United Nation Environment Programme (UNEP) publishes the Global Peatland Hotspot Atlas, 2024

The Atlas builds on the Global Peatlands Assessment (2022) and accompanying Global Peatland Map 2.0, both flagship products of the UNEP Global Peatlands Initiative.

UNEP Global Peatlands Initiative: It was formed at the United Nations Framework Convention on Climate Change (UNFCCC) COP in Marrakech, Morocco in 2016.

About Peatlands

- ▶ Peatlands: Terrestrial wetland ecosystems in which waterlogged conditions prevent plant material from fully decomposing. Consequently, the production of organic matter exceeds its decomposition, resulting in a net accumulation of peat.
 - Peat is dead and partially decomposed plant remains that have accumulated in situ under waterlogged conditions.
- Global Peatlands distribution: Peatlands cover 3.8% of the world's land area.
 - Its expanse: Naturally forested peatlands in Europe and tropical peat swamps in South East Asia, permafrost area of Russia and Canada, and high mountain peatlands in the Andes and Himalayas.
 - ⊕ The world's largest tropical peatlands are located in the Congo Basin.
- Peatland Degradation: Nearly 12% of global peatlands are degraded, with more than 60% of peatlands in India being degraded.
 - Threats: Agriculture, peat extraction, industrial activities and infrastructure development. Represents currently 4% of global anthropogenic emissions.
- Initiatives: Guidelines for Global Action on Peatlands (2002), The UN Environment Assembly (UNEA-4) resolution on the Conservation and Sustainable Management of Peatlands (2019), etc.

Significance of Peatland:

- ➤ Carbon storage: Peatlands are the world's largest terrestrial carbon stock storing at least 550 Gigatonnes of carbon globally more than twice the carbon stored in all the world's forests.
- Biodiversity conservation: Peatlands are vital habitats for rare and threatened species.
- Ecosystem services: Regulating and purifying water for human consumption, agriculture & have a net cooling effect on climate.

Declaration on Green Digital Action (GDA) adopted in CoP-29 of UNFCCC

GDA was launched in CoP28 (Dubai, 2023) by International Telecommunication Union (ITU) along with other governmental and civil society organizations.

▶ It aims to unite global digital community in developing practical solutions, boosting industry-wide climate support, and strengthening frameworks for monitoring and reporting.

Key Highlights of the Declaration

- Leveraging Digital Technologies: To support climate action and building resilient digital infrastructure.
- ▶ Mitigating the impact of Digitization on climate: Including establishing metrics and indicators to measure the impact of digitization on climate.
- **Fostering Sustainable Innovation:** By facilitating investments; protecting intellectual property and adopting open access to technologies, etc.
- Others: Promoting Digital inclusion, literacy, data driven decision making, etc.

Significance of Digital Technologies in Sustainable Development

- ▶ Informed decision making: Using technologies like data analytics, cloud computing, energy consumption can be optimised to support sustainable manufacturing processes.
- **Sustainable Design approaches:** Stress on circular economy model rather than take-make-dispose to achieve climate goals.
- ➤ **Promoting Open data sources:** Easily accessible information sources and driving innovation towards newer and cleaner technologies. Ex., **Digital Public Infrastructure**, etc.
- Role in Disaster Management: Enhancing climate monitoring and forecasting including Early Warning Systems, early communication, and search and rescue, etc.







Supreme Court (SC) upheld the inclusion of 'socialist, secular' in the Preamble of the Constitution.

The SC's order was based on a batch of petitions filed in 2020 challenging the validity of the inclusion of 'socialist' and 'secular' in the Preamble through the 42nd Constitution Amendment in 1976.

➤ The word 'integrity' was also inserted in the Preamble by the 42nd Amendment Act, 1976

SC observations

- Constitution is a living document: Addition of 'Socialist' & 'Secular' could not be invalidated merely on the ground that the Preamble retained its original adoption date of November 26, 1949.
 - Article 368 of the Constitution permits amendment of the Constitution & the power to amend unquestionably rests with the Parliament whose amending power extends to the Preamble.
- Secularism: State neither supports any religion nor penalizes the profession and practice of any faith, also the State maintains no religion of its own.
 - This principle is enshrined in Articles 14, 15, and 16 along with Article 25, 26, 29 & 30.
- Socialism: Reflects the goal of economic and social upliftment and does not restrict private entrepreneurship and the right to business and trade, a fundamental right under Article 19(1)(g).
- ➤ Addition of 'Socialist' & 'Secular': SC observed that the addition did not restrict legislations pursued by elected governments, provided such actions did not infringe upon Constitutional rights or the basic structure of the Constitution.

Important judgements quoted by SC:

- Kesavananda Bharati v. State of Kerala and S R Bommai vs Union of India: Secularism is a basic feature of the Constitution.
- R C Poudyal v. Union of India: Secularism represents the nation's commitment to treat persons of all faiths equally and without discrimination.
- 9-Judge Constitution Bench in Property Owners Association and Others v. State of Maharashtra: Constitution allows government to adopt a structure for economic governance which would sub-serve the policies for which it is accountable to the electorate.

Union Cabinet approves the continuation of the Atal Innovation Mission (AIM)

AIM 2.0, a flagship initiative under **NITI Aayog** aims at **piloting new initiatives** to fill gaps and scale success in the innovation and entrepreneurship ecosystem.

Key Highlights of AIM 2.0

- ➤ Allocated Budget: Rs. 2,750 crore
- Duration: Till March 31, 2028.

Key Objectives

- ➤ To strengthen India's innovation and entrepreneurship ecosystem in three ways by:
 - Increasing Input (i.e., ushering more innovators and entrepreneurs) through:
 - Language Inclusive Program of Innovation (LIPI): Establish Vernacular Innovation Centers in existing incubators in scheduled languages.
 - Frontier Program: Create customized templates for Jammu and Kashmir (J&K), Ladakh, the North Eastern states (NE), Aspirational Districts and Blocks.
 - Improving the success rate or throughput through:
 - Human Capital Development Program: System for producing professionals (managers, teachers, trainers).
 - Deeptech Reactor: Research sandbox for testing ways of commercializing research-based deep tech startups.
 - State Innovation Mission (SIM) to assist states/UTs under NITI Aayog's State Support Mission.
 - International Innovation Collaborations program: Envisaging an Annual Global Tinkering Olympiad, Bi-lateral, multilateral engagements with advanced nations, etc.
 - **⊕** Improving output through
 - Industrial Accelerator program: Create Industry Accelerators in critical sectors in Public Private Partnership (PPP) mode.
 - Atal Sectoral Innovation Launchpads (ASIL) program: Build iDEX-like platforms in central ministries.

About AIM 1.0

- ➤ Launched in 2016 for fostering new innovation infrastructure to strengthen India's then nascent innovation ecosystem. Some key components include:
 - Atal Tinkering Lab (ATL) at school level. So far, 10,000 such labs exist across the country.
 - Atal Incubation Centres (AICs) at universities, institutions and corporates.
 - Others: Atal Community Innovation Centres (for unserved/underserved areas); Atal New India Challenge, etc.







Natural Farming National Mission on (NMNF) launched as a standalone Centrally Sponsored Scheme

The scheme under the Ministry of Agriculture & Farmers' Welfare has total outlay of Rs.2481 crore coterminous with the 15th Finance Commission (2025-26).

Background

- Earlier, Zero Budget Natural Farming (ZBNF) was renamed as Bhartiya Prakritik Krishi Paddhti (BPKP) and made a sub-scheme under the umbrella scheme of Paramparagat Krishi Vikas Yojna (PKVY) in 2019.
 - → BPKP was renamed as NMNF from 2023-24.

Key Highlights of the Scheme

- Implementation: In 15,000 clusters in willing Gram Panchayats reaching 1 crore farmers, initiating Natural Farming (NF) in 7.5 lakh hectare area over the next 2 years.
- Bio-input Resource Centres (BRCs): 10,000 such need-based centres to be set-up for easy availability of ready-to-use inputs for
- Model Demonstration Farms: Established at Krishi Vigyan Kendras (KVKs), Agricultural Universities (AUs) and farmers' **fields** to train willing farmers.
- Awareness Generation: Through Krishi Sakhi for mobilisation and handholding of willing farmers.
- Certification: Easy simple certification system and dedicated common branding for market access.
- Monitoring: Real time geo-tagged & referenced monitoring of implementation through an online portal.
- Convergence: With existing schemes and support structures to be explored.

About Natural Farming

- Chemical- free and livestock based farming which integrates crops, trees and livestock with functional biodiversity.
- **Key Components:**
 - Beejamrit (treatment of seeds with cow dung, etc.);
 - Jivamrit (acts as a bio-stimulant promoting the activity of microorganisms);
 - Mulching (covering of soil surface using both live crops and dead biomass):
 - Whapasa (activating earthworms in soil for water vapour condensation);
 - Plant Protection (Spraying biological concoctions to prevent pests, etc.)

Cabinet approves One Nation One **Subscription (ONOS)**

ONOS is in line with the goals of Viksitbharat@2047, National Education Policy (NEP) 2020 and Anusandhan National Research Foundation (ANRF).

About ONOS

- The Scheme: It's a Central Sector Scheme for providing country-wide access to scholarly research articles and journal publication on a single platform.
 - It will be administered through a simple, user friendly and fully digital process.
- Financial allocation: Rs. 6,000 crores for 2025-2027.
- Ministry: Ministry of Education.
- Implementation: The Department of Higher Education (DHE) will have a unified portal "One Nation One Subscription" through which the institutions will be able to access the journals.
 - ⊕ ANRF will periodically review the usage of ONOS and publications of Indian authors of these institutions.
- **Beneficiaries:** Higher Educational Institutions under Central or State Government & Research & Development (R&D) Institutions of the Central Government.
- Access: Through a national subscription coordinated by central agency - Information and Library Network (INFLIBNET).
 - INFLIBNET is an autonomous inter-university centre of the University Grants Commission.

Benefits:

- Institutional coverage: ONOS encompasses 6,300+ government educational and research institutions & would serve ~1.8 crore
- Outreach: Extends scholarly research access to tier 2 and 3 cities, thereby bridging geographical research participation gaps.

Initiatives on R&D in Budget 2024-25

- ANRF: Established by the ANRF Act 2023 to provide high-level strategic direction for scientific research, ensuring collaborations between industry, academia, government departments, and research institutions.
- Private Sector-Driven Research and Innovation: A financing pool of ₹1 lakh crore was announced to spur private sector-driven research and innovation at a commercial scale.
- Venture capital fund of ₹1,000 crore will be set up to support startups and projects in the space sector.

Also In News



Right to be forgotten

Delhi High Court calls for masking the couple's names on search engines. About right to be forgotten

- The right to be forgotten is described as the right to remove one's digital footprint (from Internet searches, etc.) where it violates the right to
- It's considered as a part of the right to privacy, which is a fundamental right under article 21.
 - However, there is no statutory framework that prescribes the right to be forgotten.



HIV (human immunodeficiency virus)

New HIV (human immunodeficiency virus) infections have fallen 22% and HIV-related deaths 40% globally: The Lancet HIV journal.

About HIV Virus

- It's a virus that attacks cells that help the body fight infection.
- If left untreated, HIV can lead to the disease AIDS (acquired immunodeficiency syndrome).

Initiatives taken by India:

- National AIDS Control Programme (NACP) Phase-V: Aims to reduce annual new HIV infections and AIDS-related mortalities by 80% by 2025-26 from the baseline value of 2010.
- India's HIV and AIDS (Prevention & Control) Act, 2017.









Samvidhan Diwas 2024

75th Samvidhan Diwas is being celebrated on the day of adoption of the Indian Constitution.

- Adopted: 26th November, 1949.
- Came into effect: 26th January, 1950. Samvidhan Diwas
- Samvidhan Diwas was instituted in 2015, the 125th birth anniversary year of Dr. B. R. Ambedkar.
 - Dr. Ambedkar, known as the 'Father of the Indian Constitution' was the Chairman of the Drafting Committee of the Constitution.

India's Constitution:

- Longest written Constitution.
- Not printed or typed: Its handwritten by Prem Behari Narain Raizada (English) & by Vasant Krishan Vaidya (Hindi).
- Pages, artistically decorated by artists from Shantiniketan under Nandalal Bose.



