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PATRIOTIC IAS

THE HINDU NEWSPAPER

DAILY CURRENT AFFAIRS

24 MARCH 2025

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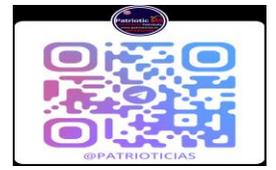
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24_03_2025 DAILY CURRENT AFFAIRS

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Male devotees defy dress code, enter Kerala temple wearing shirts to protest 'caste-based discrimination'

GS Paper I: Society

The Hindu Bureau
PATHANAMTHITTA

The centuries-old Koyikkal Sri Dharmasastha temple in Ranni-Perunadu under the Travancore Devaswom Board (TDB) witnessed an unusual protest on Sunday when a group of Sree Narayana Dharma Paripalana (SNDP) Yogam members entered it wearing shirts, defying a long-standing tradition.

The incident took place in the morning when mem-



SNDP Yogam members wearing shirts entering the Kakkad Koyikkal Sri Dharmasastha temple in Pathanamthitta on Sunday.

bers of various branches of the SNDP Yogam in Perunadu, Naranamoozhi, and neighbouring villages en-

tered the temple without removing their shirts and offered prayers.

Speaking to the media

after offering prayers, the SNDP Yogam members said their decision to wear shirts inside the temple was a symbolic protest against caste-based discrimination.

Posting of priests

Pointing out that no individual from backward communities has ever been appointed the chief priest in major temples, including Sabarimala, they also warned of intensifying their protests if the dis-

crimination persisted. The protest also aligned with the views of Sivagiri Madhom president Swami Sathchidananda, who recently urged temples under the Madhom and the SNDP Yogam to abolish outdated custom.

"We have no disagreements with the State government on this matter. Our protest is against the casteism that exists in the TDB and among the Tantris," said V.K. Vasudevan, one of the protest leaders.

Male devotees defy dress code, enter Kerala temple wearing shirts to protest 'caste-based discrimination'

पुरुष भक्तों ने ड्रेस कोड की अवहेलना कर केरल मंदिर में शर्ट पहनकर प्रवेश किया, 'जाति-आधारित भेदभाव' के खिलाफ विरोध जताया

The centuries-old Koyikkal Sri Dharmasastha temple in Ranni-Perunadu under the Travancore Devaswom Board (TDB) witnessed an unusual protest on Sunday when a group of Sree Narayana Dharma Paripalana (SNDP) Yogam members entered it wearing shirts, defying a long-standing tradition.

सदियों पुराना कोयिक्कल श्री धर्मशास्ता मंदिर, जो रन्नी-पेरुनाडु में त्रावणकोर देवस्वम बोर्ड (TDB) के अंतर्गत आता है, रविवार को एक असामान्य विरोध प्रदर्शन का साक्षी बना, जब श्री नारायण धर्म परिपालन (SNDP) योगम के सदस्यों ने शर्ट पहनकर प्रवेश किया, जिससे लंबे समय से चली आ रही परंपरा का उल्लंघन हुआ।



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- The incident took place in the **morning** when members of various branches of the **SNDP Yogam** in **Perunadu, Naranamoozhi, and neighbouring villages** entered the temple **without removing their shirts and offered prayers.**

यह घटना सुबह हुई जब पेरुनाडु, नरनामूझी और आसपास के गांवों में स्थित SNDP योगम की विभिन्न शाखाओं के सदस्य शर्ट उतारे बिना मंदिर में प्रवेश कर गए और पूजा-अर्चना की।

- Speaking to the **media** after **offering prayers**, the **SNDP Yogam members** said their decision to **wear shirts inside the temple** was a **symbolic protest against caste-based discrimination.**

पूजा करने के बाद मीडिया से बात करते हुए, SNDP योगम के सदस्यों ने कहा कि मंदिर में शर्ट पहनकर प्रवेश करने का निर्णय जाति-आधारित भेदभाव के खिलाफ एक प्रतीकात्मक विरोध था।

Posting of priests

पुरोहितों की नियुक्ति

- Pointing out that **no individual from backward communities** has ever been appointed the **chief priest in major temples**, including **Sabarimala**, they also warned of **intensifying their protests** if the **discrimination persisted.**

यह इंगित करते हुए कि पिछड़ी जातियों से कोई भी व्यक्ति कभी भी सबरीमाला सहित प्रमुख मंदिरों में मुख्य पुजारी के रूप में नियुक्त नहीं किया गया, उन्होंने यह भी चेतावनी दी कि यदि भेदभाव जारी रहा, तो वे अपने विरोध को तेज करेंगे।

- The **protest** also aligned with the **views of Sivagiri Madhom president Swami Sathchidananda**, who recently urged **temples under the Madhom and the SNDP Yogam to abolish outdated customs.**

यह विरोध सिवागिरी मठ के अध्यक्ष स्वामी सत्चिदानंद के विचारों के अनुरूप था, जिन्होंने हाल ही में मठ और SNDP योगम के अंतर्गत आने वाले मंदिरों से पुरानी प्रथाओं को समाप्त करने का आह्वान किया था

- V.K. Vasudevan**, one of the **protest leaders**, stated, **"We have no disagreements with the State government on this matter. Our protest is against the casteism that exists in the TDB and among the Tantris."**

विरोध के नेताओं में से एक, वी.के. वासुदेवन, ने कहा, "इस मामले पर हमारी राज्य सरकार से कोई असहमति नहीं है। हमारा विरोध TDB और तंत्रियों में मौजूद जातिवाद के खिलाफ है।"

Sree Narayana Guru Dharma Paripalana (SNDP) Movement

- The SNDP movement was initiated by **Sree Narayana Guru Swamy (1856-1928)** to challenge the caste hierarchy and promote social equality among the **Ezhavas of Kerala.**



- केरल के पिछड़े वर्ग एझावा समुदाय के बीच जातिगत असमानता को चुनौती देने और सामाजिक समानता को बढ़ावा देने के लिए श्री नारायण गुरु स्वामी (1856-1928) द्वारा एसएनडीपी आंदोलन की शुरुआत की गई थी।
- The Ezhavas were traditionally engaged in **toddy-tapping** and were considered untouchables. They faced severe discrimination, including denial of education and temple entry.
- एझावा समुदाय पारंपरिक रूप से ताड़ी निकालने का काम करता था और उन्हें अछूत माना जाता था। उन्हें शिक्षा और मंदिर प्रवेश से वंचित किया गया था।
- The Ezhavas constituted 26% of Kerala's population, making them the largest caste group in the state.
- एझावा समुदाय केरल की जनसंख्या का 26% था, जो राज्य का सबसे बड़ा जाति समूह था।

Aruvippuram Movement (1888)

- In 1888, Sree Narayana Guru consecrated a **Sivalinga at Aruvippuram on Shivaratri**, taking a stone from the **Neyyar River**.
- 1888 में श्री नारायण गुरु ने अरुविप्पुरम में शिवरात्रि के दिन नेय्यार नदी से एक पत्थर लेकर शिवलिंग की स्थापना की।
- This act was a revolutionary step to demonstrate that idol consecration was not the monopoly of upper castes.
- यह कदम यह दिखाने के लिए एक क्रांतिकारी कदम था कि मूर्ति स्थापना केवल ऊँची जातियों का विशेष अधिकार नहीं है।
- The movement attracted Kumaran Asan, a renowned poet, who became a disciple of Sree Narayana Guru.
- इस आंदोलन ने प्रसिद्ध कवि कुमारन आसन को आकर्षित किया, जो श्री नारायण गुरु के शिष्य बन गए।

Formation of SNDP Yogam (1903)

- In 1903, the **Aruvippuram Sree Narayana Guru Dharma Paripalana Yogam (SNDP)** was registered.
- 1903 में अरुविप्पुरम श्री नारायण गुरु धर्म परिपालन योगम (एसएनडीपी) को भारतीय कंपनी अधिनियम के तहत पंजीकृत किया गया।
- Sree Narayana Guru was made the permanent chairman, and **Kumaran Asan was appointed as the general secretary**.



- श्री नारायण गुरु को स्थायी अध्यक्ष और कुमारन आसन को महासचिव नियुक्त किया गया।

Role of Dr. Palpu

- Dr. Palpu, an Ezhava doctor, played a crucial role in the formation of the SNDP. He led the Ezhava Memorial (1896) and Malayali Memorial (1891), demanding social and educational rights for Ezhavas.

डॉ. पालपू, जो एक एझावा डॉक्टर थे, ने एसएनडीपी के गठन में महत्वपूर्ण भूमिका निभाई। उन्होंने एझावा मेमोरियल (1896) और मलयाली मेमोरियल (1891) का नेतृत्व किया।

Area of Reform of Sree Narayana Guru

- Sree Narayana Guru held the belief that all religions are the same and advocated for equality and social harmony.
- श्री नारायण गुरु ने माना कि सभी धर्म समान हैं और सामाजिक सौहार्द के लिए प्रचार किया।
- He condemned animal sacrifice and spoke against divisiveness based on caste, race, or creed.
- उन्होंने पशु बलि की निंदा की और जाति, नस्ल या धर्म के आधार पर विभाजन का विरोध किया।
- On the wall of the Aruvippuram Temple, he inscribed the words: "Devoid of dividing walls of caste or race, or hatred of rival faith, we all live here in brotherhood."
- अरुविप्पुरम मंदिर की दीवार पर उन्होंने ये शब्द अंकित कराए: "जाति या नस्ल के विभाजन की दीवारों के बिना, प्रतिद्वंद्वी धर्मों से घृणा किए बिना, हम यहाँ भाईचारे में रहते हैं।"
- He urged the Ezhava community to leave the toddy-tapping profession and abstain from liquor consumption.
- उन्होंने एझावा समुदाय से आग्रह किया कि वे ताड़ी निकालने का व्यवसाय छोड़ दें और शराब के सेवन से बचें।



Maharashtra to introduce Kumbh Mela Authority Law on the lines of Uttar Pradesh

GS Paper I: A&C

The Hindu Bureau

MUMBAI

Maharashtra Chief Minister Devendra Fadnavis on Sunday announced a ₹1,100-crore plan for the development of the Trimbakeswar Temple in Nashik and the establishment of a Kumbh Mela Authority Law, modelled on the law in Uttar Pradesh. This law would provide a legal framework for Kumbh Mela-related projects and facilitates effective crowd management.

Mr. Fadnavis made these announcements dur-

The law would provide a legal framework for Kumbh Mela-related projects

ing his visit to Nashik to review preparations for the Trimbakeswar Simhastha Kumbh Mela in 2027.

According to the Chief Minister's Office, the plan focuses on the utilisation of public transport and the integration of electric vehicles in Nashik and Trimbakeswar, the arrangement of effective solid waste

management and sanitation facilities, the initiation of sewage treatment projects for the purification of the Godavari river, and the enhancement of temple's infrastructure to accommodate the influx of devotees using technology.

Mr. Fadnavis pointed out that the Mela will have entrepreneurial value. He acknowledged the delay in development plans and said, "We are behind schedule. We started preparations last year, and planning has been ongoing since then. Let's see how it goes."

Maharashtra to introduce Kumbh Mela Authority Law

महाराष्ट्र कुंभ मेला प्राधिकरण कानून पेश करेगा

Maharashtra Chief Minister Devendra Fadnavis announced a ₹1,100-crore plan for the development of **Trimbakeswar Temple in Nashik**.



महाराष्ट्र के मुख्यमंत्री देवेन्द्र फडणवीस ने नासिक में त्र्यंबकेश्वर मंदिर के विकास के लिए ₹1,100 करोड़ की योजना की घोषणा की।

- The government will establish a **Kumbh Mela Authority Law** on the lines of **Uttar Pradesh**, providing a legal framework for **Kumbh Mela-related projects** and **effective crowd management**.
सरकार उत्तर प्रदेश की तर्ज पर कुंभ मेला प्राधिकरण कानून स्थापित करेगी, जो कुंभ मेले से संबंधित परियोजनाओं और प्रभावी भीड़ प्रबंधन के लिए एक कानूनी ढांचा प्रदान करेगा।
- **Mr. Fadnavis** made these announcements during his visit to **Nashik** to review preparations for the **Trimbakeshwar Simhastha Kumbh Mela in 2027**.
श्री फडणवीस ने 2027 में होने वाले त्र्यंबकेश्वर सिंहस्थ कुंभ मेले की तैयारियों की समीक्षा के लिए नासिक की यात्रा के दौरान यह घोषणाएँ कीं।
- According to the **Chief Minister's Office**, the plan focuses on:
मुख्यमंत्री कार्यालय के अनुसार, योजना निम्नलिखित बिंदुओं पर केंद्रित है:
 - **Public transport utilisation and integration of electric vehicles** in **Nashik and Trimbakeshwar**.
नासिक और त्र्यंबकेश्वर में सार्वजनिक परिवहन का उपयोग और इलेक्ट्रिक वाहनों का समावेश।
 - **Effective solid waste management and sanitation facilities**.
कुशल ठोस अपशिष्ट प्रबंधन और स्वच्छता सुविधाओं की व्यवस्था।
 - **Sewage treatment projects** for the purification of the **Godavari river**.
गोदावरी नदी की शुद्धि के लिए सीवेज उपचार परियोजनाओं की शुरुआत।
 - **Enhancement of temple infrastructure using technology** to accommodate the influx of devotees.
भक्तों की भीड़ को संभालने के लिए तकनीक का उपयोग कर मंदिर की संरचना का विकास।
- **Mr. Fadnavis** highlighted the **entrepreneurial value** of the **Kumbh Mela**.
श्री फडणवीस ने कुंभ मेले के उद्यमिता मूल्य को रेखांकित किया।
- He acknowledged the **delay in development plans** and said, "**We are behind schedule. We started preparations last year, and planning has been ongoing since then.**"
उन्होंने विकास योजनाओं में देरी को स्वीकार करते हुए कहा, "हम तय समय से पीछे हैं। हमने पिछले साल तैयारियाँ शुरू की थीं और तब से योजना जारी है।"

Concept of Jyotirlinga



ज्योतिर्लिंग की अवधारणा

- The concept of **Jyotirlinga** holds profound significance in Hinduism, representing the **supreme, formless reality of Lord Shiva**, manifesting as a **pillar of light**.
ज्योतिर्लिंग की अवधारणा हिंदू धर्म में अत्यंत महत्वपूर्ण है, जो भगवान शिव की सर्वोच्च, निराकार वास्तविकता को दर्शाती है, जो प्रकाश स्तंभ के रूप में प्रकट होती है।
- According to the **Shiva Purana**, an event unfolded where **Brahma (the creator) and Vishnu (the preserver)** disputed their supremacy.
शिव पुराण के अनुसार, एक घटना में ब्रह्मा (सृजनकर्ता) और विष्णु (पालनकर्ता) के बीच श्रेष्ठता को लेकर विवाद हुआ।
- To test them, Shiva appeared as an **infinite pillar of light—the Jyotirlinga**.
उनकी परीक्षा लेने के लिए, शिव एक अनंत प्रकाश स्तंभ—ज्योतिर्लिंग के रूप में प्रकट हुए।
- **Vishnu admitted his inability** to find the extremities of the light, while **Brahma falsely claimed success**.
विष्णु ने अपनी असमर्थता स्वीकार की, जबकि ब्रह्मा ने झूठा दावा किया कि उन्होंने सीमा पा ली।
- In response, **Shiva cursed Brahma**, decreeing that **he would have no temples** dedicated to his worship, whereas **Vishnu would be eternally revered**.
इसके परिणामस्वरूप, शिव ने ब्रह्मा को श्राप दिया, कि उनके किसी भी मंदिर में पूजा नहीं होगी, जबकि विष्णु की हमेशा पूजा की जाएगी।
- This narrative underscores the **concept of the Jyotirlinga** as a symbol of **Shiva's infinite nature**.
यह कथा ज्योतिर्लिंग की अवधारणा को शिव की अनंतता के प्रतीक के रूप में उजागर करती है।

The Twelve Jyotirlingas

बारह ज्योतिर्लिंग

- Traditionally, there are believed to be **64 Jyotirlingas**, but **12 hold special significance** each representing a **unique manifestation of Shiva**



परंपरागत रूप से, 64 ज्योतिर्लिंग माने जाते हैं, लेकिन 12 को विशेष महत्व प्राप्त है, जो शिव के विभिन्न स्वरूपों को दर्शाते हैं।

List of 12 Jyotirlingas:



12 ज्योतिर्लिंगों की सूची:

- **Somnath – Gujarat**
सोमनाथ – गुजरात
- **Mallikarjuna – Srisailem, Andhra Pradesh**
मल्लिकार्जुन – श्रीशैलम, आंध्र प्रदेश



- Mahakaleshwar – Ujjain, Madhya Pradesh
महाकालेश्वर – उज्जैन, मध्य प्रदेश
- Omkareshwar – Madhya Pradesh
ओंकारेश्वर – मध्य प्रदेश
- Kedarnath – Himalayas
केदारनाथ – हिमालय
- Bhimashankar – Maharashtra
भीमाशंकर – महाराष्ट्र
- Kashi Vishwanath – Varanasi, Uttar Pradesh
काशी विश्वनाथ – वाराणसी, उत्तर प्रदेश
- Trimbakeshwar – Maharashtra
त्र्यंबकेश्वर – महाराष्ट्र
- Vaidyanath – Deoghar, Jharkhand
वैद्यनाथ – देवघर, झारखंड
- Aundha Nagnath – Maharashtra
औंढा नागनाथ – महाराष्ट्र
- Ramanathaswamy – Rameswaram, Tamil Nadu
रामनाथस्वामी – रामेश्वरम, तमिलनाडु
- Grishneshwar – Aurangabad, Maharashtra
घृष्णेश्वर – औरंगाबाद, महाराष्ट्र

Trimbakeshwar Temple

त्र्यंबकेश्वर मंदिर

- Trimbakeshwar Temple, located in Trimbak, Nashik, Maharashtra, is one of the 12 Jyotirlingas.
त्र्यंबकेश्वर मंदिर, त्र्यंबक, नासिक, महाराष्ट्र में स्थित है और यह 12 ज्योतिर्लिंगों में से एक है।
- This temple is **unique** as the Shiva Lingam here embodies **the three faces of the divine trinity: Brahma, Vishnu, and Shiva**.
यह मंदिर अद्वितीय है क्योंकि यहां का शिवलिंग त्रिदेव – ब्रह्मा, विष्णु और शिव के तीन मुखों को दर्शाता है।
- The **temple's architecture** is notable for its **intricate carvings and sculptures**, reflecting the **rich heritage of ancient Indian temple design**.
इस मंदिर की वास्तुकला अपनी **सूक्ष्म नक्काशी और मूर्तियों** के लिए प्रसिद्ध है, जो प्राचीन भारतीय मंदिर निर्माण की समृद्ध विरासत को दर्शाती है।



- Additionally, the temple is the **source of the Godavari River**, one of the **most sacred rivers in India**.

