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**CONTACT: 9971932488**



# PATRIOTIC IAS

THE HINDU NEWSPAPER

DAILY CURRENT AFFAIRS

31 MARCH 2025

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31\_03\_2025 DAILY CURRENT AFFAIRS

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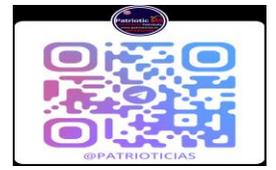
Address : 3rd Floor, KV Tower, Padleyganj Road, Gorakhpur  
Email Id : [info@patrioticias.in](mailto:info@patrioticias.in)  
Contact Number : **9971932488**  
Website : [patrioticias.in](http://patrioticias.in)



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## 5. A Fight for Survival

जीवित रहने की लड़ाई

## 6. Controversy over the Bodh Gaya Temple

बोधगया मंदिर को लेकर विवाद

## 7. Ink and Revolution: Women Writers Who Paved the Way for Change

स्याही और क्रांति: वे महिला लेखक जिन्होंने परिवर्तन का मार्ग प्रशस्त किया

# Water to be released from Bhadra dam

GS Paper I: Rivers

**The Hindu Bureau**  
BENGALURU

On the Ugadi festival day, Karnataka Chief Minister Siddaramaiah announced the release of two tmc ft of water from the Bhadra reservoir between April 1 and 5 to allow water flow in the Tungabhadra canals.

**This will protect crops in Koppal, Raichur, Yadgir, and ensure drinking water: Siddaramaiah**

He said in a release on Sunday, "As an Ugadi gift to our hardworking farmers and the people of Kalyana

Karnataka, I am happy to share that we have decided to release 2 tmc ft of water from Bhadra reservoir between April 1 and 5 to allow water flow in Tungabhadra canals. This will help protect standing crops in Koppal, Raichur and Yadgir while ensuring adequate drinking water for these

districts."

As of Sunday, Bhadra has 28 tmc ft of live storage, with 11 tmc ft needed for irrigation till May 8 and 14 tmc ft for drinking water, leaving a cushion of 3 tmc ft, he said.

From April 6, canals will be used only for drinking water supply.

## Water to be released from Bhadra dam

भद्रा बांध से पानी छोड़ा जाएगा

On the occasion of Ugadi festival, Karnataka Chief Minister Siddaramaiah announced the release of 2 tmc ft of water from the Bhadra reservoir between April 1 and 5 to allow water flow in the Tungabhadra canals.

उगादी उत्सव के अवसर पर, कर्नाटक के मुख्यमंत्री सिद्धारमैया ने 1 से 5 अप्रैल के बीच

Address : 3rd Floor, KV Tower, Padleyganj Road, Gorakhpur  
Email Id : [info@patrioticias.in](mailto:info@patrioticias.in)  
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भद्रा जलाशय से 2 टीएमसी फीट पानी छोड़ने की घोषणा की, जिससे तुंगभद्रा नहरों में जल प्रवाह हो सके।

- He stated, "As an **Ugadi gift** to our hardworking **farmers** and the people of **Kalyana Karnataka**, we have decided to release this water to **protect standing crops** in **Koppal, Raichur, and Yadgir**, while ensuring **adequate drinking water** for these districts."

उन्होंने कहा, "कल्याण कर्नाटक के मेहनती किसानों और लोगों को उगादी उपहार के रूप में, हमने यह पानी छोड़ने का निर्णय लिया है ताकि कोप्पल, रायचूर और यादगीर में खड़ी फसलों की सुरक्षा की जा सके और इन जिलों के लिए पर्याप्त पेयजल सुनिश्चित किया जा सके।"

- As of **Sunday**, **Bhadra reservoir** has **28 tmc ft of live storage**, with **11 tmc ft** required for **irrigation till May 8** and **14 tmc ft** reserved for **drinking water**, leaving a **cushion of 3 tmc ft**.

रविवार तक, भद्रा जलाशय में 28 टीएमसी फीट लाइव स्टोरेज था, जिसमें 8 मई तक सिंचाई के लिए 11 टीएमसी फीट और पेयजल के लिए 14 टीएमसी फीट आरक्षित है, जिससे 3 टीएमसी फीट का अतिरिक्त भंडार बचता है।

- From **April 6**, the **canals** will be used **only for drinking water supply**.

6 अप्रैल से, नहरों का उपयोग सिर्फ पेयजल आपूर्ति के लिए किया जाएगा।



# Indian Army team reaches Mandalay in Myanmar, recce on to set up a field hospital

**GS Paper I: Mapping**

**Dinakar Peri**  
NEW DELHI

The first relief and rescue detachment of 10 personnel who are part of the Indian Army's 118-personnel field hospital team under "Operation Brahma" landed at the Mandalay airport in Myanmar on Sunday evening. The personnel have commenced site-reconnaissance for establishing a hospital, Army officials said.

Soon after the devastating earthquake struck Myanmar and Thailand, India launched "Operation Brahma" to provide assistance to Myanmar

"The first relief and rescue detachment of 10 personnel landed at Mandalay International Airport, Myanmar at 5.45 p.m. local time today. The team has commenced site-reconnaissance for establishing the field hospital and is currently undergoing orientation of the Area of Operations," an Army official said. "The main body of the party, along with heavy load and equipment, is scheduled to arrive



**Earthquake relief:** An image released by the IAF on Sunday of relief materials being loaded on an IAF aircraft to Myanmar. PTI

by road tomorrow morning."

The Indian Army's 60 Para Field Hospital unit landed at Nay Pyi Taw airport late on Saturday on two Indian Air Force C-17 transport aircraft and Mandalay was identified as the primary Area of Operations. The first reconnaissance party, consisting of one officer and one Junior Commissioned Officer (JCO), reached Mandalay on Sunday morning, officials said.

Two Indian naval ships, *Satpura* and *Savitri*, sailed to Yangon on Saturday from Visakhapatnam while two more ships, *Karmuk*

and *LCU 52*, departed from the Andaman and Nicobar Command on Sunday with relief material and to assist relief efforts, the Navy said in a statement. "Approximately 52 tonnes of relief material have been embarked onboard these ships, including Humanitarian Assistance and Disaster Relief (HADR) pallets consisting of essential clothing, drinking water, food, medicines, and emergency stores," it said.

"So far, 96.3 tonnes of critical supplies and 198 personnel have been airlifted using three C-130Js and two C-17s," the IAF said in a social media post.

**Indian Army team reaches Mandalay in Myanmar, recce on to set up a field hospital**

**भारतीय सेना की टीम म्यांमार के मांडले पहुंची, फील्ड अस्पताल स्थापित करने के लिए निरीक्षण जारी**

**The first relief and rescue detachment of 10 personnel from the Indian Army's 118-personnel field hospital team under "Operation Brahma" landed at Mandalay airport in Myanmar on Sunday evening.**

**"ऑपरेशन ब्रह्मा" के तहत भारतीय सेना की 118-सदस्यीय फील्ड अस्पताल टीम के पहले राहत और बचाव दल में 10 कर्मी शामिल थे, जो रविवार शाम**

**को म्यांमार के मांडले हवाई अड्डे पर उतरे।**



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- The team has **commenced site-reconnaissance** for establishing the hospital, as per Army officials.  
सेना अधिकारियों के अनुसार, टीम ने अस्पताल स्थापित करने के लिए स्थल निरीक्षण शुरू कर दिया है।
- Soon after the **devastating earthquake** struck Myanmar and Thailand, India launched "Operation Brahma" to provide assistance to Myanmar.  
म्यांमार और थाईलैंड में आए विनाशकारी भूकंप के तुरंत बाद, भारत ने म्यांमार को सहायता प्रदान करने के लिए "ऑपरेशन ब्रह्मा" शुरू किया।
- The **first relief and rescue detachment of 10 personnel** landed at **Mandalay International Airport** at **5:45 p.m. local time** on Sunday.  
पहला राहत और बचाव दल 10 कर्मियों के साथ रविवार को स्थानीय समयानुसार 5:45 बजे मांडले अंतरराष्ट्रीय हवाई अड्डे पर उतरा।
- The team has begun **site-reconnaissance** and is currently **undergoing orientation** of the **Area of Operations**.  
टीम ने स्थल निरीक्षण शुरू कर दिया है और वर्तमान में ऑपरेशन क्षेत्र का अभिविन्यास कर रही है।
- The **main body** of the team, along with **heavy load and equipment**, is scheduled to arrive **by road tomorrow morning**.  
टीम का मुख्य दल भारी उपकरणों के साथ कल सुबह सड़क मार्ग से पहुंचेगा।
- The **Indian Army's 60 Para Field Hospital unit** landed at **Nay Pyi Taw airport** on **Saturday night** on two Indian Air Force **C-17 transport aircraft**, with **Mandalay** identified as the primary **Area of Operations**.  
भारतीय सेना की 60 पैरा फील्ड अस्पताल इकाई शनिवार रात को दो भारतीय वायु सेना के C-17 परिवहन विमान से नाय पी ताव हवाई अड्डे पर उतरी, और मांडले को प्राथमिक ऑपरेशन क्षेत्र के रूप में चुना गया।
- The **first reconnaissance party**, consisting of **one officer and one Junior Commissioned Officer (JCO)**, reached **Mandalay** on **Sunday morning**.  
पहली निरीक्षण टीम, जिसमें एक अधिकारी और एक जूनियर कमीशंड अधिकारी (JCO) शामिल थे, रविवार सुबह मांडले पहुंचे।
- Two Indian naval ships, **Satpura and Savitri**, sailed to **Yangon** on **Saturday** from **Visakhapatnam**, while two more ships, **Karmuk and LCU 52**, departed from the **Andaman and Nicobar Command** on **Sunday** with relief material.  
भारतीय नौसेना के दो जहाज, सतपुड़ा और सावित्री, शनिवार को विशाखापत्तनम से यांगून के लिए रवाना हुए, जबकि दो अन्य जहाज, कर्मुक और LCU 52, रविवार को अंडमान और निकोबार कमांड से राहत सामग्री के साथ प्रस्थान किए।
- Approximately **52 tonnes of relief material** have been loaded onto these ships, including **Humanitarian Assistance and Disaster Relief (HADR) pallets** with **essential clothing, drinking water, food, medicines, and emergency stores**.  
इन जहाजों पर लगभग 52 टन राहत सामग्री लादी गई है, जिसमें मानवीय सहायता और आपदा राहत (HADR) पैलेट्स शामिल हैं, जिनमें आवश्यक वस्त्र, पेयजल, खाद्य सामग्री, दवाइयां और आपातकालीन वस्तुएं हैं।

**Address : 3rd Floor, KV Tower, Padleyganj Road, Gorakhpur**  
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- So far, **96.3 tonnes of critical supplies** and **198 personnel** have been airlifted using **three C-130Js** and **two C-17s**, according to the **Indian Air Force (IAF)**.  
अब तक, **96.3 टन आवश्यक आपूर्ति** और **198 कर्मियों** को **तीन C-130J** और **दो C-17 विमानों** के जरिए **हवाई मार्ग से पहुंचाया गया है**, भारतीय वायु सेना (IAF) के अनुसार।

## It is time to reform the Waqf

### GS Paper I:

In the social and diverse fabric of India's religious and socio-economic landscape, the Waqf stands as one of the most significant, yet underutilised, institutions. This statutory entity, steeped in Islamic spiritual tradition, holds the potential to transform the socio-economic conditions of the Muslim community. However, despite its profound heritage and substantial landholdings, the Waqf has been hampered by inefficiencies, mismanagement, and a lack of transparency.

It is indeed paradoxical that the Waqf, as the third largest landowning entity in India, presides over a community that continues to struggle with issues of education, healthcare, and socio-economic upliftment. The very purpose of Waqf, which was established centuries ago, was to serve the welfare of Muslims through the creation and maintenance of public goods such as schools, hospitals, libraries, and other charitable institutions. The fact that such a vast resource base is not being leveraged effectively for the betterment of the community has been a cause for grave concern for many decades.

### State of the Waqf

The proposed Unified Waqf Management, Empowerment, Efficiency, and Development (UMEED) Bill, also called the Waqf (Amendment) Bill, 2024, aims to address some of the long-standing issues that are plaguing the Waqf. These reforms are crucial, as they acknowledge the widespread consensus within the Muslim community regarding the misuse of Waqf properties by *mutawallis* (custodians), some members with zero credibility, and the inefficiencies that have prevented Waqf boards from maximising the value of these assets.

The current state of the Waqf is a reflection of the broader challenges faced by Muslims in India. The lack of accountability and transparency in the management of Waqf properties



**Haji Syed Salman Chishty**

Gaddi Nashin,  
Dargah Ajmer Sharif  
Chairman,  
Chishty Foundation

has allowed for the perpetuation of inefficiencies and corruption.

One of the most glaring issues with the current Waqf system is the outdated rental structure for Waqf-owned properties. Many of these properties are rented out at rates fixed decades ago, often as far back as the 1950s. Not only are these rents absurdly low in today's market, but even the meagre amounts due are often not collected regularly. This situation is compounded by allegations of illegal sales and squandering of Waqf assets, which have significantly eroded the potential revenue that could have been used for community welfare. A classic example would be Jaipur's most central and famous shopping street known as M.I. Road, which runs from Sanganeri Gate to Government Hostel. Many may not know that M.I. stands for Mirza Ismail. Some of the properties located on MI Road have been donated to the Waqf board for the cause of community and religious work. The board can allot these properties on rent, but it cannot sell them to anyone. Other such commercial properties of 100-400 square feet on MI Road that are fetching ₹300 a month would fetch close to ₹25,000 a month when the rent policies are updated. There are thousands of such cases of negligence across India in every State.

The Sachar Committee Report, 2006, estimated that the Waqf could generate an annual income of ₹12,000 crore from its properties. However, surveys by the Ministry of Minority Affairs reveal that the actual number of Waqf properties exceeds 8.72 lakh. Today, factoring in inflation and revised estimates, the potential income could be as high as ₹20,000 crore annually. Yet, the actual revenue generated remains a paltry ₹200 crore.

The potential for revenue generation and investment in community welfare is enormous. If managed efficiently, Waqf properties could fund the establishment of world-class

institutions – schools, universities, hospitals, and more – that serve not only the Indian Muslim community, but society at large. This is where we, as Indian Muslims, must broaden our understanding of "welfare". Welfare does not mean free, run-down institutions that struggle to sustain themselves. Instead, we should aspire to create institutions that are self-sustaining, inclusive, and of such high standards that they become aspirational for all.

The final Waqf (Amendment) Bill, which we will see after the Joint Parliament Committee provides constructive suggestions, must offer a visionary commitment towards the righteous space and scope of Waqf development leading to the overall upgradation of the Muslim community. By overhauling the governance and administration of Waqf boards and the Central Waqf Council, the Bill seeks to create a more accountable and transparent system that can better serve the community.

### Generating revenue is crucial

But reforms should not stop at governance. The credible administration of the Waqf board must also address the critical issue of revenue generation. Revising the rental structure of Waqf properties to reflect current market rates is essential for ensuring the Waqf's financial sustainability. Further, profits generated from these properties should be reinvested into Muslim community welfare projects, in line with the original mandate of the Waqf establishment.

The Waqf is too important an institution to fail. It holds the key to unlocking the potential of the Muslim community, not only in terms of socio-economic development but also in fostering a spirit of inclusivity and excellence. By embracing reform and demanding accountability, we can ensure that it serves its intended purpose of benefiting the community and contributing to the broader society.

**It is time to reform the Waqf**  
**वक़फ़ सुधारने का समय आ गया है**

**In the social and diverse fabric of India's religious and socio-economic landscape, the Waqf stands as one of the most significant yet underutilised institutions.**

**भारत के धार्मिक और सामाजिक-आर्थिक परिदृश्य की सामाजिक और विविध संरचना में, वक़फ़ सबसे महत्वपूर्ण लेकिन अपर्याप्त रूप से उपयोग किए जाने वाले संस्थानों में से एक है।**

- This statutory entity, rooted in **Islamic spiritual tradition**, has the potential to transform the **socio-economic conditions** of the **Muslim community**.



यह क़ानूनी संस्था, जो इस्लामिक आध्यात्मिक परंपरा में निहित है, में मुस्लिम समुदाय की सामाजिक-आर्थिक स्थिति को बदलने की क्षमता है।

- Despite its **profound heritage and substantial landholdings**, the **Waqf** has been hampered by **inefficiencies, mismanagement, and lack of transparency**.  
अपनी महत्वपूर्ण विरासत और विशाल भूमि संपत्तियों के बावजूद, वक़फ़ को अप्रभावीता, कुप्रबंधन और पारदर्शिता की कमी से बाधित किया गया है।
- It is paradoxical that **Waqf**, as the **third largest landowning entity in India**, oversees a community struggling with **education, healthcare, and socio-economic upliftment**.  
यह विडंबना है कि वक़फ़, जो भारत में तीसरा सबसे बड़ा भूमि स्वामी संस्थान है, एक ऐसे समुदाय की देखरेख करता है जो शिक्षा, स्वास्थ्य सेवा और सामाजिक-आर्थिक उत्थान के लिए संघर्ष कर रहा है।
- **The very purpose of Waqf**, established centuries ago, was to serve **Muslims' welfare** by creating and maintaining **public goods like schools, hospitals, and libraries**.  
वक़फ़ का मूल उद्देश्य, जो सदियों पहले स्थापित हुआ था, **मुसलमानों के कल्याण** के लिए **स्कूल, अस्पताल और पुस्तकालय** जैसे सार्वजनिक संसाधनों का निर्माण और रखरखाव करना था।
- However, **this vast resource base is not being leveraged effectively**, raising **grave concerns** for decades.  
हालांकि, इस विशाल संसाधन आधार का प्रभावी रूप से उपयोग नहीं किया जा रहा है, जो दशकों से गंभीर चिंता का विषय बना हुआ है।

## State of the Waqf

### वक़फ़ की स्थिति

- The proposed **UMEED Bill (Waqf Amendment Bill, 2024)** aims to address **long-standing issues** affecting the **Waqf system**.  
प्रस्तावित **UMEED विधेयक (वक़फ़ संशोधन विधेयक, 2024)** का उद्देश्य वक़फ़ प्रणाली को प्रभावित करने वाले लंबे समय से चले आ रहे मुद्दों को हल करना है।
- The **misuse of Waqf properties by mutawallis (custodians) and inefficiencies of Waqf boards** have been major concerns.  
**मुतवल्लियों (प्रबंधकों) द्वारा वक़फ़ संपत्तियों के दुरुपयोग और वक़फ़ बोर्डों की अप्रभावीता** प्रमुख चिंताओं में रही हैं।
- The **lack of accountability and transparency** has allowed **inefficiencies and corruption** to persist in the system.  
**जवाबदेही और पारदर्शिता की कमी** ने **अप्रभावीता और भ्रष्टाचार** को प्रणाली में बने रहने की अनुमति दी है।
- One of the biggest problems is the **outdated rental structure for Waqf-owned properties**, where rents were fixed decades ago.  
सबसे बड़ी समस्याओं में से एक **वक़फ़ संपत्तियों के लिए पुरानी किराया संरचना** है, जहां किराए दशकों पहले तय किए गए थे।



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**CONTACT: 9971932488**



- Jaipur's M.I. Road has properties owned by the Waqf board that are rented for ₹300/month but could generate ₹25,000/month at market rates.  
जयपुर के M.I. रोड पर वक़फ़ बोर्ड की संपत्तियाँ हैं, जो ₹300/माह के किराए पर दी जा रही हैं, जबकि बाजार दरों पर ₹25,000/माह कमा सकती हैं।
- The Sachar Committee Report (2006) estimated Waqf's potential annual income at ₹12,000 crore, but today, with inflation, it could be ₹20,000 crore annually.  
सच्चर समिति रिपोर्ट (2006) ने वक़फ़ की संभावित वार्षिक आय को ₹12,000 करोड़ आंका था, लेकिन आज मुद्रास्फीति के साथ यह ₹20,000 करोड़ प्रति वर्ष हो सकती है।
- However, the actual revenue generated remains a mere ₹200 crore.  
हालांकि, वास्तविक राजस्व केवल ₹200 करोड़ ही है।

## Generating revenue is crucial

### राजस्व उत्पन्न करना महत्वपूर्ण है

- Revising the rental structure to reflect market rates is crucial for the financial sustainability of Waqf.  
बाजार दरों के अनुरूप किराया संरचना को संशोधित करना वक़फ़ की वित्तीय स्थिरता के लिए महत्वपूर्ण है।
- Profits generated should be reinvested into community welfare projects, ensuring their long-term sustainability.  
हासिल किए गए लाभों को सामुदायिक कल्याण परियोजनाओं में पुनर्निवेश किया जाना चाहिए, जिससे उनकी दीर्घकालिक स्थिरता बनी रहे।
- If managed efficiently, Waqf properties could fund world-class institutions for education, healthcare, and community welfare.  
यदि प्रभावी रूप से प्रबंधित किया जाए, तो वक़फ़ संपत्तियाँ शिक्षा, स्वास्थ्य सेवा और सामुदायिक कल्याण के लिए विश्व स्तरीय संस्थानों का वित्तपोषण कर सकती हैं।
- The Waqf (Amendment) Bill should aim for visionary development that leads to the overall betterment of the Muslim community.  
वक़फ़ (संशोधन) विधेयक का उद्देश्य दूरदर्शी विकास होना चाहिए, जिससे मुस्लिम समुदाय का समग्र उत्थान हो।
- The Waqf is too important to fail, and it holds the key to unlocking socio-economic development for Indian Muslims.  
वक़फ़ को विफल होने नहीं दिया जा सकता, क्योंकि यह भारतीय मुसलमानों के सामाजिक-आर्थिक विकास को बढ़ाने की कुंजी रखता है।
- By embracing reform and demanding accountability, the Waqf can serve its intended purpose of community welfare and broader societal contribution.  
सुधारों को अपनाकर और जवाबदेही की मांग करके, वक़फ़ अपने मूल उद्देश्य यानी सामुदायिक कल्याण और व्यापक सामाजिक योगदान की पूर्ति कर सकता है।



## Gender gap in household chores persists in urban India

While the share of women in paid work has risen, so too has the share of women involved in unpaid household work

GS Paper I: Society

DATA POINT

Sambavi Parthasarathy  
Vignesh Radhakrishnan

**W**hile an increasing number of urban women are entering paid employment, the share of them who do unpaid household work, such as cooking, shopping, and caring for children and the elderly, has also grown. This means that the deep gender divide in doing household chores largely remains unchanged in India. Although more urban men are participating in domestic work now, with the share going up considerably in recent years, the gender divide persists as the share of such women is already very high and growing. Notably, these trends are consistent across most States, with the exception of some north-eastern States, where a relatively higher proportion of urban men participate in household chores.

**Chart 1** shows the share of urban men and women (above six years of age) who did paid work in India in 2019 and 2024. Among urban women the share increased from 15.5% to 18% – a 2.5% point rise – while among urban men it increased from 58.1% to 61.2%. Paid work includes self-employment, regular wage/salaried jobs, and casual labour.

**Chart 2** shows the share of urban men and women (above six years of age) who provide unpaid services for their own use in India in 2019 and 2024. Unpaid provision of services for own use includes household accounting and management, purchasing goods, preparing and/or serving meals, waste disposal and recycling, cleaning, decorating and maintaining one's own dwelling and gardening. The share of women doing such work increased from 79.3% to 81% in the period, with the share of men increased from 23% to 28.5%.

**Chart 3** shows the share of ur-

ban men and women (above six years of age) who took care of children, the sick, the elderly, and differently abled persons in India in 2019 and 2024. The share of urban women doing such work increased from 25.9% to 31.8% in this period, while the share of men increased from 12.9% to 17.3%.

**Chart 4** shows the State-wise share of urban men (horizontal axis) and women (vertical axis) who did unpaid domestic services for household members in 2024. All the States show very little variation and tend to cluster closely together. Across most States, the share of urban men who did household chores ranged from 20% to 40%, and the share of urban women ranged from 75% to 85%.

Some north-eastern States stand out. In Sikkim, Arunachal Pradesh and Nagaland, over 50% men participated in household chores. Among major States, Kerala leads with 44% men participating in household work.

**Chart 5** shows the State-wise share of urban men and women who did paid employment and related activities in 2024. Here too, all the States are mostly grouped together. Across most of them, the share of urban men who went for work ranged between 55% and 65%, and the share of urban women ranged between 10% and 25%.

Among major States, Tamil Nadu stands out with 25% of women engaged in paid work compared to close to 9% in Bihar and 10% in Uttar Pradesh. The share of women who were engaged in employment was also high in Telangana (24%), Karnataka (22%), and Himachal Pradesh (23%).

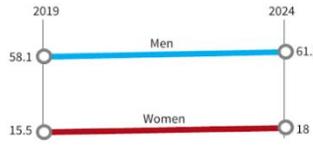
The relatively higher share of women in paid work in Tamil Nadu, Telangana, Karnataka, and Himachal Pradesh – when considered alongside the fact that over 80% of women in these States also do household chores – shows that many women are juggling both work and domestic responsibilities.



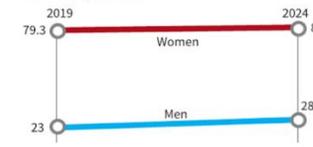
Still miles apart

The data was taken from the Time Use Survey (2019 and 2024) released by the Ministry of Statistics and Program Implementation

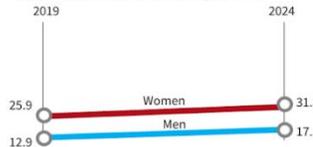
**Chart 1:** Share of urban men and women who did paid work in India in 2019 and 2024. Figures in %



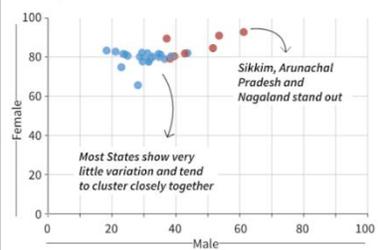
**Chart 2:** Share of urban men and women who provided unpaid services for their own use in 2019 and 2024. Figures in %



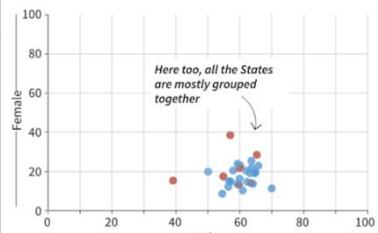
**Chart 3:** Share of urban men and women who took care of the children, sick, elderly and differently abled person in 2019 and 2024. Figures in %



**Chart 4:** State-wise share (in %) of urban men and women who did unpaid domestic services for household members in 2024. ● corresponds to north-eastern States



**Chart 5:** State-wise share (in %) of urban men and women who did paid employment and related activities in 2024. ● refers to north-eastern States



## Gender gap in household chores persists in urban India

शहरी भारत में घरेलू कामकाज में लिंग असमानता बनी हुई है

While an increasing number of urban women are entering paid employment, the share of them who do unpaid household work has also grown.



जबकि अधिक संख्या में शहरी महिलाएँ वेतनभोगी रोजगार में प्रवेश कर रही हैं, उन महिलाओं की संख्या भी बढ़ी है जो अवैतनिक घरेलू कार्य करती हैं।

- The deep **gender divide** in household chores largely remains **unchanged** in India. भारत में घरेलू कार्यों में लिंग विभाजन बड़े पैमाने पर अपरिवर्तित बना हुआ है।
- More **urban men** are now participating in **domestic work**, but the **gender divide** persists as the share of women doing such work is already **very high** and growing. अधिक शहरी पुरुष अब घरेलू कार्यों में भाग ले रहे हैं, लेकिन लिंग विभाजन बना हुआ है क्योंकि इस कार्य में महिलाओं की संख्या पहले से ही बहुत अधिक है और बढ़ रही है।
- These trends are consistent across most **States**, except some **north-eastern States**, where **more urban men** participate in household chores. ये प्रवृत्तियाँ अधिकांश राज्यों में समान हैं, सिवाय कुछ पूर्वोत्तर राज्यों के, जहाँ अधिक शहरी पुरुष घरेलू कामकाज में भाग लेते हैं।

## Increase in Paid Work Participation वेतनभोगी कार्य भागीदारी में वृद्धि

- **Chart 1** shows the share of **urban men and women (above six years)** engaged in **paid work** in 2019 and 2024. चार्ट 1 दर्शाता है कि 2019 और 2024 में 6 वर्ष से अधिक उम्र के शहरी पुरुष और महिलाएँ वेतनभोगी कार्य में कितनी संलग्न थीं।
- Among **urban women**, the share increased from **15.5% to 18%** (2.5% point rise), while among **urban men**, it increased from **58.1% to 61.2%**. शहरी महिलाओं में यह प्रतिशत 15.5% से 18% तक बढ़ा (2.5% अंकों की वृद्धि), जबकि शहरी पुरुषों में यह 58.1% से 61.2% तक बढ़ा।

## Increase in Unpaid Household Work अवैतनिक घरेलू कार्य में वृद्धि

- **Chart 2** shows the share of **urban men and women (above six years)** providing **unpaid household services** in 2019 and 2024. चार्ट 2 दर्शाता है कि 2019 और 2024 में 6 वर्ष से अधिक उम्र के शहरी पुरुष और महिलाएँ अवैतनिक घरेलू सेवाएँ प्रदान कर रही थीं।
- The share of **women** doing such work increased from **79.3% to 81%**, while for **men**, it increased from **23% to 28.5%**. महिलाओं के लिए यह प्रतिशत 79.3% से 81% तक बढ़ा, जबकि पुरुषों के लिए यह 23% से 28.5% तक बढ़ा।



## Increase in Care Work

### देखभाल कार्य में वृद्धि

- Chart 3 shows the share of urban men and women (above six years) taking care of children, the sick, the elderly, and differently-abled persons in 2019 and 2024. चार्ट 3 दर्शाता है कि 2019 और 2024 में 6 वर्ष से अधिक उम्र के शहरी पुरुष और महिलाएँ बच्चों, बीमारों, बुजुर्गों और दिव्यांगों की देखभाल कर रही थीं।
- The share of women doing such work increased from 25.9% to 31.8%, while for men, it increased from 12.9% to 17.3%. महिलाओं के लिए यह प्रतिशत 25.9% से 31.8% तक बढ़ा, जबकि पुरुषों के लिए यह 12.9% से 17.3% तक बढ़ा।

## State-Wise Variation in Household Chores

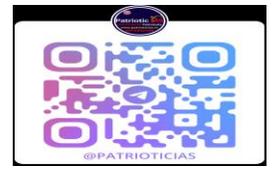
### घरेलू कार्यों में राज्य-वार भिन्नता

- Chart 4 shows the State-wise share of urban men (horizontal axis) and women (vertical axis) doing unpaid domestic services in 2024. चार्ट 4 दर्शाता है कि 2024 में राज्यवार शहरी पुरुष (क्षितिजीय अक्ष) और महिलाएँ (लंबवत अक्ष) अवैतनिक घरेलू सेवाएँ कर रही थीं।
- In most States, urban men participating in household chores ranged from 20% to 40%, while for urban women, it ranged from 75% to 85%. अधिकांश राज्यों में शहरी पुरुषों की घरेलू कार्यों में भागीदारी 20% से 40% के बीच थी, जबकि शहरी महिलाओं के लिए यह 75% से 85% थी।
- Sikkim, Arunachal Pradesh, and Nagaland had over 50% men participating in household chores. Among major States, Kerala had the highest participation with 44% men. सिक्किम, अरुणाचल प्रदेश और नागालैंड में 50% से अधिक पुरुष घरेलू कार्यों में भाग ले रहे थे। प्रमुख राज्यों में केरल सबसे आगे था, जहाँ 44% पुरुष घरेलू कार्यों में शामिल थे।

## State-Wise Variation in Paid Work

### वेतनभोगी कार्यों में राज्य-वार भिन्नता

- Chart 5 shows the State-wise share of urban men (horizontal axis) and women (vertical axis) engaged in paid employment in 2024. चार्ट 5 दर्शाता है कि 2024 में राज्यवार शहरी पुरुष (क्षितिजीय अक्ष) और महिलाएँ (लंबवत अक्ष) वेतनभोगी रोजगार में संलग्न थीं।
- In most States, urban men engaged in paid employment ranged between 55% and 65%, while for urban women, it ranged between 10% and 25%.



अधिकांश राज्यों में शहरी पुरुषों की वेतनभोगी रोजगार में भागीदारी 55% से 65% के बीच थी, जबकि शहरी महिलाओं के लिए यह 10% से 25% थी।

- Tamil Nadu had 25% of women in paid work, compared to 9% in Bihar and 10% in Uttar Pradesh.

तमिलनाडु में 25% महिलाएँ वेतनभोगी कार्य में संलग्न थीं, जबकि बिहार में 9% और उत्तर प्रदेश में 10% थी।

- Telangana (24%), Karnataka (22%), and Himachal Pradesh (23%) also had a relatively higher share of women in paid work.

तेलंगाना (24%), कर्नाटक (22%), और हिमाचल प्रदेश (23%) में भी महिलाओं की वेतनभोगी कार्य में भागीदारी अपेक्षाकृत अधिक थी।

- Despite high participation in paid work, over 80% of women in these States also do household chores, showing that many women are juggling both work and domestic responsibilities.

वेतनभोगी कार्य में उच्च भागीदारी के बावजूद, इन राज्यों में 80% से अधिक महिलाएँ घरेलू कार्य भी करती हैं, जिससे यह पता चलता है कि कई महिलाएँ काम और घरेलू जिम्मेदारियों दोनों को संभाल रही हैं।

## What is the controversy over the Bodh Gaya temple?

Why are Buddhist monks protesting near the Bodh Gaya's Mahabodhi Mahavihara? What does the Bodh Gaya Temple Act (BTA), 1949 entail? When was a Hindu temple established?

**GS Paper I: A&C**

Ziya Us Salam

The story so far:

Beginning February, nearly 100 Buddhist monks under the All India Buddhist Forum (AIBF) have been protesting, first at the Bodh Gaya's Mahabodhi Temple or Mahavihara, and later a little down the road, demanding a repeal of the Bodh Gaya Temple Act (BTA), 1949. The AIBF has support from prominent Buddhist bodies, and has submitted a memorandum to the Bihar government. The Bodh Gaya is one of the four sacred sites of Buddhism; the other three being Buddha's birthplace Lumbini, Sarnath where he gave his first sermon and Kusinagar where he attained parinirvana.

Have there been protests before?

In November 2023, Buddhist monks held a rally in Gaya and submitted a

memorandum to the Central and State governments. As it failed to have the desired effect, the monks scaled up the protest and held a rally in Patna last year to press for repealing the Act. Back in 2012, monks had filed a writ petition before the Supreme Court to repeal the Act. The petition is yet to be heard.

What is the Act?

The BTA established an eight-member management committee having equal number of Buddhists and Hindus. The Act made the local district magistrate an ex-officio chairperson of the committee. As the district magistrate hailed from the majority community, it translated to a Hindu majority on the committee, something which was resented by Buddhist bodies. Ever since then, various Buddhist bodies have been raising their voice intermittently for gaining autonomy over the Bodh Gaya temple, which they

call the Bodh Gaya Mahavihara.

What do the annals say?

Noted poet Edwin Arnold in his well-known poem, 'The Light of Asia' talks about Gautam Siddharth's enlightenment under the Bodhi tree. Bodh Gaya was then described as the Mecca of Buddhism, and in many ways popularised Buddhism in the West. However, Bodh Gaya's claim to fame goes much further back in time. In the third century, Mauryan Emperor Ashoka worshipped the Bodhi tree and built the temple there. From the time of Ashoka to the Palas, the Bodhi temple continued to be a Buddhist place of worship and a site of pilgrimage. Chinese traveller Hiuen Tsang visited it in 629 AD during the reign of Harshavardhana. Incidentally, Hiuen Tsang called it a Buddhist site, and is said to have found only Buddhist relics here save for a statue of Avaloktishvara.

Things changed with the invasion of Bakhtiyar Khilji in the 13th century. The invasion ended the Pala rule, and thus began the decline of Buddhism. During Akbar's reign, in 1590, a Hindu monk established the Bodh Gaya mutt. With this the temple lapsed into the hands of the Hindu community. Following Independence, the Bihar Assembly passed the BTA in 1949 and control of the temple was transferred from the Hindu head to the new management committee.

How has the government intervened?

The BTA was passed by the Bihar government to resolve a festering dispute between the Buddhist and Hindu heads of the Mahabodhi temple for control over the same. The Buddhist side was unhappy at the stipulation that the district magistrate, who was the ex-officio chairman, could only assume leadership if he was from the Hindu community. It changed in 2013 after the State government amended the rule and inserted a provision for the ex-officio chairman to be of any faith.

In the early 1990s, then Chief Minister of Bihar Lalu Prasad Yadav, drafted the Bodh Gaya Mahavihara Bill to replace the BTA. It was supposed to hand over the management of the temple to the Buddhist community. The Bill prohibited idol immersions near the temple and Hindu marriages inside the temple. However, the Bill went into cold storage.

## Controversy over the Bodh Gaya Temple

बोधगया मंदिर को लेकर विवाद



**TELEGRAM CHANNEL:** <https://t.me/patrioticIAS>

**YOUTUBE CHANNEL:** <https://www.youtube.com/@PatrioticIAS>

**CONTACT: 9971932488**



Beginning February, nearly 100 Buddhist monks under the All India Buddhist Forum (AIBF) have been protesting at Bodh Gaya's Mahabodhi Temple demanding a repeal of the Bodh Gaya Temple Act (BTA), 1949.

फरवरी की शुरुआत से, लगभग 100 बौद्ध भिक्षु अखिल भारतीय बौद्ध मंच (AIBF) के नेतृत्व में बोधगया के महाबोधि मंदिर में बोधगया मंदिर अधिनियम (BTA), 1949 को निरस्त करने की मांग को लेकर प्रदर्शन कर रहे हैं।

- The **AIBF** has support from **prominent Buddhist bodies** and has submitted a memorandum to the **Bihar government**.  
AIBF को प्रमुख बौद्ध संगठनों का समर्थन प्राप्त है और इसने बिहार सरकार को एक ज्ञापन सौंपा है।
- **Bodh Gaya** is one of the **four sacred sites of Buddhism**; the other three are **Lumbini** (Buddha's birthplace), **Sarnath** (where he gave his first sermon), and **Kusinagar** (where he attained Parinirvana).  
बोधगया बौद्ध धर्म के चार पवित्र स्थलों में से एक है; अन्य तीन हैं लुंबिनी (बुद्ध का जन्मस्थान), सारनाथ (जहां उन्होंने पहला उपदेश दिया), और कुशीनगर (जहां उन्होंने महापरिनिर्वाण प्राप्त किया)।

## Previous Protests

### पिछले विरोध प्रदर्शन

- In **November 2023**, **Buddhist monks** held a rally in **Gaya** and submitted a memorandum to the **Central and State governments**.  
नवंबर 2023 में, बौद्ध भिक्षुओं ने गया में एक रैली निकाली और केंद्र और राज्य सरकारों को एक ज्ञापन सौंपा।
- As it failed to have the **desired effect**, the monks scaled up the protest and held a **rally in Patna** last year to press for repealing the **Act**.  
जब इस ज्ञापन का इच्छित प्रभाव नहीं पड़ा, तो भिक्षुओं ने विरोध को तेज किया और पिछले वर्ष पटना में एक रैली निकाली, ताकि अधिनियम को निरस्त करने का दबाव बनाया जा सके।
- In **2012**, monks had **filed a writ petition** before the **Supreme Court** to repeal the **Act**, but the petition is **yet to be heard**.  
2012 में, भिक्षुओं ने सर्वोच्च न्यायालय में एक रिट याचिका दायर की थी ताकि अधिनियम को निरस्त किया जा सके, लेकिन यह याचिका अभी तक सुनी नहीं गई है।

**What is the Act?**

**अधिनियम क्या है?**

**Address : 3rd Floor, KV Tower, Padleyganj Road, Gorakhpur**  
**Email Id : info@patrioticias.in**  
**Contact Number : 9971932488**  
**Website : patrioticias.in**



- The BTA, 1949, established an **eight-member management committee** with equal number of **Buddhists and Hindus**.  
BTA, 1949 ने आठ-सदस्यीय प्रबंधन समिति बनाई, जिसमें बौद्ध और हिंदुओं की संख्या बराबर रखी गई।
- The Act made the **local district magistrate** an **ex-officio chairperson** of the committee.  
इस अधिनियम ने स्थानीय जिला मजिस्ट्रेट को समिति का पदेन अध्यक्ष बना दिया।
- Since the **district magistrate** hailed from the **majority community**, it resulted in a **Hindu majority on the committee**, which was **resented by Buddhist bodies**.  
चूंकि जिला मजिस्ट्रेट अधिकांश समुदाय से होता था, इसलिए समिति में हिंदू बहुमत हो गया, जिसे बौद्ध संगठनों ने नापसंद किया।
- Since then, **various Buddhist bodies** have been **demanding autonomy** over the **Bodh Gaya temple**, which they call **Bodh Gaya Mahavihara**.  
तब से, विभिन्न बौद्ध संगठन बोधगया मंदिर पर स्वायत्तता की मांग कर रहे हैं, जिसे वे बोधगया महाविहार कहते हैं।

## Historical References

### ऐतिहासिक संदर्भ

- Noted poet **Edwin Arnold**, in his poem '**The Light of Asia**', talks about **Gautam Siddharth's enlightenment** under the **Bodhi tree**.  
प्रसिद्ध कवि एडविन अर्नोल्ड ने अपनी कविता 'द लाइट ऑफ एशिया' में गौतम सिद्धार्थ के बोधि वृक्ष के नीचे ज्ञान प्राप्त करने का उल्लेख किया है।
- **Mauryan Emperor Ashoka**, in the **third century**, **worshipped the Bodhi tree** and built the **temple** there.  
तीसरी शताब्दी में मौर्य सम्राट अशोक ने बोधि वृक्ष की पूजा की और वहां मंदिर बनवाया।
- From **Ashoka's reign to the Palas**, the **Bodhi temple** remained a **Buddhist place of worship** and a **site of pilgrimage**.  
अशोक के शासनकाल से लेकर पाल वंश तक, बोधि मंदिर एक बौद्ध उपासना स्थल और तीर्थ स्थल बना रहा।
- **Chinese traveler Hiuen Tsang** visited it in **629 AD** during the reign of **Harshavardhana** and described it as a **Buddhist site**.  
चीनी यात्री ह्वेनसांग ने 629 ईस्वी में हर्षवर्धन के शासनकाल के दौरान इस स्थान का दौरा किया और इसे बौद्ध स्थल बताया।
- Things changed with the **invasion of Bakhtiyar Khilji** in the **13th century**, which ended **Pala rule** and led to the **decline of Buddhism**.  
13वीं शताब्दी में बख्तियार खिलजी के आक्रमण के बाद पाल वंश का अंत हुआ और बौद्ध धर्म का पतन शुरू हुआ।



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**CONTACT: 9971932488**



- During **Akbar's reign, in 1590**, a **Hindu monk** established the **Bodh Gaya mutt**, and the temple came under **Hindu control**.  
अकबर के शासनकाल में, 1590 में, एक हिंदू संत ने बोधगया मठ की स्थापना की और मंदिर हिंदू समुदाय के नियंत्रण में आ गया।
- After **Independence**, the **Bihar Assembly** passed the **BTA in 1949**, transferring control from the **Hindu head** to the **new management committee**.  
स्वतंत्रता के बाद, बिहार विधानसभा ने 1949 में BTA पारित किया, जिससे मंदिर का नियंत्रण हिंदू प्रमुख से हटकर नई प्रबंधन समिति को सौंप दिया गया।

## Government Intervention

### सरकारी हस्तक्षेप

- The **BTA** was passed by the **Bihar government** to **resolve a dispute** between the **Buddhist and Hindu heads** of the **Mahabodhi temple**.  
बिहार सरकार ने बोधगया मंदिर के बौद्ध और हिंदू प्रमुखों के बीच विवाद को हल करने के लिए **BTA** पारित किया।
- The **Buddhist community** was unhappy that the **district magistrate**, who was the **ex-officio chairman**, could only assume leadership **if he was Hindu**.  
बौद्ध समुदाय इस बात से असंतुष्ट था कि **जिला मजिस्ट्रेट**, जो पदेन अध्यक्ष था, केवल तभी अध्यक्ष बन सकता था **यदि वह हिंदू होता**।
- In **2013**, the **State government** amended the rule, allowing the **ex-officio chairman** to be of **any faith**.  
2013 में, राज्य सरकार ने नियम में संशोधन किया, जिससे पदेन अध्यक्ष किसी भी धर्म का हो सकता है।
- In the **early 1990s**, then **Chief Minister of Bihar** **Lalu Prasad Yadav** drafted the **Bodh Gaya Mahavihara Bill** to **replace the BTA**.  
1990 के दशक की शुरुआत में, उस समय के बिहार के मुख्यमंत्री लालू प्रसाद यादव ने **BTA** को बदलने के लिए **बोधगया महाविहार विधेयक** का मसौदा तैयार किया।
- The **Bill** proposed **handing over temple management** to **Buddhist authorities**, but it **went into cold storage**.  
इस विधेयक में मंदिर प्रबंधन को **बौद्ध अधिकारियों** को सौंपने का प्रस्ताव था, लेकिन यह ठंडे बस्ते में चला गया।



**Long road ahead:** Tiwa women on their way to cast their votes in the Lok Sabha election in Bormarjong village, Karbi Anglong district of Assam on April 26, 2024. RITU RAJ KONWAR

PATRI



# Ink and revolution: women writers who paved the way for change



Women's History Month, observed every March, celebrates the contributions of pioneering writers. Looking back at the books of authors such as Toni Morrison, Bell Hooks, Maya Angelou, and Betty Friedan, who have challenged societal norms and continue to shape conversations on equality

**GS Paper I: Society**

**K.S. Swati**

**M**arch, celebrated as a season of change, is also recognised as Women's History Month. Coinciding with International Women's Day on March 8, this month honours the contributions of women to American society.

The celebration dates back to 1978 when the Education Task Force of the Sonoma County (California) Commission on the Status of Women took it upon themselves to spread awareness about women's history and achievements. In 1980, led by the National Women's History Alliance (formerly the National Women's History Project), a group of women and historians gained national recognition. That same year, President Jimmy Carter issued the first Presidential Proclamation, declaring the week of March 8, 1980, as National Women's History Week. In 1987, the celebration was expanded to a month-long observance when Congress passed a resolution officially designating March as Women's History Month.

**'Moving forward together'**

This year's theme, 'Moving Forward Together,' celebrates women's education and their enduring role as inspirations across generations. It highlights the collective strength, equality, and transformative influence of women in mentorship, and leadership. Eminent writers like Toni Morrison, Bell Hooks, Maya Angelou, Sandra Cisneros, and Betty Friedan not only paved the way but also laid the foundation for current and

future generations. Their work continues to serve as a beacon for progress and empowerment.

Betty Friedan's *The Feminine Mystique* (1963) ushered in the second wave of feminism in the United States, holding a mirror to post-World War II society, where women were largely reduced to the roles of homemakers and mothers. Through her work, Friedan challenged the cultural ideal that women should find fulfilment solely in household duties, coining the famous term 'feminine mystique'. She encouraged women to pursue higher education and careers, urging them to seek fulfilment beyond the domestic sphere. Her book also played a crucial role in the founding of the National Organization for Women. Despite facing significant backlash, *The Feminine Mystique* remains a seminal critique of societal pressures and continues to resonate in the modern era.

Advocating for a more inclusive and accessible approach to feminism, Bell Hooks' *Feminism is for Everybody* (2000) calls on those affected by patriarchy, racism, capitalism, and other oppressive systems to unite in the fight for collective liberation. With a focus on intersectionality and grassroots activism, Hooks argues that feminism must include marginalised voices. At the core of her philosophy is the idea of love as a radical force – not just a passive emotion but an active resistance against injustice. She challenges readers to rethink everyday actions, from parenting to political organising, through a feminist lens. By framing feminism as a movement rooted in love and justice, Hooks has inspired

countless individuals to engage in feminist praxis that promotes a more equitable and compassionate world.

**Inspiring marginalised communities**

A poignant fusion of magical realism and historical testimony, Toni Morrison's *Beloved* (1987) exposes how systemic violence fractures identity and memory, particularly for Black women whose pain has long been silenced. Winner of the Pulitzer Prize, the novel reimagines the true story of Margaret Garner through the character of Sethe, an escaped slave haunted by the ghost of the daughter she killed to prevent her return to bondage. The novel's nonlinear structure mirrors the disruptive nature of unresolved grief, making its 19th-century setting feel urgently contemporary.

Even today, *Beloved* remains essential to discussions on reparative justice, as its themes of inherited trauma resonate with movements addressing systemic racism's enduring impact. By centering enslaved women's interiority – their love, guilt, and resilience – Morrison challenged dominant narratives that often reduced victims to statistics.

Maya Angelou's *I Know Why the Caged Bird Sings* (1969), the first volume of her seven-part autobiography, recounts her childhood and adolescence, focusing on her experiences of racism, trauma, and resilience growing up in the segregated South. Inspired by a Paul Laurence Dunbar poem, the book's title symbolises the struggle for freedom and self-expression in the face of oppression. Angelou's story of overcoming racial discrimination, sexual abuse, and the

challenges of finding her voice as a young Black woman has inspired generations of readers. The book remains a testament to the power of storytelling as a tool for healing and social change.

**Long road to gender parity**

Sandra Cisneros' *The House on Mango Street* (1984) remains deeply relevant in contemporary discussions on immigration, cultural identity, and the intersection of gender and race. A coming-of-age novel written in a series of vignettes, the book follows Esperanza Cordero, a young Latina girl growing up in a poor Chicago neighbourhood. Through Esperanza's eyes, the novel explores themes of identity, gender, race, class, and the pursuit of belonging. She dreams of escaping her impoverished surroundings and finding her voice, even as she witnesses the struggles of the women around her, many of whom are trapped by societal expectations and systemic inequality. The book's themes of empowerment and self-expression align closely with modern movements advocating for women's rights and social justice.

However, we have a long way to go. According to the Global Gender Gap Report 2024, it will take 134 years to achieve full gender parity. For decades, writers have taken it upon themselves to highlight the plight of women and bring forth stories of struggle, oppression, discrimination and patriarchy and have fought tooth and nail for younger generations to reap the fruits of their struggle. We live to finally see the day when society is just and love conquers all.

## Ink and Revolution: Women Writers Who Paved the Way for Change

स्याही और क्रांति: वे महिला लेखक जिन्होंने परिवर्तन का मार्ग प्रशस्त किया

Women's History Month, observed every March, celebrates the contributions of pioneering women writers.

महिला इतिहास माह, जो हर मार्च में मनाया जाता है, अग्रणी महिला लेखकों के योगदान का उत्सव मनाता है।

- Authors like Toni Morrison, Bell Hooks, Maya Angelou, and Betty Friedan have challenged societal norms and continue to shape conversations on equality. टोनी मॉरिसन, बेल हुक्स, माया एंजेलो और बेट्टी फ़िडन जैसी लेखिकाओं ने सामाजिक मानदंडों को चुनौती दी और समानता पर चर्चाओं को आकार देना जारी रखा।



## History of Women's History Month

### महिला इतिहास माह का इतिहास

- **March**, celebrated as a **season of change**, is also recognized as **Women's History Month**.  
मार्च, जिसे परिवर्तन के मौसम के रूप में मनाया जाता है, इसे महिला इतिहास माह के रूप में भी मान्यता प्राप्त है।
- Coinciding with **International Women's Day on March 8**, this month honors **women's contributions to American society**.  
8 मार्च को अंतर्राष्ट्रीय महिला दिवस के साथ मेल खाते हुए, यह महीना महिलाओं के योगदान को अमेरिकी समाज में सम्मानित करता है।
- The celebration dates back to **1978**, when the **Education Task Force of the Sonoma County (California) Commission on the Status of Women** spread awareness about **women's history and achievements**.  
इस उत्सव की शुरुआत 1978 में हुई, जब सोनोमा काउंटी (कैलिफोर्निया) महिला स्थिति आयोग की शिक्षा टास्क फोर्स ने महिला इतिहास और उपलब्धियों के बारे में जागरूकता फैलाई।
- In **1980**, the **National Women's History Alliance** led a movement that gained **national recognition**.  
1980 में, नेशनल वूमेन हिस्ट्री एलायंस ने एक आंदोलन का नेतृत्व किया, जिससे इसे राष्ट्रीय पहचान मिली।
- That same year, **President Jimmy Carter** issued the **first Presidential Proclamation**, declaring the week of **March 8, 1980**, as **National Women's History Week**.  
उसी वर्ष, राष्ट्रपति जिमी कार्टर ने पहला राष्ट्रपति उद्घोषणा पत्र जारी किया, जिसमें 8 मार्च 1980 का सप्ताह को राष्ट्रीय महिला इतिहास सप्ताह घोषित किया गया।
- In **1987**, Congress passed a **resolution** officially designating **March as Women's History Month**.  
1987 में, कांग्रेस ने एक संकल्प पारित किया, जिसमें मार्च को महिला इतिहास माह के रूप में आधिकारिक रूप से मान्यता दी गई।

## 'Moving Forward Together' – Theme 2025

### 'एक साथ आगे बढ़ें' – 2025 की थीम

- This year's theme, **'Moving Forward Together'**, celebrates **women's education** and their **influence across generations**.  
इस वर्ष की थीम, 'एक साथ आगे बढ़ें', महिला शिक्षा और उनके पीढ़ियों पर प्रभाव का उत्सव मनाती है।
- It highlights **collective strength, equality, and women's transformative role in mentorship and leadership**.  
यह सामूहिक शक्ति, समानता और महिलाओं की परिवर्तनकारी भूमिका को मार्गदर्शन और नेतृत्व में उजागर करता है।



- Toni Morrison, Bell Hooks, Maya Angelou, Sandra Cisneros, and Betty Friedan laid the foundation for current and future generations.  
टोनी मॉरिसन, बेल हुक्स, माया एंजेलो, सांड्रा सिस्नेरोस और बेट्टी फ्रिडन ने वर्तमान और भविष्य की पीढ़ियों के लिए नींव रखी।

## Betty Friedan and 'The Feminine Mystique'

### बेट्टी फ्रिडन और 'द फेमिनिन मिस्टिक'

- Betty Friedan's book, *The Feminine Mystique* (1963), ushered in the **second wave of feminism** in the United States.  
बेट्टी फ्रिडन की पुस्तक, 'द फेमिनिन मिस्टिक' (1963), ने संयुक्त राज्य अमेरिका में नारीवाद की दूसरी लहर को प्रेरित किया।
- The book criticized **post-World War II society**, where women were largely restricted to **homemakers and mothers**.  
इस पुस्तक ने द्वितीय विश्व युद्ध के बाद के समाज की आलोचना की, जहां महिलाएं मुख्य रूप से गृहिणी और माताओं की भूमिकाओं तक सीमित थीं।
- Friedan encouraged **women to pursue higher education and careers**, challenging the **cultural ideal of female domesticity**.  
फ्रिडन ने महिलाओं को उच्च शिक्षा और करियर अपनाने के लिए प्रेरित किया, जिससे उन्होंने महिलाओं के घरेलू जीवन के सांस्कृतिक आदर्श को चुनौती दी।

## Bell Hooks and Intersectional Feminism

### बेल हुक्स और इंटरसेक्शनल नारीवाद

- Bell Hooks' book, '*Feminism is for Everybody*' (2000), advocates for an **inclusive feminist movement**.  
बेल हुक्स की पुस्तक, 'फेमिनिज्म इज़ फॉर एवरीबडी' (2000), समावेशी नारीवादी आंदोलन की वकालत करती है।
- Hooks emphasizes **intersectionality, grassroots activism, and feminism rooted in love and justice**.  
हुक्स इंटरसेक्शनलिटी, जमीनी स्तर पर सक्रियता और प्रेम व न्याय आधारित नारीवाद पर जोर देती हैं।
- She argues that **feminism must include marginalized voices** and inspire everyday actions through a **feminist lens**.  
वह तर्क देती हैं कि नारीवाद में हाशिए पर पड़े लोगों की आवाज़ शामिल होनी चाहिए और इसे नारीवादी दृष्टिकोण से रोजमर्रा के कार्यों को प्रेरित करना चाहिए।

## Toni Morrison's 'Beloved' – A Voice for Marginalized Communities

### टोनी मॉरिसन की 'बिलव्ड' – हाशिए पर पड़े समुदायों की आवाज़



- Toni Morrison's novel, 'Beloved' (1987), won the Pulitzer Prize and portrays the systemic violence against Black women.  
टोनी मॉरिसन का उपन्यास, 'बिलव्ड' (1987), ने पुलित्जर पुरस्कार जीता और काली महिलाओं के खिलाफ प्रणालीगत हिंसा को उजागर किया।
- The novel reimagines the true story of Margaret Garner, through the character of Sethe, an escaped slave.  
यह उपन्यास मार्गरेट गार्नर की सच्ची कहानी को सेथे नामक चरित्र के माध्यम से फिर से प्रस्तुत करता है, जो एक भागी हुई दासी थी।
- The nonlinear structure mirrors the fractured memory and unresolved grief of Black women.  
इसका गैर-रैखिक संरचना काली महिलाओं की टूटी हुई यादों और अधूरे शोक को दर्शाती है।
- Set in the 19th century, the novel remains urgently contemporary, emphasizing historical injustices.  
19वीं शताब्दी में स्थापित यह उपन्यास आज भी समकालीन रूप से प्रासंगिक है और ऐतिहासिक अन्याय पर प्रकाश डालता है।

## Beloved and Reparative Justice

### "बिलव्ड" और सुधारात्मक न्याय

- Even today, **Beloved** remains **essential** to discussions on **reparative justice**, as its themes of **inherited trauma** resonate with movements addressing **systemic racism's** enduring impact.  
आज भी, "बिलव्ड" चर्चा में सुधारात्मक न्याय के लिए महत्वपूर्ण बनी हुई है, क्योंकि इसमें विरासत में मिले आघात के विषय व्यवस्थित नस्लवाद के स्थायी प्रभाव को संबोधित करने वाले आंदोलनों से मेल खाते हैं।
- By centering **enslaved women's interiority** — their **love, guilt, and resilience** — Morrison challenged **dominant narratives** that often reduced victims to **statistics**.  
गुलाम महिलाओं की आंतरिक दुनिया—उनका प्रेम, अपराधबोध और दृढ़ता—को केंद्र में रखकर, मॉरिसन ने प्रभुत्वशाली कथाओं को चुनौती दी, जो अक्सर पीड़ितों को केवल आंकड़ों तक सीमित कर देते थे।

## Maya Angelou and "I Know Why the Caged Bird Sings"

### माया एंजेलो और "आई नो व्हाई द केज्ड बर्ड सिंग्स"

- Maya Angelou's "I Know Why the Caged Bird Sings" (1969), the first volume of her **seven-part autobiography**, recounts her **childhood and adolescence**, focusing on her experiences of **racism, trauma, and resilience** growing up in the **segregated South**.  
माया एंजेलो की "आई नो व्हाई द केज्ड बर्ड सिंग्स" (1969), उनकी सात-भागीय आत्मकथा का पहला



खंड है, जो उनके बचपन और किशोरावस्था का वर्णन करता है, विशेष रूप से नस्लवाद, आघात और दृढ़ता के अनुभवों पर ध्यान केंद्रित करता है, जब वह विभाजित दक्षिण में पली-बढ़ी थीं।

- Inspired by a **Paul Laurence Dunbar** poem, the book's title symbolizes the struggle for freedom and self-expression in the face of oppression.  
पॉल लॉरेंस डनबार की एक कविता से प्रेरित, इस पुस्तक का शीर्षक स्वतंत्रता और आत्म-अभिव्यक्ति के संघर्ष का प्रतीक है, जो दमन के विरुद्ध है।
- Angelou's story of overcoming racial discrimination, sexual abuse, and the challenges of finding her voice as a young Black woman has inspired generations of readers.  
एंजेलो की कहानी, जिसमें उन्होंने नस्लीय भेदभाव, यौन शोषण, और एक युवा अश्वेत महिला के रूप में अपनी आवाज़ खोजने की चुनौतियों को पार किया, ने पीढ़ियों को प्रेरित किया है।
- The book remains a testament to the power of storytelling as a tool for healing and social change.  
यह पुस्तक कहानी कहने की शक्ति का प्रमाण है, जो चिकित्सा और सामाजिक परिवर्तन का एक सशक्त माध्यम है।

## Long Road to Gender Parity

### लैंगिक समानता की लंबी राह

- Sandra Cisneros' "The House on Mango Street" (1984) remains deeply relevant in contemporary discussions on immigration, cultural identity, and the intersection of gender and race.  
सैंड्रा सिसनेरोस की "द हाउस ऑन मॅंगो स्ट्रीट" (1984) आज भी आप्रवासन, सांस्कृतिक पहचान, और लिंग एवं नस्ल के अंतर्संबंध पर समकालीन चर्चाओं में प्रासंगिक बनी हुई है।
- A coming-of-age novel written in a series of vignettes, the book follows Esperanza Cordero, a young Latina girl growing up in a poor Chicago neighborhood.  
यह एक वयस्कता की ओर बढ़ती कहानी है, जो विभिन्न लघु कथाओं के रूप में लिखी गई है, और इसमें एस्पेरांजा कॉर्डेरो, एक युवा लैटिना लड़की की कहानी है, जो शिकागो के एक गरीब इलाके में बड़ी होती है।
- Through Esperanza's eyes, the novel explores themes of identity, gender, race, class, and the pursuit of belonging.  
एस्पेरांजा की नज़र से, यह उपन्यास पहचान, लिंग, नस्ल, वर्ग और आत्म-स्वीकृति के विषयों की पड़ताल करता है।
- She dreams of escaping her impoverished surroundings and finding her voice, even as she witnesses the struggles of women trapped by societal expectations and systemic inequality.  
वह अपने गरीबी भरे माहौल से निकलने और अपनी आवाज़ खोजने का सपना देखती है, जबकि वह उन महिलाओं के संघर्षों को देखती है जो सामाजिक अपेक्षाओं और प्रणालीगत असमानता में फंसी हुई हैं।
- The book's themes of empowerment and self-expression align closely with modern movements advocating for women's rights and social justice.



इस पुस्तक के सशक्तिकरण और आत्म-अभिव्यक्ति के विषय आधुनिक आंदोलनों से मेल खाते हैं, जो महिलाओं के अधिकारों और सामाजिक न्याय की वकालत करते हैं।

- However, we have a **long way to go**.  
हालांकि, हमें अभी लंबा रास्ता तय करना है।
- According to the **Global Gender Gap Report 2024**, it will take **134 years** to achieve **full gender parity**.  
ग्लोबल जेंडर गैप रिपोर्ट 2024 के अनुसार, पूर्ण लैंगिक समानता हासिल करने में **134 वर्ष** लगेंगे।
- For **decades**, writers have **highlighted** the **plight of women** and brought forth **stories of struggle, oppression, discrimination, and patriarchy**.  
दशकों से, लेखकों ने महिलाओं की दुर्दशा को उजागर किया है और संघर्ष, दमन, भेदभाव और पितृसत्ता की कहानियों को सामने लाया है।
- They have **fought tooth and nail** so that **younger generations** can **reap the fruits of their struggle**.  
उन्होंने **संपूर्ण प्रयासों से संघर्ष** किया ताकि **आने वाली पीढ़ियाँ** उनके **संघर्ष के लाभ** प्राप्त कर सकें।
- We live to finally see the day when **society is just and love conquers all**.  
हम उस दिन को देखने के लिए जीवित हैं, जब **समाज न्यायसंगत होगा और प्रेम सब पर विजय प्राप्त करेगा**।



**Firm stance:** ASHAs block the road in front of the Secretariat as part of their day and night protest in Thiruvananthapuram recently. They are demanding a hike in honorarium from ₹7,000 to ₹21,000 and a lump sum of ₹5 lakh when they retire at 62 years. NIRMAL HARRIDRAN



# A fight for survival

A large number of Accredited Social Health Activists of Kerala are on the warpath demanding better wages and improved service conditions. **C. Maya** meets the protesters to find out the issues plaguing the health workers, who are considered the real health warriors of the State

## GS Paper I: Society

**S**athi, an Accredited Social Health Activist (ASHA) of Kerala and her colleagues have been living on the footpath in front of the Government Secretariat for the past month-and-a-half. Braving the scorching sun and the intermittent summer showers, she and her comrades have been sleeping tough on the footpath, to wake up next morning invigorated and all determined to fight for better wages.

As the day progresses, the footpath, the venue of the protest, buzzes with people. Social activists, politicians, and people from all walks of life are pouring in pledging their support for the health workers and thus helping them keep their spirits high. Fiery speeches of the protesters as well as their supporters electrify the atmosphere. The unexpected summer showers at night have not lowered their spirits.

A section of the 26,125-strong community of ASHAs in Kerala went on a total offensive on February 10, because the government had not paid them their meagre remuneration – honorarium of ₹7,000 and incentives to the tune of ₹3,000 – for months together. They were also demanding a hike in honorarium from ₹7,000 to ₹21,000 and a lump sum of ₹5 lakh when they retire at 62 years.

Forty-five days on, and a week into the indefinite fast, they refuse to be broken even when uncertainty looms large. What began as a peaceful protest by a few hundred ASHAs in front of the Secretariat has grown so much in strength that it has become one of the largest rights agitation and women's movement seen in recent years, making it difficult for the government and the political dispensation to ignore this fight.

### ASHA scheme launched in 2005

The ASHA scheme was conceived by the Union government two decades ago under the National Rural Health Mission in 2005, when they were enrolled as community health volunteers of the Health department. While the State single-handedly takes up the financial burden of paying the honorarium, the burden of the incentives is split between the Union and the State governments in a 60:40 ratio.

Sindhu Vinod's day begins early. As an ASHA of Vathikkudi in Idukki, she has to report at 8.30 a.m. at the community health centre. As the day proceeds, she accompanies pregnant women to the nearby antenatal clinic and later ensures that children in her ward are taken for immunisation. She also finds time to visit the bedridden elders in her ward. In between there are other house calls. Assisting one who is down with fever, checking on a new mother and baby in one of the tribal hamlets and ensuring the home delivery of



The people know and acknowledge the service we have been doing for them. That may perhaps be the one reason why the ongoing strike is garnering much support from civil society.

**PADMA**  
ASHA worker

medicines to a TB patient. "My work does not end at the end of the day. The elderly woman, who is living alone in my neighbourhood, will call in the evening when she feels lonely. People call me at all hours of the day and night to seek advice, request an ambulance or to arrange a medical certificate," says Sindhu.

Padma, a 56-year-old ASHA worker from Malayinkeezhu in Thiruvananthapuram, says that her job responsibilities have been increasing steadily. "The people know and acknowledge the service we have been doing for them. That may perhaps be the one reason why the ongoing strike is garnering much support from civil society," she says.

While the protest has been receiving unprecedented support from the civil society, it has also triggered a political slugfest with the Communist Party of India (Marxist) and its allies questioning the rationale of the protest.

### Union government blamed

The State Health Minister and CPI(M) leaders argue that the protests should have been taken out against the Union government, which according to them, has refused to hike incentives for the health workers. The government claims that most ASHAs earn a monthly income of about ₹13,000 or more and that those working in tribal areas get up to ₹15,000.

However, most workers refuse to buy the contention of the State government. "One may get full payment only when a worker completes all the assigned tasks. The payment gets slashed if you fail to attend a meeting or organise a clinic. Despite working hard, I could not earn more than ₹9,000 a month. Even that amount is not paid on time," rues Shakunthala Sajeer of Madakkathara in Thrissur.

"The government cannot ignore the genuine demands of these women, who have a home and hearth to run. There have been some isolated protests in the past. However, they are determined to see that their fair demands are met," says S. Mini, an activist of the Socialist Unity Centre of India-Communist, who has been helping workers organise themselves under the banner of the Kerala ASHA Health Workers Association.

### Differing voices too

The agitation also saw a section of the workers affiliated to the Kerala ASHA Workers' Federation (CTU) staying away from the protest, alleging that the protest was being organised with political motives. J.P. Prema, State general secretary of the federation, feels that the strike is the handiwork of the anti-Left forces in the State. "The majority of the workers, who are also members of the federation, are not part of the agitation. The State government, which has assured to revise the remuneration, has sought some time to implement it considering its financial constraints. We trust the government and believe that it will fulfil the promise," hopes Prema.

Sindhu feels that the onus is on the Union government to accept the workers as regular workers and provide a better pay package. "There is no merit in fighting against the State government which has provided a significant hike in the honorarium from ₹1,000 in 2016 to the current ₹7,000," she says.

The efforts of Health Minister Veena George to broker peace with the striking ASHAs twice went in vain. In an apparent effort to pacify the protesters, the government loosened the purse strings to clear the arrears. It also recalled the criteria fixed for the workers to receive the honorarium in full. Yet, the workers have refused to relent.

### Prekarious finances limiting govt.: Minister

Veena George says that the government has always been empathetic towards the workers. "I have taken up the issue of incentives with the Un-

ion government on a couple of occasions. The demands of the workers are legitimate. Yet, a three-fold hike in honorarium at this time would be hard on the government considering its precarious financial position," says Veena, while noting that only around 400 workers are in a "non-cooperation" mode.

The Congress-led Opposition United Democratic Front pledged its support to the protesters, and its leaders have been making a beeline for the agitation venue. The front has also taken out a march to the venue of the protest in support of the protesters. Similar protests were held in the districts.

### Issue taken up in Parliament

"I see no politics in the agitation demanding fair remuneration. It is only fair that they are paid wages commensurate with their work. The United Democratic Front representatives have been successful in bringing the issue to the notice of Parliament. They could also get the Union government to declare a hike in incentives," says V.D. Satheesan, Leader of the Opposition in the State.

Satheesan sought the intervention of the Chief Minister in allowing the protest of the workers in an amicable manner. Describing the workers as the frontline warriors of the State's health sector, Satheesan noted in a social media post that they shall not be defeated by insults, humiliation, and threats.

Right from the beginning, the manner in which the CPI(M) and the Left Democratic Front government have been handling this women's agitation has come in for much criticism. The constant attempts to deride the agitation have only served to dent the government's pro-poor image. K.G. Thiara, a social activist and former head of the State Disaster Management Centre, was vociferous about what she termed as the "dismissive" manner in which the government has treated the protesters. "I feel ashamed that a government which calls itself the Left is turning its face away from a workers' rights agitation," she says.

A few Left-leaning writers and poets, including K. Satchidanandan, chairperson of the Kerala Sahitya Academy, have identified themselves with the cause of the protesters through their social media posts.

The ongoing protest in Kerala is keenly watched by the workers in the other States too. The announcement of Union Health Minister J.P. Nadra in the Rajya Sabha that the incentive will be hiked was initially greeted with cheers in the State. Yet, the fact that he has not set any time-frame for hiking the incentive and no commitment was made regarding the demand for changing the volunteer status of the workers have dampened their spirits.

### Political dimension to agitation

The ongoing protest suddenly took a political turn in the State, with some of the UDF-led local bodies announcing their decision to provide an additional amount as honorarium to the workers, much to the consternation of the State government. The unrelenting workers have also stepped up their agitation and have begun a hunger strike.

"The women are conscious of their rights, and their resolve to fight has only grown stronger despite the attempts to shatter their confidence. Unfortunately, the government has chosen to give the struggle a political dimension, instead of accepting it as a legitimate workers' movement," feels Mini.

Sathi and her comrades know that the road ahead is a difficult one. Yet, they are unwilling to give up and all decided to give it a try. For them, it is all about their survival and, hence, to be fought with all their might.



All India Congress Committee general secretary and Wayanad MP Priyanka Gandhi Vadra meeting ASHAs at the Grama Panchayat Community Hall in Sultan Bathery, Wayanad, on Thursday. ANI

## A Fight for Survival जीवित रहने की लड़ाई

A large number of Accredited Social Health Activists (ASHA) of Kerala are on the warpath demanding better wages and improved service conditions.

केरल की बड़ी संख्या में प्रशिक्षित सामाजिक स्वास्थ्य कार्यकर्ता (ASHA) बेहतर वेतन और बेहतर सेवा शर्तों की मांग को लेकर संघर्ष कर रहे हैं।



- **C. Maya** meets the protesters to find out the issues plaguing the health workers, who are considered the **real health warriors** of the State.  
सी. माया प्रदर्शनकारियों से मिलती हैं ताकि उन समस्याओं को समझ सकें जो स्वास्थ्य कार्यकर्ताओं को प्रभावित कर रही हैं, जिन्हें राज्य के वास्तविक स्वास्थ्य योद्धा माना जाता है।
- **Sathi**, an ASHA worker in Kerala, and her colleagues have been **living on the footpath** in front of the **Government Secretariat** for the past **one-and-a-half months**.  
केरल की ASHA कार्यकर्ता साथी और उनकी सहयोगी पिछले डेढ़ महीने से सरकारी सचिवालय के सामने फुटपाथ पर रह रही हैं।
- Braving the **scorching sun** and **intermittent summer showers**, they sleep rough on the footpath but wake up determined to fight for **better wages**.  
झुलसती धूप और रुक-रुक कर होने वाली गर्मी की बारिश का सामना करते हुए, वे फुटपाथ पर सोती हैं लेकिन बेहतर वेतन के लिए संघर्ष जारी रखने के लिए जागती हैं।
- As the day progresses, the footpath protest site **buzzes with people—social activists, politicians, and citizens** pledging their support.  
जैसे-जैसे दिन बढ़ता है, विरोध स्थल लोगों से गुंजने लगता है—सामाजिक कार्यकर्ता, राजनेता और आम लोग अपना समर्थन व्यक्त करते हैं।
- **Fiery speeches** from protesters and supporters **electrify the atmosphere**.  
प्रदर्शनकारियों और समर्थकों के जोशीले भाषणों से माहौल जोशपूर्ण हो जाता है।
- **Unexpected summer showers at night** have not lowered their spirits.  
रात में अचानक होने वाली गर्मी की बारिश ने उनके हौसले को कम नहीं किया है।
- A section of **26,125-strong ASHA community** in Kerala went on a **total offensive on February 10**, demanding their **pending honorarium of ₹7,000** and **incentives of ₹3,000**.  
केरल में 26,125 ASHA कार्यकर्ताओं के एक समूह ने 10 फरवरी को विरोध प्रदर्शन शुरू किया, जिसमें वे ₹7,000 के बकाया मानदेय और ₹3,000 के प्रोत्साहन राशि की मांग कर रही हैं।
- They are also demanding a hike in honorarium from **₹7,000 to ₹21,000** and a lump sum of **₹5 lakh upon retirement at 62 years**.  
वे अपने मानदेय को ₹7,000 से ₹21,000 तक बढ़ाने और 62 वर्ष की उम्र में सेवानिवृत्ति पर ₹5 लाख की एकमुश्त राशि की भी मांग कर रही हैं।
- **Forty-five days** into the protest and **a week into an indefinite fast**, they refuse to be broken despite uncertainty.  
45 दिन के विरोध और एक सप्ताह के अनिश्चितकालीन अनशन के बावजूद, वे अनिश्चितता के बीच भी हार मानने को तैयार नहीं हैं।
- The peaceful protest by a **few hundred ASHAs** has grown into **one of the largest rights agitations and women's movements** in recent years.  
कुछ सौ ASHA कार्यकर्ताओं का यह शांतिपूर्ण प्रदर्शन हाल के वर्षों में सबसे बड़े अधिकार आंदोलनों और महिला आंदोलनों में से एक बन गया है।



## ASHA Scheme Launched in 2005

### 2005 में शुरू हुई ASHA योजना

- The ASHA scheme was launched by the **Union government** in **2005** under the **National Rural Health Mission (NRHM)**, enrolling them as **community health volunteers**.  
ASHA योजना को 2005 में राष्ट्रीय ग्रामीण स्वास्थ्य मिशन (NRHM) के तहत केंद्र सरकार द्वारा शुरू किया गया था, जिसमें उन्हें सामुदायिक स्वास्थ्य स्वयंसेवक के रूप में नामांकित किया गया था।
- The **State government bears the full financial burden** of honorarium, while **incentives are split 60:40** between the **Union and State governments**.  
राज्य सरकार मानदेय का पूरा वित्तीय बोझ वहन करती है, जबकि प्रोत्साहन राशि 60:40 के अनुपात में केंद्र और राज्य सरकारों के बीच विभाजित होती है।
- **Sindhu Vinod**, an ASHA in **Vathikkudi, Idukki**, begins her day at **8:30 a.m.** at the **community health center**.  
सिंधु विनोद, जो कि वथिक्कुडी, इडुक्की की एक ASHA कार्यकर्ता हैं, अपने दिन की शुरुआत सुबह 8:30 बजे सामुदायिक स्वास्थ्य केंद्र में करती हैं।
- She escorts **pregnant women** to antenatal clinics, ensures **children receive immunizations**, and visits **bedridden elders**.  
वह गर्भवती महिलाओं को प्रसवपूर्व क्लिनिक तक ले जाती हैं, बच्चों के टीकाकरण को सुनिश्चित करती हैं और बिस्तर पर पड़े बुजुर्गों से मिलती हैं।
- **Her work does not end at the end of the day**—she receives calls **at all hours** for **medical advice, ambulance requests, or certificates**.  
उनका काम दिन के अंत में समाप्त नहीं होता—उन्हें किसी भी समय चिकित्सा सलाह, एंबुलेंस अनुरोध या प्रमाण पत्र के लिए फोन आते हैं।
- **Padma**, a **56-year-old ASHA worker** from **Malayinkeezhu, Thiruvananthapuram**, says responsibilities have steadily **increased** over time.  
पद्मा, जो 56 वर्षीय ASHA कार्यकर्ता हैं और मलयिनकीझु, तिरुवनंतपुरम से हैं, कहती हैं कि उनकी जिम्मेदारियां समय के साथ बढ़ती जा रही हैं।
- The **public recognizes and values their service**, which is why the **strike is receiving strong support** from **civil society**.  
जनता उनकी सेवा को पहचानती और सराहती है, यही कारण है कि सिविल सोसाइटी से हड़ताल को मजबूत समर्थन मिल रहा है।
- The protest has triggered a **political debate**, with the **Communist Party of India (Marxist) and its allies questioning its rationale**.  
इस विरोध प्रदर्शन ने राजनीतिक बहस को जन्म दिया है, जिसमें भारतीय कम्युनिस्ट पार्टी (माक्सवादी) और उसके सहयोगी इसके औचित्य पर सवाल उठा रहे हैं।



## Union Government Blamed

### केंद्र सरकार पर आरोप

- The **State Health Minister** and **CPI(M) leaders** argue that the protests should have been directed at the **Union government**, which, according to them, has **refused to hike incentives** for health workers.  
राज्य के स्वास्थ्य मंत्री और **CPI(M)** नेता का तर्क है कि विरोध प्रदर्शन केंद्र सरकार के खिलाफ होना चाहिए था, जिसने स्वास्थ्य कर्मियों के लिए प्रोत्साहन बढ़ाने से इनकार कर दिया है।
- The government claims that most **ASHAs earn ₹13,000** or more per month, and those working in **tribal areas get up to ₹15,000**.  
सरकार का दावा है कि ज्यादातर आशा कार्यकर्ताओं की मासिक आय ₹13,000 या उससे अधिक है, और जनजातीय क्षेत्रों में कार्य करने वाली आशा कार्यकर्ताओं को ₹15,000 तक मिलते हैं।
- However, many workers **disagree with the State government's claim**.  
हालांकि, कई कार्यकर्ता राज्य सरकार के दावे से असहमत हैं।
- "One may get full payment only when all assigned tasks are completed. Payment is reduced if a meeting is missed or a clinic is not organized," says **Shakunthala Sajeev** from **Madakkathara, Thrissur**.  
"पूरा भुगतान केवल तभी मिलता है जब सभी सौंपे गए कार्य पूरे किए जाएं। अगर कोई बैठक छूट जाती है या कोई क्लिनिक आयोजित नहीं किया जाता है, तो भुगतान घटा दिया जाता है," कहती हैं शकुंतला सजीव, मदक्काथारा, त्रिशूर।
- "Despite working hard, I could not earn more than **₹9,000 a month**, and even that is not paid on time," she adds.  
"कड़ी मेहनत के बावजूद, मैं ₹9,000 प्रति माह से अधिक नहीं कमा सकी, और वह भी समय पर नहीं मिलता," वह जोड़ती हैं।

## Workers' Demands and Activism

### कर्मचारियों की मांगें और सक्रियता

- **S. Mini**, an activist of **Socialist Unity Centre of India-Communist (SUCI-C)**, supports the protest and says that workers are determined to get their fair demands met.  
एस. मिनी, जो सोशलिस्ट यूनिटी सेंटर ऑफ इंडिया-कम्युनिस्ट (SUCI-C) की कार्यकर्ता हैं, विरोध का समर्थन करती हैं और कहती हैं कि कार्यकर्ता अपनी जायज़ मांगों को मनवाने के लिए दृढ़ संकल्पित हैं।

## Differing Voices

### अलग-अलग मत

- A section of **Kerala ASHA Workers' Federation (CITU)** stayed away from the protest, alleging that it had **political motives**.



केरल आशा वर्कर्स फेडरेशन (CITU) के कुछ कार्यकर्ताओं ने विरोध से दूरी बनाई, यह आरोप लगाते हुए कि इसमें राजनीतिक उद्देश्य हैं।

- P.P. Prema, State general secretary of the federation, believes the strike is orchestrated by anti-Left forces.

पी.पी. प्रेमा, जो फेडरेशन की राज्य महासचिव हैं, मानती हैं कि हड़ताल वाम विरोधी ताकतों द्वारा आयोजित की गई है।

- Sindhu argues that the Union government should recognize ASHA workers as regular employees and provide a better pay package.

सिंधु का तर्क है कि केंद्र सरकार को आशा कार्यकर्ताओं को नियमित कर्मचारी के रूप में मान्यता देनी चाहिए और बेहतर वेतन पैकेज देना चाहिए।

## Government's Response and Financial Constraints

### सरकार की प्रतिक्रिया और वित्तीय सीमाएँ

- Health Minister Veena George attempted twice to negotiate with striking ASHAs, but both attempts failed.

स्वास्थ्य मंत्री वीना जॉर्ज ने दो बार हड़ताली आशाओं से वार्ता करने का प्रयास किया, लेकिन दोनों बार असफल रही।

- The government cleared pending dues and relaxed honorarium criteria, but workers remain unsatisfied.

सरकार ने लंबित बकाया राशि का भुगतान किया और मानदेय की शर्तों में ढील दी, लेकिन कार्यकर्ता अब भी असंतुष्ट हैं।

- Veena George states that a threefold increase in honorarium is difficult given the financial situation.

वीना जॉर्ज का कहना है कि मानदेय को तीन गुना बढ़ाना सरकार की वित्तीय स्थिति को देखते हुए मुश्किल है।

## Political Involvement and Support

### राजनीतिक हस्तक्षेप और समर्थन

- United Democratic Front (UDF) has pledged support to the protesters and raised the issue in Parliament.

यूनाइटेड डेमोक्रेटिक फ्रंट (UDF) ने प्रदर्शनकारियों को समर्थन देने का वादा किया है और संसद में इस मुद्दे को उठाया।

- V.D. Satheesan, Leader of the Opposition, says the government must pay wages commensurate with the work.

व.डी. सतीसन, विपक्ष के नेता, कहते हैं कि सरकार को काम के अनुरूप वेतन देना चाहिए।

- Some Left-leaning intellectuals, writers, and poets, including K. Satchidanandan, have supported the protesters.



कुछ वामपंथी विचारक, लेखक और कवि, जिनमें के. सच्चिदानंदन शामिल हैं, ने प्रदर्शनकारियों का समर्थन किया है।

## Wider Impact and National Attention

### व्यापक प्रभाव और राष्ट्रीय ध्यान

- The protests in Kerala are being closely **watched by ASHA workers in other States**. केरल में विरोध प्रदर्शन को अन्य राज्यों के आशा कार्यकर्ताओं द्वारा ध्यानपूर्वक देखा जा रहा है।
- **Union Health Minister J.P. Nadda** announced in **Rajya Sabha** that **incentives will be increased**, but no timeframe was provided.  
केंद्रीय स्वास्थ्य मंत्री जे.पी. नड्डा ने राज्यसभा में घोषणा की कि प्रोत्साहन राशि बढ़ाई जाएगी, लेकिन कोई समय सीमा नहीं बताई गई।

## Political Dimension to the Agitation

### आंदोलन का राजनीतिक पहलू

- **Some UDF-led local bodies** announced additional **honorarium for ASHAs**, causing tension with the **State government**.  
कुछ UDF-शासित स्थानीय निकायों ने आशाओं के लिए अतिरिक्त मानदेय देने की घोषणा की, जिससे राज्य सरकार से टकराव हुआ।
- **Workers have intensified their protest** and begun a **hunger strike**.  
कार्यकर्ताओं ने अपना विरोध तेज कर दिया और अनशन शुरू कर दिया।
- **S. Mini** states that the government has **politicized the struggle** instead of treating it as a **legitimate workers' movement**.  
एस. मिनी कहती हैं कि सरकार ने इसे एक वैध श्रमिक आंदोलन के बजाय राजनीतिक मुद्दा बना दिया।
- **Sathi and her comrades** know the road ahead is tough, but they are **determined to fight** for their **survival**.  
साथी और उनकी साथी जानते हैं कि आगे की राह कठिन है, लेकिन वे अपने अस्तित्व की लड़ाई लड़ने के लिए दृढ़ संकल्पित हैं।

## TOPICS COVERED GS Paper II: Polity, Governance, and International Relations)

### 1. President Trump radar-focused on reciprocity, anticipate tariffs on April 2

राष्ट्रपति ट्रंप टैरिफ में पारस्परिकता पर केंद्रित, 2 अप्रैल को टैरिफ लागू होने की संभावना



## 2. CPI MP Flags Different Responses Given to Same Question in RS

सीपीआई सांसद ने राज्यसभा में एक ही सवाल के अलग-अलग जवाबों पर सवाल उठाया

## 3. The '3Cs' that Haunt Indian Education Today भारतीय शिक्षा को परेशान करने वाले '3Cs' आज

### 'President Trump radar-focused on reciprocity, anticipate tariffs on April 2'

Former Assistant U.S. Trade Representative says lowering tariffs across all sectors, balancing trade deficit, and access to agricultural market are important for a U.S.-India agreement; he points out that it is a two-way street and should not be viewed only as 'U.S. demands being met and no wins for India' in agriculture or otherwise; says there are areas which have mutual beneficial interests

**GS Paper II: India-US**

**INTERVIEW**

**Mark Linscott**

**Subasini Haider**  
NEW DELHI

**U.S. President Donald Trump is "radar-focused" on reciprocity in tariffs and will push for a Bilateral Trade Agreement with India which includes low tariffs and market access for agriculture, and addresses the bilateral deficit, says former Assistant U.S. Trade Representative (AUSTR) Mark Linscott ahead of April 2, when new tariffs are expected to be announced.**

Mr. Linscott, who negotiated with India during the previous Trump administration and is now an adviser to the U.S. India Strategic Partnership Forum (USIPF), says the deal offered by India in 2019-20 was abandoned

because it wasn't "big" enough, and Mr. Trump will expect a much more ambitious deal this time around. Excerpts:

**What should we expect on April 2?**

We have learned in the first couple of months of this administration, that day to day, it's very difficult to predict even 24 hours in advance. But for the moment, it appears pretty clear that [U.S. President Trump] is determined to impose reciprocal tariffs on April 2, involving a number of countries, maybe 15-20 with which the United States runs a substantial trade deficit.

The trade deficit between the United States and India is not at the top of the list, but it remains significant, and India has been a preoccupation for him, going back to the first Trump administration. After Prime Minister Narendra

Modi's visit to Washington where they announced plans for a Bilateral Trade Agreement, a team of U.S. negotiators have been in Delhi last week.

My understanding is that they are exploring whether they can strike a deal on tariffs. And the expectation seems to be that India will need to reach an agreement to lower its tariffs cumulatively in all sectors involved, to what would be a simple average tariff rate roughly equivalent to the U.S. rate. And you know, the current Indian simple average tariff, according to WTO, is roughly 17%, the U.S. is 3.4% so the focus is on that gap.

**President Donald Trump has certainly made it clear he wants the reciprocal tariffs, but he has also flip-flopped in statements thus far. How clear is the U.S.**



**administration about the way forward?**

The reality is that it's not always clear. We have messages from members of the administration. We have presidential memorandums and statements from the President. And it's always very difficult to read the tea leaves and to reconcile all of those things. At times they appear contradictory.

But the President has been focused on reciprocity in tariffs for a very long time. We all remember

**administration, when you were negotiating it?**

That was never an FTA negotiation, it was being referred to as a mini trade deal, and I was the first negotiator for that. At the time, we had calculated that it would cover roughly \$10 billion in bilateral trade, and we worked on tariffs as well as non-tariff barriers.

President Trump, at the time, felt like it just wasn't big enough, and ultimately it did collapse. GSP, that India had benefited from under the generalised system of preference programme was suspended. But very important experience was gained for both sides. It got the two sides accustomed to working on hard issues, not engaging in a lot of theatrics, being serious in the negotiation, and getting creative on potential solutions to bridge gaps.

And that's carrying over well into the dynamic now.

**How close were the two sides to a trade agreement in the first**

**administration, when you were negotiating it? How would you address the scepticism in India, that even if a BTA is finalised, it may not mean much. After all, the U.S. has full-fledged FTAs with Australia, Canada and Mexico, and yet they have been hit by new tariffs...**

It's a fair question. The one constant we have now is that there's inconsistency.

I do think that if there were a situation in which deals are struck by this administration and later upended without there being a strong justification, that will discredit and diminish the leverage that the Trump administration has on trade. The sanctity of trade agreements is very important.

**U.S. Commerce Secretary Howard Lutnick says he raised the issue of market access for U.S. farmers with PM Modi, and corn**

**in particular. What are the specific areas of agricultural market access that the U.S. wants?**

I strongly believe that agriculture is critical to the success of a bilateral trade agreement. It certainly cannot be excluded. Success in that area will go a long way in concluding an agreement.

There are areas where there are mutual beneficial interests, for example, feed grains (for livestock), where the U.S. would probably gain the most if there were some opening up of the Indian import market.

This is a two-way street. It shouldn't be viewed only as 'U.S. demands being met and no wins for India' in agriculture or otherwise.

This has to be a win, win agreement. There are sensitivities on both sides, but there's a decent track record, and I'm optimistic.

## President Trump radar-focused on reciprocity, anticipate tariffs on April 2

राष्ट्रपति ट्रंप टैरिफ में पारस्परिकता पर केंद्रित, 2 अप्रैल को टैरिफ लागू होने की संभावना

**U.S. President Donald Trump is "radar-focused" on reciprocity in tariffs and will push for a Bilateral Trade Agreement with India, including low tariffs, market access for agriculture, and addressing the bilateral deficit.**



अमेरिकी राष्ट्रपति डोनाल्ड ट्रंप टैरिफ में पारस्परिकता पर "केंद्रित" हैं और भारत के साथ द्विपक्षीय व्यापार समझौते को आगे बढ़ाएंगे, जिसमें कम टैरिफ, कृषि क्षेत्र के लिए बाजार पहुंच, और द्विपक्षीय घाटे का समाधान शामिल है।

- Former Assistant U.S. Trade Representative (AUSTR) Mark Linscott stated that new tariffs are expected to be announced on April 2.  
पूर्व सहायक अमेरिकी व्यापार प्रतिनिधि (AUSTR) मार्क लिंग्सकॉट ने कहा कि 2 अप्रैल को नए टैरिफ की घोषणा होने की संभावना है।
- Mr. Linscott mentioned that the trade deal offered by India in 2019-20 was abandoned because it was not "big" enough.  
मार्क लिंग्सकॉट ने बताया कि भारत द्वारा 2019-20 में पेश किया गया व्यापार समझौता इसलिए रद्द कर दिया गया था क्योंकि वह "पर्याप्त बड़ा" नहीं था।

What should we expect on April 2?

2 अप्रैल को क्या उम्मीद की जा सकती है?

- It is difficult to predict trade decisions even 24 hours in advance, but reciprocal tariffs on 15-20 countries are expected.  
व्यापार निर्णयों की भविष्यवाणी करना 24 घंटे पहले भी कठिन होता है, लेकिन 15-20 देशों पर पारस्परिक टैरिफ लगाए जाने की संभावना है।
- India is not at the top of the list, but the U.S.-India trade deficit remains significant, making India a priority for Trump.  
भारत इस सूची में शीर्ष पर नहीं है, लेकिन अमेरिका-भारत व्यापार घाटा महत्वपूर्ण बना हुआ है, जिससे भारत ट्रंप की प्राथमिकता बना हुआ है।
- A team of U.S. negotiators was in Delhi last week, exploring a tariff reduction agreement.  
पिछले सप्ताह एक अमेरिकी वार्ता दल दिल्ली में मौजूद था, जो टैरिफ में कटौती समझौते पर चर्चा कर रहा था।
- India may be expected to lower tariffs across all sectors, bringing the simple average tariff rate closer to the U.S. rate.  
भारत से सभी क्षेत्रों में टैरिफ घटाने की उम्मीद की जा सकती है, जिससे साधारण औसत टैरिफ दर अमेरिका की दर के करीब आ सके।
- As per the WTO, India's simple average tariff is around 17%, whereas the U.S. tariff rate is 3.4%, creating a large gap.  
WTO के अनुसार, भारत की साधारण औसत टैरिफ दर लगभग 17% है, जबकि अमेरिका की टैरिफ दर 3.4% है, जिससे एक बड़ा अंतर बनता है।



## How clear is the U.S. administration about the way forward?

### अमेरिकी प्रशासन की भविष्य की रणनीति कितनी स्पष्ट है?

- **U.S. trade policies are inconsistent**, with conflicting messages from officials, presidential memos, and statements.  
अमेरिकी व्यापार नीतियां असंगत रही हैं, जिसमें अधिकारियों, राष्ट्रपति ज्ञापनों और बयानों में विरोधाभास रहा है।
- **Trump has been focused on reciprocity for a long time**, especially regarding India's tariffs.  
ट्रंप लंबे समय से टैरिफ में पारस्परिकता पर ध्यान केंद्रित कर रहे हैं, विशेष रूप से भारत के टैरिफ को लेकर।
- In the **first Trump administration**, he criticized India as a "**tariff king**", especially regarding motorcycles.  
पहली ट्रंप सरकार के दौरान, उन्होंने भारत को "टैरिफ किंग" कहा था, विशेष रूप से मोटरसाइकिल टैरिफ को लेकर।
- **His stance on reciprocity remains strong**, and he continues to emphasize it.  
उनका पारस्परिकता पर रुख अब भी मजबूत है, और वे इसे बार-बार दोहरा रहे हैं।

## How close were India and the U.S. to a trade agreement during the first Trump administration?

### पहली ट्रंप सरकार के दौरान भारत-अमेरिका व्यापार समझौता कितना करीब था?

- It was **not a Free Trade Agreement (FTA)** but rather a "**mini trade deal**", covering **\$10 billion** in bilateral trade.  
यह मुक्त व्यापार समझौता (FTA) नहीं था, बल्कि एक "मिनी व्यापार समझौता" था, जो \$10 बिलियन के द्विपक्षीय व्यापार को कवर कर रहा था।
- The deal collapsed as Trump felt it was "**not big enough**".  
यह समझौता विफल हो गया क्योंकि ट्रंप को लगा कि यह "पर्याप्त बड़ा" नहीं है।
- **India's Generalized System of Preferences (GSP) benefits** were suspended as a result.  
भारत को सामान्यीकृत वरीयता प्रणाली (GSP) के तहत मिलने वाले लाभ निलंबित कर दिए गए।
- However, the **negotiation experience helped both countries**, and current talks are benefiting from it.  
हालांकि, इस वार्ता अनुभव ने दोनों देशों को लाभ पहुंचाया, और वर्तमान वार्ताएं इससे लाभान्वित हो रही हैं।



## Can India trust a U.S. trade deal, considering past tariff changes?

क्या भारत अमेरिका के व्यापार समझौते पर भरोसा कर सकता है, पिछले टैरिफ परिवर्तनों को देखते हुए?