Black thrips (Thrips parvispinus)

Black thrips infestation has surfaced in the chilli crop around Ballari (Karnataka) & parts of Rayalaseema (Andhra Pradesh).

The pest has become **endemic** in the region.

About Black thrips

- It's an invasive sucking pest that feeds on tender flowers, shedding of flowers and also causes fruit drop in chillies leading to yield loss.
- Both adults and larvae damage plants by rasping and sucking of the plant sap.

Preventive Measures

- Practicing intercrop with agathi/maize/sorghum.
- Spraying of neem oil.



Buddhist Sites of Kanaganahalli and Sannati

Recently, researchers highlighted the untapped tourism potential of the ancient Buddhist sites of Kanaganahalli and Sannati, located in Kalaburgi, Karnataka along the banks of Bhima river.

Findings of Kanaganahalli and Sannati

- 2000-year-old Ashokan edict.
- Adholoka Maha Chaitya (the Great Stupa of the Netherworlds)
 - Built: From 3rd Century B.C. to 3rd Century A.D.
 - Features: Elaborate ornamentation, Ayaka platforms, circumambulatory path, etc.
- Sculptures: Of Buddha, Yakshas, Jataka stories, Ashoka, Shatavahana monarchs etc.
 - Sculpture of Asoka etched with 'Raya Asoka' in Brahmi script, the only surviving image of the Mauryan emperor.
 - Resembles Amaravati School of Art.

PAN (Permanent Account Number) 2.0

The Cabinet Committee on Economic Affairs (CCEA) approved PAN 2.0 Project of the Income Tax (IT) Department.

About PAN 2.0 Project

- An e-Governance initiative for re-engineering the business processes of taxpayer registration services through technology driven transformation.
- It will be an upgrade of the current PAN/TAN 1.0 eco-system
 - PAN is a ten-digit unique alphanumeric number issued by the IT Department to identify/ link transactions (tax payments, etc.) of the holder with the department.
- Benefits: Serve as common Identifier for all digital systems of specified government agencies, Data consistency, Single Source of Truth, etc.



Reang Tribe

Members of Reang community (a Particularly Vulnerable Tribal Group) requested for recognition to their language, Kaubru.

There are 75 PVTGs in India identified based on the Dhebar Commission recommendation.

Reang Tribe

- About: Second largest tribal community of Tripura from Indo-Mongoloid race.
- Agriculture: Nomadic, practice Jhum Cultivation and other food gathering activities.
- Religion/Faith: Hindus (majority being followers of Vaishnavism); believe in spirits and existence of soul.
- Social: Endogamous (marry within their community).
- Culture: Hojagiri Dance (performed by only women in a team of 4-6, with male members involved in singing the lyrics, playing drum, etc.)



Narasapur Crochet Lace

Narasapur Crochet Lace from West Godavari District, Andhra Pradesh awarded the Geographical Indication (GI) tag.

About Narasapur crochet lace

- Crochets crafted with cotton thread in different colors.
- Lace work is done using thin threads woven with thin crochet needles of varying sizes.

About GI Tag

- Name or a sign given to certain products that relate to a specific geographical location valid for 10 years.
- Administered under the Geographical Indications of Goods (Registration and Protection) Act of 1999.
- Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry is the Nodal ministry.

Place in news

Republic of Korea/South Korea (Capital: Seoul)

Final negotiations on Global Plastics Treaty under United Nations Environment Program are underway in Busan, South Korea.

Political Features

- Location: East Asian country occupying the southern Korean Peninsula.
- Boundaries: North Korea (North).
 - 38°N latitude/parallel separates it from North Korea.
- Maritime boundaries: Surrounded by water on 3 sides i.e. East Sea or Sea of Japan (East), East China Sea (South), Yellow Sea (West).

Geographical features

- Strait: Korean Strait (separates it from Tsushima Islands, Japan in the south-east).
- Major Mountain ranges: Taebaek, Sobaek
- Highest Peak: Mount Halla (on Jeju Island).
- Major rivers: Han, Geum, Nakdong.





























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