

India's military expenditure

In 2024, India's military expenditure was nine times that of Pak.: SIPRI

The country's military expenditure, the fifth largest globally, grew by 16% to \$86.1 billion, while Pakistan spent \$10.2 billion, according to the Stockholm International Peace Research Institute

Press Trust of India
NEW DELHI

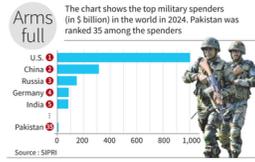
India's military spending in 2024 was nearly nine times that of Pakistan's expenditure, according to a study released on Monday by a leading Swedish think tank that comes amid growing tensions between the two countries over the Pahalgam terror attack.

The country's military expenditure, the fifth largest globally, grew by 16% to \$86.1 billion while Pakistan spent \$10.2 billion, according to the Stockholm International Peace Research Institute (SIPRI). The top five military spenders – the United States, China, Russia, Germany and India – accounted for 60% of the global total, with combined spending of \$1,635 billion, it said.

China's military expenditure increased by 7% to an estimated \$314 billion, marking three decades of consecutive growth, the study noted. China accounted for 50% of all mil-



Troops stand guard at a market area in Srinagar on Monday. AFP



itary spending in Asia and Oceania, investing in the continued modernisation of its military and expansion of its cyberwarfare capabilities and nuclear arsenal, it said in the report titled 'Trends in World Military Expenditure 2024'. SIPRI said military spending in Europe (including Russia) rose by 17% to \$693 billion and was the main contributor to the

global increase in 2024. With the war in Ukraine in its third year, military expenditure kept rising across the continent, pushing European military spending beyond the level recorded at the end of the Cold War, it noted.

SIPRI said Russia's military expenditure reached an estimated \$149 billion in 2024, a 38% increase from 2023 and double the level in 2015. This represented 7.1% of Russia's GDP and 19% of all Russian government spending.

Ukraine's total military expenditure grew by 2.9% to reach \$64.7 billion – equivalent to 43% of Russia's spending. At 34% of GDP, Ukraine had the largest military burden of any country in 2024, the report added.

"Russia once again significantly increased its military spending, widening the spending gap with Ukraine," said Diego Lopes da Silva, Senior Researcher with the SIPRI Military Expenditure and Arms Production Programme.



SIPRI REPORT

In 2024, India has made a significant military investment of **\$86.1 billion**, which represents a **1.6% increase** from the previous year, 2023, solidifying its status as the **fifth largest military spender in the world** .

This expenditure is notably "**nearly nine times greater than Pakistan's military expenditure**," which is reported at **\$10.2 billion** .

The top five military spenders globally—**the United States, China, Russia, Germany, and India**—collectively account for **60% of the total global military expenditure**, amounting to **\$1,635 billion** .



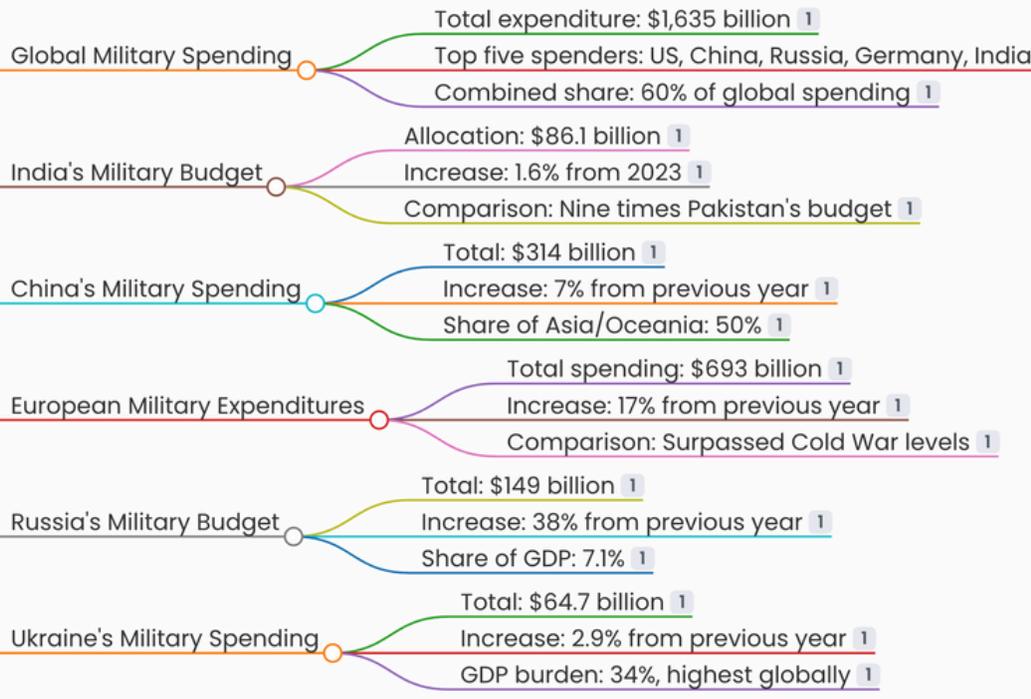
China's military spending has also seen a **7% increase**, reaching **\$314 billion**, which constitutes **50% of the total military expenditure in Asia and Oceania** .

In Europe, including Russia, military expenditures have surged by **17% to \$693 billion**, surpassing levels recorded at the end of the Cold War. Russia's military budget has dramatically increased by **38%**, totaling **\$149 billion**, which represents **7.1% of its GDP** and **19% of its government budget**.

In contrast, Ukraine's military spending has risen by **2.9% to \$64.7 billion**, which is approximately **43% of Russia's military expenditure**.

This has resulted in a **military burden of 34% of Ukraine's GDP**, the highest in the world for the year 2024.

Military Expenditure Overview 2024



North American Spider

Study reveals urban spider creates webs to block noise

Spiders in urban environments can build webs that filter out loud ambient vibrations, according to new research. Urban centers are noisier than rural areas, and as a result, spiders in cities are exposed to higher levels of noise. This new research suggests that spiders in cities may be building webs that filter out noise, which could help them survive in these environments.

Urban spiders create webs that filter out noise

A new study published last week in Current Biology, a North American spider species, reveals how it builds webs that filter out noise in urban environments.

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The difference between city and rural spiders

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Spider webs as sensory systems: For funnel-weaving spiders like *Agelenopsis pennsylvanica*, the web functions as an extension of their sense of "hearing," since spiders don't have ears. Vibrations help them detect prey.

Urban vs. Rural Adaptations:

- **Urban spiders, exposed to constant noise, build webs that dampen broad-frequency vibrations to filter out ambient urban noise.**
- **Rural spiders in quieter environments build webs that amplify biologically relevant vibrations — helping them detect prey more easily.**

Implications for urban ecology:

- **Shows how even small animals like spiders must adapt to urban noise — and that noise pollution affects more than just humans.**
- **Points to the need for broader environmental protections beyond just carbon emissions — highlighting noise, light, and air pollution as equally urgent stressors.**

- Spider silk is known to be an amazing natural material with unique properties. It has inspired researchers to develop materials derived from spider silk with applications in tissue engineering and regenerative medicine. They are also studying the unique combination of strength and flexibility in spider silk for use in textile production.
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- **PRELIMS facts**

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Assorted brands of honey are seen at a supermarket in Vienna, Austria, on April 3. AP

Austria trials DNA testing to uncover honey fraud

Agence France-Presse

At a laboratory in Austria's mountainous Tyrol province, scientists are DNA testing about 100 honey samples a month to learn about their composition – and in some cases to determine whether they have been adulterated.

With fake honey flooding markets, and only a few European laboratories running such analysis, the small Austrian company Sinsoma began offering the tests two years ago.

"It is really something new for the honey market," said Corinna Wallinger, head of sales at Sinsoma. It is essential that technology "always moves forward – just as the counterfeiters" do, she added.

Honey cannot have ingredients such as water or inexpensive sugar syrups – which might boost its volume – added to it, according to EU legislation. But tests have shown that is common practice.

Honey cannot have ingredients such as water or inexpensive sugar syrups – which might boost its volume – added to it, according to EU legislation

Between 2021 and 2022, 46% of the

DNA TESTING

DNA Testing: A New Frontier



- **Austrian lab Sinsoma uses DNA analysis to test honey's authenticity — the process identifies DNA traces from the environment where bees collected nectar.**
- **Genuine honey shows diverse DNA from flowers and plants; fake honey shows unnatural DNA, like that from corn or rice.**
- **Supermarket chain SPAR and Austria's food agency (AGES) have begun using DNA testing for honey quality control.**

The Urgent Necessity for a Deputy Speaker in the Lok Sabha: A Constitutional Call to Action

saurabh pandey upsc

The Constitutional Foundation

Article 93: A Mandate for Leadership

- Constitutional Basis:** Article 93 of the Indian Constitution mandates the appointment of a Deputy Speaker, highlighting the necessity for a leader who can step in during the Speaker's absence.
- Implications:** The phrase "as soon as may be" emphasizes the urgency of this appointment, reflecting the need for seamless legislative proceedings.

- Article 94: Tenure and Stability**
- Tenure Conditions:** Article 94 outlines the tenure of the Deputy Speaker, ensuring a stable presence in parliamentary affairs.
- Importance of Continuity:** A consistent leadership structure fosters trust and reliability within the Lok Sabha.

Historical Context

Origins of the Deputy Speaker's Office

- Colonial Roots:** The Deputy Speaker's role has its origins in the Central Legislative Assembly, with Sachidanand Sinha being the first officeholder.
- Post-Independence Evolution:** The role has evolved significantly, particularly during the Constituent Assembly sessions, shaping the modern structure of leadership in Parliament.

M.A. Ayyangar: A Pioneering Figure

- First Elected Deputy Speaker:** M.A. Ayyangar's election marked a significant milestone, setting a precedent for future appointments and highlighting the importance of the Deputy Speaker in legislative processes.

The Role of the Deputy Speaker in Parliamentary Practice

Ensuring Uninterrupted Functioning

- Second-in-Command:** The Deputy Speaker acts as a crucial support system, ensuring that the Lok Sabha operates effectively during the Speaker's absence.
- Responsibilities:** This includes presiding over sessions and maintaining decorum, which is vital for democratic functioning.



Beyond Ceremonial Duties

- Chairing Sessions: The Deputy Speaker is responsible for chairing significant sessions and committees, showcasing the role's importance in legislative operations.**
- Impartiality in Debates: Handling sensitive discussions with fairness is essential, fostering trust among members.**

The Current Constitutional Vacuum

The 17th Lok Sabha: A Historic Anomaly

- Vacancy Issues: The absence of a Deputy Speaker during the 17th Lok Sabha raised concerns regarding legislative efficiency and adherence to constitutional norms.**
- Implications of Prolonged Absence: The lack of leadership has led to uncertainties in parliamentary proceedings.**

The 18th Lok Sabha: Continuing the Trend

- Current Status: As the 18th Lok Sabha persists without a Deputy Speaker, the urgency for appointment becomes increasingly critical.**
- Constitutional Anomalies: This situation poses significant risks to procedural integrity and institutional credibility.**



Consequences of Neglecting the Deputy Speaker's Role

Centralization of Power

- Speaker's Dominance: Concentrating procedural power in the Speaker can lead to confusion during emergencies, jeopardizing legislative efficiency.**

Erosion of Parliamentary Norms

- Unwritten Rules: Neglecting the Deputy Speaker's role undermines established unwritten rules that facilitate consensus politics, impacting public trust in legislative processes.**



The Argument Against Complacency

The Fallacy of "No Urgency"

- Counterarguments: The notion that there is no urgency in appointing a Deputy Speaker overlooks the importance of redundancy in leadership roles, which is crucial for a functioning democracy.**

The Need for Inclusivity

- Appointing from the Opposition: Restoring the practice of appointing the Deputy Speaker from the Opposition can foster a more balanced legislative environment, promoting cooperation and trust among parties.**

Legislative Reform: A Path Forward

Proposals for Constitutional Amendments

- Tightening Language: Suggestions for clearer language regarding Deputy Speaker elections can enhance the appointment process.**
- Mandatory Timelines: Establishing timelines for appointments would ensure prompt action and adherence to constitutional norms.**

Statutory Mechanisms for Timely Appointments

- Role of Leadership: The President and Prime Minister should play a pivotal role in initiating timely appointments, ensuring clarity in legislative procedures.**

Conclusion

- 1. Reaffirming the importance of the Deputy Speaker's role is paramount in restoring trust and functionality within the Lok Sabha. As we call for urgent action, it is essential that Parliament respects constitutional norms and prioritizes the appointment of a Deputy Speaker to uphold democratic integrity.**



saurabh pandey