

Union Finance Ministry Grants Approval to Maitri II, New Research Station in Eastern Antarctica

This will be India's 4th research base expected to be operational by **January 2029**.

- It would be established as a **green research base** powered using renewable energy sources (solar and wind) and would house **automated instruments**.

Importance of the Antarctica Region

- World's Natural Laboratory:** It is the **5th largest continent**, holds key to understanding Earth's climate and ocean systems, acting as a **natural tracker** of global climate change.
- Natural Resources:** Holds nearly **75 percent of the earth's freshwater reserves** and houses abundance of edible algae, more than 200 species of fish including the discovery of iron and copper.
- Geopolitical Significance:** Overlapping **territorial claims**, China's expansion with **dual-use critical infrastructures** raises global concerns.

India's initiatives in Antarctica

- Research Initiatives:** India currently has two operational research stations in Antarctica named **Maitri (Commissioned in 1989)** and **Bharati (Commissioned in 2012)**.
 - Dakshin Gangotri (1983-84)**, India's first Scientific Research Station was operational till 1990.
- Institution:** Goa-based **National Centre for Polar and Ocean Research (NCPOR)** under **Ministry of Earth Sciences** is the nodal agency for operating and organising missions to polar regions.
- Legal Framework:** **Indian Antarctic Act 2022** aims at having India's own national measures for protecting the Antarctic environment and the dependent and associated ecosystem.
- Global Commitment:** India has been a **Consultative Party** to the **Antarctic Treaty** since **1983**.
 - Treaty was signed in **1959** for ensuring peaceful use of Antarctica, ensuring freedom of scientific investigation and cooperation, etc.

India's Disease Burden Shifts to Non-Communicable Diseases (NCDs): Global Burden of Disease (GBD) Report

The GBD Report, released by the Institute for Health Metrics and Evaluation (IHME) at the World Health Summit, Berlin.

Key Findings

- Shift toward NCDs:** From 1990 to 2023, NCDs grew to overshadow infectious diseases, except COVID-19, as the leading causes of death in India.
 - Infectious diseases have declined due to better healthcare access, immunization, and sanitation.
- Mental health disorders**, including anxiety and depression, have shown a sharp rise (2013–2023).
- Major Risk Factors:** Air pollution remains among India's top three causes of early death and disability.

About NCDs

- NCDs, also known as chronic diseases **are not passed from person to person**. E.g., cardiovascular diseases, cancers, diabetes, etc.
- NCDs tend to be of **long duration** and are the result of a combination of **genetic, physiological, environmental and behavioral factors**.
- NCDs now account for nearly **two-thirds of the world's total mortality and morbidity**.

Initiatives Undertaken by India

- Eat Right India movement by FSSAI** promotes healthy eating.
- Fit India Movement:** Launched in 2019 aims to promote a physically active lifestyle and make fitness an integral part of daily life in India.
- National Tobacco Control Programme (NTCP):** Launched in **2007-08** for creating awareness about harmful effects of tobacco consumption; reduce production etc.
- National Programme for Prevention and Control of Cancer, Diabetes, Cardio-vascular Diseases and Stroke (NPCDCS)** was launched in **2010** to combat NCDs.

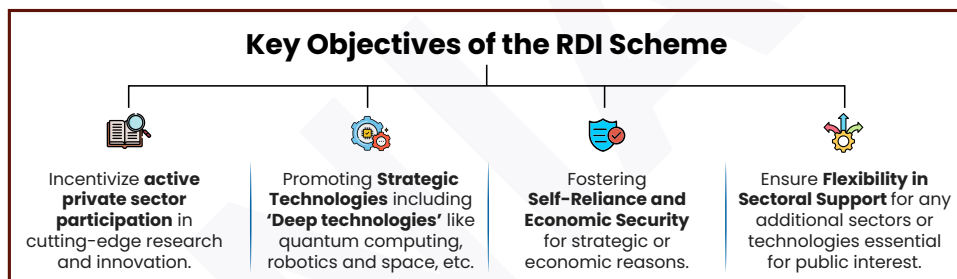
Guidelines and Special Purpose Fund (SPF) for Research Development and Innovation (RDI) Scheme Approved

It was approved by the **Executive Council** of the **Anusandhan National Research Foundation (ANRF)** ensuring seamless **scheme execution, effective private sector participation and long term innovation.**

- ANRF was established with **Anusandhan National Research Foundation (ANRF) Act, 2023.**
- It acts as an **apex body** to provide high-level strategic direction of scientific research.
- **Science and Engineering Research Board (SERB)** established by 2008 Act has been subsumed into **ANRF.**

RDI Scheme

- **About:** Establishes **1 Lakh crore RDI Fund** approved by the Union Cabinet on **July 1, 2025.**
- **Nodal Department:** **Department of Science & Technology (DST).**
- **Funding Structure:** Two Tiered
 - ⊕ **Special Purpose Fund (SPF):** Being set up under the **Anusandhan National Research Foundation (ANRF)** to serve as the **first-level custodian.**
 - ⊕ **Second-Level Fund Managers (SLFMs):** Alternate Investment Funds (AIFs), Development Finance Institutions (DFIs), Non-Banking Financial Companies (NBFCs), or Focused Research Organizations (FROs) like Technology Development Board (TDB), Biotechnology Industry Research Assistance Council (BIRAC), IIT Research Parks, etc.
- **Exclusions:** **Grants and short-term loans** are not supported.
- **Coverage:** Financing can cover up to **50% of assessed project cost** for transformative RDI projects at Technology Readiness Levels (TRLs) 4 and above.



Global Land Outlook Thematic Report on Ecological Connectivity and Land Restoration

It was launched at the **International Union for Conservation of Nature (IUCN) World Conservation Congress** in **Abu Dhabi.**

- Prepared by the **United Nations Convention to Combat Desertification (UNCCD)** and the **Convention on the Conservation of Migratory Species of Wild Animals (CMS)**, the report calls upon countries to include **Ecological Connectivity** in land, water and infrastructure planning.

About Ecological connectivity

- **Meaning:** Refers to the **unimpeded movement of species**, connection of habitats without hindrance and flow of natural processes that sustain life on Earth.
 - ⊕ These processes include the flow of organisms, energy, nutrients, water, sediments, information, knowledge, culture, etc.
- **Successful Models:** **European Green Belt** stretching through 24 countries from northern Europe to the Balkans and the Mediterranean; **Costa Rica, system of wildlife corridors** for species like jaguars, etc.

Major Threats

- **Altered Habitats:** More than 60% of world's rivers are diverted or dammed disrupting fish migrations. Example, **Mekong river.**
- **Infrastructure Development:** **Linear Infrastructures** like railways, roads, etc., leads to land degradation and fragmentation through direct land clearing as well as indirectly by attracting settlements, and secondary road development creating **fishbone effect.**

Key Recommendations on Promoting Ecological Connectivity

- **Sustainable Agriculture:** Regenerative Agriculture, Vertical Agriculture, Hydroponics & Aquaponics, Water Harvesting and Soil Moisture Management, etc.
- **Forest:** Assisted Natural Regeneration (combines active planting with passive restoration), etc.
- **Water Management:** Bioretention Areas, River Floodplains, Natural Inland Wetlands, etc.
- **Enhancing Ecological Connectivity:** Ecological Corridors, Management of Invasive Species, etc.
- **Greening Cities and Buildings:** Urban Forests, Urban Green Corridors, etc.

PM Dhan Dhaanya Krishi Yojana & Mission for Aatmanirbharta in Pulses Launched

The Prime Minister launched two major schemes in the agriculture sector i.e., PM Dhan Dhaanya Krishi Yojana and Mission for Aatmanirbharta in Pulses.

Key Features

PM Dhan Dhaanya Krishi Yojana	Mission for Aatmanirbharta in Pulses
<ul style="list-style-type: none"> • Duration: 6 Years (2025-26 to 2030-31). • Coverage: Target 100 districts (a minimum of 1 district will be selected from each state). • Financial Outlay: Rs. 24,000 crore. • Sector Focus: Exclusively designed to enhance agricultural and allied sectors in underperforming districts. • Objectives: <ul style="list-style-type: none"> • Enhancing agricultural production and productivity. • Increasing adoption of crop diversification and sustainable agriculture practices. • Improving irrigation facilities. • Facilitating availability of long-term and short-term credit. • It draws inspiration from NITI Aayog's Aspirational District Programme. 	<ul style="list-style-type: none"> • Duration: 6 Years (2025-26 to 2030-31). • Aim: Boosting domestic production and achieving self-sufficiency (Aatmanirbharta) in pulses. • Financial Outlay: Rs. 11,440 crore. • Focus Crops: Tur/Arhar (pigeon pea); Urad (black gram) & Masoor (red lentil). • Target: <ul style="list-style-type: none"> • Area: Increase area under pulses to 310 lakh hectares. • Production: To drive production to 350 lakh tonnes. • Productivity: Raise yield to 1130 kg/ha. • Approach: It will adopt a cluster-based approach, tailoring interventions to the specific needs of each cluster. • Assured Procurement: National Agricultural Cooperative Marketing Federation of India (NAFED) & National Cooperative Consumers' Federation of India Ltd. (NCCF) will procure 100% of produce from farmers.

Also In News



Thitu Island

A Chinese ship and a Philippine vessel collided near Thitu Island, which is controlled by the Philippines.

About Thitu Island

- **Thitu Island (Pag-asa Island)** is the largest Philippine-occupied Island in the **Spratly Islands** of the **South China Sea**.
- Thitu Island has been at the center of **territorial disputes** between the Philippines and China.



New Delhi Declaration on 6G

Leading 6G alliances and research institutions have issued the New Delhi Declaration, during the International Bharat 6G Symposium 2025, held alongside the India Mobile Congress in New Delhi.

Key Highlights

- The declaration emphasizes that 6G should be developed as a **global public good**.
- It articulates a **shared vision for 6G** that prioritizes **openness, inclusivity, and sustainability**.

About 6G

- **6G (sixth-generation wireless)** is the successor to 5G cellular technology
- The advantages of 6G over 5G, among others, include **higher data speeds** and **reduced latency**, integration of communication and sensing capabilities, etc.



Durand Line

Border clashes erupted between Pakistan and Afghanistan along the disputed Durand Line.

About Durand Line

- The **Durand Line** is the 2,640-kilometer international land border between **Afghanistan and Pakistan**.
- The line was established in 1893 by an agreement between **Sir Henry Mortimer Durand**, the Foreign Secretary of British India, and **Amir Abdur Rahman Khan**, the Emir of Afghanistan.



Indian Wolf (*Canis lupus pallipes*)

International Union for Conservation of Nature (IUCN) for the first time evaluated Indian Wolf separately as **potential distinct species within the Canis genus**.

- The genus currently has **seven species** recognized by the **IUCN**. With the inclusion of the Indian wolf, this will be the eighth recognized species of the genus.

About Indian Wolf

- **Habitat:** Thorn forests, scrublands, arid and semi-arid grassland habitats in **India** (few found in Pakistan).
 - ☉ It is one of the **common large carnivores** found in the agro-pastoral regions of semi-arid India.
- **Threats:** Habitat loss, conflict with humans, and diseases.
- **Conservation Status:** Vulnerable (IUCN).



Virtual Museum of Stolen Cultural Objects

UNESCO launches the World's First Virtual Museum of Stolen Cultural Objects at MONDIACULT 2025.

- MONDIACULT is the world's largest conference on cultural policies.

About Virtual Museum of Stolen Cultural Objects

- It is a **global digital platform** using advanced technology to highlight the **illicit trafficking of cultural heritage**.
- It displays around **240 stolen objects from 46 countries**, including sculptures, idols, fossils, and paintings.
- **Notable Indian Artifacts:** Two 9th-century sandstone sculptures from **Mahadev Temple, Pali, Chhattisgarh**:
 - ⊕ **Nataraja** – Lord Shiva in his cosmic dance.
 - ⊕ **Brahma** – Seated in **lalitasana**, representing wisdom and creation.



IUCN World Heritage Outlook

IUCN World Heritage Outlook 4 report assessing the conservation status of natural and mixed heritage sites was released by International Union for Conservation of Nature (IUCN).

Key Findings

- Globally, percentage of sites with a **positive conservation outlook** has, for the first time, **decreased significantly**.
- **India Related Findings:**
 - ⊕ Only the **Khangchendzonga National Park** remained 'Good' in Conservation Outlook Rating.
 - ⊕ **Sundarbans National Park:** Witnessed Deterioration in its conservation outlook status from 'Good with Some Concerns' to '**Significant Concerns**' from 2020-2025.
 - **Manas National Park and Western Ghats** too are in 'Significant Concern' category.



AUSTRAHIND 2025

The fourth edition of **India-Australia joint military Exercise AUSTRAHIND 2025** began in Australia.

- It is an **annual exercise** aimed at enhancing military cooperation, improving interoperability, etc.



International Blue Flag Certification

Five Maharashtra Beaches Receive Prestigious **International Blue Flag Certification**.

- The beaches are **Shrivardhan, Nagaon, Parnaka, Guhagar and Ladghar**.

About Blue Flag Certification

- **Awarded by:** **Foundation for Environmental Education (FEE)** of Denmark since **1985**.
- **Criteria:** Awarded to beaches that meet **33 criteria** related to cleanliness, beauty, and environmental sustainability.
- **Significance:**
 - ⊕ It is a **globally recognized eco-label** awarded to beaches, marinas, and tourism boats that meet high environmental and safety standards.
 - ⊕ **Certification programme** based on rigorous requirements in the areas of accessibility, education, environmental performance, responsible behavior, safety, services, stakeholder engagement and water quality.



Kenton R. Miller Award

Kaziranga Director becomes first Indian to receive IUCN's **Kenton R. Miller Award** for innovation in national parks.

About Kenton R. Miller Award

- It is constituted by the **World Commission on Protected Areas (WCPA)**.
 - ⊕ The WCPA is one of six technical commissions of the International Union for Conservation of Nature (IUCN).
- Established in **2006**, the Kenton R. Miller Award for Innovation in National Parks and Protected Area Sustainability.
- It honors individuals who show innovation and leadership in conserving national parks and protected areas.
- It is presented **every two years by the IUCN-WCPA**.

Place in News



Egypt (Capital: Cairo)

India sends the Minister to **Egypt for Gaza summit**.

Political Features

- **Location:** Northeastern Africa with its **Sinai Peninsula stretching into Western Asia**.
- **Bordering Countries:** Libya (west), Sudan (south), Israel & Gaza strip.
- **Bordering Water Bodies:** Mediterranean Sea (north), Red Sea and Gulf of Aqaba (east).

Geographical Features

- **Major River :** Nile (1500km)
- **Nile Delta:** One of the **most significant features stretches from the northern part of Cairo to the Mediterranean Sea**.
- **Major Deserts:** Western Desert (Al-Ṣaḥrā' al-Gharbiyyah), the Eastern Desert (Al-Ṣaḥrā' al-Sharqiyyah).
- **Highest Peak:** Mount Catherine (2,642 m).



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI