors its attack to a specific antigen.
- The white blood cells responsible for acquired immunity are Lymphocytes (T cells and B cells).



Satellite Communication

India's private telecom operators have raised concerns about the pricing for satellite based communication networks.

About Satellite Communication (SATCOM)

- It refers to any communication link that involves the use of an artificial satellite in its propagation path.
- It is a form of wireless communication where satellites serve as relay stations in space, enabling the transfer of data over vast distances.
- Key Characteristics: Facilitates long-distance communication; operates over radio frequencies; provides global coverage, including remote and inaccessible areas, etc.
- Most common orbits followed by SATCOMs are Low Earth Orbit (LEO), Medium Earth Orbit (MEO), and Geostationary Satellite Orbit (GSO).



Operation Spider Web

Under Operation Spider Web, Ukraine carried out its most devastating drone strike of the war.

Operation Spider Web

- Conducted by Ukraine's SBU (Security Service/Agency).
- It is a drone attack (using first-person view (FPV) drones) on strategic bomber aircrafts at Russian air bases.
 - ⊕ The attack was planned on four air bases. E.g. Belaya air base in the Irkutsk region of Siberia.
- FPV, also known as Remote Person View (RPV), are unmanned aerial vehicles which streams real-time video from the camera on the drone to goggles.



Neolithic habitation in Assam

Furnace and iron slag found at Daojali Hading point to early metallurgical practices of the Neolithic Age.

Daojali Hading:

- A neolithic site in Assam's Dima Hasao district near the Brahmaputra valley.
- First evidence of an Eastern Asiatic Neolithic complex of double-shouldered Celts and cord-marked pottery in India was reported from there.

Neolithic period (About 6000 BC to 1000 BC):

- Last stage of the Stone Age
- Significant for spread of agricultural practices, and the use of polished stone, more refined tools.

Other Neolithic Sites:

- Kashmir: Burzahom, Gufkral and Kanisapur.
- Ganga valley: ChopaniMando, Koldihwa, Lehuradeva and Mahagara.

Personality in News



Lokmata Devi Ahilyabai Holkar (1725 - 1795)

Nation pays tribute to Lokmata Devi Ahilyabai Holkar on her 300th birth anniversary.

About Ahilya Bai Holkar

- She was the Holkar Queen of the Malwa kingdom & famously known as Philosopher Queen.
- Early Life:
 - ⊕ Born in village of Chondi, Ahmednagar (Maharashtra).
 - ⊕ Married to Malhar Rao Holkar, the Lord of the Malwa territory.
- Royal Succession: Peshwa granted Ahilyabai to take over Malwa. Later she ascended the throne and became the ruler of Indore in 1767.

Key Contributions

- Established a textile industry in Maheshwar, famous for Maheshwari sarees.
- Temple Construction & Restoration:
 - ⊕ Built two of the Twelve Jyotirlingas.
 - ⊕ Repair of Kashi Vishwanath Temple.
 - ⊕ Construction of Old (Juna) Somnath temple in Gujarat, popularly known as Ahilyabai temple.
 - ⊕ Restored temples at pilgrimage sites like Haridwar, Kashi, Somnath, and Rameshwaram
- Architectural Legacy: Build Maheshwar Fort (Ahilya Fort) on the banks of Narmada River.
- Formed a women's army which symbolize state defense, law and order, and women's empowerment.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI