

Mains Topics

COP 30

Context

COP30 (UNFCCC), hosted in Belém, Brazil, concluded with a weak and compromised final outcome, despite being labelled the “COP of Truth”, “COP of implementation”, and “COP of adaptation”.

Key Outcomes of COP30

- **Belém Package Adopted:** Set of 29 decisions to fast-track Paris Agreement implementation, focusing on finance, adaptation tracking, gender inclusion, and cooperation.
- **Climate Finance Commitment:** Pledge to mobilise **USD 1.3 trillion annually by 2035**, including a **tripling of adaptation finance** for vulnerable countries.
- **Global Implementation Accelerator & 1.5°C Mission:** Mechanisms launched to monitor NDC progress, improve accountability, and narrow the emissions gap.
- **Just Transition Mechanism:** Support framework for fossil-fuel-dependent workers and economies transitioning to sustainable pathways.
- **Roadmaps Announced:**
 - Roadmap to halt and reverse **deforestation**.
 - Roadmap for a **fair fossil-fuel transition**, reflecting national circumstances.
- **Belém Health Action Plan:** First global initiative linking climate action and public health, aiming to build climate-resilient health systems.
- **Tropical Forests Forever Facility:** Long-term performance-based fund for forest conservation, with **20% reserved for Indigenous and local communities**.
- **Equity and Inclusive Governance:** Strengthened emphasis on equity, climate justice, gender-responsive policies, Indigenous leadership, and intergenerational rights.
- **Climate–Trade Dialogue:** New platform to harmonise climate goals with international trade, reducing conflicts like carbon border adjustments.
- **Global Mutirão Agreement:** Commitment to enhanced multilateral cooperation and collective climate responsibility.

Major COPs Outcomes

COP	Key Outcomes
COP1 – Berlin (1995)	Berlin Mandate adopted and initiated process for binding emission cuts for

	developed countries.
COP3 – Kyoto (1997)	Kyoto Protocol adopted. Clean Development Mechanism (CDM), Joint Implementation (JI), and Emissions Trading.
COP7 – Marrakech (2001)	Marrakech Accords finalised.
COP13 – Bali (2007)	Bali Roadmap adopted. Launched REDD+ mechanism.
COP15 – Copenhagen (2009)	Copenhagen Accord (political agreement). Recognised 2°C limit. \$100 billion/year climate finance pledge by 2020.
COP21 – Paris (2015)	Paris Agreement adopted. 1.5°C and well-below 2°C targets.
COP26 – Glasgow (2021)	Glasgow Climate Pact. “Phase down” coal ; cut fossil fuel subsidies. Global Methane Pledge launched.
COP27 – Sharm El-Sheikh (2022)	Loss and Damage Fund approved. Focus on adaptation and finance delivery.
COP28 – Dubai (2023)	First Global Stocktake completed. Call to transition away from fossil fuels. Operationalised Loss & Damage Fund. Pledges to triple renewables, double energy efficiency.
COP29 – Baku (2024)	Negotiated elements of the New Collective Quantified Goal (post-2025 finance). Progress on climate finance architecture.

Key Obstacles to Meeting Climate Goals

- **Insufficient Climate Finance:** Adaptation finance remains severely underfunded, receiving **less than one-third of required levels**.
 - E.g., Adaptation Fund received only **\$135 million** (target: \$300 million). and Loss & Damage Fund received **just \$250 million**, considered negligible.
- **Geopolitical Divisions and Burden-Sharing Disputes:** Countries remain divided on how to equitably distribute responsibilities between developed and developing nations, particularly regarding monitoring and accountability mechanisms.
 - Inconsistent cooperation between the US and China further weakens collective global progress.
- **Weak NDC Ambition:** Current NDCs fall far short of the 1.5°C pathway.
 - E.g., UNEP’s 2025 Emissions Gap Report indicates only a **15% reduction by 2035**, against the **required 45–60% from 2019 levels**.
- **Large Implementation Gap:** Even where targets exist, on-ground action lags. Coal phase-outs remain slow, and fossil fuel investments continue.
 - E.g., Climate Action Tracker shows a **29–32 Gt CO₂e gap** in required cuts by 2030.

- **Technology Access and Capacity Constraints:** Uneven access to clean technologies limits progress, especially in developing regions.
 - **E.g.,** Africa's renewable capacity (~70 GW in 2024) is a fraction of Europe's 800+ GW.
- **Weak Data Systems and Reporting Challenges:** Inadequate GHG inventories and inconsistent reporting weaken accountability.
 - **E.g.,** Over half of 133 developing countries showed little progress in inventory preparation from 1997–2019.

Way Forward

- **Strengthen NDC Ambition with Clear Sectoral Pathways:** Countries must submit 1.5°C-aligned NDCs with explicit plans for power, transport, industry, and agriculture.
 - Mandatory five-year NDC updates and alignment with net-zero pathways should be enforced under stronger UNFCCC review mechanisms.
- **Accelerate Implementation Through Policy and Investment Shifts:** Governments must phase out fossil fuel subsidies, adopt renewable energy mandates, and fast-track coal retirement plans.
 - Corporations should be required to disclose climate risks, avoid over-reliance on offsets, and invest directly in emission-cutting technologies.
- **Deliver Scaled-Up and Predictable Climate Finance:** Developed countries must honour and surpass the \$100 billion commitment and operationalise the \$1.3 trillion goal with clear timelines.
 - Dedicated windows for adaptation finance, concessional loans, and grant-based support should be prioritised for vulnerable nations.
- **Expand Technology Transfer and Capacity Building:** Establish global technology partnerships to bridge renewable, storage, and carbon-capture gaps.
 - Support developing countries in grid modernisation, MRV (measurement, reporting, verification) capacity, and skill development through South–South and North–South cooperation.
- **Ensure a People-Centric Just Transition:** Create national just transition plans with social protection, reskilling, job-creation programmes, and safety nets for affected workers.
 - Engage local communities, Indigenous groups, and labour institutions to ensure inclusive and equitable transition pathways.

Source: [DTE](#)

G20 Summit 2025

Context

The 20th G20 Summit 2025, held in Johannesburg as the first G20 meeting on African soil, focused on the theme “Solidarity, Equality, Sustainability” and culminated in the adoption of the Johannesburg Leaders’ Declaration.

About G20 Summit

- **Origin:**
 - Formed after the **1997–98 Asian Financial Crisis** as a platform for Finance Ministers and Central Bank Governors to strengthen global financial stability.
 - Over time, its agenda expanded beyond macroeconomics to include **trade, climate change, health, food security, energy transition, and digital governance**.
 - Elevated to the **Leaders’ Level during the 2008–09 Global Financial Crisis**, recognising the need for top-level political coordination.
 - Since 2009, **annual Leaders’ Summits** have become the central decision-making forum.
- **Composition:**
 - Includes **19 major economies + the European Union (EU) + the African Union (AU)**.
 - India is a founding member.
 - Non-members may join as **special invitees** depending on the host presidency.
 - Collectively, G20 economies represent **85% of global GDP, 75%+ of global trade**, and **~2/3 of the world’s population**.
- **Mandate:**
 - Serves as the **premier forum for international economic cooperation**.
 - Shapes global governance across multiple domains:
 - Economic growth and financial stability
 - Trade and investment
 - Sustainable development and climate action
 - Global health, energy security, agriculture
 - Anti-corruption and digital governance
- **Structure and Governance:**
 - Operates without a permanent secretariat or headquarters.
 - Presidency rotates annually among members.
 - Uses the **Troika System** to ensure continuity:

■ Previous President – Current President – Incoming President

- For the **2025 South Africa Presidency**, the Troika comprises **Brazil, South Africa, and the United States**.

Key Highlights of G20 Summit 2025

- **Adoption of a 122-paragraph Leaders' Declaration (G20 Johannesburg Declaration):** Members agreed on a 122-paragraph declaration covering climate action, multilateral reforms, and equitable global governance.
 - **Spirit of Ubuntu:** The declaration drew on the African principle of Ubuntu, stressing shared responsibility and interconnectedness.
 - **Renewed Multilateralism:** Leaders called for deeper multilateral cooperation to confront conflicts, inequality, and humanitarian crises.
 - **Support for UNSC Reform:** Strong backing for transforming the UN Security Council to reflect today's geopolitical realities and emphasised on expanding representation for Africa, Asia-Pacific, and Latin America.
 - **Clear Stand Against Terrorism:** The declaration condemned terrorism in all forms, echoing India's long-held position.
 - **Enhanced Climate Action Commitments:** G20 members supported scaling climate finance from "billions to trillions."
 - Reinforced commitment to a more **just and equitable energy transition** under the Paris Agreement.
 - **Women's Empowerment:** Leaders stressed removing structural barriers, promoting equal participation, and recognising women's role in peace and governance.
- **Debt Crisis and Financial Architecture Reform:** Launched the **Cost of Capital Commission** to address biased rating systems and reduce the "African risk premium."
 - Highlighted Africa's rising debt burden (USD 1.8 trillion) and growing fiscal stress on public services.
- **Mission 300:** Endorsed Mission 300, led by the World Bank and AfDB, aiming to provide electricity to **300 million people in Sub-Saharan Africa** by 2030.
- **Critical Minerals Value Chain Framework:** Welcomed the G20 Framework to promote secure, sustainable critical mineral supply chains.
 - Focused on investment in exploration and local processing in developing economies.
- **Youth and Gender Inclusion Targets:** Adopted the **Nelson Mandela Bay Target** to cut youth NEET rates by 5% by 2030.
 - Committed to achieving **25% gender parity** in labour force participation by 2030.

Major Initiatives Proposed by India at G20 Summit 2025

- **Addressing the Drug–Terror Financing Nexus:** India flagged global drug trafficking—especially **synthetic opioids like fentanyl**—as a major security threat and source of terror financing.
 - Proposed a **G20 Initiative on Countering the Drug–Terror Nexus**, focusing on financial tracking, border cooperation, and coordinated enforcement.
- **Championing Africa’s Development Priorities:** Stressed that **Africa must be central** to future global development frameworks.
 - Proposed the **G20–Africa Skills Multiplier Initiative** to train **1 million certified trainers** across Africa over the next decade.
- **Leading Global Cooperation in Health, Knowledge, and Space:** Proposed three new global partnerships:
 - **G20 Global Healthcare Response Team** for coordinated health emergency action.
 - **Global Traditional Knowledge Repository** to preserve and exchange indigenous medicinal systems.
 - **Open Satellite Data Partnership** for sharing space data to support agriculture, fisheries, and disaster management.
- **Strengthening Critical Minerals Security:** Proposed a **Critical Minerals Circularity Initiative** promoting recycling, urban mining, and innovation.
 - Called for **democratic, diversified, and transparent mineral supply chains**, reducing over-dependence on a few suppliers.
- **Promoting Safe, Inclusive and Accountable AI:** Advocated a **Global Compact on Responsible AI**, rooted in safety-by-design, human oversight, transparency, and strict controls on misuse (deepfakes, cybercrime, terrorism).
 - Invited countries to participate in the **AI Impact Summit 2026**, to be held in India.
- **Advocating for a Fair and Representative Global Order:** Strongly supported **UN Security Council reform** to include Africa, Latin America, and Asia–Pacific.
 - Reinforced commitment to **multilateralism and a rules-based global system**.

Source: [Indian Express](#)

Today's Prelims Topics

IMF FX Regime

Context

The International Monetary Fund (IMF) has reclassified India's "de facto" exchange rate regime from "stabilised" to a "crawl-like arrangement" in its latest review.

More in News

- The IMF expects **India's GDP growth at 6.6% in 2025-26** and **6.2% the year after**, but flags risks from **US tariffs, weather shocks, and geopolitics**.

What is the IMF's Foreign Exchange (FX) Regime

- The IMF classifies each country's exchange rate system in two ways:
 - **De jure:** What the country officially declares.
 - **De facto:** What the IMF observes in practice (actual behaviour of the exchange rate and central bank interventions).
 - The **de facto classification** is more important and has **10 major categories**, grouped into **Hard Pegs, Soft Pegs, and Floating Arrangements**.

De facto FX Regime

- **Hard Pegs (Least Flexible):**
 - **No Separate Legal Tender:** Country uses another country's currency (e.g., Ecuador using the USD).
 - **Currency Board Arrangement:** Domestic currency is legally and rigidly pegged to another currency; minimal discretion for monetary policy.

- **Soft Pegs (Intermediate Arrangements):**

- **Conventional Peg:** Fixed peg to another currency or basket with limited $\pm 1\%$ flexibility.
- **Stabilised Arrangement:** Exchange rate stays within $\pm 2\%$ of a fixed level for 6 months.
- **Crawl-Like Arrangement:** Exchange rate moves within a narrow margin of $\pm 2\%$ around a trend for 6 months or more.
- **Crawling Peg:** The peg itself shifts periodically at a predetermined rate.
- **Pegged to Composite:** Linked to a basket like SDR.

- **Floating Arrangements:**

- **Floating:** Market-driven rate with occasional intervention to smooth volatility.
- **Free Floating:** Market determines exchange rate almost entirely; intervention is extremely rare or absent.

About International Monetary fund (IMF)

- It is a **specialised agency** of the United Nations (UN), founded at the Bretton Woods Conference in 1944. (**HQ- Washington DC**)
- **Membership:** 190 countries.
- It grants loans **only to its member countries**.
- **Reports released by IMF:**
 - World Economic Outlook (WEO)
 - Global Financial Stability Report (GFSR)
- **Lending facilities of IMF:** Extended Fund Facility, Rapid Financing Instrument, Rapid Credit facility.

Source: [Indian Express](#)

Scheme to Promote Manufacturing of Sintered Rare Earth Permanent Magnets (REPM)

Context

The Union Cabinet has recently approved the 'Scheme to Promote Manufacturing of Sintered Rare Earth Permanent Magnets'.

About Scheme

- **Total Outlay: Rs. 7,280 crore**
- **Duration: 7 years** (2-year gestation + 5-year incentive period)
- **Key Features:**
 - Establish 6,000 MTPA of integrated REPM production capacity.
 - Capacity divided among **five beneficiaries**.
 - Each was allotted up to **1,200 MTPA** through **global competitive bidding**.
 - **Covers Complete Value Chain:** Rare earth oxides → metals → alloys → sintered permanent magnets.
 - **Incentive Structure:**
 - **Sales-Linked Incentives (SLI):** Rs. 6,450 crore
 - Provided for **5 years** on REPM sales.
 - **Capital Subsidy:** Rs. 750 crore
 - For establishing manufacturing facilities.
- **Expected Outcomes:**
 - Creation of a **complete domestic REPM supply chain**.
 - Reduction of strategic vulnerabilities in critical minerals and magnet imports.
 - Boost to **Make in India, Atmanirbhar Bharat**, and advanced manufacturing.

- Significant **employment generation** in high-tech sectors.
- Strengthening India's role in global green technology value chains.

What are Rare Earth Permanent Magnets (REPMs)?

- High-strength permanent magnets made from rare earth elements like **Neodymium (Nd)**, **Praseodymium (Pr)**, **Samarium (Sm)**, **Dysprosium (Dy)**, **Terbium (Tb)**.
- **Used in:**
 - Electric Vehicles (EV motors)
 - Wind turbines
 - Electronics and semiconductors
 - Aerospace & defence systems
 - Industrial robotics and automation.

Source: [PIB](#)

Operation PAWAN

Context

The Army Chief paid homage to Operation Pawan bravehearts at National War Memorial.

About Operation PAWAN

- Operation PAWAN was the **Indian Peace Keeping Force (IPKF)** operation in **Sri Lanka** from **1987 to 1990** to enforce the **Indo-Sri Lanka Accord (1987)**.
- **Operational Area:** Primarily the Jaffna Peninsula and other LTTE-dominated regions in northern Sri Lanka.
- **Objective:**
 - To **disarm the LTTE** and other militant groups in Northern and Eastern Sri Lanka.
 - Restore peace and facilitate a political settlement between the Sri Lankan government and Tamil groups.

Source: [The Hindu](#)

Kerala's ON court

Context

A year has passed since an open and networked (ON) court was set up in Kerala's Kollam district by the High Court of Kerala.

About Open & Networked (ON) Court

- It is a fully digital, 24×7 special court designed to speed up justice delivery through continuous, technology-enabled access.
- It has been designated by the State Home Department as a **Special Court under the Judicial Magistrate of First Class**.
- **Works:**
 - **24×7 availability:** Litigants can file cases, upload documents, and pay fees at any time through the e-Treasury platform.
 - **Instant case tracking:** Integrated dashboards provide real-time updates on case status, upcoming hearings, and procedural steps.
 - **Electronic summons:** Digital issuance of summons through the iCops system speeds up communication with accused persons and police authorities.
 - **Institutional integration:** Automated data and document exchange with banks, police, and treasury departments ensures faster and coordinated case management.

Source: [Hindustan Times](#)

Dr. Verghese Kurien

Context

India observes National Milk Day on 26 November to mark the birth anniversary of Dr. Verghese Kurien.

About Dr. Varghese Kurien

- Born in **1921 in Kozhikode, Kerala**, he is celebrated as the chief architect of India's White Revolution.
- Led **Operation Flood**, which transformed India into the **world's largest milk producer**.
- Served as the **Founder Chairman** of key institutions including the National Dairy Development Board (NDDB), Gujarat Co-operative Milk Marketing Federation (GCMMF), and the Institute of Rural Management Anand (IRMA).
- Expanded India's edible oil sector by launching the '**Dhara**' brand in 1979.
- Honoured with major awards such as the **Ramon Magsaysay Award (1963)**, **World Food Prize (1989)**, and **Padma Vibhushan (1999)**.

Source: [The Hindu](#)

Species in News

Cuban Gar



News? A restoration project is underway in the Zapata Swamp in Cuba—the Caribbean’s largest intact wetland—to save the Cuban gar (manjuarí) from extinction.

About Cuban Gar

- **Geographical Distribution:** Limited to **western Cuba** and the **Isla de la Juventud**.
- **Key Features:**
 - It is primarily a **tropical freshwater species**, though it is also capable of living in **brackish water** environments.
 - It is also called **manjuarí**, belongs to the ancient fish family **Lepisosteidae**, which has existed for nearly **100 million years**.
 - The species occupies a variety of habitats, including **large lakes, rivers, slow-moving tributaries, backwaters, and pools**.
 - Cuban gars are **ambush predators**, feeding mainly on **small fish and aquatic crustaceans**.
 - The species is known for its **remarkable tolerance** to elevated **ammonia and nitrate levels** in water.
 - It can also **breathe atmospheric air**, enabling it to survive in **low-oxygen conditions**.
- **Major Threats:** **Habitat degradation** and the introduction of the **invasive African walking catfish**.
- **IUCN Status:** Classified as **Critically Endangered**.

Source: [India Today](#)