- The U.S. has FTAs with Australia, Canada, and Mexico, but new tariffs have still been imposed.  
अमेरिका का ऑस्ट्रेलिया, कनाडा और मैक्सिको के साथ FTA है, लेकिन फिर भी नए टैरिफ लगाए गए हैं।
- If deals keep getting upended, the Trump administration's credibility on trade will be affected.  
यदि समझौते बार-बार रद्द होते रहे, तो ट्रंप प्रशासन की व्यापारिक विश्वसनीयता प्रभावित होगी।
- Trade agreements must be honored to maintain trust.  
व्यापार समझौतों का सम्मान किया जाना चाहिए ताकि विश्वास बना रहे।

## What are the key agricultural market access issues for the U.S.?

अमेरिका के लिए प्रमुख कृषि बाजार पहुंच मुद्दे क्या हैं?

- U.S. Commerce Secretary Howard Lutnick discussed market access for U.S. farmers with PM Modi, particularly focusing on corn.  
अमेरिकी वाणिज्य सचिव हार्वर्ड लुटनिक ने प्रधानमंत्री मोदी से अमेरिकी किसानों के लिए बाजार पहुंच पर चर्चा की, विशेष रूप से मक्का (कॉर्न) पर।
- Agriculture is critical to a successful trade agreement.  
कृषि एक सफल व्यापार समझौते के लिए आवश्यक है।
- The U.S. seeks access for feed grains (for livestock), which could provide mutual benefits for both countries.  
अमेरिका चारे के अनाज (पशुओं के लिए) की बाजार पहुंच चाहता है, जो दोनों देशों के लिए लाभकारी हो सकता है।
- The agreement should be mutually beneficial, not just about meeting U.S. demands.  
यह समझौता आपसी लाभकारी होना चाहिए, सिर्फ अमेरिकी मांगों को पूरा करने के लिए नहीं।
- There are sensitivities on both sides, but previous negotiations show a positive track record.  
दोनों पक्षों की अपनी संवेदनशीलताएं हैं, लेकिन पिछली वार्ताओं ने सकारात्मक रिकॉर्ड दिखाया है।



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- Optimism remains for a balanced trade deal.  
एक संतुलित व्यापार समझौते के लिए आशावाद बना हुआ है।

## CPI MP flags different responses given to same question in RS

GS Paper II:  
Parliament

NEW DELHI

The Ministry of Science and Technology has given two different answers in Parliament to the same question three years apart. To the question of which was the first State to implement a science policy after Independence, in 2022, its answer was Gujarat. In 2025, it was Kerala.

Communist Party of India's MP in Rajya Sabha P. Sandosh Kumar raised the question on both the occasions. In 2022, he asked the Ministry "whether any State government has ever initiated a science policy since Independence?" To this, the Ministry replied, "Yes Sir, the State of Guja-

rat had brought out its Science Technology and Innovation policy in 2018".

Framing the question slightly differently, on March 13, he asked, "The first State in the country that has implemented science policy after Independence?". The Ministry responded saying, "Kerala was the first State that implemented the science and technology policy after independence in 1974."

Mr. Sandosh said, "The primary mandate of Parliament is to hold the executive accountable. Parliamentary questions are the primary tool for this. But this kind of irresponsible and casual way of answering the questions defeats the very purpose."

with Kerala as the first State to implement a science and technology policy in 1974.

2025 में, उसी सवाल का जवाब देते हुए मंत्रालय ने कहा कि केरल पहला राज्य था, जिसने 1974 में विज्ञान और प्रौद्योगिकी नीति लागू की।

### Parliamentary Questions and Accountability

संसदीय प्रश्न और जवाबदेही

### CPI MP Flags Different Responses Given to Same Question in RS

सीपीआई सांसद ने राज्यसभा में एक ही सवाल के अलग-अलग जवाबों पर सवाल उठाया

The Ministry of Science and Technology has given two different answers in Parliament to the same question three years apart.

विज्ञान और प्रौद्योगिकी मंत्रालय ने तीन साल के अंतराल में एक ही सवाल के दो अलग-अलग जवाब संसद में दिए।

- In 2022, to the question of which was the first State to implement a science policy after Independence, the Ministry answered Gujarat.

2022 में, जब पूछा गया कि आजादी के बाद विज्ञान नीति लागू करने वाला पहला राज्य कौन था, तो मंत्रालय ने गुजरात को उत्तर दिया।

- In 2025, the same question was answered



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**CONTACT: 9971932488**



- **CPI MP P. Sandosh Kumar** raised the **same question** in **Rajya Sabha** on both occasions.  
सीपीआई सांसद पी. संदोश कुमार ने राज्यसभा में दोनों बार एक ही सवाल उठाया।
- In **2022**, he asked, "**whether any State government has ever initiated a science policy since Independence?**"  
2022 में, उन्होंने पूछा, "क्या किसी राज्य सरकार ने आजादी के बाद कभी विज्ञान नीति शुरू की है?"
  - The **Ministry** replied, "Yes, Sir, Gujarat had brought out its **Science Technology and Innovation policy** in 2018."  
मंत्रालय ने जवाब दिया, "हां, सर, गुजरात ने 2018 में अपनी विज्ञान, प्रौद्योगिकी और नवाचार नीति लागू की थी।"
- On **March 13, 2025**, he reframed the question: "**The first State in the country that has implemented science policy after Independence?**"  
13 मार्च 2025 को, उन्होंने सवाल को थोड़ा बदला: "देश का पहला राज्य कौन था, जिसने आजादी के बाद विज्ञान नीति लागू की?"
  - The **Ministry** responded, "**Kerala was the first State that implemented the science and technology policy after Independence in 1974.**"  
मंत्रालय ने उत्तर दिया, "केरल पहला राज्य था, जिसने आजादी के बाद 1974 में विज्ञान और प्रौद्योगिकी नीति लागू की।"

## MP Criticizes Contradictory Answers

### सांसद ने विरोधाभासी उत्तरों की आलोचना की

- **Mr. Sandosh** criticized the Ministry, stating that **Parliament's primary role** is to **hold the executive accountable**.  
श्री संदोश ने मंत्रालय की आलोचना करते हुए कहा कि संसद का मुख्य कार्य कार्यपालिका को जवाबदेह बनाना है।
- He said, "**Parliamentary questions are a primary tool for accountability, but such irresponsible and casual answers defeat their purpose.**"  
उन्होंने कहा, "संसदीय प्रश्न जवाबदेही का एक प्रमुख साधन हैं, लेकिन इस तरह के गैर-जिम्मेदाराना और लापरवाह उत्तर उनके उद्देश्य को कमजोर करते हैं।"



## The '3Cs' that haunt Indian education today

### GS Paper II: Government Polities

**T**he introduction of the high-profile **National Education Policy (NEP) 2020**, has hidden the reality of a government that is profoundly indifferent to the education of India's children and youth. The Union Government's track record over the last decade has convincingly demonstrated that in education, it is concerned only with the successful implementation of three core agenda items – the centralisation of power with the Union Government; the commercialisation and outsourcing of investments in education to the private sector, and the communalisation of textbooks, curriculum, and institutions.

#### Brazen centralisation

Unchecked centralisation has been the hallmark of this Government's functioning over the last 11 years, but its most damaging consequences have been in the domain of education. The Central Advisory Board of Education, comprising Ministers for Education in both the Union and State Governments, has not been convened since September 2019. Even while adopting and implementing a paradigm shift in education through the NEP 2020, the Union Government has not seen fit to consult State governments on the implementation of these policies even once. It is a testament to the Government's singular determination not to heed any voice other than its own, even on a subject that is squarely in the Concurrent List of the Indian Constitution.

The lack of dialogue is accompanied by a 'bullying tendency'. Among the most disgraceful acts committed by this Government is the coercion of State governments to implement the PM-SHRI (or PM Schools for Rising India) scheme of model schools by withholding the grants due to them under the **Samagra Shiksha Abhiyan (SSA)** as leverage.

These funds have been due to States for years as part of the financial support required to implement the **Right of Children to Free and Compulsory Education (RTE) Act**, which came into force in 2010. These actions betray the motivations of a government that cares more about posturing and pursuing publicity than upholding the constitutionally guaranteed Right to Education. It is a flagrant violation of constitutional morality and in its 363rd Report, even the bipartisan Parliamentary Standing Committee on Education, Women, Children, Youth, and Sports, has called for the unconditional release of the SSA funds to State governments.

In higher education, the Government has



**Sonia Gandhi**

is Member of Parliament (Rajya Sabha) and the Chairperson of the Congress Parliamentary Party

brought in the draconian draft University Grants Commission (UGC) guidelines of 2025 which have fully written out State governments from the appointment of Vice-Chancellors in universities established, funded, and operated by them. The Union Government has given itself – through the Governors who are typically designated as the Chancellor of the University – near-monopoly power in the selection of the Vice-Chancellors in State universities. This is a backdoor attempt to convert a subject in the Concurrent List into the sole preserve of the Union Government and represents one of the gravest threats to federalism in today's times.

#### The issue of commercialisation

The Narendra Modi government's commercialisation of the education system has been happening in plain sight, in full compliance with the NEP.

As a constitutional guarantee for primary school education, the RTE provided key safeguards to ensure the accessibility of primary schools for all Indian children – **a lower primary school (Classes I-V) within one kilometre of every neighbourhood, and an upper primary school (Classes VI-VIII) within three kilometres of every neighbourhood**. The NEP, which generally omits to mention the RTE, seeks to overturn the concept of these neighbourhood schools by introducing school complexes. Couched in this language of school complexes is the large-scale shutdown of public schooling and unchecked privatisation of school education. Since 2014, we have seen the closure and consolidation of 89,441 public schools across the country – and the establishment of 42,944 additional private schools. The country's poor have been forced out of public education, and into the hands of a prohibitively expensive and under-regulated private school system.

In higher education, the Union Government has introduced the Higher Education Financing Agency (HEFA) as a replacement to the University Grants Commission's erstwhile system of block-grants. Universities are being encouraged to seek loans, offered at market rates of interest, from HEFA, which they are then obliged to repay from their own revenues. In its 364th Report on the Demand for Grants, the Parliamentary Standing Committee on Education found that between 78% to 100% of these loans are being repaid by universities through student fees. In other words, the price of the Government's retreat from financing public education has been borne by students facing fee hikes.

The increasing prevalence of corruption in our education systems is, similarly, a manifestation of this commercialisation. From the bribery scandal in the National Assessment and Accreditation Council (NAAC) to the tragically inept National Testing Agency (NTA), public education systems and agencies are increasingly under the spotlight for financial malfeasance. This growing venality and cynicism in our public education system is linked to the Government-sponsored politicisation and commercialisation of education.

#### There is a communalisation

The Union Government's third thrust is on communalisation – the fulfilment of the long-standing ideological project of the Rashtriya Swayamsevak Sangh and the Bharatiya Janata Party, of indoctrinating and cultivating hatred through the education system.

Textbooks of the National Council of Educational Research and Training (NCERT), the backbone of the school curriculum, have been revised with the intention of sanitising Indian history. Mahatma Gandhi's assassination and the sections on Mughal India have been dropped from curricula. In addition, the Preamble to the Indian Constitution was dropped from textbooks, until public backlash forced the Government to commit to mandatory inclusion once again.

In our universities, we have seen the large-scale hiring of professors from regime-friendly ideologically backgrounds, no matter the comically poor quality of their teaching and scholarships. Leadership positions in key institutions – even in the Indian Institutes of Technology and Indian Institutes of Management that Pandit Jawaharlal Nehru so evocatively described as the temples of modern India – have been reserved for pliant ideologues. The UGC's ongoing attempts to dilute the qualifications for professorships and vice-chancellorships are only the latest play intended to enable the influx of educationists who are driven by ideological considerations rather than academic ideals.

Over the last decade, our education systems have been systematically cleansed of the spirit of public service and education policy has been sanitised of any concerns about access to and the quality of education.

The consequences of this single-minded push for centralisation, commercialisation, and communalisation have fallen squarely on our students. This carnage of India's public education system must end.

The three-point agenda of the government of the day is leading to damaging consequences in the domain of education

## The '3Cs' that Haunt Indian Education Today

### भारतीय शिक्षा को परेशान करने वाले '3Cs' आज

The introduction of the National Education Policy (NEP) 2020 has hidden the reality of a government that is indifferent to the education of India's children and youth.

राष्ट्रीय शिक्षा नीति (NEP) 2020 की शुरुआत ने इस सच्चाई को छुपा दिया है कि सरकार भारत के बच्चों और युवाओं की शिक्षा के प्रति उदासीन है।



- Over the last **decade**, the Union Government has focused on three core agenda items in education:

पिछले एक दशक में, केंद्र सरकार ने शिक्षा में तीन मुख्य एजेंडा बिंदुओं पर ध्यान केंद्रित किया है:

- **Centralisation** of power with the Union Government.  
सत्ता का केंद्रीकरण केंद्र सरकार के पास।
- **Commercialisation** and outsourcing of education investments to the **private sector**.  
शिक्षा निवेश का व्यावसायीकरण और निजी क्षेत्र को आउटसोर्सिंग।
- **Communalisation** of textbooks, curriculum, and institutions.  
पाठ्यपुस्तकों, पाठ्यक्रम और संस्थानों का सांप्रदायिकरण।

## Brazen Centralisation

### बेदरकार केंद्रीकरण

- **Unchecked centralisation** has been a hallmark of this Government's functioning over the last **11 years**, with its worst impact on education.  
अत्यधिक केंद्रीकरण पिछले 11 वर्षों में इस सरकार की कार्यप्रणाली की विशेषता रही है, जिसका सबसे बुरा प्रभाव शिक्षा पर पड़ा है।
- The **Central Advisory Board of Education (CABE)**, which includes **Ministers for Education from both Union and State Governments**, has **not been convened since September 2019**.  
केंद्रीय शिक्षा सलाहकार बोर्ड (CABE), जिसमें केंद्र और राज्य सरकारों के शिक्षा मंत्री शामिल होते हैं, को सितंबर 2019 के बाद से नहीं बुलाया गया है।
- Even during the adoption of **NEP 2020**, **State Governments were not consulted** regarding its implementation.  
NEP 2020 को अपनाते समय भी, राज्य सरकारों से इसके क्रियान्वयन पर कोई परामर्श नहीं लिया गया।
- This demonstrates the Government's **refusal to heed any other voice**, despite education being on the **Concurrent List** of the Indian Constitution.  
यह दर्शाता है कि सरकार किसी अन्य राय को सुनने से इनकार कर रही है, जबकि शिक्षा भारतीय संविधान की समवर्ती सूची में आती है।

## Coercion through PM-SHRI Scheme

### पीएम-श्री योजना के माध्यम से दबाव

- The Government has been **coercing State Governments** to implement the **PM-SHRI (PM Schools for Rising India)** scheme by **withholding grants under the Samagra Shiksha Abhiyan (SSA)**.



सरकार समग्र शिक्षा अभियान (SSA) के तहत राज्यों को मिलने वाले अनुदानों को रोककर, पीएम-श्री (PM Schools for Rising India) योजना को लागू करने के लिए राज्य सरकारों पर दबाव डाल रही है।

- These SSA funds were meant to support the implementation of the **Right of Children to Free and Compulsory Education (RTE) Act**, which came into force in 2010.

ये SSA फंड निःशुल्क और अनिवार्य शिक्षा का अधिकार (RTE) अधिनियम, जो 2010 में लागू हुआ, को लागू करने के लिए आवश्यक वित्तीय सहायता के रूप में थे।

- The **Parliamentary Standing Committee on Education, Women, Children, Youth, and Sports**, in its 363rd Report, has called for the **unconditional release of SSA funds** to State Governments.

शिक्षा, महिला, बाल, युवा और खेल पर संसदीय स्थायी समिति ने अपनी 363वीं रिपोर्ट में राज्य सरकारों को SSA फंड की बिना शर्त जारी करने की मांग की है।

## Control over Higher Education

### उच्च शिक्षा पर नियंत्रण

- The Government has introduced the **draconian draft UGC guidelines of 2025**, which have completely **removed State Governments** from the **appointment of Vice-Chancellors** in State Universities.

सरकार ने 2025 के कठोर यूजीसी मसौदा दिशानिर्देश पेश किए हैं, जिसने राज्य सरकारों को पूरी तरह से विश्वविद्यालयों के कुलपतियों की नियुक्ति की प्रक्रिया से बाहर कर दिया है।

- The Union Government, through **Governors (who act as University Chancellors)**, has given itself **monopoly power in the selection of Vice-Chancellors** in State Universities.

केंद्र सरकार ने राज्यपालों (जो विश्वविद्यालय के चांसलर होते हैं) के माध्यम से राज्य विश्वविद्यालयों में कुलपतियों की नियुक्ति पर अपना एकाधिकार स्थापित कर लिया है।

- This is an attempt to **convert education from a Concurrent List subject into a Union Government-controlled sector**, posing a **serious threat to federalism**.

यह शिक्षा को समवर्ती सूची से हटाकर केंद्र सरकार के नियंत्रण वाले क्षेत्र में बदलने का प्रयास है, जो संघीय ढांचे के लिए एक गंभीर खतरा है

## The Issue of Commercialisation

### शिक्षा के व्यावसायीकरण की समस्या

- The **Narendra Modi government** has been **commercialising** the education system openly, in full compliance with the **NEP**.

नरेंद्र मोदी सरकार शिक्षा प्रणाली का व्यावसायीकरण खुलेआम कर रही है, जो पूरी तरह NEP के अनुरूप है।

- The **Right to Education (RTE) Act** provided safeguards to ensure **primary schools** were accessible:



निःशुल्क और अनिवार्य शिक्षा का अधिकार (RTE) अधिनियम ने यह सुनिश्चित करने के लिए सुरक्षा उपाय प्रदान किए कि प्राथमिक विद्यालय सुलभ हों:

- Lower primary schools (Classes I-V) within one kilometre of every neighbourhood.

निचली प्राथमिक विद्यालय (कक्षा I-V) प्रत्येक मोहल्ले के एक किलोमीटर के दायरे में हों।

- Upper primary schools (Classes VI-VIII) within three kilometres of every neighbourhood.

उच्च प्राथमिक विद्यालय (कक्षा VI-VIII) प्रत्येक मोहल्ले के तीन किलोमीटर के दायरे में हों।

- The NEP seeks to replace neighbourhood schools with school complexes, leading to large-scale closure of public schools and privatisation of education.

NEP ने मोहल्ला विद्यालयों को स्कूल परिसरों से बदलने का प्रयास किया है, जिससे सार्वजनिक विद्यालयों का बड़े पैमाने पर बंद होना और शिक्षा का निजीकरण हुआ है।

- Since 2014, 89,441 public schools have been shut down, while 42,944 private schools have been established.

2014 के बाद से 89,441 सार्वजनिक विद्यालय बंद हुए हैं, जबकि 42,944 निजी विद्यालय स्थापित किए गए हैं।

- The poor have been forced out of public education and into expensive, under-regulated private schools.

गरीबों को सार्वजनिक शिक्षा से बाहर निकालकर महंगे और कम नियंत्रित निजी विद्यालयों में धकेला गया है।

## Higher Education and Financial Burden

### उच्च शिक्षा और वित्तीय बोझ

- The Higher Education Financing Agency (HEFA) replaced the UGC's block-grant system, pushing universities to take market-rate loans.

उच्च शिक्षा वित्तीय एजेंसी (HEFA) ने यूजीसी के अनुदान प्रणाली को बदल दिया, जिससे विश्वविद्यालयों को बाजार दर पर ऋण लेने के लिए मजबूर किया गया।

- The 364th Report of the Parliamentary Standing Committee on Education found that 78% to 100% of these loans are being repaid through student fees.

शिक्षा पर संसदीय स्थायी समिति की 364वीं रिपोर्ट में पाया गया कि 78% से 100% तक के ऋण छात्रों की फीस से चुकाए जा रहे हैं।

- This has led to higher tuition fees, shifting the burden of financing education onto students and families.

इससे ट्यूशन फीस में वृद्धि हुई है, जिससे शिक्षा का वित्तीय बोझ छात्रों और उनके परिवारों पर आ गया है।



## Corruption in Education

### शिक्षा में भ्रष्टाचार

- The **National Assessment and Accreditation Council (NAAC)** faced a **bribery scandal** exposing corruption in accreditation.  
राष्ट्रीय मूल्यांकन और प्रत्यायन परिषद (NAAC) में घूसखोरी घोटाला सामने आया, जिससे प्रत्यायन में भ्रष्टाचार उजागर हुआ।
- The **National Testing Agency (NTA)** has also faced criticism for **mismanagement and inefficiency**.  
राष्ट्रीय परीक्षण एजेंसी (NTA) को भी कुप्रबंधन और अक्षमता के लिए आलोचना झेलनी पड़ी है।
- Corruption in education is directly linked to **politicisation and commercialisation** promoted by the Government.  
शिक्षा में भ्रष्टाचार सीधे सरकार द्वारा बढ़ाए गए राजनीतिकरण और व्यावसायीकरण से जुड़ा हुआ है।

## The Issue of Communalisation

### शिक्षा का सांप्रदायिकरण

- The Government is fulfilling the **RSS-BJP's ideological agenda** of **indoctrinating students and spreading hatred** through education.  
सरकार RSS-BJP के वैचारिक एजेंडे को पूरा कर रही है, जो शिक्षा के माध्यम से छात्रों को कट्टर बनाना और नफरत फैलाना है।
- **NCERT textbooks**, the backbone of school education, have been **revised to sanitize Indian history**.  
एनसीईआरटी की पाठ्यपुस्तकों, जो स्कूल शिक्षा की रीढ़ हैं, को भारतीय इतिहास को तोड़-मरोड़कर पेश करने के लिए संशोधित किया गया है।
- Topics like **Mahatma Gandhi's assassination** and **Mughal India** have been **removed from the curriculum**.  
महात्मा गांधी की हत्या और मुगल भारत जैसे विषयों को पाठ्यक्रम से हटा दिया गया है।
- The **Preamble of the Indian Constitution** was **removed from textbooks**, but was later reinstated after **public backlash**.  
भारतीय संविधान की प्रस्तावना को पाठ्यपुस्तकों से हटा दिया गया था, लेकिन जनता के विरोध के बाद इसे दोबारा जोड़ा गया।
- Universities have seen **large-scale hiring of ideologically aligned professors**, despite their **poor academic credentials**.  
विश्वविद्यालयों में वैचारिक रूप से अनुकूल प्रोफेसरों की बड़े पैमाने पर भर्ती की गई है, भले ही उनकी शैक्षणिक योग्यता कमजोर हो।
- Leadership roles in **IITs and IIMs**, once considered the **temples of modern India**, are now filled with **ideologically driven individuals**.



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**CONTACT: 9971932488**



आईआईटी और आईआईएम, जिन्हें कभी आधुनिक भारत के मंदिर माना जाता था, अब वैचारिक रूप से प्रेरित व्यक्तियों से भरे जा रहे हैं।

- The UGC's attempts to dilute qualifications for professorships and vice-chancellorships are part of this effort.

यूजीसी के प्रयास कुलपतियों और प्रोफेसरों की योग्यता को कमजोर करने के लिए किए जा रहे हैं।

## The Consequences

### परिणाम

- Over the last **decade**, public education has been stripped of its **spirit of public service**, and access to quality education has deteriorated.

पिछले एक दशक में, सार्वजनिक शिक्षा से जन सेवा की भावना समाप्त कर दी गई है, और गुणवत्तापूर्ण शिक्षा तक पहुंच कम हो गई है।

- The combined effects of **centralisation, commercialisation, and communalisation** have harmed **students the most**.

केंद्रीकरण, व्यावसायीकरण और सांप्रदायिकरण के संयुक्त प्रभावों ने छात्रों को सबसे अधिक नुकसान पहुंचाया है।

This **destruction of India's public education system** must come to an end. भारत की सार्वजनिक शिक्षा प्रणाली के इस विनाश को समाप्त किया जाना चाहिए।

To watch an in-depth discussion on the topic, click on the YouTube link below: <https://www.youtube.com/@PatrioticIAS>

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31\_03\_2025 DAILY CURRENT AFFAIRS

TOPICS COVERED GS Paper III: Economy, S&T, Environment, DM, IS)

1. **Telangana pioneering development model**

तेलंगाना का अग्रणी विकास मॉडल

2. **11 Billion Cubic Metres of Water Saved in Eight Years, Says PM**

प्रधानमंत्री ने कहा: आठ वर्षों में 11 अरब घन मीटर पानी बचाया गया

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### 3. Diet is Key to Balancing Iron Levels in Body

शरीर में आयरन के स्तर को संतुलित करने में आहार महत्वपूर्ण

### 4. Parker Solar Probe: Trying to 'Touch' the Sun

पार्कर सोलर प्रोब: सूर्य को 'छूने' की कोशिश

### 5. Status of the SpaceX Mars Mission

स्पेसएक्स मंगल मिशन की स्थिति

## 'Telangana pioneering development model'

Based on this model, the party is evolving a vision of growth and inclusion as an alternative to the BJP's vision nationally, says State's Deputy CM Bhatti Vikramarka Mallu; he highlights new schemes in Telangana Budget, says a caste census has been held to ensure focused intervention

#### GS Paper III: Development Model

Varghese  
HYDERABAD

The initiatives taken by the Revanth Reddy-led Congress government in Telangana will evolve as a development model in which robust economic growth and social inclusion go hand in hand, says Deputy Chief Minister Bhatti Vikramarka Mallu.

"A Telangana model is in the making, and this is in line with our leader Rahul Gandhi's vision of social justice, secularism and inclusive growth," Mr. Bhatti told *The Hindu* in an exclusive interview. "The Congress is working towards a vision of growth and inclusion, nationally, as an alternative to the BJP vision. We are using the historic mandate in the Telangana to pioneer it."

Mr. Bhatti holds the Finance portfolio in the Revanth Reddy government in Telangana. The Congress won the 2023 Assembly election in the State offering a new wel-

lcome architecture for the State based on six guarantees which included free bus rides for women and free electricity up to 200 units a month.

Mr. Bhatti said the government had gone beyond the six guarantees and this year's Budget had kicked off transformational schemes in education, women and tribal welfare. "In addition to the inclusive growth path, there is complete harmony within the party under the leadership of the Chief Minister," Mr. Mallu said.

#### 'Economic dynamism'

The Deputy Chief Minister, who presented the State Budget on March 19, said a slew of new projects announced in it would combine social progress and grassroots economic dynamism, particularly among tribespeople and women. The Young India Integrated Residential Schools Scheme, named after the magazine run by Mahatma Gandhi, has been allotted ₹11,600 crore. "We are



Schemes in the State Budget will combine social progress and economic dynamism, says Mallu Bhatti Vikramarka. NAGARA GOPAL

spending ₹200 crore for each school and are planning to complete 58 of them this year. The aim is to have one such school in each Assembly constituency, where students from all social groups will have world-class residential school facility. Each school will be built on 25 acres of land, and will have the latest technology and sport facilities," Mr. Bhatti said.

He said the schools would most importantly help the disadvantaged

sections of society to find better opportunities in life. He noted that Telangana had completed a caste census and the data would be analysed to ensure focused intervention for the welfare of the most vulnerable segments. Mr. Bhatti, a Dalit leader and CM aspirant himself, was working president of the State party unit in the run-up to the 2023 election.

He said this year's Budget included the Scheduled Caste/Scheduled Tribe

Sub-Plan, which was ignored by the previous Bharat Rashtra Samithi government. The government had allotted ₹40,232 crore for SC and ₹17,169 crore for ST welfare, respectively.

Under the Indira Giri Jalvikasam, 2.1 lakh tribal farmers would be provided solar-powered irrigation systems free of cost. "This will not require long electricity lines or any big construction in forest areas. We will ensure smooth coordination between various departments to get this project implemented on war footing," he said.

Mr. Bhatti said another focus area of the government was to encourage entrepreneurship and economic dynamism among women through self-help groups (SHGs), and small and micro enterprises.

"We are involving SHGs in paddy procurement and milling through capital support from the government, helping them start petrol pumps, giving them contracts for the upkeep of government buildings, etc.

We can channel government spending in a manner that generates more economic activity among women," he said.

With budgetary support of ₹6,000 crore, a new scheme will offer ₹4 lakh to eligible youth to start an enterprise.

"Five per cent of plots in new industrial parks will be for women, and 15% will be for SC/ST entrepreneurs," he said.

"We are also extremely conscious of keeping Telangana on a high growth trajectory. We need to attract investment and expand our industrial base. The Chief Minister, along with IT and Industries Minister D. Sridhar Babu, was in Davos in January, and at least 16 global companies, in various sectors such as green energy, defence, and data infrastructure, agreed to make fresh investments worth ₹1.78 lakh crore. Telangana's status as a coveted destination for global and Indian companies will be strengthened further in our model," he said.

## Telangana pioneering development model

### तेलंगाना का अग्रणी विकास मॉडल

The initiatives taken by the Revanth Reddy-led Congress government in Telangana aim to create a development model where robust economic growth and social inclusion go hand in hand, says Deputy



## Chief Minister Bhatti Vikramarka Mallu.

तेलंगाना में रेवंत रेड्डी के नेतृत्व वाली कांग्रेस सरकार द्वारा उठाए गए पहल एक ऐसे विकास मॉडल को बनाने की दिशा में हैं, जहां मजबूत आर्थिक विकास और सामाजिक समावेशन साथ-साथ चलें, ऐसा उप मुख्यमंत्री भट्टी विक्रमार्क मल्लू ने कहा।

- He stated that a "Telangana model" is being developed, aligning with **Rahul Gandhi's vision of social justice, secularism, and inclusive growth.**  
उन्होंने कहा कि "तेलंगाना मॉडल" बनाया जा रहा है, जो राहुल गांधी के दृष्टिकोण के अनुरूप है, जिसमें सामाजिक न्याय, धर्मनिरपेक्षता और समावेशी विकास शामिल हैं।
- The **Congress** is working towards a vision of **growth and inclusion** at the national level as an alternative to the **BJP's vision.**  
कांग्रेस राष्ट्रीय स्तर पर विकास और समावेशन के दृष्टिकोण पर काम कर रही है, जो बीजेपी के दृष्टिकोण का एक विकल्प होगा।
- The **historic mandate** in Telangana is being used to pioneer this model.  
तेलंगाना में मिले ऐतिहासिक जनादेश का उपयोग इस मॉडल को लागू करने के लिए किया जा रहा है।

## Welfare architecture and budget focus

### कल्याणकारी ढांचा और बजट पर ध्यान केंद्रित

- **Bhatti Vikramarka Mallu** holds the **Finance portfolio** in the Telangana government.  
भट्टी विक्रमार्क मल्लू के पास वित्त विभाग का प्रभार है।
- The **Congress won the 2023 Assembly election** by offering a new **welfare architecture** based on **six guarantees.**  
कांग्रेस ने 2023 का विधानसभा चुनाव नए कल्याणकारी ढांचे के आधार पर जीता, जिसमें छह गारंटी शामिल थीं।
- These guarantees include **free bus rides for women and free electricity up to 200 units per month.**  
इन गारंटियों में महिलाओं के लिए मुफ्त बस यात्रा और 200 यूनिट प्रति माह तक मुफ्त बिजली शामिल हैं।
- The **2024 Budget** introduced **transformational schemes** in **education, women's welfare, and tribal welfare.**  
2024 के बजट में शिक्षा, महिला कल्याण और जनजातीय कल्याण के लिए परिवर्तनकारी योजनाएं शुरू की गई हैं।

## Economic dynamism and key projects

### आर्थिक गतिशीलता और प्रमुख परियोजनाएं



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- On **March 19, 2024**, the **State Budget** introduced various projects aimed at **social progress and grassroots economic growth**.  
19 मार्च 2024 को प्रस्तुत राज्य बजट में सामाजिक प्रगति और जमीनी स्तर पर आर्थिक विकास को बढ़ावा देने के लिए विभिन्न परियोजनाएं शुरू की गईं।
- The **Young India Integrated Residential Schools Scheme**, named after **Mahatma Gandhi's magazine**, has been allotted **₹11,600 crore**.  
यंग इंडिया इंटीग्रेटेड रेजिडेंशियल स्कूल योजना, जो महात्मा गांधी की पत्रिका के नाम पर रखी गई है, को **₹11,600 करोड़** आवंटित किए गए हैं।
- **₹200 crore** will be spent on each school, and **58 schools** are planned for completion this year.  
प्रत्येक स्कूल पर **₹200 करोड़** खर्च किए जाएंगे, और इस वर्ष **58 स्कूलों** को पूरा करने की योजना है।
- Each school will be built on **25 acres** with **advanced technology and sports facilities**.  
प्रत्येक स्कूल **25 एकड़** में बनाया जाएगा और इसमें **उन्नत तकनीक और खेल सुविधाएं** होंगी।
- These schools aim to provide **better opportunities for disadvantaged communities**.  
इन स्कूलों का उद्देश्य **वंचित समुदायों के लिए बेहतर अवसर प्रदान करना** है।

## Caste census and targeted welfare

### जाति जनगणना और लक्षित कल्याणकारी योजनाएं

- Telangana has **completed a caste census**, and the data will be analyzed for **focused intervention for vulnerable groups**.  
तेलंगाना में **जाति जनगणना पूरी हो चुकी है**, और इस डेटा का उपयोग **कमजोर वर्गों के लक्षित हस्तक्षेप** के लिए किया जाएगा।
- The **Scheduled Caste (SC) and Scheduled Tribe (ST) Sub-Plan** was **ignored** by the previous **Bharat Rashtra Samithi (BRS) government** but has now been revived.  
**अनुसूचित जाति (SC) और अनुसूचित जनजाति (ST) उप-योजना** को **पिछली भारत राष्ट्र समिति (BRS) सरकार द्वारा नजरअंदाज** किया गया था, लेकिन अब इसे पुनर्जीवित किया गया है।
- **₹40,232 crore** has been allocated for **SC welfare**, and **₹17,169 crore** for **ST welfare**.  
**SC कल्याण** के लिए **₹40,232 करोड़** और **ST कल्याण** के लिए **₹17,169 करोड़** आवंटित किए गए हैं।
- Under the **Indira Giri Jalvikasam** scheme, **2.1 lakh tribal farmers** will receive **solar-powered irrigation systems** for free.  
**इंदिरा गिरी जलविकासम योजना** के तहत, **2.1 लाख आदिवासी किसानों** को **सौर ऊर्जा आधारित सिंचाई प्रणाली** मुफ्त में दी जाएगी।
- This scheme eliminates the need for **long electricity lines or large constructions in forest areas**.  
इस योजना के तहत **जंगलों में लंबी बिजली लाइनों या बड़े निर्माण की आवश्यकता नहीं होगी**।

## Empowering women and entrepreneurship

### महिलाओं और उद्यमिता को सशक्त बनाना

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**Email Id : info@patrioticias.in**  
**Contact Number : 9971932488**  
**Website : patrioticias.in**



- The government is promoting **women's entrepreneurship** through **Self-Help Groups (SHGs)** and **micro-enterprises**.  
सरकार स्वयं सहायता समूहों (SHGs) और सूक्ष्म उद्यमों के माध्यम से महिला उद्यमिता को बढ़ावा दे रही है।
- **SHGs** will be involved in **paddy procurement, milling, and government building maintenance**.  
**SHGs** को धान खरीद, मिलिंग और सरकारी भवनों के रखरखाव में शामिल किया जाएगा।
- A new scheme with **₹6,000 crore** budget will provide **₹4 lakh** to eligible youth for starting an enterprise.  
**₹6,000 करोड़** के बजट के साथ एक नई योजना शुरू की गई है, जो योग्य युवाओं को **₹4 लाख** की सहायता देगी ताकि वे अपना उद्यम शुरू कर सकें।
- **5% of plots** in new industrial parks will be reserved for **women entrepreneurs**, and **15% for SC/ST entrepreneurs**.  
नए औद्योगिक पार्कों में **5% प्लॉट महिलाओं** के लिए और **15% SC/ST उद्यमियों** के लिए आरक्षित होंगे।

## Investment and industrial growth

### निवेश और औद्योगिक विकास

- The government is focusing on keeping **Telangana on a high-growth trajectory** by **attracting investments**.  
सरकार तेलंगाना को उच्च विकास दर पर बनाए रखने के लिए निवेश आकर्षित करने पर ध्यान केंद्रित कर रही है।
- In **January 2024**, CM **Revanth Reddy** and IT & Industries Minister **D. Sridhar Babu** visited **Davos** to promote Telangana's investment potential.  
जनवरी 2024 में, मुख्यमंत्री रेवंत रेड्डी और आईटी एवं उद्योग मंत्री डी. श्रीधर बाबू ने दावोस का दौरा किया ताकि तेलंगाना के निवेश की संभावनाओं को बढ़ावा दिया जा सके
- **16 global companies** from **green energy, defense, and data infrastructure** sectors agreed to invest **₹1.78 lakh crore** in Telangana.  
ग्रीन एनर्जी, रक्षा और डेटा इन्फ्रास्ट्रक्चर क्षेत्रों की **16 वैश्विक कंपनियों** ने तेलंगाना में **₹1.78 लाख करोड़** का निवेश करने पर सहमति जताई।
- Telangana is strengthening its **status as a top destination for global and Indian companies**.  
तेलंगाना वैश्विक और भारतीय कंपनियों के लिए एक शीर्ष गंतव्य के रूप में अपनी स्थिति मजबूत कर रहा है।



# 11 billion cubic metres of water saved in eight years, says PM

Modi pushes for rainwater harvesting, waste water management, and recycling of waste; highlights the efforts towards sustainable fashion

**GS Paper III: Sustainable Development**

The Hindu Bureau  
NEW DELHI

In the 120th episode of his monthly radio address *Mann Ki Baat*, Prime Minister Narendra Modi on Sunday pitched for rainwater harvesting, waste water management, and recycling of waste for a sustainable future.

Giving out details of the benefits of rainwater harvesting, Mr. Modi said over the past few years, unprecedented tasks related to water conservation had been undertaken in many parts of the country.

"During the last seven to eight years, over 11 billion cubic metres of water has been conserved through newly built tanks, ponds and other water recharge structures," he said, adding that water accumulated in the **Bhakra Nangal dam** was not more than 9-10 billion cubic metres. "The countrymen, through their tiny efforts, have managed to conserve 11 billion cubic metres of



Indians through their tiny efforts have managed to conserve 11 billion cubic metres of water in the country... isn't that a great effort  
**NARENDRA MODI**  
Prime Minister

water in different parts of the country – isn't that a great effort?" he said.

On the efforts towards sustainable fashion, he said many items such as decorative pieces, handbags, stationery, and toys were being made from textile waste. "Many organisations are engaged in popularising the 'circular fashion brands' these days. New rental platforms are also coming up, where designer clothes are available on rent. Some organisations collect old clothes, make them reusable and distribute them to the poor," he said.

He added that some cities were also carving a

new identity for themselves in dealing with textile waste. "Panipat in Haryana is emerging as a global hub for textile recycling. Bengaluru is also creating a distinct identity for itself with innovative tech solutions. More than half of the textile waste is collected here, which is an example for our other cities as well. Similarly, Tiruppur in Tamil Nadu is engaged in textile waste management through waste water treatment and renewable energy," he said.

He announced "Yoga for One Earth, One Health" as the theme of this year's International Day of Yoga.

## 11 Billion Cubic Metres of Water Saved in Eight Years, Says PM

**प्रधानमंत्री ने कहा: आठ वर्षों में 11 अरब घन मीटर पानी बचाया गया**

In the 120th episode of *Mann Ki Baat*, Prime Minister Narendra Modi emphasized rainwater harvesting, waste water management, and recycling of waste for a sustainable future.

मन की बात के 120वें एपिसोड में, प्रधानमंत्री नरेंद्र मोदी ने वर्षा जल संचयन, अपशिष्ट जल प्रबंधन और कचरे के पुनर्चक्रण पर जोर दिया, ताकि सतत भविष्य सुनिश्चित किया जा सके।

- Over the last seven to eight years, more than 11 billion cubic metres of water has been conserved through newly built tanks, ponds, and other water recharge structures.

पिछले सात से आठ वर्षों में, 11 अरब घन मीटर से अधिक पानी को नई बनी टंकियों, तालाबों और अन्य जल

पुनर्भरण संरचनाओं के माध्यम से संरक्षित किया गया।

- He mentioned that the water accumulated in **Bhakra Nangal Dam** is not more than 9-10 billion cubic metres, whereas people across the country have saved 11 billion cubic metres.

उन्होंने कहा कि **भाखड़ा नंगल बांध** में संचित पानी 9-10 अरब घन मीटर से अधिक नहीं है, जबकि देशवासियों ने 11 अरब घन मीटर पानी बचाया है।

## Sustainable Fashion and Textile Waste Management

सतत फैशन और कपड़ा अपशिष्ट प्रबंधन



**TELEGRAM CHANNEL:** <https://t.me/patrioticIAS>

**YOUTUBE CHANNEL:** <https://www.youtube.com/@PatrioticIAS>

**CONTACT: 9971932488**



- **Decorative pieces, handbags, stationery, and toys are being made from textile waste.**  
कपड़ा अपशिष्ट से सजावटी सामान, हैंडबैग, स्टेशनरी और खिलौने बनाए जा रहे हैं।
- Many organizations are promoting 'circular fashion brands', and new rental platforms are emerging, where **designer clothes are available on rent.**  
कई संगठन 'सर्कुलर फैशन ब्रांड्स' को बढ़ावा दे रहे हैं और नए किराए के प्लेटफॉर्म आ रहे हैं, जहां डिजाइनर कपड़े किराए पर उपलब्ध हैं।
- Some organizations **collect old clothes, make them reusable, and distribute them to the poor.**  
कुछ संगठन पुराने कपड़े इकट्ठा कर उन्हें पुनः उपयोगी बनाकर गरीबों में वितरित कर रहे हैं।
- **Panipat (Haryana) is emerging as a global hub for textile recycling, while Bengaluru is known for innovative tech solutions in textile waste management.**  
पानीपत (हरियाणा) कपड़ा पुनर्चक्रण के वैश्विक केंद्र के रूप में उभर रहा है, जबकि बेंगलुरु कपड़ा अपशिष्ट प्रबंधन में नवाचार तकनीकों के लिए प्रसिद्ध हो रहा है।
- **More than half of India's textile waste is collected in Bengaluru, serving as a model for other cities.**  
भारत के कुल कपड़ा अपशिष्ट का आधे से अधिक हिस्सा बेंगलुरु में एकत्र किया जाता है, जो अन्य शहरों के लिए एक उदाहरण है।
- **Tiruppur (Tamil Nadu) is engaged in textile waste management through waste water treatment and renewable energy.**  
तिरुप्पुर (तमिलनाडु) अपशिष्ट जल उपचार और नवीकरणीय ऊर्जा के माध्यम से कपड़ा अपशिष्ट प्रबंधन में कार्यरत है।

## International Day of Yoga Theme

### अंतर्राष्ट्रीय योग दिवस की थीम

- PM Modi announced "Yoga for One Earth, One Health" as the theme for this year's **International Day of Yoga.**  
प्रधानमंत्री मोदी ने इस वर्ष के अंतर्राष्ट्रीय योग दिवस की थीम "वन अर्थ, वन हेल्थ के लिए योग" घोषित की।



## Diet is key to balancing iron levels in body, say experts

**GS Paper III: S&T**

**The Hindu Bureau**  
CHENNAI

The prevalence of iron-deficiency anaemia in India is 10% to 20% higher when compared worldwide. It is estimated that 53% of Indian women and children suffer iron deficiency as against 29.3% to 39.8% globally. On the other hand, India also tops in people with thalassaemia, one of the biggest causes of iron overload in children.

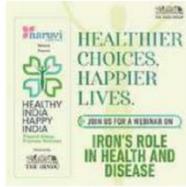
Diet is the key to ensuring balanced levels of iron in the body, emphasised haematologists at a webinar conducted by *The Hindu* and Naruvi Hospitals, Vellore, on the role of iron in human health. The webinar was the seventh in a series of 15 under the "Health India Happy India" initiative.

The panellists highlighted why iron was the most

important biocatalytic element and how shortage or excess of it could mess up the body's organs.

Padma Shri awardee Mammen Chandy, who is currently working as senior consultant, physician, and haematologist at Naruvi Hospitals, Vellore, said iron provides haemoglobin (Hb), a protein in the red blood cells that carries oxygen from the lung to the tissues and executes an important role in enabling the body to live and function well.

An individual's daily diet should include an iron intake of 7mg/1,000 kcal, he said. While it is easier to absorb iron from animal proteins (up to 30%) than plant-based food (less than 5%), it is also important to excrete excess iron from the body. The body can naturally excrete only 1% of the protein absorbed.



"Right amount of iron in the body helps to maintain maternal health, healthy muscles, bone marrow and immune system and regulate proper growth and development in children," Dr. Chandy added, urging people to eat a normal healthy diet and avoid iron supplements if Hb is good.

His colleague, Mathumithra T., consultant, clinical haematology, said the body goes into an iron-deficient state due to decreased dietary intake, increased physiological demands, inflammation

due to chronic diseases, increased needs during pregnancy, infancy and chemotherapy and iron malabsorption due to stomach disorders.

Fatigue, exercise intolerance, headache and apathy, difficulty in focusing, brittle nails, bald smooth tongue, pale conjunctiva and skin, loss of hair are all early signs of iron-deficiency anaemia that need to be recognised by the people, she said.

But one can be iron-deficient without anaemia also and when Hb starts decreasing, it is the final manifestation warranting medical intervention, she added.

### Basic lab tests

Revathi Raj, senior consultant and paediatric haematologist, Apollo Hospitals, Chennai, reiterated how iron ties up all that one

feels inside and how pale one looks on the exterior. Young girls on weight loss diets, young adults on taxing jobs, multi-tasking women, children with unusual food cravings (such as raw rice, chalk pieces, clay), individuals unable to focus are at risk and need to get the basic lab tests done for blood count and also be fed properly, she said.

"For non-vegetarians, meat and poultry are good source of iron and vegetarians can fulfil their iron requirement from fortified cereals, spinach, broccoli, millets, pumpkin seeds, tofu, cashews, oats, quinoa, lentils at home. In case of iron deficiency, medically prescribed iron supplements are recommended," Dr. Revathi added.

While there are health benefits of iron, too much of it can also adversely im-

pack organs of the body, warned Ramya Uppuluri, consultant paediatric haematologist, Apollo Hospitals, Chennai. Speaking on body's challenges in eliminating excess iron and how to manage iron overload, she highlighted the stages of toxicity and also focused on thalassaemia.

"India has 40 million carriers of thalassaemia including 1,00,000 thalassaemia-majors, 50% of whom will not survive beyond the age of 25," she said. There are 10,000 livebirths of thalassaemia-major every year while the country's blood transfusion burden is 2,00,000 units a year. "Thalassaemia – a condition in which synthesis of Hb is impaired – can be prevented and controlled by screening, and pre-natal diagnosis," Dr. Ramya said.

The webinar is available at <https://bit.ly/43wKP95>.

## Diet is Key to Balancing Iron Levels in Body

शरीर में आयरन के स्तर को संतुलित करने में आहार महत्वपूर्ण

Iron-deficiency anaemia in India is 10% to 20% higher compared to the global average.

भारत में आयरन की कमी से होने वाला एनीमिया वैश्विक औसत से 10% से 20% अधिक है।

- 53% of Indian women and children suffer from iron deficiency, compared to 29.3% to 39.8% globally.  
53% भारतीय महिलाएं और बच्चे आयरन की कमी से पीड़ित हैं, जबकि वैश्विक स्तर पर यह 29.3% से 39.8% के बीच है।
- India also has the highest number of people with thalassaemia, a major cause of iron overload in children.  
भारत में थैलेसीमिया के सबसे अधिक मामले हैं, जो बच्चों में आयरन की अधिकता का एक प्रमुख कारण है।
- Diet plays a crucial role in maintaining balanced iron levels, highlighted by haematologists at a webinar by *The Hindu* and Naruvi Hospitals, Vellore.



आहार आयरन के स्तर को संतुलित बनाए रखने में महत्वपूर्ण भूमिका निभाता है, जिसे "द हिंदू" और "नारुवी हॉस्पिटल्स, वेल्लोर" द्वारा आयोजित एक वेबिनार में रक्त विशेषज्ञों ने बताया।

- This webinar was the seventh in a 15-part series under the "Health India Happy India" initiative.

यह वेबिनार "Health India Happy India" पहल के तहत 15 सर्तों की श्रृंखला में सातवां था।

## Importance of Iron in the Body

### शरीर में आयरन का महत्व

- **Padma Shri awardee Mammen Chandy**, senior consultant at **Naruvi Hospitals**, explained that **iron provides haemoglobin (Hb)**, which carries **oxygen** to tissues.  
पद्मश्री पुरस्कार विजेता मम्मन चांडी, नारुवी हॉस्पिटल्स के वरिष्ठ सलाहकार, ने बताया कि आयरन हीमोग्लोबिन (Hb) प्रदान करता है, जो ऑक्सीजन को ऊतकों तक पहुंचाता है।
- A **daily iron intake of 7mg/1,000 kcal** is recommended.  
रोजाना 7mg/1,000 kcal आयरन का सेवन आवश्यक है।
- **Iron absorption is higher from animal proteins (up to 30%)** than from **plant-based sources (less than 5%)**.  
आयरन का अवशोषण पशु-आधारित प्रोटीन (30% तक) से अधिक होता है, जबकि पौधों से मिलने वाला आयरन 5% से कम ही अवशोषित होता है।
- The **body naturally excretes only 1% of absorbed iron**, making it essential to **avoid excess iron intake**.  
शरीर स्वाभाविक रूप से केवल 1% अवशोषित आयरन ही बाहर निकाल सकता है, इसलिए अधिक आयरन के सेवन से बचना जरूरी है।
- **Balanced iron levels help maintain maternal health, muscle strength, bone marrow function, and immunity**, and support **child growth and development**.  
संतुलित आयरन स्तर मातृ स्वास्थ्य, मांसपेशियों की शक्ति, अस्थि मज्जा के कार्य और प्रतिरक्षा प्रणाली को बनाए रखता है और बच्चों के विकास में सहायक होता है।

## Causes and Symptoms of Iron Deficiency

### आयरन की कमी के कारण और लक्षण

- **Dr. Mathumithra T.**, consultant in **clinical haematology**, explained that iron deficiency is caused by:  
डॉ. मथुमित्रा टी., क्लिनिकल हेमेटोलॉजी विशेषज्ञ, ने बताया कि आयरन की कमी निम्न कारणों से होती है:
  - **Decreased dietary intake** (आहार में आयरन की कमी)
  - **Increased physiological demands** (शरीर की आयरन आवश्यकता बढ़ना)
  - **Chronic diseases causing inflammation** (पुरानी बीमारियों के कारण सूजन)



- Higher iron needs during pregnancy, infancy, and chemotherapy (गर्भावस्था, शैशवावस्था और कीमोथेरेपी में बढ़ी हुई आयरन आवश्यकता)
- Iron malabsorption due to stomach disorders (पेट की बीमारियों के कारण आयरन का सही अवशोषण न होना)

Early symptoms of iron-deficiency anaemia include:

आयरन की कमी से होने वाले एनीमिया के शुरुआती लक्षण इस प्रकार हैं:

- Fatigue and exercise intolerance (थकान और व्यायाम सहन न कर पाना)
- Headache, difficulty in focusing, apathy (सिरदर्द, ध्यान केंद्रित करने में कठिनाई, उत्साह की कमी)
- Brittle nails, hair loss, pale skin and conjunctiva (नाखूनों का कमजोर होना, बाल झड़ना, त्वचा और आंखों का पीला पड़ना)
- Smooth bald tongue (जीभ का चिकना और बाल रहित होना)
- One can be iron-deficient without anaemia, but decreasing Hb levels indicate the need for medical intervention.  
कोई व्यक्ति एनीमिया के बिना भी आयरन की कमी से पीड़ित हो सकता है, लेकिन हीमोग्लोबिन (Hb) के स्तर में गिरावट होने पर चिकित्सा की जरूरत होती है।

## Basic Lab Tests and Dietary Recommendations

### आवश्यक लैब टेस्ट और आहार संबंधी सिफारिशें

- Dr. Revathi Raj, senior paediatric haematologist, emphasized that iron deficiency affects both internal health and external appearance.  
डॉ. रेवथी राज, वरिष्ठ बाल रक्त विशेषज्ञ, ने बताया कि आयरन की कमी आंतरिक स्वास्थ्य और बाहरी रूप-रंग दोनों को प्रभावित करती है।
- High-risk groups include:  
जिन लोगों को अधिक खतरा है, वे हैं:
  - Young girls on weight loss diets (वजन घटाने वाले आहार पर रहने वाली युवा लड़कियां)
  - Young adults with taxing jobs (कठिन कार्य करने वाले युवा)
  - Multi-tasking women (एक साथ कई कार्य करने वाली महिलाएं)
  - Children with unusual food cravings like eating raw rice, chalk, or clay (असामान्य खानपान की लालसा रखने वाले बच्चे, जैसे कच्चा चावल, चॉक, या मिट्टी खाना)



- **Basic lab tests for blood count** should be done, and a **proper diet should be maintained.**  
खून की जांच (ब्लड काउंट) करवाना आवश्यक है, और उचित आहार का पालन करना चाहिए।
- **Iron-rich foods for non-vegetarians:**  
मांसाहारियों के लिए आयरन युक्त खाद्य पदार्थ:
  - **Meat and poultry** (मांस और पोल्ट्री)
- **Iron-rich foods for vegetarians:**  
शाकाहारियों के लिए आयरन युक्त खाद्य पदार्थ:
  - **Fortified cereals, spinach, broccoli, millets, pumpkin seeds, tofu, cashews, oats, quinoa, lentils**  
फोर्टिफाइड अनाज, पालक, ब्रोकली, बाजरा, कद्दू के बीज, टोफू, काजू, ओट्स, क्विनोआ, दालें
- **In case of iron deficiency, medically prescribed iron supplements are recommended.**  
आयरन की कमी होने पर डॉक्टर द्वारा सुझाए गए आयरन सप्लीमेंट्स लेने चाहिए।

## **Dangers of Excess Iron and Thalassemia**

### **अधिक आयरन और थैलेसीमिया के खतरे**

- **Excess iron can damage body organs**, warned **Dr. Ramya Uppuluri**, consultant paediatric haematologist, Apollo Hospitals.  
अधिक आयरन शरीर के अंगों को नुकसान पहुंचा सकता है, यह चेतावनी डॉ. राम्या उप्पुलुरी, अपोलो हॉस्पिटल्स ने दी।
- **India has 40 million carriers of thalassemia**, including **1,00,000 thalassemia majors**, of whom **50% do not survive beyond 25 years.**  
भारत में 40 मिलियन लोग थैलेसीमिया वाहक हैं, जिनमें 1,00,000 थैलेसीमिया-मेजर मरीज शामिल हैं, जिनमें से 50% की आयु 25 वर्ष से अधिक नहीं होती।
- **Thalassemia can be prevented by screening and pre-natal diagnosis.**  
थैलेसीमिया की रोकथाम स्क्रीनिंग और प्री-नेटल डायग्नोसिस से की जा सकती है।



# Why the Parker Solar Probe is trying to 'touch' the sun

On March 22, the probe made another attempt to get within 6 million km of the sun, considered a very small distance to be from the star; it was launched on a Delta IV rocket from Cape Canaveral in 2018. Once in space, the probe's maximum speed was an astounding 692,000 km/hr. It will spend 2,000 hours flying through the corona

**GS Paper III: S&T**

Shamim Haque Mondal

**A**mong the various places humans have aspired to visit in the solar system, the sun remains the most forbidding. On December 24, 2024, NASA's Parker Solar Probe arrived within 6.1 million km of the star's surface. This is a short distance to be from the sun: no spacecraft has ever made such a close approach. Even the Parker Solar Probe took seven years to get here.

The probe made another approach to the sun on March 22 and will do so again on June 19 this year.

## Watching the sun

Sunlight is the main source of energy for earthlife. The sun's core produces this energy using nuclear fusion. The star also has strong, dynamic magnetic fields crisscrossing its surface, and sudden changes in the way they're arranged give rise to intense explosions called solar flares. Numerous electrons, protons, and heavy nuclei are spit out of the solar corona – the uppermost layer of the sun's atmosphere – at about 900 km/s.

These particles carry an enormous amount of energy and sometimes rush towards the earth at tremendous speed in an event called a coronal mass ejection. Their effects on the earth constitute a solar storm, including electric grid failures, loss of telecommunication channels, and damage to the ozone layer. They can also damage instruments onboard satellites.

To understand the dynamics of the corona over time and their effects on the solar system at large, scientists need to observe the sun closely. This is also why the Indian Space Research Organisation launched and is currently operating the Aditya-L1 probe, stationed at about 150 million km from the star.

## An able heat shield

Around six decades ago, a scientist named Eugene Parker predicted the existence of the solar wind: a stream of charged particles flowing out from the sun in all directions. NASA named the Parker Solar Probe in his honour.

The probe was launched on board a Delta IV rocket from Cape Canaveral in Florida in August 2018. Once in space, the probe's maximum speed was an astounding 692,000 km/hr.

To protect against the sun's intense heat, the probe has an 8-foot-wide, 4.5-inch thick carbon-carbon composite material shield that can withstand up to 1,370° C while weighing only 73 kg. This shield was built by researchers at the Johns Hopkins Applied Physics



A 2018 artist's concept shows the Parker Solar Probe flying into the sun's outer atmosphere, called the corona, on a mission to help scientists learn more about the star. NASA

Laboratory. It consists of a carbon composite foam sandwiched between two carbon plates. Its sun-facing side is coated with white ceramic paint to reflect as much sunlight as possible instead of absorbing it.

Just a few metres behind the shield, in its shadow, the ambient temperature drops to 29° C, allowing the probe's scientific instruments to operate without special provisions to maintain the temperature. The probe also has two sets of solar power arrays: one in the shield's shadow that supplies power to the instruments and the other on the sun-facing side, which uses a special fluid pump to cool itself while powering the probe during its close approaches.

## Touching the sun

Curiously, the first obstacle to the mission's success wasn't the sun's heat but its gravity. Since the probe flew through space at a very high speed, it had to decelerate significantly as it got close to the sun. If it didn't, the sun's gravity would have encouraged it to dive right into the star. This is why Parker's first mission profile had the probe fly towards Jupiter and swing around the gas giant to achieve an optimal speed to fly towards the sun. This idea fell out of favour because of the large travel distance.

The probe's final mission profile was more direct: to use the combined gravitational forces of the earth and Venus

**Around six decades ago, a scientist named Eugene Parker predicted the existence of the solar wind: a stream of charged particles flowing out from the sun in all directions. NASA named the Parker Solar Probe in his honour**

to slowly spiral closer to the sun's surface, in the process spending more than 2,000 hours flying through the corona and 24 times along the solar equator.

The probe has four scientific instruments: FIELDS, Integrated Science Investigation of the Sun (ISoIS), Wide-Field Imager (WISPR), and Solar Wind Electrons Alphas and Protons (SWEAP). FIELDS measures the electric and magnetic fields of the sun's atmosphere; ISoIS observes the energetic particles that cause solar storms while SWEAP records their properties; and WISPR takes pictures as it passes through the corona.

A "sun-touching" event occurred in April 2021 when Parker moved closer to the sun than its Alfvén surface – the height beyond which the solar wind can't affect the star's surface – as ascertained by the FIELDS and SWEAP instruments.

A fifth instrument, called a Faraday cup, lies outside the shadow of the heat shield and measures the density of ions

and electrons in the solar wind. It is made of a molybdenum alloy with a melting point of 2,349° C.

## Blowin' in the (solar) wind

Parker data has already revealed many new details about the sun. The solar system is ceaselessly coated in dust particles created when space rocks weather and scientists believed the dust ought to be everywhere. Yet Parker revealed dust-free pockets near the sun. The probe also detected magnetic switchbacks: parts of the solar wind where the magnetic field (created by the collective of charged particles) abruptly bent back on itself.

An important open question in solar astrophysics is why the sun's surface is only 6,000° C or so whereas the solar corona is 200-times hotter. Based on Parker's data of magnetic switchbacks and other related phenomena, scientists believe the answer to the mystery lies in Alfvén waves: an oscillation of ions in the plasma released by the sun, set in motion by forces in the surrounding magnetic field. During its close-approach on March 22, the Parker Solar Probe once again attempted to get within around 6 million km of the sun's surface. What did it find this time?

(Shamim Haque Mondal is a researcher in the Physics Division, State Forensic Science Laboratory, Kolkata. shamimmondal709@gmail.com)

## THE GIST

Changes in the sun's magnetic fields cause explosions called solar flares. Electrons, protons, and heavy nuclei are spit out of the solar corona. These cause solar storms – which trigger grid failures, loss of telecommunication channels, and damage to the ozone layer

Parker data has revealed many new details. The solar system is coated in dust created when space rocks weather. Parker revealed dust-free pockets near the sun. The probe also detected magnetic switchbacks: parts of the solar wind where the magnetic field abruptly bent back on itself

An important open question in solar astrophysics is why the sun's surface is only 6,000° C or so, whereas the corona is 200 times hotter. Based on Parker's data, scientists believe the answer lies in Alfvén waves: an oscillation of ions in the plasma released by the sun

**Parker Solar Probe: Trying to 'Touch' the Sun**

**पार्कर सोलर प्रोब: सूर्य को 'छूने' की कोशिश**



On March 22, 2024, the probe made another attempt to get within 6 million km of the sun, considered a very small distance from the star. 22 मार्च 2024 को, प्रोब ने सूर्य के 6 मिलियन किमी के भीतर पहुंचने का एक और प्रयास किया, जो तारे से बहुत छोटी दूरी मानी जाती है।

- It was launched on a **Delta IV rocket** from **Cape Canaveral** in **2018**.  
इसे 2018 में केप कैनावेरल से डेल्टा IV रॉकेट पर लॉन्च किया गया था।
- Once in space, the probe's maximum speed reached **692,000 km/hr**.  
अंतरिक्ष में, प्रोब की अधिकतम गति **692,000 किमी/घंटा** तक पहुंच गई।
- It will spend **2,000 hours** flying through the corona.  
यह **2,000 घंटे** तक कोरोना के माध्यम से उड़ान भरेगा।

## Human Aspirations to Visit the Sun

### सूर्य पर जाने की मानव आकांक्षा

- Among various places humans aspire to visit in the **solar system**, the sun remains the most **foreboding**.  
सौर मंडल में जहां मानव जाने की इच्छा रखता है, उनमें सूर्य सबसे भयावह बना हुआ है।
- On **December 24, 2024**, NASA's **Parker Solar Probe** arrived within **6.1 million km** of the sun's surface.  
24 दिसंबर 2024 को नासा का **पार्कर सोलर प्रोब** सूर्य की सतह से **6.1 मिलियन किमी** के भीतर पहुंचा।
- This is the **closest approach** ever made by a spacecraft.  
यह किसी अंतरिक्ष यान द्वारा किया गया अब तक का **सबसे निकटतम** संपर्क है।
- Even the **Parker Solar Probe** took **seven years** to get here.  
पार्कर सोलर प्रोब को यहां तक पहुंचने में **सात वर्ष** लगे।
- The probe will make another approach on **June 19, 2024**.  
प्रोब **19 जून 2024** को एक और निकटतम संपर्क करेगा।

## Watching the Sun

### सूर्य का अध्ययन

- **Sunlight** is the main source of **energy** for Earth.  
सूर्य का प्रकाश पृथ्वी के लिए ऊर्जा का मुख्य स्रोत है।
- The sun's **core** produces energy using **nuclear fusion**.  
सूर्य का केंद्र नाभिकीय संलयन द्वारा ऊर्जा उत्पन्न करता है।
- The sun has strong and **dynamic magnetic fields** on its surface.  
सूर्य की सतह पर मजबूत और गतिशील चुंबकीय क्षेत्र होते हैं।



- Changes in these fields cause **solar flares**, which are intense explosions.  
इन क्षेत्रों में बदलाव सौर लपटों को जन्म देते हैं, जो तीव्र विस्फोट होते हैं।
- **Solar corona emits electrons, protons, and heavy nuclei** at about **900 km/s**.  
सौर कोरोना इलेक्ट्रॉन, प्रोटॉन, और भारी नाभिक को लगभग **900 किमी/सेकंड** की गति से उत्सर्जित करता है।
- These particles can cause **coronal mass ejections (CMEs)**, leading to **solar storms**.  
ये कण कोरोनाल मास इजेक्शन (CMEs) उत्पन्न कर सकते हैं, जिससे सौर तूफान आते हैं।
- Effects of **solar storms**:  
सौर तूफानों के प्रभाव:
  - **Electric grid failures**  
बिजली ग्रिड की विफलता
  - **Loss of telecommunication channels**  
दूरसंचार चैनलों का नुकसान
  - **Damage to the ozone layer**  
ओजोन परत को नुकसान
  - **Damage to satellite instruments**  
उपग्रह उपकरणों को नुकसान
- To understand these dynamics, **ISRO** launched **Aditya-L1**, positioned at **150 million km** from the sun.  
इन गतियों को समझने के लिए, **ISRO** ने **आदित्य-L1** को लॉन्च किया, जो सूर्य से **150 मिलियन किमी** की दूरी पर स्थित है।

## An Able Heat Shield

### एक सक्षम हीट शील्ड

- **Eugene Parker**, six decades ago, predicted the **solar wind**, a stream of charged particles.  
यूजीन पार्कर ने छह दशक पहले सौर वायु की भविष्यवाणी की, जो आवेशित कणों की धारा है।
- NASA named the **Parker Solar Probe** in his honor.  
नासा ने उनके सम्मान में पार्कर सोलर प्रोब का नाम रखा।
- The probe has an **8-foot-wide, 4.5-inch-thick carbon-carbon composite shield** to withstand temperatures up to **1,370°C**.  
प्रोब में **8 फुट चौड़ी, 4.5 इंच मोटी कार्बन-कार्बन मिश्रित शील्ड** है, जो **1,370°C** तक के तापमान को सहन कर सकती है।
- The shield weighs only **73 kg** and was built at **Johns Hopkins Applied Physics Laboratory**.  
यह शील्ड मात्र **73 किग्रा** की है और इसे **जॉन्स हॉपकिन्स एप्लाइड फिजिक्स लेबोरेटरी** में विकसित किया गया।



- It has **carbon composite foam** sandwiched between two **carbon plates**.  
इसमें कार्बन प्लेटों के बीच कार्बन-कॉम्पोजिट फोम लगाया गया है।
- Its **sun-facing side** is coated with **white ceramic paint** to reflect sunlight.  
इसकी सूर्य की ओर वाली सतह को सफेद सिरेमिक पेंट से कोट किया गया है ताकि यह सूर्य के प्रकाश को परावर्तित कर सके।
- Just a few meters behind the shield, the temperature drops to **29°C**, allowing scientific instruments to operate normally.  
शील्ड के कुछ मीटर पीछे, तापमान 29°C तक गिर जाता है, जिससे वैज्ञानिक उपकरण सामान्य रूप से कार्य कर सकते हैं।
- The probe has **two sets of solar power arrays**:  
प्रोब में दो सौर ऊर्जा सरणियां हैं:
  - **One in the shield's shadow** that supplies power to instruments.  
एक शील्ड की छाया में, जो उपकरणों को ऊर्जा प्रदान करता है।
  - **One on the sun-facing side**, which has a **special fluid pump** for cooling.  
एक सूर्य की ओर, जिसमें विशेष द्रव पंप ठंडा करने के लिए लगा है।

## Parker Solar Probe: Trying to 'Touch' the Sun

### पार्कर सोलर प्रोब: सूर्य को 'छूने' की कोशिश

- On **March 22, 2024**, the probe made another attempt to get within **6 million km** of the sun, considered a very small distance from the star.  
22 मार्च 2024 को, प्रोब ने सूर्य के 6 मिलियन किमी के भीतर पहुंचने का एक और प्रयास किया, जो तारे से बहुत छोटी दूरी मानी जाती है।
- It was launched on a **Delta IV rocket** from **Cape Canaveral** in **2018**.  
इसे 2018 में केप कैनावेरल से डेल्टा IV रॉकेट पर लॉन्च किया गया था।
- Once in space, the probe's maximum speed reached **692,000 km/hr**.  
अंतरिक्ष में, प्रोब की अधिकतम गति 692,000 किमी/घंटा तक पहुंच गई।
- It will spend **2,000 hours** flying through the corona.  
यह 2,000 घंटे तक कोरोना के माध्यम से उड़ान भरेगा।

## Touching the Sun

### सूर्य को छूना

- **The first obstacle** to the mission's success wasn't the **sun's heat** but its **gravity**.  
मिशन की सफलता की पहली बाधा सूर्य की गर्मी नहीं, बल्कि उसकी गुरुत्वाकर्षण शक्ति थी।
- Since the probe **flew at a very high speed**, it had to **decelerate significantly** as it got close to the sun.



चूँकि यान बहुत अधिक गति से उड़ रहा था, इसलिए उसे सूर्य के करीब पहुंचते ही गति को काफी कम करना पड़ा।

- If it didn't, the **sun's gravity** would have pulled it **into the star**.  
अगर ऐसा नहीं होता, तो सूर्य का गुरुत्वाकर्षण इसे सूर्य में गिरा सकता था।
- Initially, the mission plan involved **flying towards Jupiter** and using its gravity to set an **optimal speed towards the sun**, but this was dropped due to **long travel distance**.  
प्रारंभ में, मिशन योजना में बृहस्पति की ओर उड़ान और उसके गुरुत्वाकर्षण का उपयोग कर सूर्य की ओर उपयुक्त गति प्राप्त करना शामिल था, लेकिन अत्यधिक दूरी के कारण इसे छोड़ दिया गया।
- The final mission profile used the **gravitational forces of Earth and Venus** to **slowly spiral closer to the sun**, spending **more than 2,000 hours** in the **corona** and crossing the **solar equator 24 times**.  
अंतिम मिशन योजना में पृथ्वी और शुक्र के गुरुत्वाकर्षण बलों का उपयोग कर धीरे-धीरे सूर्य के करीब जाने की रणनीति अपनाई गई, जिसमें यान ने कोरोना में 2,000 से अधिक घंटे बिताए और सौर भूमध्य रेखा को 24 बार पार किया।

The probe has four scientific instruments:

यान में चार वैज्ञानिक उपकरण हैं:

- **FIELDS**: Measures the **electric and magnetic fields** of the sun's atmosphere.  
**FIELDS**: सूर्य के वायुमंडल में विद्युत और चुंबकीय क्षेत्र को मापता है।
- **Integrated Science Investigation of the Sun (ISoIS)**: Observes the **energetic particles** responsible for **solar storms**.  
**Integrated Science Investigation of the Sun (ISoIS)**: सौर तूफानों के लिए जिम्मेदार ऊर्जावान कणों का अध्ययन करता है।
- **Wide-Field Imager (WISPR)**: Captures **images of the corona**.  
**Wide-Field Imager (WISPR)**: कोरोना की तस्वीरें लेता है।
- **Solar Wind Electrons Alphas and Protons (SWEAP)**: Records the **properties of solar wind particles**.  
**Solar Wind Electrons Alphas and Protons (SWEAP)**: सौर हवा के कणों के गुणों को रिकॉर्ड करता है।
- A "**sun-touching**" event happened in **April 2021**, when Parker crossed the **Alfvén surface**, beyond which **solar wind cannot affect the sun's surface**.  
"सूर्य-स्पर्श" घटना अप्रैल 2021 में हुई, जब पार्कर ने अल्फ़वेन सतह को पार किया, जो वह सीमा है जहां से सौर हवा सूर्य की सतह को प्रभावित नहीं कर सकती।
- A **fifth instrument, the Faraday cup**, is located **outside the heat shield** and measures **density of ions and electrons** in the solar wind.  
पांचवां उपकरण, फेराडे कप, हीट शील्ड के बाहर स्थित है और सौर हवा में आयनों और इलेक्ट्रॉनों की घनत्व को मापता है।



- It is made of a **molybdenum alloy** with a **melting point of 2,349°C**.  
यह मोलिब्डेनम मिश्रधातु से बना है, जिसकी गलनांक 2,349°C है।

## Blowin' in the (Solar) Wind

### (सौर) हवा में बहाव

- Parker has revealed **new details about the sun**, including the **unexpected absence of dust pockets near the sun**, contrary to previous assumptions.  
पार्कर ने सूर्य के बारे में नई जानकारियां दी हैं, जिनमें सूर्य के पास धूल की अनुपस्थिति शामिल है, जबकि पहले वैज्ञानिकों को वहां धूल के व्यापक रूप से फैले होने की उम्मीद थी।
- The probe also discovered **magnetic switchbacks**, where the **solar wind's magnetic field abruptly bends back**.  
यान ने चुंबकीय स्विचबैक भी खोजे, जहां सौर हवा का चुंबकीय क्षेत्र अचानक मुड़ जाता है।
- A major mystery in solar astrophysics is why the **sun's surface is only 6,000°C**, while the **solar corona is 200 times hotter**.  
सौर खगोल भौतिकी में एक बड़ा रहस्य यह है कि सूर्य की सतह मात्र 6,000°C गर्म है, जबकि सौर कोरोना 200 गुना अधिक गर्म है।
- Based on Parker's **magnetic switchback data**, scientists believe the **Alfvén waves** may be the reason for this temperature difference.  
पार्कर के चुंबकीय स्विचबैक डेटा के आधार पर, वैज्ञानिक मानते हैं कि अल्फ़वेन तरंगों इस तापमान अंतर का कारण हो सकती हैं।
- **On March 22**, the Parker Solar Probe attempted to **get within 6 million km of the sun's surface** to gather new findings.  
22 मार्च को, पार्कर सौर यान ने सूर्य की सतह से 60 लाख किमी के भीतर जाने का प्रयास किया ताकि नए निष्कर्ष प्राप्त किए जा सकें।



## Centrifuge: getting to the good uranium

**GS Paper III: S&T**

**Vasudevan Mukunth**

The enrichment centrifuge is a device used to extract uranium-235 isotope from a sample of natural uranium. U-235 is fissile and thus useful to generate nuclear power and to build nuclear weapons.

Natural uranium consists of 99.3% U-238 and 0.7% U-235. Nuclear power reactors need the uranium fuel to contain 3-20% U-235, depending on the reactor design. Nuclear weapons need U-235 to be enriched to around 90%.

The first step for both technologies is to enrich uranium in a centrifuge. This device is named for the centrifugal force: it contains a chamber attached to a rotor. When the rotor spins the chamber very fast, the centrifugal force acts on objects inside such that the denser ones are moved more outwards. The amount of this force is equal to the mass of the molecule multiplied by its distance from the centrifuge's centre and the square of the angular velocity ( $F_c = m \times \omega^2 \times r$ ).

Uranium is converted to compound form (usually uranium hexafluoride,  $UF_6$ ), then to gas, and flowed into



The Kursk Nuclear Power Plant (KNPP) in Kursk, Russia.  
REUTERS

centrifuges. U-238 is slightly more dense than U-235, so as the centrifuges spin at 50,000 revolutions per minute, more U-235 collects towards the centre.

This mass is then diverted to more centrifuges to further separate U-238 out. Over multiple stages, the sample becomes more enriched in U-235.

The spinning part is made of some light yet strong material that doesn't disintegrate during such extreme motion, like carbon fibre.

*mukunth.v@thehindu.co.in*

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नाभिकीय ऊर्जा रिएक्टरों के लिए यूरेनियम ईंधन में 3-20% यू-235 होना आवश्यक होता है, जो रिएक्टर डिजाइन पर निर्भर करता है।

- **Nuclear weapons** require uranium to be enriched to **around 90% U-235**.

परमाणु हथियारों के लिए यूरेनियम को लगभग 90% यू-235 तक समृद्ध किया जाना आवश्यक होता है।

७।

## Process of Uranium Enrichment

### यूरेनियम समृद्धि की प्रक्रिया

- The first step for both nuclear power and weapons is to enrich uranium in a centrifuge.

नाभिकीय ऊर्जा और हथियारों दोनों के लिए पहला कदम यूरेनियम को सेंट्रीफ्यूज में समृद्ध करना है।

## Centrifuge: Getting to the Good Uranium

### सेंट्रीफ्यूज: अच्छे यूरेनियम तक पहुंचना

- The enrichment centrifuge is a device used to extract uranium-235 isotope from a sample of natural uranium.

संपन्नता सेंट्रीफ्यूज एक उपकरण है जिसका उपयोग प्राकृतिक यूरेनियम से यूरेनियम-235 समस्थानिक निकालने के लिए किया जाता है।

- U-235 is fissile and is useful for nuclear power generation and nuclear weapons.

यू-235 विखंडनीय होता है और यह नाभिकीय ऊर्जा उत्पादन तथा परमाणु हथियारों के लिए उपयोगी है।

- Natural uranium consists of 99.3% U-238 and 0.7% U-235.

प्राकृतिक यूरेनियम में 99.3% यू-238 और 0.7% यू-235 होता है।

- Nuclear power reactors require uranium fuel to contain 3-20% U-235, depending on reactor design.



- The **centrifuge** works using **centrifugal force**, which moves **denser materials outward** when spun at **high speed**.  
संटीफ्यूज अपकेंद्रित बल का उपयोग करता है, जो गाढ़े पदार्थों को बाहर की ओर धकेलता है जब उसे तेज़ गति से घुमाया जाता है।
- The force is calculated as  $F_c = m \times \omega^2 \times r$ , where **m** is the molecule's mass,  **$\omega$**  is angular velocity, and **r** is the distance from the center.  
इस बल की गणना  $F_c = m \times \omega^2 \times r$  से की जाती है, जहां **m** अणु का द्रव्यमान,  **$\omega$**  कोणीय वेग, और **r** केंद्र से दूरी है।
- **Uranium** is converted into **uranium hexafluoride (UF6) gas** before enrichment.  
यूरेनियम को समृद्ध करने से पहले यूरेनियम हेक्साफ्लोराइड (UF6) गैस में बदला जाता है।
- **U-238** is **slightly denser** than **U-235**, so when the centrifuge spins at **50,000 revolutions per minute**, **U-235 collects toward the center**.  
यू-238 थोड़ा अधिक घना होता है यू-235 की तुलना में, इसलिए जब संटीफ्यूज 50,000 चक्र प्रति मिनट की गति से घूमता है, तो यू-235 केंद्र की ओर इकट्ठा होता है।
- This **partially enriched uranium** is sent to **more centrifuges** for further separation of **U-238**.  
यह आंशिक रूप से समृद्ध यूरेनियम अधिक संटीफ्यूज में भेजा जाता है ताकि यू-238 को और अधिक अलग किया जा सके।
- **Over multiple stages**, the **sample becomes increasingly enriched in U-235**.  
कई चरणों में, नमूना यू-235 में अधिक समृद्ध होता जाता है।

## Materials Used in Centrifuges

### संटीफ्यूज में प्रयुक्त सामग्री

- The **spinning part** of the centrifuge is made of **light yet strong materials** like **carbon fiber**, which prevents **disintegration at extreme speeds**.  
संटीफ्यूज का घूमने वाला भाग हल्की लेकिन मजबूत सामग्री से बना होता है, जैसे कार्बन फाइबर, जो अत्यधिक गति पर टूटने से बचाता है।



# What is status of the SpaceX Mars mission?

When will the uncrewed Mars landing mission take place, according to SpaceX CEO Elon Musk? Will refuelling be possible in space? Is there a conflict of interest between Mr. Musk's role in government and his position as CEO? Why are scientists at NASA worried?

GS Paper III: S&T

## EXPLAINER

Franciszek Snarski

### The story so far:

On March 15, Elon Musk, the CEO of SpaceX, announced on X that an uncrewed Mars landing mission will take place by the end of next year. The operation is expected to feature Optimus, a robot developed by Tesla – another company owned by Mr. Musk – as its passenger. “If those landings go well, then human landings may start as soon as 2029, although 2031 is more likely,” Mr. Musk stated on X. The billionaire entrepreneur appears determined to achieve this milestone using SpaceX's reusable super heavy-lift launch vehicle, Starship.

### Is it possible?

The project has faced multiple setbacks in recent months, including two critical Starship test flight failures, or as Mr. Musk refers to them, “rapid unscheduled disassemblies”. Despite this, he has not postponed the planned date for SpaceX's Mars mission. Originally announced in September 2024, the plan faces technical and logistical challenges, leading experts to question its feasibility.

### What are some of the challenges?

One of the main concerns is whether SpaceX will be able to develop and produce an auxiliary tanker spacecraft in time and successfully refuel Starship in orbit. To reach Mars, Starship's second stage must traverse approximately 5.5 crore kilometres in space. Timing is crucial, as every 26 months, Earth and Mars reach a “launch window” – a period when the two planets are closest, allowing for the most efficient space travel. If SpaceX fails to launch within this window, the mission could be delayed by more than two years.

Currently, Starship has only demonstrated its ability to reach Low Earth Orbit (LEO). Its fuel storage



**Beyond the skies:** SpaceX Starship lifts off from Starbase in Boca Chica, Texas, for its sixth flight test on November 19, 2024. AFP

capacity of 4,200 tonnes of propellant is insufficient for a Mars journey. To address this, SpaceX announced in April 2024 that it would use LEO tanker spacecraft to refuel Starship mid-flight. However, this plan has yet to be demonstrated, and there is no clear evidence that development is underway. With only 20 months until the next launch window, it is doubtful whether anyone can design, construct, test, and deploy these tankers in time, said Daniel Dumbacher, former Deputy Associate Administrator of NASA's Human Exploration and Operations Mission Directorate, during a U.S. Congressional hearing in February.

Beyond the issue of readiness, there is also uncertainty over whether SpaceX can manufacture and launch enough tanker spacecraft in a short time frame, given the complexity of in-orbit refuelling. This type of refuelling involves the

transfer of super-cooled liquid oxygen and methane from a full tank to an empty one, operating under extreme pressure between machinery and the vacuum of space; a feat which has never been attempted before. SpaceX would need to launch and dock Starship's multiple tankers in quick succession to offset fuel evaporation, adding another layer of difficulty to the mission.

### How has SpaceX fared so far?

SpaceX has repeatedly demonstrated its ability to accomplish seemingly impossible feats. The successful deployment of reusable Falcon 9 rocket boosters and the development of the Dragon capsule have proven its capacity to design spacecraft that can withstand the harsh conditions of space. SpaceX's Starbase facility in Texas gives it a competitive edge, with the company

reportedly manufacturing one Raptor engine per day and assembling the second stage of Starship within weeks. These production capabilities could prove essential in developing the required tanker spacecraft.

### How will SpaceX land on Mars?

Given that Mr. Musk envisions Starship as a vessel for human settlement, and that the 2026 mission will carry Tesla's Optimus robot, it appears likely that the spacecraft will attempt a surface landing. However, the current version of Starship lacks features necessary for landing, such as retractable landing gear similar to Falcon 9. While Starship has successfully landed on Earth, this was only possible with the “Chopsticks” vertical catching system, which does not exist on Mars.

Additionally, Starship's high failure rate in test flights suggests that further refinements are needed before it is considered reliable enough for such a critical mission.

### What has NASA said?

The Guardian reports that senior NASA officials are worried about potential conflicts of interest between SpaceX and the Department of Governmental Efficiency (DOGE), an advisory body to U.S. President Donald Trump, which Mr. Musk heads. DOGE has been pushing for extensive federal budget cuts, leading to the shutdown of NASA's Office of Technology, Policy, and Strategy, as well as the Office of the Chief Scientist. With these cuts, speculation has grown that more funding could be directed towards SpaceX's contracts with NASA, raising concerns about Mr. Musk's dual role as a government adviser and private contractor. While Mr. Musk is known for making bold claims, a successful Mars landing would solidify SpaceX's dominance in space industry. However, whether the billionaire can overcome the technical, logistical, and political challenges ahead remains to be seen.

Franciszek Snarski is an intern at The Hindu.

## THE GIST

On March 15, Elon Musk, the CEO of SpaceX, announced on X that an uncrewed Mars landing mission will take place by the end of next year.

The project has faced multiple setbacks in recent months, including two critical Starship test flight failures, or as Mr. Musk refers to them, “rapid unscheduled disassemblies”. Despite this, he has not postponed the planned date for SpaceX's Mars mission.

The Guardian reports that senior NASA officials are worried about potential conflicts of interest between SpaceX and the Department of Governmental Efficiency (DOGE), an advisory body to U.S. President Donald Trump, which Mr. Musk heads.

## Status of the SpaceX Mars Mission

## स्पेसएक्स मंगल मिशन की स्थिति

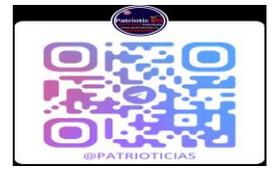
On March 15, Elon Musk, the CEO of SpaceX, announced on X that an uncrewed Mars landing mission will take place by the end of next year.

15 मार्च को स्पेसएक्स के सीईओ एलन मस्क ने X पर घोषणा की कि अगले वर्ष के अंत तक एक मानव रहित मंगल लैंडिंग मिशन होगा।

- The operation is expected to feature **Optimus**, a robot developed by **Tesla**, as its passenger.

इस अभियान में टेस्ला द्वारा विकसित रोबोट 'ऑप्टिमस' को यात्री के रूप में शामिल किया जाएगा।

- If these landings go well, **human landings may start as soon as 2029**, although **2031 is more likely**.



यदि ये लैंडिंग सफल होती है, तो मानव लैंडिंग 2029 तक शुरू हो सकती है, हालांकि 2031 अधिक संभावित है।

- SpaceX plans to use its reusable super heavy-lift launch vehicle, Starship, for this milestone.

स्पेसएक्स इस लक्ष्य को प्राप्त करने के लिए अपने पुनः उपयोग योग्य सुपर हेवी-लिफ्ट लॉन्च वाहन, स्टारशिप, का उपयोग करेगा।

## Is it possible?

### क्या यह संभव है?

- The project has faced multiple setbacks, including two critical Starship test flight failures.

इस परियोजना को कई अड़चनों का सामना करना पड़ा है, जिसमें स्टारशिप की दो महत्वपूर्ण परीक्षण उड़ान विफलताएं शामिल हैं।

- Elon Musk refers to these failures as "rapid unscheduled disassemblies".

एलन मस्क इन विफलताओं को "तेजी से अनियोजित विघटन" कहते हैं।

- Despite challenges, the planned date for SpaceX's Mars mission has not been postponed.

चुनौतियों के बावजूद, स्पेसएक्स के मंगल मिशन की निर्धारित तिथि स्थगित नहीं की गई है।

- The plan was originally announced in September 2024, but experts question its feasibility due to technical and logistical challenges.

इस योजना की मूल घोषणा सितंबर 2024 में की गई थी, लेकिन विशेषज्ञ तकनीकी और तार्किक चुनौतियों के कारण इसकी संभाव्यता पर सवाल उठा रहे हैं।

## What are some of the challenges?

### क्या चुनौतियाँ हैं?

- One major concern is whether SpaceX can develop and produce an auxiliary tanker spacecraft in time.

एक बड़ी चिंता यह है कि क्या स्पेसएक्स समय पर सहायक टैंकर अंतरिक्ष यान विकसित और उत्पादन कर सकता है।

- Starship's second stage must travel approximately 5.5 crore kilometers to reach Mars.

मंगल तक पहुंचने के लिए स्टारशिप के दूसरे चरण को लगभग 5.5 करोड़ किलोमीटर की यात्रा करनी होगी।

- Timing is crucial, as every 26 months, Earth and Mars reach a "launch window" that allows for the most efficient travel.



समय महत्वपूर्ण है, क्योंकि हर 26 महीने में, पृथ्वी और मंगल एक "लॉन्च विंडो" में आते हैं, जिससे सबसे कुशल यात्रा संभव होती है।

- **Currently, Starship has only demonstrated its ability to reach Low Earth Orbit (LEO).**

वर्तमान में, स्टारशिप ने केवल निम्न पृथ्वी कक्षा (LEO) तक पहुंचने की क्षमता का प्रदर्शन किया है।

- **Its fuel storage capacity of 4,200 tonnes is insufficient for a Mars journey.**  
इसकी 4,200 टन ईंधन भंडारण क्षमता मंगल यात्रा के लिए अपर्याप्त है।
- **In April 2024, SpaceX announced that it would use LEO tanker spacecraft to refuel Starship mid-flight.**

अप्रैल 2024 में, स्पेसएक्स ने घोषणा की कि वह मिड-फ्लाइट में स्टारशिप को रीफ्यूल करने के लिए LEO टैंकर अंतरिक्ष यान का उपयोग करेगा।

- However, this **plan has yet to be demonstrated**, and there is **no clear evidence** of ongoing development.

हालांकि, इस योजना का अभी तक कोई प्रदर्शन नहीं हुआ है, और इसके विकास का कोई स्पष्ट प्रमाण नहीं है।

- With only **20 months** until the next **launch window**, experts doubt whether these tankers can be designed, built, tested, and deployed in time.

अगली लॉन्च विंडो में केवल 20 महीने बचे हैं, विशेषज्ञों को संदेह है कि ये टैंकर समय पर डिज़ाइन, निर्मित, परीक्षण और तैनात किए जा सकते हैं।

- **Daniel Dumbacher**, a former **NASA official**, expressed skepticism about meeting the timeline.

डेनियल डंबाकर, एक पूर्व नासा अधिकारी, ने इस समय सीमा को पूरा करने पर संदेह जताया।

- Another challenge is whether **SpaceX can manufacture and launch enough tankers quickly.**

एक और चुनौती यह है कि क्या स्पेसएक्स पर्याप्त संख्या में टैंकरों का उत्पादन और लॉन्च तेजी से कर सकता है।

- In-orbit refueling involves **transferring super-cooled liquid oxygen and methane in extreme conditions**, which has never been attempted before.

कक्षा में ईंधन भरना अत्यधिक परिस्थितियों में सुपर-कूल्ड लिक्विड ऑक्सीजन और मीथेन को स्थानांतरित करने से जुड़ा है, जिसे पहले कभी आजमाया नहीं गया है।

- SpaceX must **launch and dock multiple tankers quickly** to prevent fuel evaporation, adding more complexity to the mission.

स्पेसएक्स को ईंधन के वाष्पीकरण को रोकने के लिए कई टैंकरों को तेजी से लॉन्च और डॉक करना होगा, जिससे मिशन और जटिल हो जाएगा।

## Performance of SpaceX so far

### अब तक का स्पेसएक्स का प्रदर्शन



**TELEGRAM CHANNEL:** <https://t.me/patrioticIAS>

**YOUTUBE CHANNEL:** <https://www.youtube.com/@PatrioticIAS>

**CONTACT: 9971932488**



- **SpaceX** has repeatedly demonstrated its ability to accomplish seemingly **impossible feats**.  
स्पेसएक्स ने बार-बार अपनी क्षमता साबित की है कि वह असंभव लगने वाले कार्यों को भी पूरा कर सकता है।
- The successful deployment of **reusable Falcon 9 rocket boosters** and the development of the **Dragon capsule** have proven its capacity to design spacecraft that can withstand the harsh conditions of space.  
पुनः उपयोग किए जाने वाले फाल्कन 9 रॉकेट बूस्टर की सफल तैनाती और ड्रैगन कैप्सूल के विकास ने इसकी यह क्षमता साबित कर दी है कि यह अंतरिक्ष के कठोर वातावरण को सहने योग्य यान बना सकता है।
- **SpaceX's Starbase facility in Texas** gives it a **competitive edge**, with the company reportedly manufacturing **one Raptor engine per day** and assembling the **second stage of Starship within weeks**.  
टेक्सास में स्पेसएक्स की स्टारबेस सुविधा इसे एक प्रतिस्पर्धात्मक बढ़त देती है, जहां कंपनी कथित तौर पर प्रति दिन एक रैप्टर इंजन बनाती है और स्टारशिप के दूसरे चरण को कुछ ही हफ्तों में असेंबल कर लेती है।
- These **production capabilities** could prove essential in developing the required **tanker spacecraft**.  
ये उत्पादन क्षमताएँ आवश्यक टैंकर अंतरिक्ष यान के विकास में महत्वपूर्ण साबित हो सकती हैं।

## How will SpaceX land on Mars?

### स्पेसएक्स मंगल पर कैसे उतरेगा?

- Given that **Mr. Musk envisions Starship** as a vessel for **human settlement**, and that the **2026 mission** will carry **Tesla's Optimus robot**, it appears likely that the spacecraft will attempt a **surface landing**.  
चूंकि श्री मस्क स्टारशिप को मानव बस्तियों के लिए एक यान के रूप में देखते हैं, और 2026 का मिशन टेस्ला का ऑप्टिमस रोबोट ले जाएगा, इसलिए यह संभव है कि अंतरिक्ष यान सतह पर उतरने का प्रयास करेगा।
- However, the current version of **Starship** lacks necessary **landing features**, such as **retractable landing gear** similar to **Falcon 9**.  
हालांकि, वर्तमान स्टारशिप में आवश्यक अवतरण सुविधाओं की कमी है, जैसे कि फाल्कन 9 की तरह पीछे हटने वाला लैंडिंग गियर।
- While **Starship** has successfully landed on Earth, this was only possible with the "**Chopsticks**" **vertical catching system**, which does not exist on **Mars**.  
भले ही स्टारशिप ने पृथ्वी पर सफलतापूर्वक लैंडिंग की हो, लेकिन यह केवल "चाँपस्टिक्स" वर्टिकल कैचिंग सिस्टम के कारण संभव था, जो मंगल पर मौजूद नहीं है।

**Address : 3rd Floor, KV Tower, Padleyganj Road, Gorakhpur**  
**Email Id : info@patrioticias.in**  
**Contact Number : 9971932488**  
**Website : patrioticias.in**



- Additionally, **Starship's high failure rate in test flights** suggests that further **refinements** are needed before it is considered **reliable** enough for such a **critical mission**.

इसके अलावा, स्टारशिप की परीक्षण उड़ानों में उच्च विफलता दर यह संकेत देती है कि इसे इतनी विश्वसनीय बनाने के लिए और भी सुधार की जरूरत है ताकि यह इतने महत्वपूर्ण मिशन के लिए उपयुक्त हो सके।

## What has NASA said?

### नासा ने क्या कहा है?

- The **Guardian** reports that senior **NASA officials** are worried about potential **conflicts of interest** between **SpaceX** and the **Department of Governmental Efficiency (DOGE)**, an advisory body to **U.S. President Donald Trump**, which **Mr. Musk** heads. द गार्जियन की रिपोर्ट के अनुसार, वरिष्ठ नासा अधिकारी स्पेसएक्स और गवर्नमेंटल एफिशिएंसी विभाग (DOGE) के बीच संभावित हितों के टकराव को लेकर चिंतित हैं। यह विभाग अमेरिकी राष्ट्रपति डोनाल्ड ट्रंप की एक सलाहकार संस्था है, जिसे श्री मस्क संचालित करते हैं।

- **DOGE** has been pushing for **extensive federal budget cuts**, leading to the **shutdown of NASA's Office of Technology, Policy, and Strategy**, as well as the **Office of the Chief Scientist**.

**DOGE** ने व्यापक संघीय बजट कटौती की वकालत की है, जिसके कारण नासा के प्रौद्योगिकी, नीति और रणनीति कार्यालय और मुख्य वैज्ञानिक कार्यालय को बंद कर दिया गया है।

- With these **cuts**, speculation has grown that more **funding** could be directed towards **SpaceX's contracts with NASA**, raising concerns about **Mr. Musk's dual role** as a **government adviser** and **private contractor**.

इन बजट कटौतियों के साथ, यह अटकलें बढ़ गई हैं कि नासा के साथ स्पेसएक्स के अनुबंधों की ओर अधिक वित्तीय सहायता निर्देशित की जा सकती है, जिससे श्री मस्क की दोहरी भूमिका को लेकर चिंता बढ़ गई है – एक सरकारी सलाहकार और एक निजी ठेकेदार के रूप में।

- While **Mr. Musk** is known for making **bold claims**, a successful **Mars landing** would solidify **SpaceX's dominance in the space industry**.

भले ही श्री मस्क को साहसी दावे करने के लिए जाना जाता हो, लेकिन यदि मंगल पर सफल लैंडिंग होती है, तो यह अंतरिक्ष उद्योग में स्पेसएक्स के प्रभुत्व को और मजबूत करेगा।

- However, whether the **billionaire** can overcome the **technical, logistical, and political challenges** ahead **remains to be seen**.

हालांकि, यह देखना बाकी है कि यह अरबपति आगामी तकनीकी, तार्किक और राजनीतिक चुनौतियों को पार कर सकता है या नहीं।