

NEWS TODAY

10 Years of Polio Eradication in India

In **March 2014**, the **World Health Organization** declared India polio-free based on criteria including three years of no wild poliovirus transmission, robust surveillance systems, and the destruction of any remaining stocks of the virus.

- It involved culmination of decades of dedicated efforts, starting with India's participation in the **Global Polio Eradication Initiative** and national immunization efforts under **Universal Immunization Programme (UIP)**.

About Universal Immunization Programme

- It is one of the world's largest public health programs providing **free vaccines for 12 vaccine-preventable diseases**.
- In **1985**, **Expanded Programme on Immunization** was renamed as **UIP**, broadening its reach to rural areas beyond urban centers.

Preventive measures to maintain Polio-free status in India

- Annual Polio Campaigns:** National Immunization Days (NID) and Sub-National Immunization Days (SNID) conducted annually to keep immunity levels high and ensure that no child is missed.
- Surveillance and Border Vaccination:** Vaccination at international borders continues to mitigate the risk of polio re-importation from endemic regions.
- Inactivated Polio Vaccine (IPV):** Introduced in 2015, provides additional protection against polio, especially against type 2 poliovirus.
- Mission Indradhanush:** Launched in 2014, it aims to increase immunization coverage to 90%. Special attention is given to hard-to-reach areas with low immunization rates.

About Poliomyelitis (Polio)

- Highly infectious **viral disease** that largely affects children **under 5 years of age**.
- Transmission:** Person-to-person spread mainly through the faecal-oral route or,
 - less frequently, by a common vehicle (e.g., **contaminated water or food**) and multiplies in the intestine, from where it can invade the nervous system and cause paralysis.
- Wild Poliovirus Strain Status across the World**
 - Type 1:** Remains endemic in Pakistan and Afghanistan (as of 2022).
 - Type 2:** Eradicated in 1999
 - Type 3:** Eradicated in 2020
- Vaccine-derived polio** occurs when the weakened strain in oral polio vaccine (OPV) mutates, potentially regaining the ability to cause paralysis in under-vaccinated populations.

Italy-India Unveiled Joint Strategic Action Plan 2025-2029

India & Italy held a bilateral meeting on sidelines of **G20 Summit in Brazil** & unveiled **5-year Joint Strategic Action Plan** outlining their vision for collaboration in key sectors, like defense, energy etc.

Key Highlights

- Economic Cooperation:** Both countries agreed to **boost trade & investment** in sectors like green technologies, pharmaceuticals, etc through **Joint Commission for Economic Cooperation & Working Group on Food Processing**.
- Connectivity:** They agreed to cooperate on **India-Middle East-Europe Economic Corridor (IMEEC)**, a strategic initiative aimed at enhancing connectivity & trade between India, Middle East, and Europe.
- Science and Technology:** They agreed on expanding **cooperation in critical technologies** like artificial intelligence & digitalization, with implementation of **2025-27 Executive Programme for Scientific & Technological Cooperation**.
 - They also introduced a **new Indo-Italian Innovation and Incubation Exchange Programme** to foster academic & industrial collaboration.
- Energy Transition:** Both countries agreed on organizing **"Tech Summits"** & strengthening alliances like **Global Biofuels Alliance & International Solar Alliance**.
- Defense cooperation:** They decided to hold annual **Joint Defence Consultative (JDC) meetings & Joint Staff Talks (JST)** to improve coordination in defence matters.
 - They also discussed establishing a **Defence Industrial Roadmap** to foster cooperation in defence manufacturing.

India-Italy Relations

- Political:** Diplomatic relations between India & Italy were established in 1947.
- Economic:** Italy is **India's 4th largest trading partner in EU**.
 - Bilateral trade in 2022-23 crossed US\$ 14.253 billion (**balance of trade is in India's favour**).
- Indian Diaspora** in Italy is estimated at 2 lakhs.
 - Migration and Mobility Partnership Agreement (2023)** between India & Italy was signed to facilitate safe & legal migration.

The G20 Summit 2024 Concluded with adoption of Rio de Janeiro Declaration

The G20 Rio de Janeiro Declaration aimed at addressing major global challenges and crises and promotes **strong, sustainable, and inclusive growth**.

- The theme of G20 Summit 2024 was 'Building a Just World and a Sustainable Planet'.

Key Highlights of Declaration

The Summit focused on 3 priorities:

➤ Social inclusion & fight against hunger and poverty:

- ⊕ **Global Alliance against Hunger and Poverty:** Launched to eradicate poverty and Hunger. (Refer Box)
- ⊕ **Global Coalition for Local and Regional Production, Innovation and Equitable Access:** Launched to promote access to vaccines, diagnostics, and other health technologies for neglected diseases and vulnerable persons.

➤ Sustainable development, energy transitions & climate action:

- ⊕ **It welcomed the establishment of Task Force on a Global Mobilization against Climate Change.**
 - ◆ Established to identify & address structural barriers to foster private capital flows for climate action, particularly for developing countries.

➤ Reform of Global Governance Institutions:

- ⊕ **Pledged to reform UN Security Council** aligning with realities & demands of 21st century, which is more **inclusive, effective, democratic, accountable** etc.
- ⊕ **Endorsed G20 Roadmap towards Better, Bigger, and More Effective Multilateral Development Banks (MDBs).**

Global Alliance against Hunger and Poverty

- **Aim:** To accelerate global efforts to eradicate hunger and poverty.
- **Members:** 148 (82 countries, African Union, EU etc.)
 - ⊕ **India is a member.**
- **Goal:**
 - ⊕ Reaching **500 million people** with cash transfer programs in low- and lower-middle-income countries by 2030.
 - ⊕ Expand high-quality school meals to an additional 150 million children in vulnerable countries.

New Initiatives launched by UNFCCC COP 29 Presidency

Recently, COP29 Presidency launched the **Reducing Methane from Organic Waste Declaration** and the **Baku Harmoniya Climate Initiative for Farmers**.

- The declaration builds on the work of previous COPs by supporting the implementation of the **2021 Global Methane Pledge (GMP)**, launched at **COP26**.

About Reducing Methane from Organic Waste Declaration

- Signatories declared their **commitment to set sectoral targets** to reduce methane from organic waste **within future NDCs** and launch **policies and roadmaps to meet sectoral methane targets**.
 - ⊕ **Organic waste** is the **third largest source of anthropogenic methane emissions**, behind **agriculture and fossil fuels**.
- It has been developed with the **UNEP-convened Climate and Clean Air Coalition (CCAC)**.
 - ⊕ **CCAC** is a voluntary partnership founded in **2012** aimed at reducing **short-lived climate pollutants (SLCPs)** like **methane, black carbon, HFCs, and tropospheric ozone**.
- **Signatories: 35 countries (India not a signatory)**, representing **47%** of global methane emissions from organic waste.

About Baku Harmoniya Climate Initiative for Farmers

- It is a **new aggregator platform** launched by the **COP29 Azerbaijan Presidency** with the **UN FAO**.
- **Aim:** Aiding farmers navigate various programs supporting **climate-resilient agrifood systems transformation, catalyzing investments and empowering farmers, especially, women and youth**.
- It will be hosted by **FAO** as part of the **Food and Agriculture for Sustainable Transformation (FAST) Partnership**.
 - ⊕ **FAST** is a **multi-stakeholder platform** established at **COP27 (2022)** that works to strengthen the quantity and quality of **climate finance in agrifood systems** for the most vulnerable.



CDRI announces funding for 12 projects across 17 Small Island Developing States (SIDS)

The projects were announced by the Coalition for Disaster Resilient Infrastructure (CDRI) under its **Infrastructure for Resilient Island States (IRIS)** initiative.

- IRIS, launched at COP26 during the World Leaders Summit, is a **dedicated initiative to achieve sustainable development** through a **systemic approach** to promote resilient, sustainable and inclusive infrastructure in SIDS.

About SIDS

- SIDSs are located across **three geographical regions**: the **Caribbean**; the **Pacific**; and the **Atlantic, Indian Ocean and South China Sea (AIS)**.
- Recognized, at **1992 United Nations Conference on Environment and Development**, as a distinct group of 39 States and 18 Associate Members of United Nations regional commissions.

Need of Disaster Resilient Infrastructure for SIDS

- SIDSs are some of the world's most disaster-prone countries with high exposure and vulnerability to hazards such as cyclones, floods, droughts, sea-level rise, earthquakes, and tsunamis.
- Disaster mortality rate in SIDS is **more than double the global average**, according to Sendai Framework Monitor data.
- On average, **SIDS experience 2.1 % of GDP loss due to disasters**, whereas other countries face an average of 0.3 % of GDP.

About CDRI

- Launched:** In 2019 at United Nations Climate Action Summit.
- It is a **partnership of national governments, UN agencies, multilateral development banks** to promote the resilience of new and existing infrastructure systems.
- Members:** 40 Countries and 7 Organizations.
- Governance:** Governing Council is co-chaired by representatives of two national governments, with **India** being the **permanent co-chair**.

Food and Agriculture Organization (FAO) Released 'Statistical Yearbook 2024'

'Statistical Yearbook' is a primary tool & indispensable reference for policymakers, researchers and analysts, to understand past, present and future paths of food and agriculture.

Key Observation

- Agriculture's share in global GDP:** Stable at around 4% since 2000.
- Global workforce employed in agriculture:** Declined from 40% (2000) to 26% (892 million in 2022).
 - Agriculture is 2nd largest employment source after services sector.
- Global Hunger:** Affected **9.1 % of world population** in 2023, far above pre-COVID-19 pandemic level (7.5%).

Key Findings about India

- Cropland area per capita (ha per capita):** Decreased from 0.16 in 2000 to 0.12.
- Agriculture share in total GDP:** Declined from 27.9% to 15.9% in 2022 against world average 4.3 & china's 7.7%.
- Employment:** India had **largest number of people working in agriculture** (226 million) in 2022 followed by china (170 million).
 - Share of women in agriculture** increased from 32.2 % in 2000 to **36 %** in 2022.
- Agriculture production:** India is **2nd largest producer of sugar** (19%) after Brazil & **largest producer of milk** (23 %) in 2022.
- Other:**
 - India's 6% area is under organic farming in 2022. It is **2nd largest globally behind Australia (46%)**.
 - India (76 million ha) has largest equipped area for **irrigation followed by China** (75 million ha).

Also In News



African Penguins

Last month, African Penguins were listed as **Critically Endangered** on the IUCN Red List.

About African Penguins

- It is the only Penguin species found in Africa.
- Characteristics:** It is **one of the smallest penguin species**. Males are generally slightly larger than their female counterparts.
 - They have a small pink gland above each eye, which helps them cope with high temperatures.
- Behavior:** Communicate with one another through vocalizations and body language like gaping, pointing the bill, pecking, and bill-jabbing.
- Diet:** They feed on pelagic schooling fish, particularly sardine and anchovy.



UNRWA

Recently, India released the **second tranche of USD 2.5 million** to the **United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA)**, fulfilling its annual contribution of USD 5 million for 2024-25.

About UNRWA

- Genesis:** **Post-1948 Arab-Israel war**, UNRWA was formed by a **UN General Assembly Resolution** in 1949 to carry out **direct relief and works programmes for Palestine refugees**.
- Funding:** Funded almost entirely by **voluntary contributions** from **UN Member States**.
- Its mandate has been extended **until 30 June 2026**.
- Headquarters:** Amman (Jordan) and Gaza.
- Area of work:** Jordan, Lebanon, Syria, the Gaza Strip and the West Bank, including East Jerusalem.



Fossil Fuel Non-Proliferation Treaty (FF-NPT)

At UNFCCC COP 29, Baku (Azerbaijan), it was announced that **10 more countries** had joined discussions on the FF-NPT.

About FF-NPT

- It was conceptualised in **2016** and officially launched in **2019**.
- It is a group of **civil society, research organizations, Nobel Laureates, government, etc.**
- It operates on **3 pillars** -
 - ⊕ **Non-proliferation:** Global cooperation to stop new fossil fuel (coal, oil, gas) production.
 - ⊕ **Fair phase-out:** Developed nations lead in closing existing fossil fuel facilities, based on their capacity and historical emissions.
 - ⊕ **Just transition:** Fast-track renewables while ensuring economic support for affected workers, communities, and countries.



ATACMS missiles

Ukraine used American-made ATACMS missiles to strike into Russia

About ATACMS missiles

- ATACMS is a long-range, guided surface-to-surface ballistic missile.
- **Maximum range is 300 km.**
- It has improved guidance package with **Global Positioning System**.
- ATACMS missiles are fired from the **HIMARS** and **MLRS M270 platforms**.



Global Energy Efficiency Alliance

UAE launched "Global Energy Efficiency Alliance" at COP29, hosted in Azerbaijan.

About "Global Energy Efficiency Alliance"

- **Aim:** To **double global energy efficiency rates by 2030** and contribute to significant emission reductions.
 - ⊕ It also aims to **encourage strategic public-private partnerships & bolster investments in energy efficiency initiatives.**
- The alliance will focus on **compiling & disseminating best practices**, with a particular emphasis on assisting African nations.
- The initiative builds on 'UAE Consensus' from COP28, a commitment to reduce carbon emissions and promote sustainable resource management.



MECHS

Recently, Scientists have developed a **new bioplastic** and named it **Mechanical Engineered Living Materials with Compostability, Healability, and Scalability (MECHS)**.

About MECHS

- It is **nature-inspired solution**, with the ability to regenerate, regulate itself, and respond to external stimuli such as light.
- It comprises of engineered **E. coli bacteria intertwined with a fiber matrix**, crafted into a paper- or film-like material.
- MECHS is **biodegradable in water and even in a compost bin**.
- **Challenges in adopting MECHS:** Genomic stability of the engineered E. coli bacteria, scale of economic and logistical barriers, etc.



Sanyukt Vimochan 2024

Indian Army conducted Multilateral Annual Joint Humanitarian Assistance and Disaster Relief (HADR) Exercise, 'Sanyukt Vimochan 2024' in Gujrat.

About Sanyukt Vimochan

- The exercise brought together all agencies involved with disaster relief efforts, signifying the necessity of a **whole-government approach**.
 - ⊕ **Nine Friendly Foreign Countries** from Gulf Cooperation Council, Indian Ocean Region and South East Asia also attended the exercise.
- It represented a significant step towards **strengthening India's preparedness and response capabilities**, solidifying its leadership in **disaster management** at the global stage.



AroTrack

Scientists at IIT Bombay have developed **portable water-pollutant detecting device** called 'AroTrack'.

About AroTrack

- The device uses a **protein-based biosensor to detect harmful 'aromatic xenobiotic' pollutants** like phenol, benzene and xylenols from water samples.
 - ⊕ **Aromatic xenobiotic compounds** can be **extremely toxic** to living organisms and are difficult to detect.
- The **MopR biosensor with engineered protein DNA sequence** senses different pollutants and a LED phototransistor relays the results through light of varied intensities.
- **Significance:** It's a low cost, battery-operated nature can revolutionize water quality testing.



2nd India-Australia Annual Summit

The 2nd India-Australia Annual Summit was held on the sidelines of the G20 Summit in Rio de Janeiro.

Key Highlights

- **Australia-India Business Exchange (AIBX) programme:** Extended for **4 years** from July 2024.
 - ⊕ **AIBX**, launched in 2021, to provide **businesses with market insights** and foster **commercial partnerships**.
- **India-Australia Renewable Energy Partnership (REP):** Launched to provide a **framework** for practical **cooperation in priority areas** such as **solar PV, green hydrogen, energy storage** etc.



Unified Complex Radio Antenna (UNICORN)

India and Japan signed a **Memorandum of Implementation** for co-development of UNICORN mast for Indian naval warships.

About UNICORN

- It is a **mast with integrated communication systems** which will help improve the **stealth characteristics of Naval platforms**.
 - ⊕ Indian Navy currently uses **Bharat Electronics Limited (BEL)'s Advanced Composite Communication System**, a 4th-gen integrated voice/data system for ship communications.
- This is first case of **co-development and co-production** of defence equipment between **India and Japan signed in 2015**.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI