

NEXT IAS

DAILY NEWS

ANALYSIS



09 July

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PM-Lula meet: 'India, Brazil have similar thinking on terror... zero tolerance, zero double standards'

SHUBHAJIT ROY
NEW DELHI, JULY 8

PRIME MINISTER Narendra Modi on Tuesday said the growing cooperation in defence between India and Brazil is a "symbol of deep mutual trust" and the two countries have a similar thinking on the fight against terrorism — "zero tolerance and zero double standards".

After meeting PM Modi, Brazilian President Luiz Inacio Lula da Silva said his country aims to triple trade flows with India from \$12 billion last year "in the short term", without giving a more specific time frame.

Speaking alongside Modi in Brasilia, Lula also said Brazilian planemaker Embraer wants to strengthen its presence in India, partnering with companies there.

Lula also said expanding a preferential trade agreement be-

tween India and South American bloc Mercosur could help reduce both tariff and non-tariff barriers that are limiting trade.

The two leaders met in Brasilia, after they attended the BRICS leaders summit in Rio de Janeiro.

Modi said, "We have a similar thinking on the fight against terrorism — zero tolerance and zero double standards. We are clear that there is no place for double standards on terrorism. We strongly oppose terrorism and those who support terrorism."

"The growing cooperation in the field of defence is a symbol of our deep mutual trust. We will continue our efforts to connect our defence industries," he said.

Six agreements were signed — on combating terrorism and transnational organised crime, renewable energy, digital solutions, intellectual property, agricultural research and mutual protection of classified information.



Brazil's President Luiz Inácio Lula da Silva presents the Grand Collar of the National Order of the Southern Cross, Brazil's highest civilian award, to Prime Minister Narendra Modi. *Reuters*

Modi said cooperation in Artificial Intelligence and super-computers is also growing. "This

is a proof of our common thinking of inclusive development and human-centric innovation.

Both sides are also working together on the adoption of UPI in Brazil. We will be happy to share India's successful experience in areas like digital public infrastructure and space with Brazil."

Stating that cooperation in agriculture and animal husbandry is decades old, he said, "Now we will also work together on agricultural research and food processing. We are also increasing our win-win cooperation in the field of health. We emphasised on the expansion of Ayurveda and traditional medicine in Brazil."

Calling President Lula the "chief architect of India-Brazil strategic partnership", he said, "We have set a target to take bilateral trade to 20 billion dollars in the coming five years."

"Football is the passion of Brazil, cricket is the passion of the people of India. Whether the ball crosses the boundary, or scores a goal, when both are in the same team, a partnership of

20 billion is not difficult. We will also work together to expand the India-Mercosur preferential trade agreement," he said.

The PM said cooperation in the field of energy is constantly growing. "Environment and clean energy are the main priorities of both the countries. The agreement that has been made today to increase cooperation in this area will give new direction and momentum to our green goals. I wish President Lula all the best for the COP30 meeting to be held in Brazil this year," Modi said.

Underlining that India and Brazil have always worked in close coordination at the global level, Modi said, "As two large democratic countries, our cooperation is relevant not only for the Global South, but for the entire humanity. We believe that it is our moral obligation to raise the concerns and priorities of the Global South at global forums."

Backdrop: After meeting PM Modi, the Brazilian President said Brazil aims to triple trade with India in the near future.

Relevance: GS2 - Bilateral Relations

Prime Minister Narendra Modi on Tuesday said the growing cooperation in defence between India and Brazil is a “symbol of deep mutual trust” and the two countries have a similar thinking on the fight against terrorism — “zero tolerance and zero double standards”.

India–Brazil Bilateral Engagement

Diplomatic Ties

- Diplomatic relations established in **1948**.
- Relationship rooted in **democratic values, development priorities, and global cooperation**.
- **Strategic and Defence Cooperation**
- Growing defence ties reflect “*deep mutual trust*.”
- Emphasis on further connecting **defence industries**.
- Signed agreement on **combating terrorism and transnational crime**.

Common Stand Against Terrorism

- Both countries share a “**zero tolerance, zero double standards**” approach.
- Strong opposition to terrorism and to those who support it.

Trade and Economic Relations

Trade Goals

- **India: 5th largest trading partner** of Brazil.
- Brazil aims to **triple bilateral trade** with India from \$12 billion “in the short term”.
- Target set to **reach \$20 billion** in trade over the next **five years**.

Trade Facilitation

- Expansion of the **India–Mercosur Preferential Trade Agreement** discussed.
- Aim to reduce **tariff and non-tariff barriers**.

Technology and Digital Cooperation

- Increasing collaboration in **Artificial Intelligence** and **supercomputers**.
- Work underway on **UPI adoption** in Brazil.
- India to share expertise in **digital public infrastructure** and **space**.

Agriculture and Health

- Longstanding ties in **agriculture** and **animal husbandry**.
- New cooperation in **agricultural research** and **food processing**.
- Emphasis on expanding **Ayurveda** and **traditional medicine** in Brazil.
- Strengthening cooperation in the health **sector**.

Global South and Multilateral Coordination

- India and Brazil to coordinate closely on **Global South** priorities.
- Shared belief in resolving global tensions through **dialogue** and **diplomacy**.
- Modi emphasized cooperation relevant to the entire **humanity**, not just developing countries.

Culture & People-to-People Ties

- **Cultural Exchange Programme (2020–24)** in place.
- Strong community of **Yoga and Ayurveda** practitioners in Brazil.
- **Indian cinema and culture** enjoy wide popularity.

Multilateral and Bilateral Diplomacy

- On sidelines of BRICS summit, PM Modi held meetings with:
 - **Cuba, Malaysia, Uruguay, Bolivia**
- Focused areas: **Digital tech, critical minerals, healthcare, space, and trade diversification.**
- Active collaboration in **BRICS, BASIC, G20, G4, IBSA, WTO, UN, ISA, WIPO.**
- Support each other's **UNSC permanent membership bids** via G4.

India's Future BRICS Presidency

- India to take over BRICS presidency in 2026.
- Modi proposes redefinition of BRICS as:
 “Building Resilience and Innovation for Cooperation and Sustainability”.
- Focus to continue on **Global South**, **people-centric** and **humanity-first** development.

Mapping Corner

- Bordering countries of Brazil are - Argentina, Uruguay, Paraguay, Bolivia, Peru, Colombia, Venezuela, Guyana, Suriname, and French Guiana.





PRACTICE QUESTION

Q1. With reference to India–Brazil relations, consider the following statements:

1. India and Brazil established diplomatic relations in 1953.
2. Brazil is India's largest trading partner in Latin America.
3. India and Brazil are both members of G4, which supports reforms in the UN Security Council.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only**
- (c) 3 only
- (d) 1, 2 and 3

CBAM (BRICS CONDEMNS EUROPE'S CBAM)

BRICS nations 'condemn and reject' Europe's carbon-based import duties

AMITABH SINHA
NEW DELHI, JULY 8

IN STRONGEST statement on the subject yet, the BRICS nations have "condemned and rejected" Europe's Carbon Border Adjustment Mechanisms (CBAMs), and other similar restrictive trade measures taken under the pretext of climate concerns, saying these undermined their development and transition to cleaner economy.

CBAM is an import duty imposed by the European Union (EU) on goods produced by processes that lead to more carbon emissions than domestic European manufacturers are allowed to emit. The ostensible reason is to check 'carbon leakage', but this has the effect of making items like steel or cement, from a country like India for example, more expensive, and thus less competitive, in the European markets.



Prime Minister Narendra Modi at the 17th annual BRICS Summit in Brazil.

PMO via PTI

Developing countries including India and China have been strongly critical of CBAM, calling it a unilateral and unfair trade barrier. They maintain this violates international agreements on both trade and climate, and have raised this issue at multiple international forums, including the annual climate conferences. But EU has been unrelenting. The statement by the BRICS nations, a group of

nine large developing economies whose annual two-day summit concluded in Brazil on Monday, is another reiteration of the stand of the developing countries, though in a much stronger language.

"We condemn and reject unilateral, punitive and discriminatory, protectionist measures that are not in line with international law, under the pretext of environmental concerns, such as unilat-

eral and discriminatory carbon border adjustment mechanisms (CBAMs), due diligence requirements with detrimental impacts on global efforts to halt and reverse deforestation, taxes and other measures...", the BRICS nations said in a statement on climate finance that is a new addition to the outcomes from this annual meeting.

The Leaders' Framework Declaration on Climate Finance is the result of the discussions held by a new contact group of ministers on climate change and sustainable development that was formed last year under Russia's chairmanship of BRICS.

The declaration said CBAMs, and other measures like restrictions on trade of forest goods, violated the provisions of the 1994 UN Framework Convention on Climate Change (UNFCCC) and agreements reached at other climate meetings. **FULL REPORT ON**

www.indianexpress.com

Backdrop: BRICS nations have **strongly opposed** and **denounced** Europe's Carbon Border Adjustment Mechanisms (CBAMs).

Relevance: GS2- Regional groupings involving India and affecting India's interests.

GS3- Environmental conservation, climate change

BRICS nations have “condemned and rejected” Europe’s Carbon Border Adjustment Mechanisms (CBAMs), and other similar restrictive trade measures taken under the pretext of climate concerns, saying these undermined their development and transition to cleaner economy.

Opposition to CBAM and Similar Measures

- **Strong Condemnation:** BRICS nations “*condemned and rejected*” the EU’s Carbon Border Adjustment Mechanism (CBAM) and similar unilateral trade measures under climate pretext.
- **Nature of CBAM:** CBAM imposes import duties on goods with high carbon footprints, disadvantageous for products from developing nations like India and China.
- **Violation of Global Norms:** BRICS states that CBAM violates:
 - International trade agreements
 - UNFCCC provisions, particularly Article 3(5), which opposes discriminatory or restrictive climate actions.
- **Labelled as Protectionist:** Such measures are termed *unilateral, punitive, discriminatory, and protectionist*, distorting global trade and supply chains.

- **Call for Full Implementation:** BRICS demand full enforcement of the UNFCCC's principles, especially around fair trade and non-discrimination in climate action.
- **Criticism of Sanctions & Trade Barriers:** Expressed concern over:
 - Unilateral sanctions
 - Trade restrictions on forest products
 - Financial measures that divert resources from climate priorities
- **Impact on Development:** Such actions hurt BRICS nations' ability to fund their *just transitions* and climate development goals.

- **Unfulfilled Commitments:**

- Developed countries pledged \$100 billion annually.
- Promised its increase to \$300 billion by 2035 is seen as inadequate.
- Developing nations claim \$1.3 trillion/year is actually needed.

- **Urgent Increase in Adaptation Finance:**

- Urged developed countries to *double adaptation funding by 2025* (compared to 2019 levels).

- Emphasis on **grant-based, concessional finance** that doesn't increase debt burdens.

- **Adaptation Needs:**

- Developing countries are *most vulnerable* and *least equipped* to deal with climate change.
- Need a greater share of climate finance, especially for public infrastructure and local solutions.

- **Finance Principles Highlighted:**

- Accessibility to local communities
- Predictability and adequacy
- Alignment with national priorities and adaptation plans

Key Takeaways from the BRICS Climate Finance Declaration



- A new *Leaders' Framework Declaration on Climate Finance* was released.
- Emerged from discussions within a new ministerial group formed under Russia's 2024 chairmanship.
- Reinforces the collective position of BRICS as a bloc of major developing economies pushing back against perceived climate-related trade injustice.

What is CBAM?

- An **EU tariff on carbon-intensive imports** to prevent *carbon leakage* (shifting production to countries with lax climate norms).
 - **Carbon leakage** refers to the shift of greenhouse gas emissions from a region with strict climate policies to one with weaker or no environmental regulations, due to relocation of production.
- **Purpose**
 - Ensure **imported goods bear the same carbon cost** as EU-produced ones.
 - Promote **cleaner production practices** globally.
 - Prevent **undermining of EU climate goals**.

- **Carbon Certificates**
- EU importers must **buy certificates** equal to the carbon price if goods were made in the EU.
- Countries with equivalent carbon pricing regimes are **exempt** from CBAM obligations.

Initial Sectoral Coverage

- Iron & Steel
- Cement
- Fertilizers
- Aluminium
- Electricity
- Hydrogen



PRACTICE QUESTION

Q2. With reference to the Carbon Border Adjustment Mechanism (CBAM) introduced by the European Union, consider the following statements:

1. It imposes a tariff on imports of carbon-intensive goods to prevent carbon leakage.
2. Countries with domestic carbon pricing regimes equivalent to that of the EU are exempt from CBAM obligations.
3. It currently applies to sectors such as iron and steel, cement, and fertilizers.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3**

Reforming UNFCCC process

In recent years, climate negotiations have failed to achieve sufficient progress in tackling climate change and its impact. Several ideas have been proposed to reform these talks but it's unlikely that they will be implemented



AMITABH SINHA

THE INTERNATIONAL climate negotiations, held under the UN Framework Convention on Climate Change (UNFCCC), have been facing a credibility crisis in recent years.

Their outcomes have been largely underwhelming as they have not delivered the kind of action required to curb global warming. Developed countries that fail to meet their targets, or deliver on their commitments, have not been held to account. Developing countries, particularly the small and most vulnerable of them, have repeatedly complained that their concerns are often ignored, and that the negotiations have failed to deliver climate justice.

Also, the withdrawal of the United States from these negotiations, following the return of Donald Trump to the White House this year, has threatened to make the entire process irrelevant.

As a result, there has been an effort to re-infuse trust and confidence in the system in the lead-up to the COP30 meeting in Brazil which will take place in November. As the host of the COP30, Brazil has been actively engaged with other countries to explore the possible steps that can be taken in this direction.

The annual mid-year climate meeting in Bonn, Germany, which wrapped up last month, discussed the ideas and suggestions submitted by countries, climate groups, and non-government organisations, to reform the system and make it more effective.

Suggestions for reforming climate negotiations

The Bonn meeting, held in the second half of June, acknowledged that the "growing scale and complexity" of the climate negotiations presented challenges. It also emphasised the need to "improve the efficiency of the UNFCCC process in a transparent and inclusive manner".

However, the proposals that were included in the discussions were not radical.



The closing plenary of the Bonn summit on June 26. UN Climate Change

Amongst the things proposed was streamlining agenda items to eliminate overlapping or redundant issues, and asking countries and observer groups to restrict the length of their statements to allow for more time for negotiations. Notably, it was also proposed that countries limit the size of their negotiating teams. The discussions remained inconclusive, and would continue in the COP30 meeting.

Civil society organisations and climate advocacy groups, which have been at the forefront of the demands to reform the UNFCCC process, have been asking for more fundamental changes. At Bonn, a letter signed by more than 200 such groups, suggested five major reforms. One of them was a demand to allow majority-based decision-making when attempts to find a consensus remain elusive.

The UNFCCC works through consensus, which means no decision is accepted till every country accepts it. In a way, every country has a veto. Getting all of the more than 190 parties to agree to every part of a decision has always been a big challenge. This is often blamed for the lack of ambition in the outcomes of climate negotiations.

The civil society groups suggested that countries that do not have a good track

record of climate action be not allowed to hold the COP meetings. In the last few years, the choice of Dubai and Baku for holding COP meetings has come under criticism as their economies are sustained largely by the fossil fuel industry.

These groups also called for reducing the participation and involvement of representatives of fossil fuel companies and other polluting industries in COP meetings. There have been allegations that these companies influence the outcomes of COP meetings in their favour.

Any decision to reform the UNFCCC process will have to be approved through consensus by all the parties, and it is unlikely that any of the more radical suggestions would go through.

Brazil's bid to rebuild trust in the system

As the host of the COP30, Brazil has to take leadership in ensuring its success. The outcome of this meeting will be measured largely by the faith and confidence that countries, mainly developing and vulnerable ones, are able to put back into the process.

In a recent letter to all the parties, Brazil acknowledged the need for reforms, and asked them to "consider" the future of the

UNFCCC process.

Brazil said long-standing issues such as excessively long agenda items, overlapping themes, scheduling constraints, and barriers that prevent meaningful participation of smaller delegations, needed to be addressed.

The country has also talked about mainstreaming climate conversations in other multilateral forums, including different UN agencies and financial institutions.

It has floated the idea of creating additional multilateral mechanisms that can complement the UNFCCC process, and push the implementation of the decisions taken at climate meetings.

Brazil has also drawn up a list of 30 items on which it would work with other countries to accelerate climate actions.

Developing nations' demand to increase climate finance

For developing countries, the single biggest issue currently is the lack of adequate money to finance their climate actions, and the failure of developed countries to deliver on their obligations to provide climate finance.

To comply with the provisions of the 2015 Paris Agreement, the Baku meeting had to decide on a new finance mobilisation target for developed countries, which, as of now, are under obligation to, collectively, raise at least \$100 billion a year to help developing countries.

While the needs of developing countries were assessed to be at least \$1.3 trillion a year, developed countries agreed to mobilise a sum of just \$300 billion a year, and that too from 2035 onwards.

Developing countries have continued to put pressure on the developed world to take additional steps to increase the availability of finance. They stalled the discussions in the Bonn meeting last month, and managed to force a special meeting on the issue. However, it remained inconclusive. The matter is likely to dominate the discussions at the COP30.

BRICS, a group of nine large and influential developing economies, also weighed in on the subject at its recently concluded meeting in Brazil.

In a separate declaration on climate finance, the BRICS countries asked developed countries to fully deliver on their finance commitments under the UNFCCC and the Paris Agreement, while increasing their contribution to adaptation finance.

Backdrop: Rising Demand for UNFCCC reform
Relevance: GS 3/Environment

In recent years, climate negotiations have failed to achieve sufficient progress in tackling climate change and its impact. Several ideas have been proposed to reform these talks, but it's unlikely that they will be implemented

Credibility Crisis in UNFCCC Climate Negotiations

- Outcomes falling short of what's needed to tackle global warming.
- **Developed countries** have not been held accountable for missing climate targets, while **developing and vulnerable nations** feel ignored, raising concerns over **climate justice**.
- **U.S. withdrawal** from the talks under President Trump has further undermined the process.
- **Inadequate climate finance**: Paris Agreement committed to **\$100 billion/year**, but actual needs exceed **\$1.3 trillion/year**.
 - Developed countries have agreed to only **\$300 billion/year starting 2035**.

Current Reform Efforts



- Ahead of **COP30 in Brazil (November)**, there is renewed effort to **restore trust** in the UNFCCC process.
- The **Bonn climate meeting (June 2025)** discussed limited reforms:
 - Streamlining agenda items.
 - Limiting delegation sizes and speech durations.
 - Improving inclusivity and negotiation efficiency.

Suggestions for Reforming Climate Negotiations



- Streamlining agenda items to avoid overlap.
- Limiting the length of country statements.
- Reducing the size of negotiating teams.
- **Majority-based decision-making**, when consensus is unreachable to overcome the current **veto-based system**.
- **Barring countries with poor climate records** (like fossil-fuel dependent nations) from hosting COPs.
- **Limiting the participation of fossil fuel companies** and polluting industries, alleging they influence outcomes in their favour.
- Developed countries need to **fulfil and scale up** their climate finance obligations, especially for adaptation.

Brazil's Leadership Role (COP30 Host)



- Brazil is working to:
 - Address process inefficiencies and participation barriers.
 - Mainstream climate action across UN bodies and financial institutions.
 - Propose **30 priority action areas** to accelerate global climate efforts.

UNFCCC

- **UNFCCC (United Nations Framework Convention on Climate Change)** is the UN entity supporting the **global response to climate change**.
- Originated at the **1992 Earth Summit (Rio de Janeiro)** and entered into force on **March 21, 1994**.
- It has **197 member parties** and is the **parent treaty of the 2015 Paris Agreement**.

Objective

- As per **Article 2**, it aims to **stabilize greenhouse gas concentrations** at levels that prevent dangerous human-induced climate interference.
- It emphasizes sustainability by allowing **ecosystem adaptation, food security, and economic development**.

Secretariat

- Originally in **Geneva**, now located in **Bonn, Germany (since 1996)**.
- Services all major UNFCCC bodies, including COP, Subsidiary Bodies, and others.

Institutional Arrangements

- **Conference of the Parties (COP)**
 - The **supreme decision-making body**.
 - Meets annually to review progress and adopt decisions.

- **COP President and Bureau**

- **COP President** is responsible for facilitating the proceedings of the COP and fostering consensus among Parties. The **presidency rotates** among the five UN regional groups,
- **Bureau** provides guidance to the COP and its subsidiary bodies, ensuring continuity by functioning both during and between sessions.

- **Subsidiary Bodies (SBs)**

- **Subsidiary Body for Scientific and Technological Advice:** Offers guidance on technical issues.
- **Subsidiary Body for Implementation** – monitors and reviews implementation progress.

- **Other Bodies**

- Created by the COP for specific functions (e.g., ad hoc groups, long-term dialogues).
- Report findings and outcomes back to COP.



PRACTICE QUESTION

Q3. With reference to the United Nations Framework Convention on Climate Change (UNFCCC), consider the following statements:

1. It originated at the 1992 Earth Summit in Rio de Janeiro.
2. Decision-making within the UNFCCC is based on majority vote
3. The UNFCCC secretariat is currently based in Bonn, Germany.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 3 only**
- (c) 2 and 3 only
- (d) All of the above

BULGARIA ADOPTS EURO

Bulgaria becomes 21st member to adopt euro after EU green light



AFP

EU Ministers gave the final green light for Bulgaria to adopt the euro on January 1, 2026, making it the single currency area's 21st member. Bulgaria's switch from the lev to the euro comes nearly 19 years after the country joined the European Union. EU finance

Backdrop: Eurozone Expansion

Relevance: GS 3- Economy

About the news

- **Bulgaria will adopt the euro on January 1, 2026.**
- It becomes the **21st member** of the **eurozone**.
- Final approval was given by **EU finance ministers** on **July 8, 2025**.
- The official **conversion rate** set: **1 euro = 1.95583 Bulgarian lev**.
- Bulgaria joined the **European Union** in **2007**.

Eligibility Criteria

- **Inflation control** (within 1.5% of three best-performing EU states).
- **Sound fiscal discipline**.
- Earlier efforts were delayed due to **high inflation**.

Expected Benefits

- **Economic stability** and deeper integration with the **West**.
- Protection from **external influence**, particularly **Russia**.
- Strengthened ties with **EU institutions and markets**.

Eurozone VS European Union



The Eurozone comprises EU member states that have adopted the euro (€) as their official currency, whereas the European Union is a larger political and economic bloc of 27 countries, some of which continue to use their national currencies.

Eurozone Expansion History

- Euro introduced: **January 1, 2002** (12 founding members).
- Subsequent joiners:
 - **Slovenia (2007)**
 - **Cyprus, Malta (2008)**
 - **Slovakia (2009)**
 - **Estonia (2011)**
 - **Latvia (2014)**
 - **Lithuania (2015)**
 - **Croatia (2023)**

How Countries Join the Euro Area:

- **Maastricht Criteria:** Countries must meet specific economic and legal conditions outlined in the 1992 Maastricht Treaty (also called convergence criteria).
- **Mandatory for EU Members:** All EU countries (except Denmark) are required to adopt the euro once they meet the criteria.
- **No Fixed Timeline:** Member states can adopt their own strategies; the Treaty sets no deadline for joining.
- **Evaluation Process:** The **European Commission** and **European Central Bank (ECB)** assess candidate countries and publish reports on their readiness.
- **Final Approval:** The **ECOFIN Council**, after consulting the **European Parliament** and **Heads of State**, ratifies the decision for euro adoption.

Mapping Corner

Bordering countries of Bulgaria

Romania to the north, Serbia and North Macedonia to the west, Greece and Turkey to the south, and the Black Sea to the east.





PRACTICE QUESTION

Q4. Consider the following countries :

1. Romania
2. Serbia
3. Albania
4. Turkey
5. Greece

How many of the above countries share land border with Bulgaria ?

- (a) Only two
- (b) Only three
- (c) Only four**
- (d) All five

Rare Great Hornbill sighting in Ezhimala sparks renewed calls for biodiversity conservation

The Hindu Bureau
KANNUR

In a rare and remarkable sighting, the Malamuzhakki Vezhambal (Great Hornbill), Kerala's State bird, was spotted in the coastal belt of Kakkampara, near Ezhimala, in Kannur, an area far from its usual forested habitats.

The bird was first observed perched on a fig-laden *Ficus exasperata* tree on May 24 and later it flew towards the Ezhimala Naval Academy's campus.

Birdwatchers Manoj Karingamathil, P. Jameela and Abhinav Jeevan, a student of the Forestry Department in Sir Syed College, Taliparamba, confirmed the sighting and



Piqued interest: The Malamuzhakki Vezhambal (Great Hornbill) seen near Ezhimala in Kannur recently. SPECIAL ARRANGEMENT

said the bird spotted was a male.

The hornbill remained in the area for about two weeks, foraging from fruit-bearing trees and occasionally flying to neighbouring regions, said Mr.

Manoj, adding that the bird was first noticed by Abhinav's relatives, who without knowing the rarity of the bird sighting, used its photos for WhatsApp status update.

Typically found in Kera-

la's evergreen and moist deciduous forests such as the Silent Valley, Nelliampathy, Athirappilly, Aralam and Parambikulam, the hornbill is rarely seen in coastal areas, Mr. Manoj said, adding that its unexpected presence is hailed as an ecological indicator.

There were very few reports of the birds being sighted near forest regions of the Aralam and Karimbam farms. However, there is no public documentation, Mr. Manoj said.

Ramanthali grama panchayat president V. Shyma said the sighting is significant proof that the region remains a biodiversity hotspot despite human habitation.

"This reflects the eco-

logical richness of the area," she said.

Sneha Subhash, head of the Department of Forestry, Sir Syed College, emphasised the need for further studies on the Great Hornbill's movement to coastal hills. "Such occurrences near the sea are unusual and point to the broader ecological value of the region," she said.

Listed as Endangered by the International Union for Conservation of Nature (IUCN) and protected under Schedule 1 of the Indian Wildlife (Protection) Act, the Great Hornbill's appearance in Ezhimala has sparked both excitement and renewed calls for conservation efforts in the areas.

Backdrop: Rare Great Hornbill sighting in Ezhimala sparks hope for biodiversity.

Relevance: GS3- Ecology

About the news

- A **male Great Hornbill** (Malamuzhakki Vezhambal), **Kerala's State Bird**, was spotted in **Kakkampara, near Ezhimala** (Kannur district).
- The location is **unusual**, as the species is typically confined to **evergreen and moist deciduous forests**.



About Great Hornbill



- **Scientific Name:** *Buceros bicornis*
- Large bird with a **distinctive yellow and black casque** (bony helmet-like structure on top of the beak).
- **Common Names:** Great Indian Hornbill, Great Pied Hornbill, Concave-Casqued Hornbill
- **Distribution:** Indian subcontinent and Southeast Asia
- **Habitat:** Evergreen and moist deciduous forests
- **Preferred Zones:** Western Ghats, Northeastern states, and the Himalayas
- There are 62 hornbill species globally, with 32 in Asia and 30 in Africa. Many hornbill species are facing conservation challenges, with 26 out of 62 listed as Globally Threatened or Near Threatened by the IUCN.

Ecological Significance

- Ecologists regard the sighting as a **positive indicator of biodiversity**.
- **Ramanthali Panchayat President**: The event highlights the area's **ecological richness** despite human settlements.
- Known as “**engineers of the forest**” for their role in **seed dispersal**, vital for maintaining tropical forest ecosystems

Conservation Status

- Listed as Vulnerable by **IUCN**.
- Protected under **Schedule I** of the **Indian Wildlife (Protection) Act**.

Cultural and Symbolic Value

- **State Bird**: Arunachal Pradesh and Kerala
- Celebrated in **Hornbill Festival** in Nagaland
- Holds cultural significance for tribal communities like the **Nyishi** of Arunachal Pradesh

Major Threats

- **Habitat loss** due to deforestation and logging
- **Hunting** for meat, traditional medicine, and ornamental use
- **Lack of awareness and conservation infrastructure**



PRACTICE QUESTION



Q5. The Great Indian Hornbill is the state bird of which of the following Indian states?

- (a) Nagaland and Manipur
- (b) Arunachal Pradesh and Kerala**
- (c) Assam and Meghalaya
- (d) Mizoram and Tripura

EFFECTS OF RISING MILITARY SPENDING

What will be effect of rising military spending?

Why have NATO nations decided to increase their defence expenditure? During which period was global military spending the most? Will increased remilitarisation have an effect on domestic health spending? Why has the United Nations decided to cut down on its budget?

EXPLAINER

Nissim Mannathukkaren.

The story so far:

The North Atlantic Treaty Organization (NATO) summit in June pledged to increase military spending to 5% of the member nations' GDP (specifically "core defence requirements as well as defence and security-related spending by 2035"). The previous spending target was 2%. Such a move is symptomatic of the sharp increase in global military spending in the last few years.

What has been the historical trajectory of military expenditures? According to the Stockholm International Peace Research Institute (SIPRI), which produces the most comprehensive database on military spending, global military spending was \$2,718 billion in 2024. The year saw a 9.4% increase, which was the highest year-on-year increase since 1988, with the Russia-Ukraine war and the Israel-Gaza conflict contributing to it. In 2025, the world saw two big additional conflicts, between India and Pakistan, and Israel and Iran. This, combined with the NATO pledge, will see further increases in global military spending in the coming years. Historically, the Cold War period saw the highest amounts of global military spending. It was 6.1% of the world's GDP in 1960. In the last year of the Cold War, it was at 3%. It reached its lowest levels in 1998 at 2.1% (a total expenditure of around \$1,100 billion). In 2024, it reached 2.5% (from 2.3% in 2015).

Who are the biggest military spenders?

The United States is the biggest military spender in the world with \$997 billion, followed by China at \$314 billion, Russia at \$149 billion, Germany at \$88.5 billion and India at \$86.1 billion – these nations are the top five military spenders. Almost 80% of the total worldwide military spending is spent by the top 15 military spenders. All of the NATO members (32) combined spent \$1,506 billion, which makes it around 55% of global military spending. Thus, there is a concentration of spending in a few countries.

In terms of GDP percentage, among the top 20 spenders (excluding countries at war such as Russia, Ukraine and Israel), the highest spenders include Saudi Arabia (7.3%), Poland (4.2%) and the U.S. (3.4%). The rest fall in the range of 2.6% to 1.3%.

What about the expenditure on other public goods?

The present wave of remilitarisation threatens to eliminate the gains made from declining military expenditures after the end of the Cold War. According to the Global Peace Index, in 2023, militarisation increased in 108 countries and the year saw the highest number of conflicts since World War II. Of course, military spending, driven by the military-industrial complex, can benefit certain sectors of the economy. Yet, as studies show (for example, by Masako Ikegami and Zijian Wang, based on 116 countries), there is a significant crowding-out effect that increased military spending has on domestic government health spending, the effects of which are borne more by middle- and low-income countries. But even high-income countries are not immune. Spain, which spends only 1.24% of GDP on defence, asserted its sovereignty and opted out of the new NATO target citing



Increasing the cost: Police experts work at the site of the Russian drone strike, amid Russia's attack on Ukraine, in Kharkiv, Ukraine on July 7. REUTERS

that it is "unreasonable" and that the extra burden of 300 billion euros will cut welfare spending. It should be noted that nine NATO members failed to meet even the 2% target by 2024 despite it being proposed first in 2012.

What about the UN?

The present military spending of \$2.7 trillion and its scale can be understood only by placing it in the context of other critical global expenditures. The latest budget of the United Nations is only \$44 billion – with which it should fund development, humanitarian aid, and peacekeeping operations. But the UN, in six months, has only received \$6 billion, and as a result, is seeking to reduce the budget to \$29 billion. In the 12-day Israel-Iran war, the U.S. is estimated to have spent nearly \$1 billion on missile interceptors alone.

The U.S., under President Donald Trump, seeking to cut foreign aid is the major cause of the UN funding crisis. While Mr. Trump wants to be known as a peace-making President, he has pushed NATO to adopt the 5% military spending target and has closed down the U.S. Agency for International Development (USAID), which provided annual assistance to the tune of \$50-60 billion worldwide in the few years until the Russian-Ukraine war. A *Lancet* study found that USAID assistance in healthcare, nutrition, etc., prevented 91 million deaths in low- and middle-income countries in the past two decades, and that Mr. Trump's decision could potentially cause a staggering 14 million

additional deaths by 2030, a third of them being children. It demonstrates that peace is not just the absence of war, but also the material conditions for the healthy sustenance of life.

Additionally, increased defence spending is undermining the progress of achieving the UN Sustainable Development Goals (SDGs). It is estimated that ending extreme poverty and absolute monetary poverty globally by 2030 would need \$70 billion and \$325 billion respectively per year. It constitutes only 0.1% and 0.6% of the gross national income of high-income countries. The UN estimates that in 2021, around 4.5 billion people did not have full coverage of essential health services, and that even spending just \$1 per person yearly on preventing non-communicable diseases could save nearly seven million lives by 2030.

Increased military spending has deleterious effects on another SDG as well – combating climate change. According to a study by the Conflict and Environment Observatory, if NATO's defence spending reached 3.5% of GDP, greenhouse gas emissions would increase 200 million tonnes annually. When the world is seeing unprecedented heatwaves, and with 2024 being the hottest year on record, increased military spending will only divert scarce resources from climate mitigation, and other pressing public goods.

How is India affected by increased military spending?

Close to home, after Operation Sindoor,

THE GIST

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₹50,000 crore was additionally sanctioned (to supplement the annual budget of ₹6.81 lakh crore) for emergency defence purchases to replenish used weaponry.

To put it in perspective, funds allocated by the centre for Ayushman Bharat health insurance which covers 58 crore people was ₹7,200 crore for 2023-24. India spends 2.3% of GDP on the military whereas the public expenditure on health, despite increasing in recent years, is very low. It is 1.84% of the GDP, less than the 2.5% target of the National Health Policy, and much less than the 10% mark of most developed countries. In the light of heightened tensions and public sentiment being in favour of militarisation, spending on other public goods might suffer. Military conflicts and spending can be ruinous for middle- and low-income countries. Lebanon spent 29% of its GDP, and Ukraine 34%, on military spending last year.

NATO Secretary General Mark Rutte stated that "We must spend more, to prevent war." The present proposed increase is, according to NATO, mainly to counter Russia. Scholars note of the huge disparity between Russia and NATO: Russia's economy is 25 times smaller and military spending, 10 times lesser. This shows how fear-mongering can be used by leadership to militarise society further. If the NATO pledge does indeed become a reality, the consequences for human well-being will be enormous.

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Backdrop: Global trend of rising military expenditures in recent years
Relevance: GS 2/International Relations

About the news

At the **NATO summit** held in June, member countries pledged to raise their military spending to **5% of GDP by 2035**. This includes core defense needs and broader security-related expenses. The earlier target was 2%. This sharp increase reflects a broader global trend of rising military expenditures in recent years.



Current Trends (2024–2025)

- According to the **SIPRI**, 2024 Military Spending reached **\$2,718 billion**, a **9.4% increase** from the previous year - the **highest annual rise since 1988**.
 - **Key Drivers:** Ongoing **Russia-Ukraine** war and **Israel-Gaza** conflict.
- **2025 Outlook:** Two big additional conflicts, between **India and Pakistan**, and **Israel and Iran**, combined with the NATO pledge, will see further increases in global military spending in the coming years.

Historical Context

- **Cold War Peak (1960):** Highest amounts of Military spending (**6.1% of global GDP**).
- **End of Cold War (1990):** Dropped to **3% of global GDP**.
- **Post-Cold War Low (1998):** Reached a low of **2.1% of GDP**, around **\$1,100 billion**.
- **Recent Increase:** Gradually rose from **2.3% in 2015** to **2.5% in 2024**.

Who are the biggest military spenders?

Top Military Spenders (by absolute amount)

- **1st: United States** – \$997 billion
- **2nd: China** – \$314 billion
- **3rd: Russia** – \$149 billion
- **4th: Germany** – \$88.5 billion
- **5th: India** – \$86.1 billion

Overall Spending Concentration

- The **top 15 spenders** account for **~80%** of global military expenditure.
- **NATO (32 members)** collectively accounts for **~55%** of global military spending (spent **\$1,506 billion**)

Military Spending as % of GDP

- **Saudi Arabia** – 7.3% of GDP
- **Poland** – 4.2%
- **United States** – 3.4%
- **Others:** Range between **2.6%** and **1.3%**
- **Excludes:** Countries at war like **Russia, Ukraine, and Israel**.

- **Reversal of Post-Cold War Gains**

- Decline in military budgets after the Cold War allowed greater spending on **health, education, and welfare**.
- The current **remilitarisation trend threatens these gains** and shifts the focus away from human development.

- **Military Spending vs UN Funding Crisis**

- **Global military spending** in 2024: **\$2.7 trillion**.
- In contrast, the **UN's total annual budget** is only **\$44 billion** for **development, humanitarian aid, and peacekeeping**.
- By mid-2024, the UN had received only **\$6 billion**, forcing it to **cut its budget to \$29 billion**.

- **U.S. Foreign Aid Cuts**

- The U.S. has reduced **foreign aid** and **closed USAID**, which used to provide **\$50–60 billion annually**. USAID helped **prevent 91 million deaths** in 20 years (**Lancet study**)
- **However**, it spent nearly **\$1 billion in 12 days** on missile interceptors during the **Israel-Iran war**.

- **Crowding-Out of Health and Development Spending**
 - **E.g., Pakistan** spends over **3% of its GDP** on military but **less than 1% on health**, resulting in poor health outcomes.
 - **Spain** rejected NATO's 5% GDP defense target due to its impact on **welfare spending**.
 - **Harmful for middle- and low-income countries**, like **Lebanon (29% of GDP)** and **Ukraine (34%)**, on defence.
- **Militarisation exacerbates the climate crisis**
 - A study by the **Conflict and Environment Observatory** estimated that raising NATO's defense spending to **3.5% of GDP** would emit **200 million tonnes of CO₂** annually.
- **Undermining SDGs:**
 - **SDG 1: No Poverty** – Ending extreme poverty needs only **\$70 billion annually**; absolute poverty, **\$325 billion**.
 - **SDG 3: Good Health** –Spending just **\$1 per person/year** on non-communicable disease prevention could **save 7 million lives by 2030**
- **Opportunity Cost for Post-COVID Recovery**
 - Military budgets continue rising while **COVID-recovery and public health efforts are under-resourced**.

- **Rising Defence Burden**

- After **Operation Sindoor**, India sanctioned an additional **₹50,000 crore** for emergency defense purchases.
- This is in addition to the **₹6.81 lakh crore annual defense budget**.

- **Disparity with Social Sector Spending**

- **Ayushman Bharat**, covering **58 crore people**, received only **₹7,200 crore** in 2023–24.
- **Military spending: 2.3% of GDP.**
- **Health spending:** Only **1.84% of GDP**, below the **2.5% target** of the National Health Policy and far less than the **10% average in developed nations**.

- **Geopolitical Pressure and Misinformation**

- **NATO's 5% GDP target** is promoted under the idea of "spending more to prevent war."
- However, **Russia's military spending is 10 times less** than NATO's, and its **economy is 25 times smaller**, revealing the **disproportion in threat perception**.

Conclusion

Rising military spending, driven by global and regional pressures, risks diverting resources from essential public services in India. With low investment in health and welfare, increased militarisation could undermine human development. True security must balance defence needs with the well-being of citizens.



PRACTICE QUESTION

- Q. "Rising global militarisation poses a serious challenge to human development, especially in middle- and low-income countries like India." Discuss in the context of recent defense spending trends and their impact on social sector allocations. *(250 words)*

INDIA'S RESEARCH, DEVELOPMENT, AND INNOVATION SCHEME



Quick fix

Budgetary allowances alone will not solve India's R&D problem

The Union Cabinet recently approved a ₹1-lakh crore Research Development and Innovation (RDI) scheme that aims to incentivise the private sector to invest in basic research. The scheme will primarily consist of a special purpose fund established within the Anusandhan National Research Foundation (ANRF), which will act as the custodian of funds. The funds will be in the form of low-interest loans. The ANRF is conceived as an independent institutional body, with oversight by the Science Ministry, to allocate funds for basic research and to incentivise private sector participation in core research. The involvement of the ANRF here is a novel move as the newly created organisation is meant to be the equivalent of a single-window clearance mechanism for funding research and development for universities and academic institutions. It is also expected to get about 70% of its budget from private sources. In sum, through the RDI and the ANRF, the government is looking to stake the bold claim that it has played its part and that it is now up to the private sector to come forward and reverse the ratio from where the government today accounts for about 70% of India's R&D spend. However, already incipient in the government's tall ambitions are traces of what has caused previous such schemes to falter. The first of these is conservatism.

It turns out that a condition for availing funds is that only products that have reached a certain level of development and market potential or, what are called Technology Readiness Level-4 (TRL-4) projects, would be eligible. There are nine TRL levels, a hierarchy that was first conceived by the United States' National Aeronautics and Space Administration (NASA) in the 1970s. TRL-1 represents a basic level of research and TRL-9 a state of advanced readiness. TRL-4 appears to be an arbitrary decision to support any promising research that has progressed halfway. Were there such a magic sauce, venture capital industries, premised on the fickleness of predicting the 'next big thing', would not exist. The scheme also seems to forget that technologically advanced countries have become what they are because of their military industrial complexes – where the spectre of war incentivises the development of technology that is risky and expensive but, over time, may prove to be of immense civilian value – examples are the Internet or the Global Positioning System. India continues to haemorrhage scientists to the West due to the lack of opportunities commensurate with their training. Finally, it lacks a deeply skilled manufacturing sector that can make the products that scientists conceive of. Budgetary allowances cannot overnight fix that which requires major surgery.

Backdrop: Launch of Research Development and Innovation (RDI) scheme

Relevance: GS 3/ Science and Technology

About the news



The Union Cabinet approved a **₹1-lakh crore Research Development and Innovation (RDI) scheme** to boost private sector investment in basic research.

- The scheme will operate through the **Anusandhan National Research Foundation (ANRF)**, which will act as the custodian of funds. The funds will be in the form of low-interest loans.

- **Boosts Private Sector Participation**
 - **70% of ANRF's funding is expected to come from private sources,** reversing the current model where the **government funds 70% of R&D.**
- **Creates a Dedicated Institutional Framework**
 - **Anusandhan National Research Foundation (ANRF)** will act as single-window clearance mechanism for funding R&D for universities and academic institutions.
- **Promotes Innovation-Driven Economy**
 - Aligns with India's goal to become a **global innovation hub** and move up in the **Global Innovation Index.**
- **Addresses Funding Gaps in Basic Research**
 - Provides **low-interest loans** to support research projects, especially in universities and research institutions that face funding shortages.

- **Encourages Academia-Industry Collaboration**
 - Seeks to bridge the gap between **research institutions and industries**, facilitating **commercialisation of innovations**.
- **Long-term Vision for Self-Reliance (Aatmanirbhar Bharat)**
 - Supports indigenous R&D development, reducing dependence on **foreign technology imports**.
- **Potential to Curb Brain Drain**
 - By improving research infrastructure and funding, it may help **retain talented scientists and researchers** in India.
- **Strategic National Development**
 - Enhances national capabilities in key areas such as **healthcare, defence, digital technologies, and climate solutions**.

- **Conservative Funding Criteria**

- Only projects at **Technology Readiness Level-4 or above** are eligible, **excluding early-stage (TRL-1 to TRL-3) basic research**, which is vital for breakthrough innovation.
- Undermines support for high-risk, high-reward ideas, limiting genuine innovation.

- **Lack of Private Sector Appetite for Basic Research**

- Private firms in India **prefer applied research** with immediate returns; they may hesitate to invest in **long-term, uncertain basic science**.

- **Weak Manufacturing Ecosystem**

- India lacks a **deeply skilled and high-tech manufacturing base**, making it difficult to scale and commercialise innovations from labs to the market.

- **Brain Drain and Talent Shortage**

- India continues to lose talented researchers to **better-funded institutions abroad**, due to limited opportunities, rigid bureaucracy, and poor research infrastructure.

- **Over-Reliance on Private Funding (70%)**
 - Expecting **70% of ANRF's budget** from private sources is **ambitious and uncertain**, especially without guaranteed investor confidence.
- **Military-industrial investments issues:** Unlike advanced nations that benefited from military-industrial investments (e.g., GPS, Internet), India lacks similar long-term high-risk funding.
- **Limited Risk Tolerance in Funding Models**
 - The scheme follows a **loan-based model**, which may **discourage small or emerging researchers/startups** who cannot afford financial risks.
- **Institutional and Bureaucratic Hurdles**
 - Despite being a single-window agency, the **ANRF may still face delays, coordination issues, or political influence** in fund allocation and review processes.
- **Historical Precedents of Underperformance**
 - Previous government R&D initiatives have often **struggled with implementation**, accountability, and uptake by the private sector.

Conclusion

While the RDI scheme is promising, it must address these structural and institutional challenges to ensure that India's research ecosystem becomes truly innovative, inclusive,





PRACTICE QUESTION



- Q. Critically examine the significance and challenges of Research Development and Innovation (RDI) scheme in the context of India's innovation ecosystem.**
(250 words)