

NEWS TODAY

95% of Land Records in Rural India Digitized: Minister of Rural Development

Since 2016, **Land record Digitization of over 6.26 lakh villages** marks a major milestone in Government's efforts to ensure **secure, transparent, and accessible land ownership**.

Significance of Digitization of Land Records:

- **Addressing traditional challenges:** E.g. land disputes (**More than 60% of litigation in India is land related**), encroachments, benami property & inefficient manual processes.
- **Accurate surveys and planning:** Geospatial mapping; provides a level of transparency in land records, promoting access and equity towards vulnerable sections.
- **Promoting agriculture Credit:** Clear land titles facilitate the supply of capital and credit for agriculture.
- **Other Benefits:** Better targeting of **farm input subsidy**, Timely compensations for **land acquisitions or disasters**, GDP boost etc.

Issues in Digitization of Land records:

- **Cumbersome and resource intensive process:** Currently, land records are incomplete and dispersed across various departments.
- **Slow process of digitization:** Leading to delayed infrastructure projects, and outdated land ownership data.
- **Overhaul of legal and administrative framework:** Effective reform requires updating tenancy laws and land use regulations for accurate reporting.

Way Forward: Use of block chain, artificial intelligence and machine learning technologies in land governance, review of registration act, etc.

Government initiative for improving land digitalization:

- **Digital India Land Records Modernization Programme (DILRMP):** Establish a modern and transparent land records management system
- **Unique Land Parcel Identification Number (ULPIN) or "Bhu-Aadhar":** 14-digit alphanumeric code for each land parcel, based on its geo-coordinates
- **National Generic Document Registration System (NGDRS):** Uniform process for document registration across countries.
- **SVAMITVA Scheme:** To provide 'Record of Rights' to household owners possessing houses in inhabited areas in villages.

India's Finance Minister highlights Global South's role in shaping Multilateral Development Banks

Finance Minister noted the **pivotal contributions of the Global South** to the **foundations of Multilateral Development Banks (MDBs)** at the 1944 Bretton Woods Conference.

- 1944 Conference led to establishment of **World Bank and International Monetary Fund**.

Contribution of Global South to MDBs

- **Establishment of New Institutions** such as New Development Bank, Asian Infrastructure Investment Bank etc.
- **With economic growth**, Global South Countries like India and China have increased their financial commitments to MDBs.
- **Advocacy for Inclusivity and MDB reforms** by emphasizing on embedding diverse voices in decision-making processes at MDBs.

Need for MDB Reforms from the perspective of Global South

- **Inadequate representation:** 59.1% of voting shares in IMF are held by countries representing just 13.7% of world's population.
- **Debt Relief Requirement:** Around 79 low-and-middle income countries deemed to be in debt distress.
- **Addressing Global Challenges:** Issues like climate change, pandemic, supply chain disruptions disproportionately affect global south, requiring additional funding support.

India's Recommendations for MDBs

- Promote a **two-way exchange of innovations**, drawing from experiences of Global South in areas like Digital Inclusion and Sustainable Energy while meeting the need of development financing to Global South.
- Adopt a **more competitive pricing model** to foster broader participation, **incentivise middle-income countries to borrow more** and deepen development impact.
- Adopt a strictly **evidence-based and data-driven approach when preparing global indices** such as the Worldwide Governance Indicators and the new B-Ready index.



U.S., Japan and South Korea signed Digital Infrastructure Growth Initiative for India Framework (DiGi Framework)

DiGi Framework seeks to advance cooperation between the United States, Japan, and the Republic of Korea in partnership with India to advance shared priorities.

DiGi Framework

- **Partner Agencies:** U.S. International Development Finance Corporation, the Japan Bank for International Cooperation (JBIC), and the Export-Import Bank of Korea (Korea Eximbank).
- **Objective:** It aims to further their collaboration with the Indian private sector to **support digital infrastructure in India.**
- **Implementation:** It will support projects in **information and communications technology sector** such as 5G, Open RAN, submarine cables, optical fiber networks, data centres, smart city, e-commerce, AI, and quantum technology.

India's Efforts at Globalizing DPIs

- **US-India Global Digital Development Partnership** to deploy responsible use of emerging digital technologies in Asia and Africa.
- **G20 Framework for Systems of DPI** adopted under India's G20 leadership outlines principles for designing and deploying DPIs.
- **Virtual Global DPI Repository**, being setup by India to host DPI-focussed tools, resources and experiences from around the world.

Digital Public Infrastructure (DPI) in India

- India became the first country to build all three foundational DPIs through **India Stack**: digital identification (**Aadhaar**), real-time rapid payment (UPI) and data sharing architecture (**Data Empowerment and Protection Architecture**).
- **Significance:**
 - ⊕ **Inclusive Development:** DPI helped India achieve **80% financial inclusion** during 2018-2023 and enabled direct benefit transfers supporting 87% of poor households during Covid-19.
 - ⊕ **Economic Growth:** Countries can speed up economic growth by 33% by implementing DPI in financial sector.
 - ⊕ **Emission Reduction:** DPI in climate sector can accelerate emissions control by 5-10 years through implementing DPI in carbon offsets and trading, land mapping, and weather information and monitoring.

Government of India invites comments on draft Arbitration and Conciliation (Amendment) Bill, 2024

Government has drafted Arbitration and Conciliation (Amendment) Bill, 2024 to **amend Arbitration and Conciliation Act, 1996.**

- Amendment aims to provide **boost to institutional arbitration, reduce court intervention** in arbitrations and **ensuring timely conclusion** of arbitration proceedings.
 - ⊕ Arbitration refers to an **alternative dispute resolution method** where the parties in dispute agree to have their case heard by a qualified arbitrator.

Arbitration Mechanism in India

- **Arbitration and Conciliation Act, 1996** governs the arbitral proceedings in India.
 - ⊕ It was based on **UNCITRAL (United Nations Commission on International Trade Law) Model Law on International Commercial Arbitration 1985 and UNCITRAL Conciliation Rules, 1980.**
 - ⊕ Act has been amended in years 2015, 2019, and 2021.

Key Features of draft Arbitration and Conciliation (Amendment) Bill, 2024

- **Omission of Conciliation:** Amended Act will be called Arbitration Act, 1996 as provisions related to conciliation have been incorporated in Mediation Act 2023.
- **Appointing an Emergency Arbitrator:** To grant interim measures prior to the constitution of an **arbitral tribunal.**
- **Institutional Focus:** Promoting **institutional arbitration** as a preferred method **over ad-hoc arrangements**, thereby enhancing efficiency.
- **Arbitration Council of India (ACI):** Provides powers to create model rules of procedure for arbitral proceedings and recognize arbitral institutions.
- **Video Conferencing:** Allow arbitrations conducted via video conferencing.
- **Establishing an Appellate Arbitral Tribunal:** To handle applications against an arbitral award.



Issues in Arbitration System

- **Lack of diversity** in appointing arbitrators, as retired judges dominate the field.
- **Lack of Trust** as there is always scepticism about the independence and impartiality of the third party.
- **Judicial intervention** in arbitration proceedings leads to delays in awards.

South Africa becomes first country to allow Heritable Human Genome Editing (HHGE)

Country's new guidelines on **Ethics in Health Research** appear to position **South Africa as first to explicitly permit use of genome editing** to create genetically modified children.

- ▶ South African guidelines are **less stringent than frameworks proposed by organizations like WHO**, which emphasize societal consensus.

About HHGE:

- ▶ Unlike somatic cell editing, which affects only individuals, HHGE introduces **changes in germline cells (sperm, eggs, or embryos)**, enabling these alterations to be inherited by offspring.
 - ⊖ **It can be achieved through tools like** Zinc-finger nucleases (ZFNs), Transcription Activator-Like Effector Nucleases (TALENs), CRISPR/Cas9 and Meganucleases.

Potential Applications of Heritable Genome Editing:

- ▶ **Disease Prevention:** Such as Heritable diseases, cystic fibrosis, Huntington's disease, and sickle cell anemia.
- ▶ **Advancement of Genetic Research:** Potential to expand our understanding of human biology, genetics, and disease mechanisms.
- ▶ **Assisted reproductive technology:** Can improve technologies, such as in vitro fertilization (IVF) etc.

Concerns of Heritable Genome Editing:

- ▶ **Unforeseen consequences:** Germline genome edits would be heritable, however, their effects could be multigenerational.
- ▶ **Ethical issues:** Against Dignity of humans and respect for their variety, challenging fundamental religious and moral beliefs etc.
- ▶ **Societal Impact:** Creation of "designer babies," where traits like intelligence, appearance, and athleticism might be engineered, can exacerbate social inequality.

Steps taken for Regulating Human Genome editing:

- ▶ **Oviedo Convention:** By European Nations and prohibits the creation of human embryos.
- ▶ **International Commission on Clinical Use of Human Germline Genome Editing:** It assesses potential clinical applications of human germline genome editing.
- ▶ **In India:** Human germline editing and reproductive cloning are banned by the National Guidelines for Stem Cell Research

A new report highlights the potential threats posed by fossil fuels to the Coral Triangle

Report was released at the 16th Conference of Parties (COP16) to the **Convention on Biological Diversity (CBD)**.
About Coral Triangle:

- ▶ **Located in tropical waters**, It is one of the world's most biodiverse marine regions.
- ▶ This unique ecosystem spans **seven countries in Southeast Asia and Melanesia.**(Refer Map)

Significance of Coral Triangle:

- ▶ It hosts **76% of world's coral species, over 2,000 coral fish species**, and six of seven marine turtle species.
- ▶ It **supports 120 million people** who rely on it for food, and income, with its habitats critical for marine diversity, earning it nickname **"the Amazon of the seas."**



Threats being faced by Coral Triangle:

- ▶ **Oil and Gas Exploration:** **Over 100 offshore oil and gas blocks are currently operating** in Triangle.
 - ⊖ It threatens **Triangle's delicate ecosystems**, including coral reefs, mangroves, and seagrasses
- ▶ **Noise pollution:** From shipping and exploration activities **harms marine life**. Eg: Man-made noises can alter animal behaviors by damaging hearing or masking animal sounds.

Recommendations by report:

- ▶ Enact a **moratorium on oil and gas development in Coral Triangle**, while phasing out existing fossil fuel operations.
- ▶ Experts recommend Coral Triangle be **classified as a Particularly Sensitive Sea Area** to provide it with special protection from harmful maritime activities.

Also in News



SOP for Protection of Vulnerable Children

Indian Railways & Ministry of Women & Child Development launched revised **Standard Operating Procedure(SOP)** for protection of vulnerable children.

- ▶ This comprehensive SOP outlines a robust framework for safeguarding children who come into contact with Indian Railways.

Other Initiative for Safeguarding Children by Indian Railway:

- ▶ **Operation AAHT:** Nationwide operation to curb human trafficking, which has been **Instrumental in rescuing over 2,300 children** and apprehending 674 traffickers since 2022.
- ▶ **Operation Nanhe Farishte:** Mission dedicated to rescuing children in need of care and protection across various Indian Railway Zones.



Bioluminescence

Chennai's coastline recently experienced phenomenon of bioluminescence.

- ▶ **Bioluminescence** is the **production and emission of light by a living organism**.
 - ⊖ Light emitted by a bioluminescent organism is produced by **energy released from chemical reactions occurring inside** (or ejected by) the organism.
- ▶ Bioluminescence is **very common in the ocean** and most common among fish, squid, and gelatinous zooplankton – jellyfish, comb jellies, and other animals.
- ▶ While **usually blue in colour**, bioluminescence can range from nearly **violet to green-yellow** (and very occasionally red).
- ▶ Some organisms **absorb light, transform it, and eject it as a different colour**. This phenomenon is called biofluorescence.



Forest Ecosystem Restoration Initiative (FERI)

Secretariat of the Convention on Biological Diversity (CBD) marks the **10th anniversary** of the Forest Ecosystem Restoration Initiative (FERI).

About FERI

- Launched as a partnership between the **Korea Forest Service (KFS) and the CBD Secretariat.**
- Implemented by **CBD Secretariat.**
- Designed to assist developing countries in **operationalizing national targets and plans** for ecosystem conservation and restoration in line with **Aichi Biodiversity Targets 5, 14 and 15.**
- It supports the implementation of the **Kunming-Montreal Global Biodiversity Framework (KMGBF).**
- **FERI's initiatives:**
 - ⊖ Adoption of a Short-Term Action Plan on Ecosystem Restoration (**STAPER**), at **COP13** in 2016.
 - ⊖ **WePlan – Forests Platform:** A decision support tool for tropical forest ecosystem restoration.



Boreal and Temperate Forest

Experts highlighted the urgent need to focus on the **world's Northern forests during COP16** to the **Convention on Biological Diversity (CBD) at Cali, Colombia.**

- Northern forests, particularly boreal and temperate ecosystems, in **Europe, North America, and Russia**, account for 30% of global forest cover and yet **only 10% are protected.**

About Boreal Forests

- **Also known as Taiga**, forms a circumpolar belt between latitudes 50° N to 70° N.
- **Frost-hardy conifer species** such as spruce, pine, fir dominate.

About Temperate Forests

- **Extend until 50° latitude** from tropics in both Southern and Northern Hemisphere.
- Characterized by **cold winters** and dominated by broadleaved trees like oaks, pine, and eucalypti.



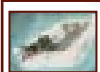
Anti-submarine warfare shallow water craft (ASW SWC)

The **seventh ASW SWC - Abhay**, built by Garden Reach Shipbuilders & Engineers (GRSE) for the Indian Navy has been launched.

- This ASW SWC ship has been designed with over 80% indigenous content, thereby **Promoting Self reliance or Atma-Nirbharta.**

About ASW SWC:

- ASW SWCs are designed for **anti-submarine operations** in coastal waters, **low-Intensity Maritime Operations (LIMO)**, and **mine-laying activities.**
- These ships are approx **77 m long, with a maximum speed of 25 knots & endurance of 1800 NM.**
- **Significance:** Countering emerging threats, promoting strategic relationship & increased defense capabilities.



Triton island

Recent satellite imagery reveals a significant military buildup by China on **Triton Island.**

About Triton island:

- **Located in the Paracels(South China Sea) is also known as Xisha Islands in China.**
- It is effectively **controlled by China** but is also **claimed by Vietnam and Taiwan.**
- **China took control of the Paracels from South Vietnam** following a 1974 naval clash.
- Military buildup on Triton Island **represents a significant escalation in China's strategy** to establish military dominance in the South China Sea.

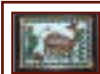


Land Port Authority of India (LPAI)

Union Home Minister inaugurated a new Passenger Terminal Building and a Maitri Dwar in Petrapole, West Bengal, built by **Land Port Authority of India.**

About Land Port Authority of India (LPAI):

- LPAI is a **statutory body** under Department of Border Management, Ministry of Home Affairs.
- **Objective:** It is responsible for functions related to **land port operations and administration.**
 - ⊖ Land Ports are **areas on international borders** notified as land customs stations or immigration check posts, with facilities for **clearance and transport of passengers and goods.**
 - ⊖ Currently, there are **currently 12 land ports being operated in India.**
- LPAI is also **responsible for establishing, operating and managing Integrated Check Posts (ICPs)** along land borders of India.
 - ⊖ ICP is a single complex that houses all regulatory agencies facilitating trade and commerce **while also addressing security concerns.**



Sohrai painting

Prime Minister Narendra Modi gifts Sohrai Painting to Russia's President Vladimir Putin during BRICS summit in Kazan, Russia.

About Sohrai painting

- Practiced mainly in mural art form in **Hazaribagh district, Jharkhand.**
- During Sohrai, a local festival, local tribal women make these paintings on **walls of their mud houses.**
- **Features:**
 - ⊖ Known for their **use of natural pigments and simple tools.**
 - ⊖ Artists often **use brushes made from twigs, rice straw, or even fingers** to create intricate designs.
 - ⊖ **Depiction of animals, birds, and nature** is a reflection of the agrarian lifestyle and the reverence for wildlife in tribal culture.
- Sohrai-Khovar Paintings have also been awarded **GI tag.**



Miyawaki forest

A dense forest created at 8,000 ft in Pithoragarh, Uttarakhand, using the **Miyawaki method** has achieved 93% success rate.

About Miyawaki method

- Miyawaki method is a reforestation technique developed by **Japanese botanist Akira Miyawaki.**
- It is based on the concept of **Potential Natural Vegetation (PNV).**
 - ⊖ It deals with the regeneration of a forest by **closely planting a variety of tree species**, best suited for the **specified locality.**
- **Benefits:** High tree density, mitigation of noise and air pollution, help in carbon sequestration, mitigating climate change, and restore degraded land.
- **Limitations:** Limited genetic diversity, resource intensive, not suitable for all locations.



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