इसके अलावा, यह मंदिर गोदावरी नदी का उद्गम स्थल भी है, जो भारत की सबसे पवित्र नदियों में से एक है

Spiritual Significance

आध्यात्मिक महत्व

- Visiting the **Jyotirlingas** is considered a **deeply spiritual journey**, believed to **cleanse one's soul and lead to enlightenment**.

ज्योतिर्लिंगों की यात्रा को गहन आध्यात्मिक यात्रा माना जाता है, जिससे आत्मा की शुद्धि होती है और मोक्ष प्राप्ति का मार्ग खुलता है।

- Devotees undertake **pilgrimages to these temples**, seeking **blessings, spiritual growth, and liberation from the cycle of birth and rebirth**.

श्रद्धालु इन मंदिरों की यात्रा करते हैं, जिससे उन्हें आशीर्वाद, आध्यात्मिक उन्नति और जन्म-मृत्यु के चक्र से मुक्ति प्राप्त हो।

- Each temple has **its own unique legends and rituals**, contributing to the **rich tapestry of Hindu spiritual traditions**.

प्रत्येक मंदिर की अपनी विशेष कथाएं और अनुष्ठान होते हैं, जो हिंदू आध्यात्मिक परंपराओं की समृद्धि को दर्शाते हैं।



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GS Paper I: Geography

Indonesia's Lewotobi Laki-laki volcano spewed ash clouds more than 8 km high when it erupted late on March 20. Local authorities raised the alert status to the highest level while an Australian airline cancelled some flights into Bali last week. The eruption, in East Nusa Tenggara province, followed dozens of smaller ones since March 13. REUTERS

PATRIOTIC



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GS Paper I: Society

Petty politics

Delaying the Census aids politicisation of delimitation issue

The impressive gathering in Chennai, on March 22, which brought together leaders from several States – including four Chief Ministers – for the inaugural meeting of the Joint Action Committee (JAC) on Fair Delimitation, sent a clear message: any delimitation exercise based solely on the current population figures is unacceptable. The meeting's primary demand – to extend the freeze on the number of parliamentary constituencies based on the 1971 Census for another 25 years – echoes a similar resolution passed at a recent meeting of parties in Tamil Nadu, which proposed a 30-year extension. This concept of a freeze is not new; it was implemented through the 42nd Amendment (until 2000) and extended again via the 84th Amendment (until 2026). Rightly, the JAC emphasised that States which have successfully implemented family planning should not be penalised with reduced parliamentary representation. This concern, which is particularly prominent in the South, should not be dismissed as a regional issue, despite the strong southern presence at the meeting, which was hosted by Tamil Nadu Chief Minister M.K. Stalin and attended by Kerala Chief Minister Pinarayi Vijayan, Telangana Chief Minister Revanth Reddy, and Karnataka Deputy Chief Minister D.K. Shivakumar. The meeting also saw participation from outside the South, including Punjab Chief Minister Bhagwant Mann and Odisha's former Chief Minister Naveen Patnaik, who, in an online address, reinforced the message against punishing States for effective population control measures. It is after a long time that parties across regions and ideologies are uniting on a substantive issue – representative democracy – rather than forming opportunistic electoral coalitions that lack policy coherence.

The Bharat Rashtra Samithi's working president, K.T. Rama Rao, proposed considering a State's fiscal contribution as a parameter in the delimitation process – an idea that may help address the concerns of the southern States. But it might not make sense to predicate decisions with long-term consequences such as delimitation on factors that change from one year to another. In any case, the Union government must act without delay to begin nationwide consultations involving a wide range of parties. Before initiating the Delimitation Commission, it should facilitate inclusive dialogue, regardless of when the next Census – an essential prerequisite – is conducted. So far, statements from Union Ministers have failed to provide clarity. The Centre must recognise the importance of transparency and consultation on this inexplicable delay. Inexplicable, unless petty political calculations are factored in.

Concerns of Southern States

दक्षिणी राज्यों की चिंताएं

- The JAC emphasized that States that successfully implemented family planning should not be penalised with reduced parliamentary representation.

Petty politics: Delaying the Census aids politicisation of delimitation issue

छोटी राजनीति: जनगणना में देरी से परिसीमन मुद्दे का राजनीतिकरण बढ़ता है

• A large gathering in Chennai on March 22 brought together leaders from multiple States, including four Chief Ministers, for the inaugural meeting of the Joint Action Committee (JAC) on Fair Delimitation.

22 मार्च को चेन्नई में एक बड़ी सभा आयोजित हुई, जिसमें कई राज्यों के नेताओं सहित चार मुख्यमंत्री शामिल हुए। यह निष्पक्ष परिसीमन पर संयुक्त कार्यवाही समिति (JAC) की पहली बैठक थी।

• The meeting sent a clear message: any delimitation based on current population figures is unacceptable.

बैठक ने यह स्पष्ट संदेश दिया कि वर्तमान जनसंख्या आंकड़ों के आधार पर किया गया परिसीमन अस्वीकार्य है।

• The primary demand was to extend the freeze on the number of parliamentary constituencies based on the 1971 Census for another 25 years.

मुख्य मांग थी कि 1971 की जनगणना के आधार पर संसदीय निर्वाचन क्षेत्रों की संख्या पर लगी रोक को अगले 25 वर्षों तक बढ़ाया जाए

• This echoes a recent Tamil Nadu meeting, where parties proposed a 30-year extension.

यह हाल ही में तमिलनाडु में हुई बैठक में पारित प्रस्ताव के समान है, जहां 30 वर्षों के विस्तार की मांग की गई थी।

• A similar freeze was implemented through the 42nd Amendment (until 2000) and extended again via the 84th Amendment (until 2026).

ऐसा ही एक फ्रीज पहले 42वें संशोधन (2000 तक) और फिर 84वें संशोधन (2026 तक) के माध्यम से लागू किया गया था।



JAC ने जोर देकर कहा कि जिन राज्यों ने सफलतापूर्वक जनसंख्या नियंत्रण लागू किया है, उन्हें संसदीय प्रतिनिधित्व में कटौती कर दंडित नहीं किया जाना चाहिए।

- This concern is **particularly prominent in the South**, but should not be dismissed as a regional issue.

यह चिंता विशेष रूप से दक्षिण भारत में प्रमुख है, लेकिन इसे केवल एक क्षेत्रीय मुद्दे के रूप में नजरअंदाज नहीं किया जाना चाहिए।

- The meeting, hosted by **Tamil Nadu Chief Minister M.K. Stalin**, was attended by **Kerala Chief Minister Pinarayi Vijayan**, **Telangana Chief Minister Revanth Reddy**, and **Karnataka Deputy Chief Minister D.K. Shivakumar**.

यह बैठक तमिलनाडु के मुख्यमंत्री एम.के. स्टालिन की मेजबानी में हुई, जिसमें केरल के मुख्यमंत्री पिनाराई विजयन, तेलंगाना के मुख्यमंत्री रेवंत रेड्डी और कर्नाटक के उपमुख्यमंत्री डी.के. शिवकुमार शामिल हुए।

- **Punjab Chief Minister Bhagwant Mann** and **Odisha's former Chief Minister Naveen Patnaik** also participated, showing that the concern is not limited to the South.

पंजाब के मुख्यमंत्री भगवंत मान और ओडिशा के पूर्व मुख्यमंत्री नवीन पटनायक ने भी भाग लिया, जिससे पता चलता है कि यह चिंता केवल दक्षिण भारत तक सीमित नहीं है।

- **Naveen Patnaik** (in an online address) reinforced the demand **not to punish States that have controlled their population growth**.

नवीन पटनायक (ऑनलाइन संबोधन में) ने दोहराया कि वे राज्य, जिन्होंने जनसंख्या नियंत्रण किया है, उन्हें दंडित नहीं किया जाना चाहिए।

Proposed Fiscal Contribution Factor

वित्तीय योगदान को परिसीमन का आधार बनाने का प्रस्ताव

- **Bharat Rashtra Samithi's (BRS) K.T. Rama Rao** suggested considering a **State's fiscal contribution as a parameter in delimitation**.

भारत राष्ट्र समिति (BRS) के के.टी. रामा राव ने परिसीमन में राज्य के वित्तीय योगदान को एक मानदंड के रूप में शामिल करने का सुझाव दिया।

- This idea could **help address the concerns of southern States**, but **long-term decisions like delimitation should not be based on factors that change yearly**.

यह विचार दक्षिणी राज्यों की चिंताओं को दूर करने में मदद कर सकता है, लेकिन परिसीमन जैसे दीर्घकालिक निर्णयों को बदलते कारकों पर आधारित नहीं किया जाना चाहिए।

Need for Nationwide Consultation

राष्ट्रव्यापी परामर्श की आवश्यकता



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- The **Union government** must act **without delay** to start **nationwide consultations** with a **wide range of political parties**.
केंद्र सरकार को बिना देरी किए विभिन्न राजनीतिक दलों के साथ राष्ट्रव्यापी परामर्श शुरू करना चाहिए।
- Before forming the **Delimitation Commission**, the government must ensure **inclusive dialogue**, irrespective of **when the next Census takes place**.
परिसीमन आयोग बनाने से पहले, सरकार को सभी हितधारकों के साथ समावेशी संवाद सुनिश्चित करना चाहिए, चाहे अगली जनगणना कब हो।
- So far, **statements from Union Ministers have not provided clarity** on this delay.
अब तक, केंद्रीय मंत्रियों के बयानों ने इस देरी पर कोई स्पष्टता नहीं दी है।
- The **Centre must ensure transparency** in addressing this **inexplicable delay** in conducting the Census.
केंद्र सरकार को इस अकारण देरी को समाप्त करने के लिए पारदर्शिता सुनिश्चित करनी चाहिए।
- The delay seems **politically motivated**, aimed at **petty political calculations** rather than fair representation.
यह देरी राजनीतिक रूप से प्रेरित प्रतीत होती है, जिसका उद्देश्य निष्पक्ष प्रतिनिधित्व के बजाय संकीर्ण राजनीतिक गणनाएँ करना है।

PATRIOTIC IAS



All in jubilation



Hindu devotees throw offerings of chickens and ducks into the sea during the **Melasti ceremony** on the Arafuru Beach in Indonesia on Sunday. **Melasti** is a festival held several days before "Nyepi", the day of silence, when devotees do not take part in any indulgence. AFP

GS Paper I: A&C

Melasti Ceremony

मेलास्ती समारोह

- **Definition:** *Melasti* is a **Hindu Balinese purification ceremony** held **several days before Nyepi**, the Balinese Day of Silence.

परिभाषा: मेलास्ती एक हिंदू बाली शुद्धिकरण समारोह है, जो न्येपी (बाली के मौन दिवस) से कुछ दिन पहले आयोजित किया जाता है।

- **Purpose:** The ritual aims to **cleans the world of sin and bad karma** through the symbolic act of acquiring **Tirta Amerta**, or "the water of life."



उद्देश्य: यह अनुष्ठान पापों और बुरे कर्मों से दुनिया को शुद्ध करने के लिए किया जाता है, जिसमें तीर्ता अमेरता या "जीवन का जल" प्राप्त करने का प्रतीकात्मक कार्य शामिल है।

Significance

महत्व

- **Spiritual Cleansing:** *Melasti* serves as a purification of the body, mind, and spirit, preparing individuals and communities for the upcoming New Year.
आध्यात्मिक शुद्धिकरण: मेलास्ती शरीर, मन और आत्मा के शुद्धिकरण का एक माध्यम है, जो व्यक्तियों और समुदायों को आने वाले नए वर्ष के लिए तैयार करता है।
- **Connection to Water:** In Hindu belief, water sources like lakes and seas are considered the source of life (Tirta Amerta), and thus, the ceremony is held at these locations to utilize their purifying properties.
जल से संबंध: हिंदू मान्यता में झीलों और समुद्र जैसे जल स्रोतों को जीवन (तीर्ता अमेरता) का स्रोत माना जाता है, इसलिए इस समारोह को इन स्थानों पर शुद्धिकरण के उद्देश्य से आयोजित किया जाता है।

Ceremonial Process

समारोह की प्रक्रिया

- **Preparation of Sacred Objects:** Sacred objects (pratima) representing deities are cleaned and adorned with fresh offerings, silk cloths, and intricate decorations.
पवित्र वस्तुओं की तैयारी: देवताओं का प्रतीक (प्रतिमा) मानी जाने वाली पवित्र वस्तुओं को साफ किया जाता है और उन्हें ताजा भेंट, रेशमी वस्त्र और सुंदर सजावट से अलंकृत किया जाता है।
- **Procession to Bale Agung:** The community carries the pratima in a majestic procession to the Bale Agung, the main temple pavilion, accompanied by chanting, gamelan music, and the presence of the barong, a mythical guardian figure.
बाले अगुंग तक जुलूस: समुदाय प्रतिमा को एक भव्य जुलूस में लेकर बाले अगुंग (मुख्य मंदिर मंडप) तक जाता है, जहां मंत्रोच्चार, गमेलान संगीत और बारोंग (एक पौराणिक रक्षक) की उपस्थिति होती है।



- **Communal Prayers:** At the **Bale Agung**, the community gathers for **joint prayers**, offering devotion through **chanting, incense, and flowers**.
सामूहिक प्रार्थना: बाले अगुंग में समुदाय सामूहिक प्रार्थना के लिए एकत्रित होता है और मंत्रोच्चार, धूप और फूलों के माध्यम से अपनी भक्ति अर्पित करता है।
- **Pilgrimage to Water Source:** The **pratima and sacred objects** are carried to the **ocean, lake, or sacred spring** for purification.
जल स्रोत की तीर्थयात्रा: प्रतिमा और पवित्र वस्तुओं को समुद्र, झील या पवित्र स्रोत तक शुद्धिकरण के लिए ले जाया जाता है।
- **Rituals by the Water:** At the **water's edge**, priests lead offerings of **banten**—elaborate arrangements of **flowers, rice, and incense**—to honor the divine. **Holy water** is sprinkled over the **pratima**, cleansing them of **past-year impurities**.
जल के पास अनुष्ठान: जल स्रोत के किनारे, पुरोहित बंतें (फूल, चावल और धूप से बने विस्तृत भोग) अर्पित करते हैं, जिससे देवताओं का सम्मान किया जाता है। पवित्र जल को प्रतिमा पर छिड़का जाता है, जिससे वे पिछले वर्ष की अशुद्धियों से मुक्त होती हैं।
- **Return and Final Blessings:** After purification, the **pratima** are carried back to the temple, where a **final communal prayer** takes place. **Blessed water** is distributed among worshippers, symbolizing **renewal and readiness for Nyepi**.
वापसी और अंतिम आशीर्वाद: शुद्धिकरण के बाद, प्रतिमा को मंदिर वापस लाया जाता है, जहां अंतिम सामूहिक प्रार्थना होती है। पवित्र जल को श्रद्धालुओं में वितरित किया जाता है, जो नवीनीकरण और न्येपी के लिए तैयार होने का प्रतीक है।

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

1.CJI seeks details of guards at judge's home

सीजेआई ने जज के घर पर तैनात गार्ड्स का विवरण मांगा

2.Turkish court formalises the arrest of Erdogan rival over 'corruption charges'



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तुर्की की अदालत ने एर्दोगान के प्रतिद्वंद्वी की 'भ्रष्टाचार के आरोपों' में गिरफ्तारी को औपचारिक रूप दिया

3. TB champions' join battle against the disease in Meghalaya

'टीबी चैंपियंस' मेघालय में इस बीमारी के खिलाफ लड़ाई में शामिल हुए

4. The complex struggle for 'Kurdistan'

'कुर्दिस्तान' के लिए जटिल संघर्ष

5. Georgia intensifies repression of pro-EU protests with heavy fines

जॉर्जिया ने यूरोपीय संघ समर्थक प्रदर्शनों के खिलाफ दमन तेज किया, भारी जुर्माने लगाए



CJI seeks details of guards at judge's home

Chief Justice of Delhi High Court forwards query to the police; judge asked not to dispose of his phones or delete or modify any conversation, message or data in them during the probe; the Police Commissioner's report to the Chief Justice of Delhi says a guard at the residence of Justice Varma saw 'half-burnt articles' and debris being removed

GS Paper II

Krishnadas Rajagopal
NEW DELHI

With Chief Justice of India Sanjiv Khanna seeking the ascertainment of details of security guards and personal security officers posted at the residence of Justice Yashwant Varma in the past six months, the Chief Justice of the Delhi High Court, Justice D.K. Upadhyaya, has forwarded the query to the police.

The CJ had also called for the call details and the Internet Protocol Detail Record of Justice Varma after the alleged discovery of "sacks" of half-burnt currency notes from a storeroom on the residential premises.

The call details have been handed over to the CJ in a pen drive. Justice Varma was asked not to

dispose of his phones or delete or modify any conversation, message or data from them.

Probe committee

All these details will be placed by the Supreme Court before the probe committee. The three-member probe committee of the Chief Justices of two High Courts and a Karnataka High Court judge will take a deeper dive into the facts of the case.

The Supreme Court's publication of documents and visual material related to the inquiry into the incident is a stride towards transparency even as the records raise further questions which the committee may examine.

For one, the published records show that the Police Commissioner got in touch with Chief Justice



Photos published by the top court show the storeroom, firefighters, and burnt currency notes at the Delhi judge's residence. PTI

Upadhyaya only around 4.50 p.m. on March 15 when the fire had broken out around 11.30 p.m. the previous night. On receiving the information, Chief Justice Upadhyaya immediately swung into action.

The Delhi Police Commissioner's report to Chief Justice Upadhyaya said a security guard at the resi-

dence of Justice Varma saw "half-burnt articles" and debris being removed in the morning after the fire.

A separate communication in Hindi said four or five sacks of half-burnt currency notes were found in the gutted room.

But the published documents, which have redacted portions whose publica-

tion may impinge on confidentiality or fairness, do not inform about the identity of the person(s) who removed the articles from the room on March 15 morning. They do not reveal who had taken the videos and photographs showing the residues of what may be currency notes. They do not mention whether the police had immediately sealed the room, a measure which may have prevented access to it following the fire and the dousing operation.

The location of the remnants of the burnt currency notes and whether it was seized or not have also not been mentioned in the Delhi High Court Chief Justice's published report. The report also does not mention if there is an investigation under way into

what caused the fire or if CCTV footage was recovered.

Justice Varma, in his response, has said he has no knowledge of cash lying in that room. He has strongly rejected "the insinuation, if made, that we removed currency. None of my staff removed any article, currency or cash in any form".

The published records show different stands on whether the storeroom, located adjacent to the Central Reserve Police Force guard room, was "used to be kept locked", as stated in the Police Commissioner's report.

Justice Varma has countered that the storeroom was "utilised generally by all and sundry" to store unused household articles as well as (Central Public Works Department) CPWD material. The room was

disconnected from the main residence. "It was surely not a room in my house," he said.

The Registrar-cum-Secretary attached to the Delhi Chief Justice, who visited the room along with Justice Varma on the night of March 15, in his report said the private secretary of the judge informed him that the room was not kept locked.

In his concluding remarks recommending a deeper probe, Chief Justice Upadhyaya reported that his inquiry, *prima facie*, did not reveal the possibility of entry or access to the room by any person other than those residing in the bungalow, the servants, the gardeners and CPWD personnel. This may lead to a presumption that the room was not accessible to a rank outsider.

CJI seeks details of guards at judge's home

सीजेआई ने जज के घर पर तैनात गार्ड्स का विवरण मांगा

Chief Justice of India Sanjiv Khanna has sought details of security guards and personal security officers posted at the residence of **Justice Yashwant Varma** in the past six months.

भारत के मुख्य न्यायाधीश संजीव खन्ना ने न्यायमूर्ति यशवंत वर्मा के घर पर पिछले छह महीनों में तैनात सुरक्षा गार्डों और निजी सुरक्षा अधिकारियों का विवरण मांगा है।

- Chief Justice of Delhi High Court, D.K. Upadhyaya, has forwarded this query to the police.

दिल्ली हाईकोर्ट के मुख्य न्यायाधीश डी.के. उपाध्याय ने यह पूछताछ पुलिस को भेजी है

Investigation into half-burnt currency notes

आधे जले हुए करेंसी नोटों की जांच

- The CJ has called for call details and Internet Protocol Detail Record of Justice Varma after the alleged discovery of "sacks" of half-burnt currency notes from a storeroom in his residence.



सीजेआई ने कॉल डिटेल्स और इंटरनेट प्रोटोकॉल डिटेल्स रिकॉर्ड मांगा है, क्योंकि न्यायमूर्ति वर्मा के आवास में एक स्टोररूम से "बोरियों में आधे जले हुए करेंसी नोट" मिलने का दावा किया गया है

- The **call details** have been handed over to the **CJI in a pen drive**.
**कॉल डिटेल्स को सीजेआई को एक पेन ड्राइव में सौंप दिया गया है।
- Justice Varma has been asked **not to dispose of his phones or delete or modify any conversations, messages, or data** from them.
न्यायमूर्ति वर्मा को अपने फोन को नष्ट न करने, न ही किसी संवाद, संदेश, या डेटा को हटाने या संशोधित करने के लिए कहा गया है।

Supreme Court Probe Committee

सुप्रीम कोर्ट की जांच समिति

- The **three-member probe committee** consists of the **Chief Justices of two High Courts and a Karnataka High Court judge**.
तीन सदस्यीय जांच समिति में दो हाईकोर्ट के मुख्य न्यायाधीश और एक कर्नाटक हाईकोर्ट के न्यायाधीश शामिल हैं।
- The Supreme Court has published documents and visual material related to the inquiry for transparency.
सुप्रीम कोर्ट ने पारदर्शिता के लिए जांच से संबंधित दस्तावेजों और दृश्य सामग्री को प्रकाशित किया है।

Key Findings from the Delhi Police Commissioner's Report

दिल्ली पुलिस कमिश्नर की रिपोर्ट से प्रमुख निष्कर्ष

- The **Police Commissioner** contacted Chief Justice Upadhyaya only at **4:50 p.m. on March 15**, even though the fire broke out at **11:30 p.m. the previous night**.
पुलिस कमिश्नर ने 15 मार्च को शाम **4:50 बजे मुख्य न्यायाधीश उपाध्याय से संपर्क किया, जबकि आग पिछली रात **11:30 बजे** लगी थी।
- A **security guard** saw "**half-burnt articles**" and debris being removed in the morning.
एक सुरक्षा गार्ड ने सुबह "**आधे जले हुए सामान**" और मलबे को हटाते हुए देखा।
- Another report stated that **four to five sacks of half-burnt currency notes** were found in the **guttred room**.
एक अन्य रिपोर्ट में कहा गया कि जले हुए कमरे में चार से पांच बोरियों में आधे जले हुए करेंसी नोट मिले।

Unanswered Questions in Published Documents

प्रकाशित दस्तावेजों में अनुत्तरित प्रश्न



- Identity of the person(s) who removed the articles from the room on March 15 morning is not mentioned.
15 मार्च की सुबह कमरे से सामान हटाने वाले व्यक्ति की पहचान का कोई उल्लेख नहीं है।
- It is unclear who took the videos and photographs of the burnt notes.
यह स्पष्ट नहीं है कि जले हुए नोटों के वीडियो और फोटो किसने लिए।
- There is no mention of whether the police sealed the room immediately after the fire.
इस बात का कोई उल्लेख नहीं है कि क्या पुलिस ने आग के बाद तुरंत कमरे को सील किया था।
- The report does not state if there is an ongoing investigation into the cause of the fire or if CCTV footage was recovered.
**रिपोर्ट में यह उल्लेख नहीं है कि आग के कारणों की कोई जांच चल रही है या CCTV फुटेज बरामद हुआ है या नहीं।

Justice Varma's Response

न्यायमूर्ति वर्मा की प्रतिक्रिया

- Justice Varma denied any knowledge of cash in the storeroom.
**न्यायमूर्ति वर्मा ने स्टोररूम में किसी भी नकदी की जानकारी से इनकार किया।
- He rejected allegations that he or his staff removed any cash.
उन्होंने यह आरोप खारिज किया कि उन्होंने या उनके स्टाफ ने कोई नकदी हटाई।

Contradictions in Statements

बयानों में विरोधाभास

- The Police Commissioner's report states that the storeroom was "kept locked".
**पुलिस कमिश्नर की रिपोर्ट कहती है कि स्टोररूम को "बंद रखा जाता था"।
- Justice Varma contradicted this, stating that the room was used by everyone for storing unused household and CPWD materials.
न्यायमूर्ति वर्मा ने इसका खंडन किया, यह कहते हुए कि कमरे का उपयोग सभी द्वारा अप्रयुक्त घरेलू सामान और CPWD सामग्री रखने के लिए किया जाता था।
- The Registrar-cum-Secretary of Delhi High Court, who visited the site, reported that the judge's private secretary said the room was not locked.
दिल्ली हाईकोर्ट के रजिस्ट्रार-कम-सचिव ने, जो साइट पर गए थे, रिपोर्ट दी कि न्यायाधीश के निजी सचिव ने कहा कि कमरा बंद नहीं किया गया था।

Preliminary Inquiry Findings

प्रारंभिक जांच निष्कर्ष

- Chief Justice Upadhyaya's report states that only residents, servants, gardeners, and CPWD staff had access to the room.



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मुख्य न्यायाधीश उपाध्याय की रिपोर्ट कहती है कि केवल निवासी, नौकर, माली, और CPWD कर्मचारी ही कमरे में प्रवेश कर सकते थे।

- The report suggests that an outsider could not have accessed the room.
रिपोर्ट से संकेत मिलता है कि कोई बाहरी व्यक्ति कमरे में प्रवेश नहीं कर सकता था।

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Turkish court formalises the arrest of Erdogan rival over 'corruption charges'

GS Paper II

Associated Press
ISTANBUL

A court formally arrested the Mayor of Istanbul, a key rival to President Recep Tayyip Erdogan, on Sunday and ordered him jailed pending the outcome of a trial on corruption charges.

Mayor Ekrem Imamoglu was detained following a raid on his residence earlier this week, sparking the largest wave of street demonstrations in Turkiye in more than a decade.

His imprisonment is widely regarded as a political move to remove a major contender from the next presidential race, currently scheduled for 2028.

The prosecutor's office said the court decided to jail Mr. Imamoglu on suspicion of running a criminal organisation, accepting bribes, extortion, illegally recording personal data and bid-rigging. A request for him to be imprisoned on terror-related charges was rejected although he still faces prosecution.

The Interior Ministry later announced that Mr. Imamoglu had been suspended from duty as a "temporary measure." The municipality had previously appointed an acting mayor from its governing council.

Alongside Mr. Imamoglu, 47 others were also jailed pending trial, including a key aide and two district Mayors from Istanbul.

Interior Minister Ali Yerlikaya said Sunday that 323 people were detained the previous evening over disturbances at protests.

The formal arrest came as more than 1.5 million members of the opposition Republican People's Party, or CHP, began holding a



Turkiye's Republican People's Party (CHP) candidate for Istanbul mayor Ekrem Imamoglu in Istanbul. FILE PHOTO

primary presidential election to endorse Imamoglu, the sole candidate.

The party has also set up symbolic ballot boxes nationwide to allow people who are not party members to express their support for the mayor. Large crowds gathered to cast a "solidarity ballot."

"This is no longer just a problem of the Republican People's Party, but a problem of Turkish democracy," Fusun Erben, 69, said at a polling station in Istanbul's Kadikoy district. "We do not accept our rights being so easily usurped. We will fight until the end."

'We are embarrassed'

"Honestly, we are embarrassed in the name of our legal system," Ankara Mayor Mansur Yavas, a fellow member of Imamoglu's CHP, told presspersons after casting his vote, criticising the lack of confidentiality in the proceedings.

CHP leader Ozgur Ozel said Mr. Imamoglu's imprisonment was reminiscent of "Italian mafia methods." Speaking at Istanbul City Hall, he added: "Imamoglu is on the one hand in prison and on the other hand on the way to the presidency."

The Council of Europe, which focuses on promot-

ing human rights and democracy, slammed the decision and demanded Mr. Imamoglu's immediate release.

The German government called the mayor's imprisonment "a serious setback for democracy in Turkey," adding that "political competition must not be conducted with courts and prisons."

Before his detention, Mr. Imamoglu had already faced multiple criminal cases that could result in prison sentences and a political ban. He was also appealing a 2022 conviction for insulting members of Turkiye's Supreme Electoral Council.

Earlier in the week, a university nullified his diploma, citing alleged irregularities in his transfer from a private university in northern Cyprus some 30 years ago. The decision effectively bars him from running for President.

Mr. Imamoglu was elected mayor of Turkiye's largest city in March 2019, in a major blow to Mr. Erdogan and the President's Justice and Development Party, which had controlled Istanbul for a quarter-century. Mr. Erdogan's party pushed to void the municipal election results in the city of 16 million, alleging irregularities.

Turkish court formalises the arrest of Erdogan rival over 'corruption charges'

तुर्की की अदालत ने एर्दोगान के प्रतिद्वंद्वी की 'भ्रष्टाचार के आरोपों' में गिरफ्तारी को औपचारिक रूप दिया

A court formally arrested the Mayor of Istanbul, a key rival to President Recep Tayyip Erdogan, on Sunday and ordered him jailed pending trial on corruption charges.

एक अदालत ने रविवार को इस्तांबुल के मेयर को गिरफ्तार किया, जो राष्ट्रपति रेसेप तैय्यप एर्दोगान के प्रमुख प्रतिद्वंद्वी हैं, और उन्हें भ्रष्टाचार के आरोपों पर मुकदमे के दौरान जेल भेज दिया।

- Mayor Ekrem Imamoglu was detained following a raid on his residence earlier this week, sparking the largest wave of street demonstrations in Turkiye in more than a decade.

मेयर एकरेम इमामोग्लू को इस सप्ताह उनके निवास पर छापेमारी के बाद गिरफ्तार किया गया, जिससे तुर्की में एक दशक में सबसे बड़े सड़क प्रदर्शन शुरू हो गए।

- His imprisonment is widely regarded as a political move to remove a major contender from the next presidential race, scheduled for 2028.

उनकी कैद को 2028 में होने वाले अगले राष्ट्रपति चुनाव

से एक प्रमुख उम्मीदवार को हटाने के लिए एक राजनीतिक कदम माना जा रहा है।



- The prosecutor's office said the court decided to jail Mr. Imamoglu on suspicion of running a criminal organisation, accepting bribes, extortion, illegally recording personal data, and bid-rigging.
अभियोजक के कार्यालय ने कहा कि अदालत ने श्री इमामोग्लू को आपराधिक संगठन चलाने, घूस लेने, जबरन वसूली, व्यक्तिगत डेटा को अवैध रूप से रिकॉर्ड करने, और बोली में हेरफेर करने के संदेह में जेल भेजने का फैसला किया।
- A request for him to be imprisoned on terror-related charges was rejected, but he still faces prosecution.
उन्हें आतंकवाद से जुड़े आरोपों पर कैद करने के अनुरोध को अस्वीकृत कर दिया गया, लेकिन वह अभी भी मुकदमे का सामना कर रहे हैं।
- The Interior Ministry announced that Mr. Imamoglu had been suspended from duty as a "temporary measure".
गृह मंत्रालय ने घोषणा की कि श्री इमामोग्लू को "अस्थायी उपाय" के रूप में पद से निलंबित कर दिया गया है।
- The municipality appointed an acting mayor from its governing council.
नगरपालिका ने अपने शासकीय परिषद से एक कार्यवाहक मेयर नियुक्त किया।
- Alongside Mr. Imamoglu, 47 others were also jailed pending trial, including a key aide and two district mayors from Istanbul.
श्री इमामोग्लू के साथ 47 अन्य लोगों को भी मुकदमे की प्रतीक्षा में जेल भेजा गया, जिनमें उनका मुख्य सहायक और इस्तांबुल के दो जिला मेयर शामिल हैं।
- Interior Minister Ali Yerlikaya said on Sunday that 323 people were detained the previous evening over protest disturbances.
गृह मंत्री अली येरलिकाया ने रविवार को कहा कि पिछली शाम विरोध प्रदर्शन के दौरान 323 लोगों को गिरफ्तार किया गया।

CHP Holds Primary Amid Controversy

विवादों के बीच सीएचपी ने प्राइमरी चुनाव कराया

- The formal arrest came as more than 1.5 million members of the opposition Republican People's Party (CHP) began holding a primary presidential election to endorse Imamoglu, the sole candidate.
आधिकारिक गिरफ्तारी ऐसे समय में हुई जब विपक्षी रिपब्लिकन पीपुल्स पार्टी (सीएचपी) के 15 लाख से अधिक सदस्य इमामोग्लू को समर्थन देने के लिए राष्ट्रपति चुनाव की प्राथमिक प्रक्रिया शुरू कर चुके थे।
- The party set up symbolic ballot boxes nationwide to allow non-party members to express support for the mayor.
पार्टी ने देशभर में प्रतीकात्मक मतदान बॉक्स लगाए ताकि गैर-पार्टी सदस्य भी मेयर के समर्थन में मतदान कर सकें।



- Large crowds gathered to cast a “solidarity ballot.”
बड़ी संख्या में लोग एक "संयुक्त समर्थन मत" डालने के लिए एकत्र हुए।

Reactions to Imamoglu's Arrest

इमामोग्लू की गिरफ्तारी पर प्रतिक्रियाएँ

- **Ankara Mayor Mansur Yavas**, a CHP member, criticized the lack of confidentiality in the proceedings, stating: “Honestly, we are embarrassed in the name of our legal system.”
अंकारा के मेयर मनसूर यावास, जो सीएचपी के सदस्य हैं, ने कार्रवाई में गोपनीयता की कमी की आलोचना करते हुए कहा: "ईमानदारी से कहें तो, हम अपने कानूनी सिस्टम के नाम पर शर्मिंदा हैं।"
- **CHP leader Ozgur Ozel** compared Imamoglu's imprisonment to “Italian mafia methods.”
सीएचपी नेता ओज़गुर ओज़ेल ने इमामोग्लू की गिरफ्तारी की तुलना “इटालियन माफिया तरीकों” से की।
- The **Council of Europe** demanded **Mr. Imamoglu's immediate release**, criticizing the decision.
यूरोप परिषद ने श्री इमामोग्लू की तुरंत रिहाई की मांग की और इस निर्णय की आलोचना की।
- The **German government** called the mayor's imprisonment a “serious setback for democracy in Turkey” and insisted that **political competition should not be conducted using courts and prisons.**
जर्मन सरकार ने मेयर की गिरफ्तारी को "तुर्की में लोकतंत्र के लिए गंभीर झटका" बताया और कहा कि राजनीतिक प्रतिस्पर्धा को अदालतों और जेलों के माध्यम से नहीं चलाया जाना चाहिए।

Previous Cases Against Imamoglu

इमामोग्लू के खिलाफ पूर्व मामले

- Before his **detention**, **Mr. Imamoglu** faced **multiple criminal cases**, including a **2022 conviction** for **insulting Turkiye's Supreme Electoral Council.**
गिरफ्तारी से पहले, श्री इमामोग्लू कई आपराधिक मामलों का सामना कर रहे थे, जिनमें 2022 में तुर्की के सर्वोच्च चुनाव परिषद का अपमान करने का मामला शामिल था।
- A **university nullified his diploma** this week, citing **alleged irregularities** in his **transfer** from a **private university** in **Northern Cyprus** 30 years ago.
इस सप्ताह एक विश्वविद्यालय ने उनकी डिग्री रद्द कर दी, यह दावा करते हुए कि 30 साल पहले उत्तरी साइप्रस के एक निजी विश्वविद्यालय में स्थानांतरण में अनियमितताएँ थीं।
- The **decision effectively bars** him from **running for President.**
यह निर्णय उन्हें राष्ट्रपति चुनाव लड़ने से प्रभावी रूप से रोकता है।



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- **Mr. Imamoglu** was elected mayor of Istanbul in **March 2019**, dealing a **major blow** to **Erdogan** and his **Justice and Development Party (AKP)**, which had controlled Istanbul for **25 years**.

श्री इमामोग्लू को मार्च 2019 में इस्तांबुल का मेयर चुना गया, जिससे एर्दोगान और उनकी जस्टिस एंड डेवलपमेंट पार्टी (AKP) को बड़ा झटका लगा, जो 25 वर्षों से इस्तांबुल पर शासन कर रही थी।

PATRIOTIC IAS



'TB champions' join battle against the disease in Meghalaya

State govt. has roped them in to spread awareness of the free testing, treatment, and support programmes, says National Health Mission official

GS Paper II:
Government Scheme

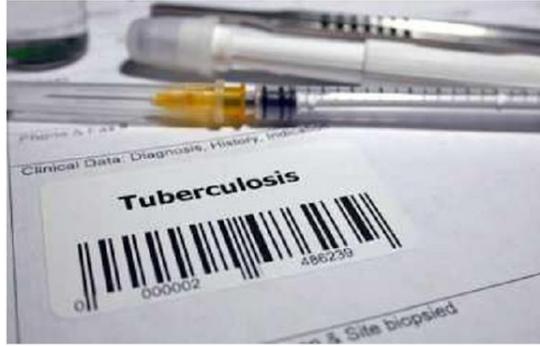
SHILLONG

The Meghalaya government is innovatively pushing for a tuberculosis-free State by reskilling TB survivors and bringing them into TB-control programmes as "TB champions", advocating for early detection and treatment adherence among patients.

TB remains a significant public health challenge worldwide, with India bearing the highest disease burden in the world. In 2023, India had an estimated 26% of the global TB burden.

Meghalaya has been battling challenges, including a hilly terrain, poor road connectivity, the presence of many hamlets in hard-to-reach valleys and mountains, which leads to delay in patients seeking timely health interventions.

"The scheme is aimed at ensuring that no patient is left behind. The TB champions spread awareness about TB, advising people to test if they see symptoms, tell them about the free testing, treatment and support programmes, and encourage them to go beyond on the Union go-



TB is a significant public health challenge worldwide with India bearing the highest TB disease burden in the world. GETTY IMAGES

vernment's 100-day campaign, which began in December last year," Ramkumar S., Secretary and Mission Director, National Health Mission (NHM), Shillong, said.

Speaking to *The Hindu* about her involvement with the State's TB programme, first as a patient and now as a TB champion, Ridalin Shullai, from East Khasi Hill district, said she wanted to become the "voice of the voiceless, who often don't seek treatment because of the fear associated with TB".

"Even with modern testing, treatment, and the support given by the State government, there is a lot of stigma, myths and fears associated with TB. This

isn't a simple disease. It has a profound and long-lasting adverse impact on the financial and emotional well-being of the family, if not treated in a holistic manner," Ms. Shullai said.

"Testing is a must"

"I am here to make a difference," another TB champion Request Star Keubah said. "One day, I coughed blood, which was dismissed as food poisoning. Later, doctors found it was TB. I now motivate youngsters and those in far-flung villages to always test for TB, even if they have only mild symptoms. My aim is to ensure that testing should be 100%. Aggressive testing is a must to free the State of TB," he said.

TB champions' join battle against the disease in Meghalaya

'टीबी चैंपियंस' मेघालय में इस बीमारी के खिलाफ लड़ाई में शामिल हुए

The Meghalaya government is working towards a tuberculosis-free state by reskilling TB survivors and involving them in TB-control programmes as "TB champions".

मेघालय सरकार टीबी से मुक्त राज्य बनाने के लिए टीबी से ठीक हुए मरीजों को टीबी नियंत्रण कार्यक्रमों में "टीबी चैंपियंस" के रूप में शामिल कर रही है।

• **TB champions** advocate for **early detection and treatment adherence** among patients.

टीबी चैंपियंस जल्दी पहचान और उपचार का पालन सुनिश्चित करने के लिए जागरूकता फैलाते हैं।

• **TB remains a major public health challenge worldwide, with India having the highest disease burden. In 2023, India accounted for 26% of the global TB burden.**

टीबी दुनियाभर में एक बड़ी सार्वजनिक स्वास्थ्य चुनौती बनी हुई है, और भारत पर इसका सबसे अधिक बोझ है। 2023 में, भारत में वैश्विक टीबी बोझ का 26% था।



- **Meghalaya faces multiple challenges in TB control due to its hilly terrain, poor road connectivity, and remote villages.**
मेघालय में पहाड़ी इलाका, खराब सड़क संपर्क, और दूरस्थ गांवों के कारण टीबी नियंत्रण में कई चुनौतियाँ हैं।
- **The scheme aims to ensure that no patient is left behind. TB champions spread awareness about:**
योजना का उद्देश्य यह सुनिश्चित करना है कि कोई भी मरीज पीछे न छूटे। टीबी चैंपियंस निम्नलिखित के बारे में जागरूकता फैलाते हैं:
 - **Free testing, treatment, and support programmes.**
निःशुल्क जांच, उपचार और सहायता कार्यक्रम।
 - Encouraging people to test if they show symptoms.
लोगों को लक्षण दिखने पर परीक्षण कराने के लिए प्रेरित करना।
 - Supporting the **Union government's 100-day campaign**, which started in **December last year.**
केंद्र सरकार के 100-दिवसीय अभियान, जो पिछले साल दिसंबर में शुरू हुआ, को समर्थन देना।
- **Ramkumar S., Secretary and Mission Director, National Health Mission (NHM), Shillong,** emphasized the importance of these efforts.
रामकुमार एस., सचिव और मिशन निदेशक, राष्ट्रीय स्वास्थ्य मिशन (NHM), शिलांग, ने इन प्रयासों के महत्व पर जोर दिया।
- **Ridalin Shullai,** a TB champion from **East Khasi Hills district,** said she wanted to become "**the voice of the voiceless**", as many people **fear seeking treatment** due to stigma.
ईस्ट खासी हिल्स जिले की टीबी चैंपियन रिडालिन शुल्लाई ने कहा कि वह "उन लोगों की आवाज बनना चाहती हैं जो डर के कारण इलाज नहीं कराते"।
- Despite **modern testing, treatment, and government support,** there is still **stigma, myths, and fears** around TB.
आधुनिक जांच, उपचार, और सरकारी सहायता के बावजूद टीबी को लेकर अभी भी कलंक, मिथक और भय बने हुए हैं।
- **TB is not a simple disease;** it has a **profound and long-lasting impact** on a patient's financial and emotional well-being.
टीबी कोई साधारण बीमारी नहीं है; इसका मरीज और उसके परिवार के वित्तीय और भावनात्मक स्वास्थ्य पर गहरा और दीर्घकालिक प्रभाव पड़ता है।
- **Request Star Keubah,** another TB champion, shared his experience.
रिक्वेस्ट स्टार केउबाह, एक और टीबी चैंपियन, ने अपना अनुभव साझा किया।
- **He was initially misdiagnosed** when he coughed blood, which was thought to be **food poisoning.** Later, **doctors diagnosed him with TB.**



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

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

CONTACT: 9971932488



**जब उन्होंने खून वाली खांसी की, तो इसे शुरुआत में फूड पाँइजनिंग समझा गया। बाद में, डॉक्टरों ने उन्हें टीबी होने की पुष्टि की।

- **Now, he motivates youngsters and people in remote villages to get tested, even for mild symptoms.**

अब, वह युवाओं और दूरदराज के गांवों में लोगों को हल्के लक्षणों पर भी जांच कराने के लिए प्रेरित करते हैं।

- His goal is to ensure **100% TB testing** and to emphasize that **aggressive testing is necessary to make Meghalaya TB-free.**

उनका लक्ष्य 100% टीबी जांच सुनिश्चित करना और यह बताना है कि मेघालय को टीबी-मुक्त बनाने के लिए व्यापक जांच आवश्यक है।

National Health Mission (NHM)

- The **National Health Mission (NHM)** is a flagship initiative by the Government of India, launched in 2013, aiming to provide accessible, affordable, and quality healthcare services to all citizens, particularly the vulnerable and underserved populations.
- It encompasses two key sub-missions: the National Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM).

Historical Background

- **National Rural Health Mission (NRHM):** Initiated in 2005, the NRHM focused on improving healthcare delivery in rural areas, addressing challenges like inadequate infrastructure, shortage of healthcare professionals, and high maternal and child mortality rates.
- **National Urban Health Mission (NUHM):** Launched in 2013, the NUHM aimed to cater to the healthcare needs of the rapidly growing urban population, especially the urban poor living in slums and other vulnerable groups.

Objectives of NHM

- **Reduce Maternal and Child Mortality:** Implement strategies to lower maternal and infant death rates.
- **Control Communicable and Non-Communicable Diseases:** Strengthen programs to prevent and manage diseases like tuberculosis, malaria, HIV/AIDS, and lifestyle-related illnesses.
- **Enhance Healthcare Infrastructure:** Upgrade existing facilities and establish new ones to ensure comprehensive healthcare services are available.
- **Promote Universal Access to Healthcare:** Ensure that all individuals, irrespective of socio-economic status, have access to essential healthcare services without financial hardship.



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Key Components

- **Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A):** A comprehensive approach addressing health needs at every life stage.
- **Communicable Disease Control Programs:** Initiatives targeting diseases such as malaria, tuberculosis, leprosy, and HIV/AIDS.
- **Non-Communicable Disease Control Programs:** Efforts to prevent and manage diseases like diabetes, hypertension, and cancer.
- **Health System Strengthening:** Focus on improving infrastructure, enhancing human resources, and ensuring the availability of medicines and diagnostics.

Achievements and Progress

- **Maternal and Child Health:** The Maternal Mortality Ratio (MMR) declined from 130 per lakh live births in 2014-16 to 97 in 2018-20, marking a 25% reduction. The Under-5 Mortality Rate (U5MR) decreased from 45 per 1,000 live births in 2014 to 32 in 2020.
- **Disease Control:** The incidence of tuberculosis reduced from 237 per 100,000 population in 2015 to 195 in 2023. Malaria-related deaths decreased by 7.77% in 2022 compared to 2021.
- **Healthcare Workforce:** Between 2021 and 2024, NHM facilitated the engagement of over 5 lakh additional healthcare workers, including medical officers, specialists, and community health officers, enhancing healthcare delivery at the grassroots level.

Recent Developments

- **Extension of NHM:** In January 2025, the Union Cabinet approved the continuation of NHM for another five years, recognizing its significant role in improving health indicators and healthcare delivery across the country.
- **Digital Health Initiatives:** The launch of the U-WIN platform in January 2023 ensures timely administration of vaccines to pregnant women, infants, and children, improving immunization coverage.



The complex struggle for 'Kurdistan'

Even though fragmented by local struggles for power between different tribes, the Zagros range of mountains that form the heartland of a hypothetical Kurdistan, home to Kurds of different identities, is rich with history

GS Paper II: South Asia
WORLD INSIGHT

Vighnesh P. Venkitesh

The story of the Kurdish people is as complex as their existence. A traditionally nomadic society spread across modern day Turkey, Syria, Iran, Iraq, and Armenia, the Kurdish people have been moving around for more than a century in search for Kurdistan – a state which has been imagined by its people ever since the concept of a 'nation state' trickled down from the West to the Ottoman empire.

Kurdish societies were spread across the Ottoman empire, and never managed to unite under a single identity like the Armenians and the Turks. Therefore, they were unable to make a claim for a separate state, as European powers moved in to carve out the region after the First World War, rendering them stateless in modern geopolitics.

Modern day nationalist sentiments, especially in Turkey, tend to take away the authenticity of Kurdish people. Bulent Arinc, former Deputy Prime Minister of Turkey, had reportedly said "Kurdish is a language without a civilisation" while he was speaker of the parliament in 2012. The underlying theme in Turkish resentment towards the Kurds is visible in this statement: Kurds are a people without a history.

The struggle to become a people
Even though fragmented by local struggles for power between different tribes, the Zagros range of mountains that form the heartland of a hypothetical Kurdistan, home to Kurds of different identities – majorly Sunni Muslims, few Shia Kurds, and some Alevi tribes (not to be confused with Alawites of Syria) – is rich with history. The Ottoman rule at its height saw the Kurds as a powerful ally against neighbouring Persia. They went from being nomads to soldiers to tribes and at one point even had their own emirates. But Ottoman efforts to modernise rule and centralise power saw the emirates go back to being divided small tribes.

However, the Treaty of Sevres, signed on August 2, 1920, did bring the Kurdish people closer to statehood than ever before and ever since. The Treaty, largely drafted by Britain, said that a commission composed of Allied appointees would "Draft within six months...a scheme of local autonomy for the predominantly Kurdish areas lying east of the Euphrates". "...No objection shall be raised by the Principal Allied Powers to the voluntary adherence to such an independent Kurdish state of the Kurds inhabiting the part of Kurdistan which was hitherto been included in the Mosul Vilayet [parts of British occupied Mesopotamia]", the treaty had said.

But the Kurds failed to capitalise on the treaty. They were unable to unite under a single identity due to their tribal composition. The tribal chiefs were faced with two options – to form a state that would probably come under British influence and risk detaching from Muslim Ottoman heartlands that they had occupied for a long time or remain stateless. Many tribal chiefs chose the latter.

The Turkish republic, born after the First World War, had its roots in the nationalist idea of a homogenous society and was driven by the fear of external threats affecting national unity. While the Ottoman government in Istanbul had signed the Treaty of Sevres, it had not



A distant dream: An Iraqi Kurdish woman waves a flag of Kurdistan during the Nowruz New Year festival in the town of Akre, on March 20. AFP

ratified it. And it did not survive to implement it. The loss of Mesopotamia and Syria, the entry of the French and the invasion of Istanbul by the Greeks all led to the revolt in Anatolia led by Mustafa Kemal Ataturk which resulted in the Turkish state in 1923.

While the Kurds fought against Armenian and Greek threats alongside Kemal hoping for a Muslim state, the Ataturk (meaning father of the Turks) had clear intentions of establishing a nation-state. Kemal abolished the Sultanate in 1922 and the Caliphate in 1924, the two pillars of the Muslim state, rendering the spiritual base from which the Kurdish Aghas and Sheikhs derived their authority, obsolete. A peace treaty finalised in July 1923, following a conference in Lusanne, rejected the British request to recognise Kurds as a national minority. Kurdish associations, publications, religious fraternities, and schools were all banned.

But this setback to the Kurdish identity only served to strengthen the people's resolve to unite different Kurdish viewpoints. The threat to the Aghas (tribal chiefs) and Sheikhs paved way for a loosely connected organisation called Azadi. But a brief mutiny of its troops led to the leadership being rounded up and brought its end in 1924. Another short-lived Kurdish revolt broke out in February 1925, in the Diyarbakir region led by Naqshbandi Sheikh Said. But this revolt was confined to Zaza-speaking Sunni Kurds. The remaining Sunni groups remained indifferent to the cause with some Alevi Kurds even assisting the authorities.

The revolt failed to seize Diyarbakir

and collapsed due to the fragmented nature of the Kurds. It also had a disastrous aftermath. It led to widespread suppression of the Kurds and gave Kemal the pretext for a one-party state. Thousands were killed and countless Kurdish villages were razed to the ground.

Another revolt in 1928, this time in the Mount Ararat region lasted till 1930, and Turkey had to insist that Iran cede territory on its side of the Ararat to encircle the region. This revolt was also pacified with great brutality, with security forces being given a free hand without consequences. The brutal repression silenced the Kurdish resistance for decades, and the region of Kurdistan remained a military zone closed to foreigners till 1966.

A revival of the movement

The authoritarian one-party system in Turkey was relaxed in 1946, and opposition parties, like the Democrat party, saw opportunity in the Kurds and began trying to woo the Aghas, reviving Kurdish identity.

Conscription and mechanisation of agriculture led to the rise of a Kurdish proletariat. It was among this class that the Kurdish revival gained momentum. The young Kurds picked up by the state for assimilation began to propagate the problems of the 'East', a euphemism used for Kurdistan. The rise of the Kurdish proletariat saw demonstrations and expressions in the press to which the state replied by crackdowns and seizure of publications. But interconnected organisations carried the Kurdish movement forward, mixed with left politics.

This period is marked by several polarities. The political left against right, nationalist Kurds against Turks, religious Sunnis against Shias, Sunnis against Alavis and Sunnis against secularists. The growing polarity led to Kurds, despairing even the Turkish left, forming their own left-wing parties, among them the Partiya Karkari Kurdistan or the Kurdistan Workers Party (PKK) under Abdullah Ocalan, which would define the Kurdish struggle for decades.

The emergence of the PKK

The PKK adopted a Marxist-Leninist doctrine and induced it with a guerrilla campaign. Their main targets were the fascist right, Turkish left, state agents, and, above all, Kurdish landlords who worked in tandem with the state to exploit the Kurdish masses. While the Kurdish masses were initially shocked by the PKK's violence, the increasingly degrading treatment they endured at the hands of the state, including military sweeps, arbitrary arrests, and widespread torture made them receptive to the PKK.

The PKK managed to grow beyond the borders of Turkey with its allies, like the Democratic Union Party (PYD) in Syria, the Free Life of Kurdistan Party (PJAK) in Iran, and the Kurdistan Democratic Solution Party (PKDK) in Iraq. The Kurdistan Communities Union (KCK) serves as an umbrella organisation for all the groups and the People's Protection Units (YPG), formed in 2012 during the Syrian civil war, serves as the armed wing for the cause.

International dynamics

While Turkey, the U.S. and the European Union designate the PKK as a terrorist organisation, it has an ally in Russia.

"Neither PKK nor the PYD are considered terrorist organisations by either Russia or the United Nations Security Council", then-Russian Ambassador to Turkey, Andrey Karlov, had said in 2015. The PKK had received training and material support through Soviet proxies and even after the fall of the Soviet Union, the PKK had held a congress in Moscow in 1996.

While Kurdish identity was forever in conflict with the Turkish state, things were different in neighbouring nations. Iraq's new Constitution that came into effect in 2005, following the U.S. invasion and fall of Saddam Hussein, recognised the semi-autonomous region of Iraqi Kurdistan under a federal structure. Occupying northern Iraq, including the oil-rich Kirkuk, Iraqi Kurdistan prospered and held a referendum of independence in 2017 with overwhelming Kurdish support. However, the referendum triggered a military response from the Iraqi government which retook regions, including Kirkuk, in a significant blow to Kurdistan aspirations.

In Syria, the PYD and YPG utilised the Syrian civil war to carve out a de facto autonomous region for the Kurds, Rojava, run by the Democratic Autonomous Administration of North and East Syria. The U.S., in the fight against the ISIS, lent assistance to the YPG to form the Syrian Democratic Forces (SDF), which Turkey sees as a threat due to its links with the PKK. Following the fall of the Assad regime in Syria, the interim government led by former militant Abu Muhammad al-Jolani managed to convince the SDF to lay down arms and integrate into the state, leaving questions over the future of Rojava. And recently, on March 1, the PKK declared a ceasefire with Turkey. Since this declaration, by Mr. Ocalan to the PKK to lay down its arms and dissolve the organisation, the future of Kurdistan is uncertain.

THE GIST

▼ Kurdish societies were spread across the Ottoman empire, and never managed to unite under a single identity like the Armenians and the Turks.

▼ While the Kurds fought against Armenian and Greek threats alongside Kemal hoping for a Muslim state, the Ataturk (meaning father of the Turks) had clear intentions of establishing a nation-state. Kemal abolished the Sultanate in 1922 and the Caliphate in 1924, the two pillars of the Muslim state, rendering the spiritual base from which the Kurdish Aghas and Sheikhs derived their authority.

▼ Conscription and mechanisation of agriculture led to the rise of a Kurdish proletariat. It was among this class that the Kurdish revival gained momentum.

The complex struggle for 'Kurdistan'



‘कुर्दिस्तान’ के लिए जटिल संघर्ष

The Kurdish people and their identity

कुर्द लोग और उनकी पहचान

- The **Kurdish people** are a **nomadic society** spread across **modern-day Turkiye, Syria, Iran, Iraq, and Armenia**.
कुर्द लोग एक घुमंतू समाज हैं, जो वर्तमान तुर्की, सीरिया, ईरान, इराक और आर्मेनिया में फैले हुए हैं।
- For over a **century**, they have sought to establish **Kurdistan, a hypothetical state imagined since the Ottoman Empire** era.
एक सदी से अधिक समय से, वे कुर्दिस्तान नामक काल्पनिक राज्य की स्थापना की तलाश में हैं, जिसे ओटोमन साम्राज्य के युग से सोचा गया था।
- **Unlike Armenians and Turks, the Kurds never united under a single identity**, making it difficult for them to claim a **separate state** after **World War I**.
अर्मेनियाई और तुर्कों के विपरीत, कुर्द कभी एक पहचान के तहत एकजुट नहीं हुए, जिससे प्रथम विश्व युद्ध के बाद एक अलग राज्य की मांग करना मुश्किल हो गया।

Kurdish identity suppression

कुर्द पहचान का दमन

- In 2012, **Bulent Arinc**, former **Deputy Prime Minister of Turkiye**, stated: "**Kurdish is a language without a civilisation**."
2012 में, तुर्की के पूर्व उप प्रधानमंत्री बुलेंट अरिंच ने कहा: "कुर्द भाषा का कोई सभ्यता से संबंध नहीं है।"
- This reflects **Turkish resentment** towards Kurds, portraying them as **a people without history**.
यह तुर्की में कुर्दों के प्रति विरोध को दर्शाता है, जिसमें उन्हें इतिहासविहीन लोग बताया जाता है।

The fragmented Kurdish struggle

कुर्दों का बंटा हुआ संघर्ष

- The **Zagros mountain range, forming the heartland of a hypothetical Kurdistan**, is home to **Kurds of different identities**:
ज़ाग्रोस पर्वत श्रृंखला, जो काल्पनिक कुर्दिस्तान का केंद्र मानी जाती है, में विभिन्न पहचान वाले कुर्द रहते हैं:
 - **Sunni Muslims (majority)**
सुन्नी मुस्लिम (अधिकांश)



- Shia Kurds (few in number)
शिया कुर्द (थोड़ी संख्या में)
- Alevi tribes (not to be confused with Syrian Alawites)
अलेवी जनजातियां (सीरियाई अलवियों से अलग)
- During the Ottoman rule, Kurds were powerful allies against Persia and had their own emirates.
ओटोमन शासन के दौरान, कुर्द फारस के खिलाफ शक्तिशाली सहयोगी थे और उनके अपने अमीरात थे।
- However, Ottoman modernization led to fragmentation of Kurdish rule, reducing emirates to small divided tribes.
हालांकि, ओटोमन आधुनिकीकरण ने कुर्द शासन को विभाजित कर दिया, जिससे अमीरात छोटे जनजातीय समूहों में बदल गए।

The Treaty of Sevres and a lost opportunity

सेव्रेस संधि और खोया हुआ अवसर

- The Treaty of Sevres (August 2, 1920) was the closest the Kurds came to statehood.
सेव्रेस संधि (2 अगस्त, 1920) कुर्दों को राज्य बनने के सबसे करीब ले आई।
- Drafted mainly by Britain, the treaty proposed a "scheme of local autonomy for Kurdish areas east of the Euphrates".
ब्रिटेन द्वारा तैयार की गई इस संधि ने "यूफ्रेट्स नदी के पूर्वी कुर्द क्षेत्रों के लिए स्थानीय स्वायत्तता की योजना" का प्रस्ताव दिया।
- The treaty allowed Kurds in Mosul Vilayet (British-occupied Mesopotamia) to join an independent Kurdish state.
संधि के तहत, ब्रिटिश-नियंत्रित मेसोपोटामिया (मोसुल विलायत) के कुर्दों को स्वतंत्र कुर्द राज्य में शामिल होने की अनुमति दी गई।
- However, the Kurds failed to capitalize on the treaty due to:
लेकिन कुर्द इस संधि का लाभ उठाने में विफल रहे, क्योंकि:
 - Tribal divisions prevented unity.
जनजातीय विभाजन ने एकता को रोक दिया।
 - Fear of British influence led some tribal chiefs to reject statehood.
ब्रिटिश प्रभाव के डर से कई जनजातीय प्रमुखों ने राज्य का गठन अस्वीकार कर दिया।

Turkish nationalism and Kurdish suppression

तुर्की राष्ट्रवाद और कुर्दों का दमन

- Mustafa Kemal Ataturk led the Turkish national movement after World War I and opposed Kurdish autonomy.
मुस्तफा कमाल अतातुर्क ने प्रथम विश्व युद्ध के बाद तुर्की राष्ट्रवादी आंदोलन का नेतृत्व किया और कुर्द स्वायत्तता का विरोध किया।



- The **Treaty of Lausanne (July 1923)** rejected British efforts to recognize Kurds as a national minority.
लुसाने संधि (जुलाई 1923) ने ब्रिटिश प्रयासों को अस्वीकार कर दिया, जो कुर्दों को राष्ट्रीय अल्पसंख्यक मान्यता देना चाहते थे।
- **Kurdish associations, publications, and religious institutions were banned in the newly formed Turkish Republic.**
नवगठित तुर्की गणराज्य में कुर्द संगठनों, प्रकाशनों और धार्मिक संस्थानों पर प्रतिबंध लगा दिया गया।

Failed Kurdish revolts and brutal repression

असफल कुर्द विद्रोह और क्रूर दमन

- **Azadi (Kurdish resistance group)** formed but collapsed in 1924 after a failed military mutiny.
आजादी (कुर्द प्रतिरोध समूह) का गठन हुआ लेकिन 1924 में सैन्य विद्रोह की विफलता के बाद समाप्त हो गया।
- The **Sheikh Said Revolt (February 1925)** failed due to lack of Kurdish unity, with some Alevi Kurds siding with Turkish authorities.
शेख सईद विद्रोह (फरवरी 1925) कुर्द एकता की कमी के कारण विफल रहा, और कुछ अलेवी कुर्दों ने तुर्की प्रशासन का समर्थन किया।
- After the revolt, **thousands of Kurds were killed, and entire villages were destroyed.**
विद्रोह के बाद, हजारों कुर्द मारे गए, और कई गांवों को नष्ट कर दिया गया।
- **Ararat Revolt (1928-1930)** lasted longer but was crushed with Iranian cooperation.
अरारात विद्रोह (1928-1930) अधिक समय तक चला लेकिन ईरान के सहयोग से दबा दिया गया।
- **Kurdistan remained a closed military zone until 1966.**
कुर्दिस्तान 1966 तक एक बंद सैन्य क्षेत्र बना रहा।

Conclusion

निष्कर्ष

- The **Kurdish struggle for statehood** remains fragmented by tribal divisions and external geopolitics.
कुर्दों का राज्य के लिए संघर्ष जनजातीय विभाजनों और बाहरी भू-राजनीति से प्रभावित रहा।
- **Turkish nationalism and regional power struggles** have prevented Kurdish unity.
तुर्की राष्ट्रवाद और क्षेत्रीय सत्ता संघर्षों ने कुर्दों की एकता को रोक दिया।



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

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

CONTACT: 9971932488



- The Kurdish dream of Kurdistan remains one of the most complex struggles in modern geopolitics.

कुर्दिस्तान का कुर्द सपना आधुनिक भू-राजनीति के सबसे जटिल संघर्षों में से एक बना हुआ है।

A revival of the movement

आंदोलन का पुनर्जागरण

- In 1946, Turkiye's one-party system was relaxed, allowing opposition parties like the Democrat Party to gain Kurdish support.
1946 में तुर्की की एक-दलीय व्यवस्था में ढील दी गई, जिससे डेमोक्रेट पार्टी जैसी विपक्षी पार्टियों को कुर्दों का समर्थन पाने का अवसर मिला।
- Conscription and mechanisation of agriculture led to the rise of a Kurdish proletariat, which became the driving force of the Kurdish revival.
सैनिक भर्ती और कृषि के मशीनीकरण से कुर्द श्रमिक वर्ग का उदय हुआ, जिसने कुर्द पुनर्जागरण को गति दी।
- Young Kurds, forcibly assimilated by the state, began advocating for the problems of the 'East' (Kurdistan).
राज्य द्वारा जबरन आत्मसात किए गए युवा कुर्दों ने 'पूर्व' (कुर्दिस्तान) की समस्याओं को उठाना शुरू किया।
- Kurdish identity revival led to demonstrations and press movements, which the state suppressed through crackdowns and publication seizures.
कुर्द पहचान के पुनर्जागरण से प्रदर्शन और प्रेस आंदोलनों का उदय हुआ, जिन्हें राज्य ने दमन और प्रकाशनों की जब्ती से कुचल दिया।

The emergence of the PKK

पीकेके का उदय

- The **Kurdistan Workers' Party (PKK)** was founded under **Abdullah Öcalan**, advocating **Marxist-Leninist ideology and guerrilla warfare**.
कुर्दिस्तान वर्कर्स पार्टी (PKK) की स्थापना अब्दुल्ला ओचलान के नेतृत्व में हुई, जिसने मार्क्सवादी-लेनिनवादी विचारधारा और गुरिल्ला युद्ध को अपनाया।
- The PKK targeted:
पीकेके ने निशाना बनाया:
 - The fascist right
फासीवादी दक्षिणपंथ



- Turkish left-wing groups
तुर्की के वामपंथी समूह
- State agents
राज्य के एजेंट
- Kurdish landlords allied with the state
राज्य समर्थित कुर्द जमींदार
- Initially, Kurdish masses were shocked by PKK's violence, but state repression (military sweeps, arrests, and torture) increased PKK support.
शुरुआत में कुर्द जनता पीकेके की हिंसा से हैरान थी, लेकिन राज्य के सैन्य अभियानों, गिरफ्तारियों और यातनाओं ने पीकेके के प्रति समर्थन बढ़ाया।
- PKK expanded beyond Turkiye, forming alliances with:
पीकेके ने तुर्की के बाहर विस्तार किया और इन संगठनों से गठबंधन किया:
 - Democratic Union Party (PYD) in Syria
डेमोक्रेटिक यूनियन पार्टी (PYD), सीरिया
 - Free Life of Kurdistan Party (PJAK) in Iran
फ्री लाइफ ऑफ कुर्दिस्तान पार्टी (PJAK), ईरान
 - Kurdistan Democratic Solution Party (PCDK) in Iraq
कुर्दिस्तान डेमोक्रेटिक सॉल्यूशन पार्टी (PCDK), इराक
- The Kurdistan Communities Union (KCK) became an umbrella organisation, and People's Protection Units (YPG) became the armed wing in Syria (2012).
कुर्दिस्तान कम्युनिटीज यूनियन (KCK) एक छत्र संगठन बना, और पीपुल्स प्रोटेक्शन यूनिट्स (YPG) सीरिया में सशस्त्र विंग बनी (2012)।

International dynamics

अंतरराष्ट्रीय परिदृश्य

- Turkiye, the U.S., and the European Union designate the PKK as a terrorist organisation.
तुर्की, अमेरिका और यूरोपीय संघ पीकेके को एक आतंकवादी संगठन मानते हैं।
- Russia does not consider the PKK or PYD as terrorist organisations.
रूस पीकेके या PYD को आतंकवादी संगठन नहीं मानता।
- The **PKK received training and material support from Soviet allies** and later held a **congress in Moscow in 1996**.
पीकेके को सोवियत सहयोगियों से प्रशिक्षण और सामग्री सहायता मिली, और बाद में 1996 में मास्को में एक सम्मेलन आयोजित किया।



Kurdish autonomy in Iraq and Syria

इराक और सीरिया में कुर्द स्वायत्तता

- **Iraq's 2005 Constitution** (after the U.S. invasion) recognized **semi-autonomous Iraqi Kurdistan**, including **oil-rich Kirkuk**.
इराक के 2005 के संविधान (अमेरिकी आक्रमण के बाद) ने तेल संपन्न किर्कुक सहित अर्ध-स्वायत्त इराकी कुर्दिस्तान को मान्यता दी।
- In **2017**, Iraqi Kurdistan held a referendum for independence, receiving **overwhelming Kurdish support**.
2017 में, इराकी कुर्दिस्तान ने स्वतंत्रता के लिए जनमत संग्रह किया, जिसे कुर्दों का भारी समर्थन मिला।
- **Iraqi forces responded militarily**, retaking **Kirkuk**, weakening Kurdistan's independence movement.
इराकी सेना ने सैन्य कार्रवाई की, किर्कुक पर फिर से कब्जा किया, जिससे कुर्द स्वतंत्रता आंदोलन कमजोर हो गया।
- In **Syria**, the **PYD and YPG** carved out **Rojava**, an **autonomous Kurdish region**, during the **Syrian Civil War**.
**सीरिया में, PYD और YPG ने "रोजावा" नामक स्वायत्त कुर्द क्षेत्र स्थापित किया, जो सीरियाई गृहयुद्ध के दौरान उभरा।
- The **U.S. supported the YPG** to form the **Syrian Democratic Forces (SDF)** against **ISIS**, but **Turkiye** sees the SDF as linked to the **PKK**.
अमेरिका ने ISIS के खिलाफ YPG को "सीरियन डेमोक्रेटिक फोर्स (SDF)" बनाने में मदद की, लेकिन तुर्की इसे पीकेके से जुड़ा मानता है।
- Following the fall of the **Assad regime**, former militant **Abu Muhammad al-Jolani** convinced the SDF to **disarm**, raising doubts over **Rojava's future**.
असद शासन के पतन के बाद, पूर्व विद्रोही अबू मुहम्मद अल-जोलेनी ने SDF को हथियार डालने के लिए मना लिया, जिससे रोजावा के भविष्य पर सवाल खड़े हुए।

Ceasefire and an uncertain future

युद्धविराम और अनिश्चित भविष्य

- On **March 1, 2024**, the **PKK** declared a **ceasefire with Turkiye**, following **Öcalan's call to disarm and dissolve the organisation**.
1 मार्च 2024 को, पीकेके ने तुर्की के साथ युद्धविराम की घोषणा की, ओचलान के संगठन भंग करने और हथियार डालने के आह्वान के बाद।
- The future of **Kurdistan** remains **uncertain**, as **Kurdish autonomy** faces challenges from **regional powers and internal divisions**.
कुर्दिस्तान का भविष्य अनिश्चित बना हुआ है, क्योंकि कुर्द स्वायत्तता को क्षेत्रीय शक्तियों और आंतरिक विभाजनों से चुनौतियां मिल रही हैं।



Ottoman Empire

ऑटोमन साम्राज्य

The **Ottoman Empire** was one of the most powerful and longest-lasting empires in history. It was founded in **1299** by **Osman I** in **Anatolia** (modern-day **Turkey**) and lasted for over **600 years**, finally dissolving in **1922** after **World War I**.

ऑटोमन साम्राज्य इतिहास के सबसे शक्तिशाली और दीर्घकालिक साम्राज्यों में से एक था। इसकी स्थापना **1299** में **उस्मान प्रथम** द्वारा **अनातोलिया** (आधुनिक **तुर्की**) में की गई थी और यह **600 से अधिक वर्षों** तक चला, अंततः **प्रथम विश्व युद्ध (1922)** के बाद भंग हो गया।

At its peak, the empire controlled vast territories spanning **Europe, Asia, and Africa**, including **modern-day Turkey, Greece, the Balkans, the Middle East, North Africa, and parts of Eastern Europe**.

अपने चरम पर, इस साम्राज्य ने **यूरोप, एशिया और अफ्रीका** के विशाल क्षेत्रों पर नियंत्रण रखा, जिसमें **आधुनिक तुर्की, ग्रीस, बाल्कन क्षेत्र, मध्य पूर्व, उत्तर अफ्रीका और पूर्वी यूरोप** के कुछ हिस्से शामिल थे।

Historical Background

ऐतिहासिक पृष्ठभूमि

Foundation (1299–1453)

स्थापना (1299–1453)

- Founded by **Osman I**, a leader of a small Turkish principality in **Anatolia**.
उस्मान प्रथम द्वारा स्थापित, जो **अनातोलिया** में एक छोटे तुर्की रियासत के नेता थे।
- Expanded gradually into the **weakened Byzantine Empire** and surrounding territories.
धीरे-धीरे कमजोर पड़ चुके **बीजान्टिन साम्राज्य** और आसपास के क्षेत्रों में विस्तार किया।
- Established the practice of **ghazi warfare**, combining **military expansion** with **Islamic faith**.
गाज़ी युद्ध प्रणाली को अपनाया, जिसमें **सैन्य विस्तार** और **इस्लामी आस्था** को जोड़ा गया।

Rise to Power and Expansion (1453–1683)

शक्ति में वृद्धि और विस्तार (1453–1683)

- **1453: Sultan Mehmed II (Mehmed the Conqueror)** captured **Constantinople**, ending the **Byzantine Empire**, and making it the new capital, **Istanbul**.
1453: सुल्तान महमूद द्वितीय (महमूद विजेता) ने **कुस्तंतुनिया (कॉन्स्टेंटिनोपल)** पर कब्ज़ा कर **बीजान्टिन साम्राज्य** समाप्त कर दिया और इसे **इस्तांबुल** नाम से नई राजधानी बनाया।



- **1520–1566: Suleiman the Magnificent** expanded the empire to its greatest extent, conquering **Hungary, Iraq, and parts of North Africa.**
1520–1566: सुलेमान महान ने साम्राज्य को सबसे अधिक विस्तार दिया, **हंगरी, इराक और उत्तर अफ्रीका के कुछ हिस्सों** को जीत लिया।
- The empire became a dominant **military and economic power**, controlling key **trade routes between Europe and Asia.**
यह साम्राज्य प्रमुख **सैन्य और आर्थिक शक्ति** बन गया, जो **यूरोप और एशिया के बीच महत्वपूर्ण व्यापार मार्गों** को नियंत्रित करता था।

Decline and Reforms (1683–1826)

पतन और सुधार (1683–1826)

- Suffered major military defeats, including the **Siege of Vienna (1683)**, marking the beginning of its decline.
वियना की घेराबंदी (1683) जैसी प्रमुख सैन्य हारों का सामना किया, जिससे साम्राज्य के पतन की शुरुआत हुई।
- Introduced **Tanzimat Reforms (1839–1876)** to modernize the **military, administration, and economy.**
तनज़ीमत सुधार (1839–1876) लागू किए, जिनका उद्देश्य **सैन्य, प्रशासन और अर्थव्यवस्था** को आधुनिक बनाना था।
- Faced **internal corruption, nationalist uprisings, and pressure from European powers.**
आंतरिक भ्रष्टाचार, राष्ट्रवादी विद्रोहों और यूरोपीय शक्तियों के दबाव का सामना किया।

Fall of the Empire (1908–1922)

साम्राज्य का पतन (1908–1922)

- **World War I** weakened the empire; it sided with **Germany and the Central Powers.**
प्रथम विश्व युद्ध में साम्राज्य कमजोर हो गया; यह **जर्मनी और केंद्रीय शक्तियों** के पक्ष में था।
- **1919–1922: Turkish War of Independence**, led by **Mustafa Kemal Atatürk**, resulted in the abolition of the **Ottoman Sultanate (1922)** and the establishment of the **Republic of Turkey (1923).**
1919–1922: तुर्की स्वतंत्रता संग्राम, जिसका नेतृत्व **मुस्तफा कमाल अतातुर्क** ने किया, जिससे **ऑटोमन सल्तनत (1922)** समाप्त हो गई और **तुर्की गणराज्य (1923)** की स्थापना हुई।



Key Features of the Ottoman Empire

ऑटोमन साम्राज्य की प्रमुख विशेषताएँ

1. Political System

1. राजनीतिक प्रणाली

Treaty of Sèvres (1920)

सेव्रे की संधि (1920)

- The *Treaty of Sèvres* was a **peace treaty signed on 10 August 1920** between the **Allied Powers and the Ottoman Empire** after World War I.
सेव्रे की संधि 10 अगस्त 1920 को मित्र राष्ट्रों (Allied Powers) और उस्मानिया साम्राज्य (Ottoman Empire) के बीच प्रथम विश्व युद्ध के बाद की गई एक शांति संधि थी।
- **Purpose:** It aimed to dismantle the Ottoman Empire and distribute its territories among the Allied nations.
उद्देश्य: इस संधि का उद्देश्य उस्मानिया साम्राज्य को विभाजित करना और उसकी भूमि को मित्र राष्ट्रों में बांटना था।

Key Provisions

मुख्य प्रावधान

- **Territorial Losses for the Ottoman Empire:**
 - **Eastern Anatolia** was to be given to **Armenia** (creating an independent Armenian state).
 - **Western Anatolia and Smyrna** were placed under **Greek administration**.
 - **Kurdistan** was proposed as an **autonomous region**.
 - **Arab lands** (Iraq, Syria, Lebanon, Palestine, and Jordan) were given to **Britain and France** under the *League of Nations mandates*.
 - **Dardanelles Strait** was **internationalized** to allow free passage.
- उस्मानिया साम्राज्य की क्षेत्रीय हानि:



- पूर्वी अनातोलिया (Eastern Anatolia) को आर्मेनिया को दिया जाना था (स्वतंत्र आर्मेनियाई राज्य बनाने के लिए)।
- पश्चिमी अनातोलिया और स्मिर्ना (Smyrna) को यूनान के प्रशासन में रखा गया।
- कुर्दिस्तान को एक स्वायत्त क्षेत्र के रूप में प्रस्तावित किया गया।
- अरब क्षेत्र (इराक, सीरिया, लेबनान, फिलिस्तीन, जॉर्डन) ब्रिटेन और फ्रांस को लीग ऑफ नेशंस के अधीन सौंपे गए।
- डार्डनेल्स जलडमरूमध्य को अंतरराष्ट्रीय क्षेत्र घोषित कर दिया गया।
- **Military Restrictions:**
 - The Ottoman army was limited to **50,000 troops**.
 - The **Ottoman Navy** was reduced to a small force.
 - **No air force** was allowed.
 - **सैन्य प्रतिबंध:**
 - *उस्मानिया सेना को 50,000 सैनिकों तक सीमित कर दिया गया।*
 - *उस्मानिया नौसेना को बहुत छोटी सेना तक घटा दिया गया।*
 - *वायु सेना रखने की अनुमति नहीं थी।*

Rejection and Replacement

अस्वीकृति और प्रतिस्थापन

- The Treaty of Sèvres was **never fully implemented** as it was rejected by Turkish nationalists, led by **Mustafa Kemal Atatürk**.
 - Instead, Turkey fought the **Turkish War of Independence (1919-1922)** and nullified the treaty.
- It was **replaced by the Treaty of Lausanne (1923)**, which recognized modern Turkey's borders.
- **संधि को अस्वीकार और प्रतिस्थापन:**
 - *तुर्की राष्ट्रवादियों के नेता मुस्तफा कमाल अतातुर्क ने इस संधि को स्वीकार करने से इनकार कर दिया।*
 - इसके बजाय, तुर्की ने **तुर्की स्वतंत्रता संग्राम (1919-1922)** लड़ा और इस संधि को रद्द कर दिया।
 - इसे 1923 में **लॉज़ेन की संधि (Treaty of Lausanne)** द्वारा प्रतिस्थापित किया गया, जिसने *आधुनिक तुर्की की सीमाओं को मान्यता दी।*



Georgia intensifies repression of pro-EU protests with heavy fines

Protests continue against the Georgian Dream government over disputed elections and its ties to Moscow; anger grew after PM Kobakhidze's decision to delay EU membership; accusations of torture have surfaced, while authorities impose fines, use facial recognition to track protesters

GS Paper II
Agence France-Presse
TBILISI

Nadim Khmaladze has been joining thousands of fellow Georgians on the streets every evening since November, when Tbilisi's increasingly repressive government shelved EU membership talks.

The 60-year-old rights activist said he was "ready to face police violence" when he first joined the anti-government rallies in Tbilisi, but he never imagined that standing on the street for a few hours could cost him more than 22 months' salary.

Three months into the protests, he received a summons: a total of 45,000 lari (around \$16,000) in fines for briefly blocking traffic along Tbilisi's central avenue.

"The government is using Russian-style methods to abolish freedom of assembly in Georgia," he said.

Mr. Khmaladze is one of thousands of Georgian protesters facing crippling fines for taking to the streets.

Prominent writer Mikhail Tsikheleshvili, who returned to Georgia last year from emigration in Portugal to fight against the ruling Georgian Dream party's "pro-Russian policies,"



Tightening grip: Georgian anti-government protesters rally outside parliament in Tbilisi. AFP

has been attending protests daily.

He says he and his girlfriend were each fined the equivalent of \$1,850, in what he called a "financial terror aimed at extinguishing popular anger."

"I took the case to court," he said, adding however that he had "little hope in Georgia's justice system, which is fully controlled by the ruling party."

Unprecedented protests Braving bitter frost, protesters continue to rally daily in Tbilisi and cities across the Black Sea nation, in what has become an unprecedented protest movement against Georgian Dream's perceived demo-

cratic backsliding and growing rapprochement with Moscow.

The mass protests first erupted following disputed parliamentary elections in October, which the Opposition rejected as rigged in favour of Georgian Dream.

The movement intensified after Prime Minister Irakli Kobakhidze's November 28 announcement that his Cabinet would not seek to open EU membership talks with Brussels until 2028 – a move that shocked many.

Georgia is an official candidate for membership in the 27-nation bloc, a bid supported by more than 80% of the population, according to opinion polls,

and enshrined in the country's constitution.

During the protests' initial phase, security forces used tear gas and water cannons to disperse demonstrators and made hundreds of arrests.

Georgia's top human rights official, ombudsman Levan Tsoveliani, and Amnesty International have accused police of "torturing" detainees – a charge the government denies.

Authorities have since resorted to harsh financial penalties and increased surveillance, deploying facial recognition technology to identify protesters and issue hefty fines.

"After the bare violence proved ineffective, the go-

vernment turned to intimidation – televised police raids on activists' homes and anonymous threats over the phone," Salome Khvadagiani, the director of Liberty Institute rights group, said.

'Slowly strangling' "When that too failed to suppress the protest, the government moved to slowly strangling them – financially," she added.

In December, fines for blocking roads were increased tenfold, to 5,000 laris (\$1,850), leaving thousands facing "absolutely disproportionate financial sanctions" or, alternatively, 15 days in prison.

In January alone, the total amount of fines surpassed \$6.5 million in the country of four million people, where the average monthly salary is some \$740, according to the For Georgia opposition party.

The Interior Ministry said it only issues fines "when the number of demonstrators doesn't justify blocking the road" and a rally can be held without disrupting traffic.

Rights groups said the government has drastically increased the number of high-resolution surveillance cameras in the streets of Tbilisi.

The widespread use of "facial recognition and re-

mote biometric recognition technologies facilitates discriminatory targeted surveillance," said GYLA rights watchdog. "These practices undermine fundamental rights."

In 2021, Amnesty International, along with several other international rights groups, called for "an outright ban on uses of facial recognition and remote biometric recognition technologies that enable mass surveillance and discriminatory targeted surveillance."

Ms. Khvadagiani of the Liberty Institute said the "campaign of mass and disproportional financial sanction has caused protests turnout to dwindle significantly over the last month."

But demonstrators are now "adapting to the situation" she said, filing court complaints that have overwhelmed the judicial system, "significantly delaying the enforcement of financial sanctions or even making them unenforceable."

"The government can't scare us," said Mr. Khmaladze, who fought for nearly two years on Ukraine's frontlines against invading Russian troops.

"We are taking to the streets for Georgia's democracy and will never back down," he said.

Georgia intensifies repression of pro-EU protests with heavy fines

जॉर्जिया ने यूरोपीय संघ समर्थक प्रदर्शनों के खिलाफ दमन तेज किया, भारी जुर्माने लगाए

Protests continue against the Georgian Dream government over disputed elections and its pro-Russian policies.



विवादित चुनावों और रूस समर्थक नीतियों को लेकर जॉर्जियन ड्रीम सरकार के खिलाफ प्रदर्शन जारी हैं।

- **Anger escalated** after Prime Minister Irakli Kobakhidze delayed EU membership talks.
प्रधानमंत्री इरकली कोबाकिहिदज़े द्वारा यूरोपीय संघ की सदस्यता वार्ता टालने के बाद गुस्सा भड़क उठा।
- **Accusations of torture have surfaced**, while authorities are imposing heavy fines and using facial recognition to track protesters.
यातना देने के आरोप सामने आए हैं, जबकि प्रशासन भारी जुर्माने लगा रहा है और प्रदर्शनकारियों की पहचान के लिए चेहरे की पहचान तकनीक का उपयोग कर रहा है।

Crackdown on protesters

प्रदर्शनकारियों पर दमनकारी कार्रवाई

- **Nadim Khmaladze**, a 60-year-old activist, has been protesting daily since November, when the government shelved EU membership talks.
60 वर्षीय कार्यकर्ता नादिम खमलादज़े नवंबर से प्रतिदिन प्रदर्शन कर रहे हैं, जब सरकार ने यूरोपीय संघ की सदस्यता वार्ता रोक दी थी।
- He was fined 45,000 lari (around \$16,000) for briefly blocking traffic in Tbilisi, which equals 22 months' salary.
उन्हें 45,000 लारी (लगभग \$16,000) का जुर्माना लगाया गया, क्योंकि उन्होंने थोड़े समय के लिए त्बिलिसी में ट्रैफिक रोका था, जो 22 महीने की तनख्वाह के बराबर है।
- He accused the government of using "Russian-style methods" to suppress freedom of assembly.
उन्होंने सरकार पर "रूसी शैली के तरीकों" का उपयोग कर विरोध प्रदर्शनों को दबाने का आरोप लगाया।

Widespread financial penalties

विस्तृत वित्तीय दंड

- **Prominent writer Mikheil Tsikhelashvili** returned from Portugal to protest against the Georgian Dream party's policies.
प्रसिद्ध लेखक मिखेल त्सिखेलाशविली जॉर्जियन ड्रीम पार्टी की नीतियों के खिलाफ प्रदर्शन करने के लिए पुर्तगाल से लौटे।
- He and his girlfriend were fined \$1,850 each, calling it "financial terror" to suppress public anger.
उन्हें और उनकी गर्लफ्रेंड को \$1,850 का जुर्माना लगाया गया, जिसे उन्होंने "जनता के गुस्से को दबाने के लिए वित्तीय आतंक" कहा।



- He took the case to court but expressed little hope in Georgia's judicial system, which he claimed is controlled by the ruling party.
उन्होंने मामला अदालत में ले जाने की बात कही, लेकिन जॉर्जिया की न्यायपालिका पर भरोसा नहीं जताया, क्योंकि यह सत्ताधारी पार्टी के नियंत्रण में है।

Unprecedented protests

अभूतपूर्व विरोध प्रदर्शन

- Despite extreme cold, protesters continue to rally daily in Tbilisi and other cities across Georgia.
भीषण ठंड के बावजूद, प्रदर्शनकारी त्बिलिसी और अन्य शहरों में प्रतिदिन रैली कर रहे हैं।
- The movement opposes Georgian Dream's democratic backsliding and closer ties with Moscow.
यह आंदोलन जॉर्जियन ड्रीम की लोकतांत्रिक गिरावट और मॉस्को के साथ बढ़ते संबंधों का विरोध कर रहा है।
- Protests erupted in October following disputed parliamentary elections, which the opposition claimed were rigged.
अक्टूबर में विवादित संसदीय चुनावों के बाद प्रदर्शन भड़क उठे, जिसे विपक्ष ने धांधली करार दिया।
- The movement intensified after PM Irakli Kobakhidze announced on November 28 that EU membership talks would be delayed until 2028.
आंदोलन तब तेज हो गया जब प्रधानमंत्री इरकली कोबाकिहिदज़े ने 28 नवंबर को घोषणा की कि यूरोपीय संघ की सदस्यता वार्ता 2028 तक स्थगित कर दी जाएगी।
- Over 80% of Georgians support EU membership, and it is enshrined in the Georgian constitution.
80% से अधिक जॉर्जियाई लोग यूरोपीय संघ की सदस्यता का समर्थन करते हैं, और यह जॉर्जिया के संविधान में निहित है।

Government crackdown and allegations of torture

सरकारी दमन और यातना के आरोप

- In the early phase, security forces used tear gas and water cannons to disperse protesters, leading to hundreds of arrests.
शुरुआती चरण में, सुरक्षा बलों ने प्रदर्शनकारियों को तितर-बितर करने के लिए आंसू गैस और पानी की बौछारों का इस्तेमाल किया, जिससे सैकड़ों गिरफ्तारियां हुईं।
- Human rights ombudsman Levan Loseliani and Amnesty International accused police of torturing detainees, which the government denies.



मानवाधिकार लोकपाल लेवन इओसेलियानी और एमनेस्टी इंटरनेशनल ने पुलिस पर हिरासत में यातना देने का आरोप लगाया, जिसे सरकार ने खारिज किया।

- The government has shifted to financial penalties and increased surveillance, using facial recognition technology to track protesters.

सरकार ने वित्तीय दंडों और बढ़ी हुई निगरानी की ओर रुख किया, और प्रदर्शनकारियों को पहचानने के लिए चेहरे की पहचान तकनीक का उपयोग कर रही है।

Harsh financial penalties and mass surveillance

कठोर वित्तीय दंड और बड़े पैमाने पर निगरानी

- Fines for blocking roads increased tenfold in December, from 500 lari (\$185) to 5,000 lari (\$1,850).
दिसंबर में सड़क अवरुद्ध करने के लिए जुर्माना दस गुना बढ़ा, 500 लारी (\$185) से 5,000 लारी (\$1,850) तक।
- In January alone, total fines exceeded \$6.5 million, in a country where the average salary is just \$740 per month.
सिर्फ जनवरी में कुल जुर्माना \$6.5 मिलियन से अधिक हो गया, जबकि देश में औसत मासिक वेतन केवल \$740 है।
- The Interior Ministry claims fines are issued only when protests unjustifiably block roads, but rights groups call them disproportionate.
गृह मंत्रालय का दावा है कि जुर्माना केवल तभी लगाया जाता है जब विरोध प्रदर्शन अनुचित रूप से सड़क अवरुद्ध करते हैं, लेकिन मानवाधिकार समूह इसे असंगत मानते हैं।
- The number of high-resolution surveillance cameras in Tbilisi has drastically increased.
त्बिलिसी में उच्च-रिज़ॉल्यूशन निगरानी कैमरों की संख्या तेजी से बढ़ गई है।
- Facial recognition and biometric tracking enable mass and targeted surveillance, violating fundamental rights.
चेहरे की पहचान और बायोमेट्रिक ट्रैकिंग बड़े पैमाने पर और लक्षित निगरानी की अनुमति देते हैं, जो मौलिक अधिकारों का उल्लंघन करते हैं।
- In 2021, Amnesty International and other groups called for a ban on facial recognition technologies that facilitate discriminatory surveillance.
2021 में, एमनेस्टी इंटरनेशनल और अन्य संगठनों ने चेहरे की पहचान तकनीक पर प्रतिबंध लगाने की मांग की, क्योंकि यह भेदभावपूर्ण निगरानी को बढ़ावा देती है।

Protesters adapt to government repression

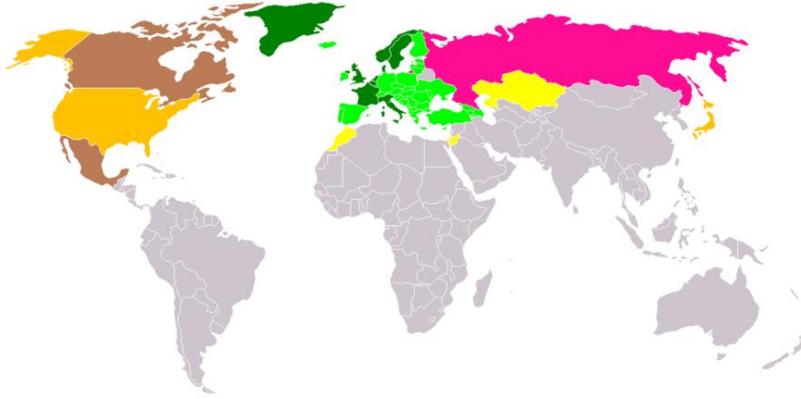
प्रदर्शनकारियों ने सरकारी दमन के खिलाफ रणनीति बदली



- **Salome Khvadagiani of the Liberty Institute** said massive financial penalties reduced protest turnout in recent months.
लिबर्टी इंस्टीट्यूट की सालोमे खवादागियानी के अनुसार, भारी वित्तीय दंड के कारण हाल के महीनों में प्रदर्शनकारियों की संख्या घटी।
- However, protesters are adapting by filing mass court complaints, overwhelming the judicial system and delaying enforcement of fines.
हालांकि, प्रदर्शनकारी बड़े पैमाने पर अदालत में शिकायतें दायर कर रहे हैं, जिससे न्यायपालिका पर दबाव बढ़ रहा है और जुर्माने की वसूली में देरी हो रही है।
- **Nadim Khmaladze**, who fought for two years on Ukraine's frontlines against Russia, vowed to continue the fight for Georgia's democracy.
नादिम खमलादजे, जिन्होंने यूक्रेन के मोर्चे पर रूस के खिलाफ दो साल तक लड़ाई लड़ी, ने जॉर्जिया के लोकतंत्र के लिए संघर्ष जारी रखने की कसम खाई।
- "The government can't scare us. We will never back down," he said.
"सरकार हमें डरा नहीं सकती। हम कभी पीछे नहीं हटेंगे," उन्होंने कहा।

Council of Europe

यूरोप परिषद



- The *Council of Europe (CoE)* is an international organization founded in 1949 to promote democracy, human rights, and the rule of law in Europe.
यूरोप परिषद (CoE) एक अंतरराष्ट्रीय संगठन है, जिसकी स्थापना 1949 में लोकतंत्र, मानवाधिकारों और कानून के शासन को बढ़ावा देने के लिए की गई थी।
- **Headquarters:** Located in **Strasbourg, France**.
मुख्यालय: स्ट्रासबर्ग, फ्रांस में स्थित है।



- **Members:** It has **46 member states**, including all European Union (EU) countries, but it is **separate from the EU**.
सदस्य: इसके 46 सदस्य देश हैं, जिनमें सभी यूरोपीय संघ (EU) के देश शामिल हैं, लेकिन यह EU से अलग है।
- **Key Objectives:**
 - **Protecting human rights** through the **European Court of Human Rights (ECHR)**.
 - **Promoting democracy** and **good governance**.
 - **Strengthening legal cooperation** among member states.
 - **मानवाधिकारों की रक्षा** यूरोपीय मानवाधिकार न्यायालय (ECHR) के माध्यम से।
 - **लोकतंत्र और सुशासन को बढ़ावा देना।**
 - **सदस्य देशों के बीच कानूनी सहयोग को मजबूत करना।**
- **European Convention on Human Rights (ECHR):**
 - Signed in **1950**, it is a landmark treaty for human rights protection in Europe.
 - All member states must comply with its provisions.
 - **यूरोपीय मानवाधिकार संधि (ECHR):**
 - **1950** में हस्ताक्षरित, यह यूरोप में **मानवाधिकारों की सुरक्षा** के लिए एक ऐतिहासिक संधि है।
 - सभी सदस्य देशों को इसके प्रावधानों का पालन करना अनिवार्य है।
- **Notable Institutions:**
 - **European Court of Human Rights (ECHR)** – Ensures compliance with human rights laws.
 - **Parliamentary Assembly of the Council of Europe (PACE)** – Composed of representatives from national parliaments.
 - **Commissioner for Human Rights** – Monitors human rights situations.
 - **प्रमुख संस्थान:**
 - **यूरोपीय मानवाधिकार न्यायालय (ECHR)** – मानवाधिकार कानूनों के अनुपालन को सुनिश्चित करता है।
 - **यूरोप परिषद की संसदीय सभा (PACE)** – राष्ट्रीय संसदों के प्रतिनिधियों से बनी होती है।
 - **मानवाधिकार आयुक्त** – मानवाधिकार स्थितियों की निगरानी करता है।
- **Difference from the European Union (EU):**
 - The *Council of Europe* focuses on **human rights, democracy, and legal cooperation**.
 - The *European Union* is a **political and economic union** with a common market and shared policies.
 - **यूरोपीय संघ (EU) से अंतर:**
 - **यूरोप परिषद मानवाधिकार, लोकतंत्र और कानूनी सहयोग पर केंद्रित है।**



- यूरोपीय संघ राजनीतिक और आर्थिक संघ है, जिसमें संयुक्त बाज़ार और साझा नीतियां होती हैं।

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

- 1. Bandipur night traffic: affidavit favouring ban turns contentious as Cong. in Kerala pushes for its lifting**
बांदीपुर रात्रि यातायात: प्रतिबंध के समर्थन में हलफनामा विवादास्पद बना, केरल में कांग्रेस इसे हटाने के लिए दबाव डाल रही है
- 2. India imposes anti-dumping duty on Chinese goods for up to 5 years**
भारत ने चीनी उत्पादों पर अधिकतम 5 वर्षों के लिए एंटी-डंपिंग शुल्क लगाया
- 3. Human creativity will retain potential despite AI disruption, says Vempati**
एआई व्यवधान के बावजूद मानव रचनात्मकता अपनी क्षमता बनाए रखेगी, वेंपति ने कहा
- 4. Why do people get tattoos? Study of twins says it's nurture, not nature**
लोग टैटू क्यों बनवाते हैं? जुड़वां बच्चों के अध्ययन से पता चला कि यह स्वभाव नहीं, बल्कि परवरिश का असर है
- 5. Lapis lazuli: earth's best blues**
लैपिस लैजुली: पृथ्वी का सर्वश्रेष्ठ नीला पत्थर
- 6. The need for universal and equitable health coverage**
सार्वभौमिक और समान स्वास्थ्य कवरेज की आवश्यकता



7. 'Social stigma is a reality even today'

‘सामाजिक कलंक आज भी एक सच्चाई है’

8. When genes wield a sickle

जब जीन बना देते हैं दरांती का आकार

Bandipur night traffic: affidavit favouring ban turns contentious as Cong. in Kerala pushes for its lifting

**GS Paper III:
Environment**

BENGALURU

With the Karnataka government being believed to be under pressure from Congress leaders in Kerala to lift the night ban on vehicular traffic through the Bandipur Tiger Reserve, a draft copy of an affidavit prepared by a senior Forest Department official has become contentious and the Karnataka government has asked for it to be reworked.

The Conservator of Forest in Project Elephant sent the draft affidavit – that did not favour lifting the night



Precautionary measure: Night-time traffic ban through the Bandipur Tiger reserve has been in place since 2009. M.A. SRIRAM

traffic ban, backed by the data on the ground – to the Registrar of the Supreme Court, which has now

been recalled. The official had given the affidavit without seeking consent of the Karnataka government

or getting legal advice, department sources said.

Following this, Forests Minister Eshwar Khandre called an emergency meeting on Sunday and warned officials against acting on their own. During the meeting, he is also learnt to have sought opinion of senior officers on the night traffic ban.

The affidavit has been asked to be changed, sources said. They added that AICC Secretary (Organisation) K.C. Venugopal in particular is pushing for the night traffic ban to be removed.

The State government,

it is learnt, is under pressure, especially after Congress leader Priyanka Gandhi's victory from Kerala's Wayanad Lok Sabha constituency.

A petition is also being heard in the Supreme Court seeking the removal of the ban that has been in place for over a decade now.

“The continuation or removal of the night traffic ban is a policy matter and decisions are to be taken at the government level. Individual officers cannot take such a decision, and the officer has been reprimanded,” sources said.

Bandipur night traffic: affidavit favouring ban turns contentious as Cong. in Kerala pushes for its lifting

बांदीपुर रात्रि यातायात: प्रतिबंध के समर्थन में हलफनामा विवादास्पद बना, केरल में कांग्रेस इसे हटाने के लिए दबाव डाल रही है

With the Karnataka government being believed to be under pressure from Congress leaders in Kerala to lift the **night ban on vehicular traffic** through the **Bandipur Tiger Reserve**, a draft affidavit prepared by a senior Forest Department official has become contentious and the Karnataka government has asked for it to be reworked.

कर्नाटक सरकार पर केरल के कांग्रेस नेताओं का बांदीपुर टाइगर रिजर्व में रात्रि यातायात प्रतिबंध हटाने के लिए दबाव माना जा रहा है। इस बीच, वन विभाग के एक वरिष्ठ



अधिकारी द्वारा तैयार किया गया ड्राफ्ट हलफनामा विवादास्पद हो गया है, और कर्नाटक सरकार ने इसे पुनः संशोधित करने को कहा है।

- The Conservator of Forest in **Project Elephant** sent the **draft affidavit** — that **did not favour lifting the night traffic ban**, backed by the **data on the ground** — to the Registrar of the Supreme Court, which has now been recalled.
प्रोजेक्ट एलीफेंट के वन संरक्षक ने ड्राफ्ट हलफनामा सुप्रीम कोर्ट के रजिस्ट्रार को भेजा था, जिसमें रात्रि यातायात प्रतिबंध हटाने का समर्थन नहीं किया गया था और जमीनी आंकड़ों के साथ इसे समर्थित किया गया था। अब इसे वापस मंगवा लिया गया है।
- The official had given the **affidavit without seeking consent** of the **Karnataka government** or getting **legal advice**, department sources said.
विभागीय सूत्रों के अनुसार, अधिकारी ने यह हलफनामा कर्नाटक सरकार की अनुमति लिए बिना और कोई कानूनी सलाह लिए बिना प्रस्तुत किया था।

Government Response and Emergency Meeting

सरकार की प्रतिक्रिया और आपात बैठक

- Following this, **Forests Minister Eshwar Khandre** called an **emergency meeting on Sunday** and **warned officials** against **acting on their own**.
इसके बाद, वन मंत्री ईश्वर खांडरे ने रविवार को आपात बैठक बुलाई और अधिकारियों को अपने स्तर पर निर्णय न लेने की चेतावनी दी।
- During the **meeting**, he is also learnt to have **sought opinion of senior officers** on the **night traffic ban**.
बैठक के दौरान, उन्होंने रात्रि यातायात प्रतिबंध पर वरिष्ठ अधिकारियों की राय भी मांगी।
- The **affidavit has been asked to be changed**, sources said. They added that **AICC Secretary (Organisation) K.C. Venugopal** in particular is **pushing for the night traffic ban to be removed**.
सूत्रों के अनुसार, हलफनामे में बदलाव करने के निर्देश दिए गए हैं। उन्होंने यह भी बताया कि एआईसीसी सचिव (संगठन) के.सी. वेणुगोपाल विशेष रूप से रात्रि यातायात प्रतिबंध हटाने के लिए जोर दे रहे हैं।

Political Pressure and Supreme Court Petition

राजनीतिक दबाव और सुप्रीम कोर्ट में याचिका

- The **State government**, it is learnt, is under **pressure**, especially after **Congress leader Priyanka Gandhi's victory** from **Kerala's Wayanad Lok Sabha constituency**.
राज्य सरकार पर दबाव बढ़ गया है, खासकर केरल के वायनाड लोकसभा क्षेत्र से कांग्रेस नेता प्रियंका गांधी की जीत के बाद।
- A **petition** is also being **heard in the Supreme Court**, seeking the **removal of the ban** that has been in place for over a decade now.



सुप्रीम कोर्ट में एक याचिका भी सुनवाई के अधीन है, जिसमें दस वर्षों से लागू प्रतिबंध को हटाने की मांग की गई है।

- “The continuation or removal of the night traffic ban is a policy matter and decisions are to be taken at the government level. Individual officers cannot take such a decision, and the officer has been reprimanded,” sources said.

"रात्रि यातायात प्रतिबंध का जारी रहना या हटना एक नीतिगत मामला है और निर्णय सरकार के स्तर पर लिया जाना चाहिए। कोई भी अधिकारी व्यक्तिगत रूप से ऐसा निर्णय नहीं ले सकता, और संबंधित अधिकारी को फटकार लगाई गई है," सूत्रों ने कहा।

India imposes anti-dumping duty on Chinese goods for up to 5 years

GS Paper III: External Sector

NEW DELHI

India has imposed anti-dumping duty on five Chinese goods to protect domestic players from cheap imports from the neighbouring country.

These duties were imposed as these products – Soft Ferrite Cores, a certain thickness of vacuum insulated flask, aluminium foil, Trichloro Isocyanuric Acid, and Poly Vinyl Chloride Paste Resin – were exported to India from China at below normal prices.

In separate notifications, the Central Board of Indirect Taxes and Cus-



The duties were imposed as products were exported from China at below normal prices.

toms, Department of Revenue, said that the duty imposed “shall be levied for a period of five years” on imports of Soft Ferrite Cores, vacuum insulated flasks,

and Trichloro Isocyanuric Acid. The anti-dumping duty of up to \$873 per tonne was imposed provisionally on aluminium foil for six months.

The government has imposed a duty in the range of \$276 per tonne to \$986 per tonne on imports of the acid (a water treatment chemical) from China and Japan.

On imports of Soft Ferrite Cores (used in electric vehicles, chargers, and telecom devices), up to 35% duty was imposed on CIF (cost, insurance freight) value.

Similarly, on a vacuum-insulated flask, \$1,732 per

tonne anti-dumping duty was levied. The levy, which ranges from \$89 per tonne to \$707 per tonne, on Poly Vinyl Chloride Paste Resin was slapped on the imports from China, Korea RP, Malaysia, Norway, Taiwan and Thailand for five years.

These duties are imposed after recommendations for the same were made by the Directorate General of Trade Remedies (DGTR).

Anti-dumping probes are conducted by countries to determine whether domestic industries have been hurt due to a surge in cheap imports.

India imposes anti-dumping duty on Chinese goods for up to 5 years

भारत ने चीनी उत्पादों पर अधिकतम 5 वर्षों के लिए एंटी-डंपिंग शुल्क लगाया

India has imposed anti-dumping duty on five Chinese goods to protect domestic players from cheap imports.



भारत ने पांच चीनी उत्पादों पर एंटी-डंपिंग शुल्क लगाया है ताकि घरेलू उद्योगों को सस्ते आयात से बचाया जा सके।

- These duties were imposed as these products— **Soft Ferrite Cores, vacuum insulated flasks (of a certain thickness), aluminium foil, Trichloro Isocyanuric Acid, and Poly Vinyl Chloride Paste Resin**— were exported from China at below normal prices.
ये शुल्क इसलिए लगाए गए क्योंकि ये उत्पाद— सॉफ्ट फेराइट कोर, एक विशेष मोटाई के वैक्यूम इंसुलेटेड फ्लास्क, एल्यूमीनियम फॉयल, ट्राइक्लोरो आइसोस्यान्यूरिक एसिड, और पॉली विनाइल क्लोराइड पेस्ट रेजिन— चीन से सामान्य कीमत से कम पर निर्यात किए गए थे।
- In separate notifications, the **Central Board of Indirect Taxes and Customs (CBIC)** stated that the duty shall be levied for 5 years on **Soft Ferrite Cores, vacuum insulated flasks, and Trichloro Isocyanuric Acid**.
अलग-अलग अधिसूचनाओं में, केंद्रीय अप्रत्यक्ष कर और सीमा शुल्क बोर्ड (CBIC) ने कहा कि सॉफ्ट फेराइट कोर, वैक्यूम इंसुलेटेड फ्लास्क, और ट्राइक्लोरो आइसोस्यान्यूरिक एसिड पर 5 वर्षों के लिए शुल्क लगाया जाएगा।
- **Provisional anti-dumping duty of up to \$873 per tonne** was imposed on **aluminium foil** for six months.
एल्यूमीनियम फॉयल पर छह महीने के लिए अस्थायी एंटी-डंपिंग शुल्क \$873 प्रति टन तक लगाया गया।
- The government imposed a duty ranging from **\$276 per tonne to \$986 per tonne** on **Trichloro Isocyanuric Acid (a water treatment chemical)** imported from **China and Japan**.
सरकार ने चीन और जापान से आयात किए गए ट्राइक्लोरो आइसोस्यान्यूरिक एसिड (जल शोधन रसायन) पर \$276 प्रति टन से \$986 प्रति टन तक का शुल्क लगाया।
- **Up to 35% duty** was imposed on **Soft Ferrite Cores, which are used in electric vehicles, chargers, and telecom devices**, based on the **CIF (cost, insurance, and freight) value**.
सॉफ्ट फेराइट कोर, जो इलेक्ट्रिक वाहनों, चार्जर और टेलीकॉम उपकरणों में उपयोग होते हैं, पर CIF (लागत, बीमा और माल भाड़ा) मूल्य के आधार पर 35% तक का शुल्क लगाया गया।
- On **vacuum insulated flasks**, **\$1,732 per tonne** anti-dumping duty was levied.
वैक्यूम इंसुलेटेड फ्लास्क पर \$1,732 प्रति टन का एंटी-डंपिंग शुल्क लगाया गया।
- **Poly Vinyl Chloride Paste Resin** imports from **China, Korea RP, Malaysia, Norway, Taiwan, and Thailand** were taxed **between \$89 per tonne and \$707 per tonne** for five years.
चीन, कोरिया RP, मलेशिया, नॉर्वे, ताइवान और थाईलैंड से आयातित पॉली विनाइल क्लोराइड पेस्ट रेजिन पर \$89 प्रति टन से \$707 प्रति टन तक का कर 5 वर्षों के लिए लगाया गया।
- These duties were imposed following **recommendations** from the **Directorate General of Trade Remedies (DGTR)**.
यह शुल्क व्यापार उपाय महानिदेशालय (DGTR) की सिफारिशों के बाद लगाया गया।



- **Anti-dumping investigations** help determine whether **domestic industries** have been affected due to an **increase in cheap imports**.

एंटी-डंपिंग जांच यह निर्धारित करने में मदद करती है कि घरेलू उद्योगों को सस्ते आयात में वृद्धि के कारण नुकसान हुआ है या नहीं।

Human creativity will retain potential despite AI disruption, says Vempati

GS Paper III: S&T

Shashi Shekhar Vempati
NEW DELHI

The increasing use of artificial intelligence (AI), especially in the media space, will remain in the long term human-led rather than machine-led despite apprehensions that automation may take over, according to Shashi Shekhar Vempati, co-founder of A4India.org and Chairperson of the Apex Advisory Committee at the Department of Science and Technology.

Speaking to *The Hindu* on a range of issues, Mr. Vempati said there were several "sticky" issues with regard to AI in the media space. "The first is, of course, of creative copyright. There are several cases in the courts questioning the manner in which models have been trained, and how they are

likely [to] impact the rights of creators, especially if AI can generate creative content that is indistinguishable from the works of the humans. We may see regulatory guardrails on this front," he said.

"The second and more sticky issue is, ultimately, the essence of creativity is human. A fact that even Prime Minister Narendra Modi alluded to in his conversation with podcaster Les Fildman. I believe that sticky creative content that will be trusted and consumed as a matter of habit requires the human touch. It cannot be fully automated," he said.

"The advent of AI is of course going to change the workplace and nature of jobs, especially in IT companies, but not in the way many feel," he added. "Despite the high levels of automation, many func-

tions, including software code generation, will require a degree of human oversight," he added.

He said that as far as Indian IT industry was concerned, the biggest impact of automation would be felt in low-level tasks, including testing, quality assurance, and so on, and with software code generation using AI becoming better, even software development would, to a large extent, get automated.

"It is also believed by some that with AI lowering the cost of software development and giving greater flexibility to enterprises to evolve their software systems to suit their needs, we may see the clock turning back towards more in-house custom applications rather than off-the-shelf products," Mr. Vempati said. "Another area of opportunity for Indian IT



Shashi Shekhar Vempati says the biggest impact of automation in the Indian IT industry will be felt in low level tasks. FILE PHOTO

would be around annotating and enriching large datasets to make them AI usable. As AI use cases become more and more specialised, requiring deep domain knowledge, these value-added data services will be the natural evolution for Indian IT, building on earlier cycles of ITO (IT outsourcing), BPO (business process outsourcing) and KPO (knowledge process outsourcing)," he said.

gues and dialects, was the basis for many of the early efforts focused on Indian models for AI. Bhashini by the MeitY (Ministry of Electronics and Information Technology), which PM Modi has used for his speeches during the 2024 elections, stands out, and Anuvadani by the AICTE (All India Council for Technical Education) is being used to translate textbooks across schools and universities using AI. A4Bharat at IIT-Madras has released a wide range of models and datasets based on Indian languages, encompassing text and voice. Sarvam AI, incubated out of IIT-Madras, has been roped in by the UIDAI (Unique Identification Authority of India) for a range of use cases. mVaak out of IIT-Kanpur has built an audio/voice model leveraging DD (Doordarshan), AIR (All In-

India's primary focus

"India's primary AI focus has been on overcoming the language barrier, and rightly so. The *Mann Ki Baat* corpus, which is a highly reliable and accurate corpus of text and audio in multiple Indian lan-

dia Radio) archives for a range of use cases," Mr. Vempati said.

There are, he added, several start-ups focused on other kinds of AI models, including Parallaxiom in Bengaluru, working on a vision AI model for public spaces in the Indian context; Pienomial in Pune, which has a knowledge model for the life sciences industry aiding highly reliable research; and Innoplexus, also out of Pune, that has amassed an array of patents in AI-led drug discovery, among others.

'Data Daan'

In terms of challenges for Indian AI start-ups, Mr. Vempati said that apart from funding and access to computing power, there are challenges for access to public datasets in the Indian context. "We at A4India.Org have done our bit

to motivate Indian organisations, institutions, corporates and public bodies to pledge to make their datasets accessible to AI model developers and researchers through what we are calling 'Data Daan' (<https://datadaan.org>), as an ethical voluntary movement to share data, in stark contrast to the manner in which LLMs (large language models) have been trained violating copyrights," Mr. Vempati said.

"Ultimately, it's more important for India to create conditions for the diffusion of AI across all layers of the economy and society, so we are able to reap tangible benefits in healthcare, education, and governance by replicating the success of other DPGs (digital public goods) such as UPI (Unified Payments Interface), etc.," Mr. Vempati said.

Human creativity will retain potential despite AI disruption, says Vempati

एआई व्यवधान के बावजूद मानव रचनात्मकता अपनी क्षमता बनाए रखेगी, वेंपति ने कहा

The increasing use of artificial intelligence (AI), especially in the media space, will still remain human-led rather than machine-led in the long term.

कृत्रिम बुद्धिमत्ता (एआई) का बढ़ता उपयोग, विशेष रूप से मीडिया क्षेत्र में, लंबे समय तक मशीन के बजाय मानव-नेतृत्व वाला रहेगा।

- Shashi Shekhar Vempati, co-founder of A4India.org and Chairperson of the Apex Advisory Committee at the Department of Science and Technology, stated this. शशि शेखर वेंपति, A4India.org के सह-संस्थापक और विज्ञान और प्रौद्योगिकी विभाग की शीर्ष सलाहकार समिति के अध्यक्ष, ने यह बात कही।
- There are several "sticky" issues regarding AI in the media space. मीडिया क्षेत्र में एआई को लेकर कई "जटिल" मुद्दे हैं।



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

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

CONTACT: 9971932488



- The **first issue is creative copyright**, as many court cases **question how AI models have been trained** and their impact on **creators' rights**.
पहला मुद्दा रचनात्मक कॉपीराइट है, क्योंकि कई अदालतों में यह सवाल उठाया गया है कि एआई मॉडल को कैसे प्रशिक्षित किया गया है और इसका रचनाकारों के अधिकारों पर क्या प्रभाव पड़ेगा।
- We may see **regulatory guardrails** emerging in this area.
इस क्षेत्र में **नियमों की सीमाएं** बन सकती हैं।
- The **second major issue** is that the **essence of creativity remains human**, as also pointed out by **Prime Minister Narendra Modi** in his conversation with **Lex Fridman**.
दूसरा बड़ा मुद्दा यह है कि रचनात्मकता का सार मानव ही है, जैसा कि प्रधानमंत्री नरेंद्र मोदी ने लेक्स फ्रिडमैन के साथ अपनी बातचीत में भी कहा था।
- **Sticky creative content**, which people trust and consume habitually, **requires a human touch and cannot be fully automated**.
ऐसा रचनात्मक कंटेंट, जिस पर लोग भरोसा करते हैं और नियमित रूप से उपभोग करते हैं, **मानवीय स्पर्श की आवश्यकता होती है और इसे पूरी तरह स्वचालित नहीं किया जा सकता।**
- **AI will change the workplace and jobs**, especially in **IT companies**, but **not in the way many expect**.
एआई कार्यस्थल और नौकरियों को बदलेगा, विशेष रूप से आईटी कंपनियों में, लेकिन जैसा कई लोग सोचते हैं, वैसा नहीं होगा।
- Despite **high automation levels**, many functions, including **software code generation**, will still require **human oversight**.
अत्यधिक स्वचालन के बावजूद, सॉफ्टवेयर कोड निर्माण सहित कई कार्यों के लिए **मानवीय निगरानी** की आवश्यकता होगी।
- In **India's IT industry**, the biggest impact of **automation** will be seen in **low-level tasks**, such as **testing and quality assurance**.
भारत की आईटी इंडस्ट्री में स्वचालन का सबसे अधिक प्रभाव **निचले स्तर के कार्यों**, जैसे परीक्षण और गुणवत्ता आश्वासन, पर पड़ेगा।
- As **AI improves in software code generation**, even **software development** will become **largely automated**.
जैसे-जैसे एआई सॉफ्टवेयर कोड निर्माण में बेहतर होता जाएगा, वैसे-वैसे सॉफ्टवेयर विकास भी बड़े पैमाने पर स्वचालित हो जाएगा।
- **AI will reduce software development costs** and allow enterprises to create **custom in-house applications**, instead of using **off-the-shelf products**.
एआई सॉफ्टवेयर विकास की लागत को कम करेगा और उद्यमों को पहले से बने उत्पादों के बजाय अपने अनुकूलित सॉफ्टवेयर बनाने की सुविधा देगा।
- **Another opportunity** for Indian IT will be in **annotating and enriching large datasets** to make them **AI-usable**.
भारतीय आईटी के लिए एक और अवसर बड़े डेटा सेट को एनोटेट और समृद्ध करने में होगा ताकि उन्हें एआई के लिए उपयोगी बनाया जा सके।



- As AI use cases become more specialized, requiring deep domain knowledge, value-added data services will be the next evolution in Indian IT.
जैसे-जैसे एआई के उपयोग अधिक विशिष्ट होते जाएंगे, और गहन डोमेन ज्ञान की आवश्यकता होगी, मूल्य वर्धित डेटा सेवाएँ भारतीय आईटी का अगला विकास चरण बनेंगी।
- This will build on previous cycles of ITO (IT outsourcing), BPO (business process outsourcing), and KPO (knowledge process outsourcing).
यह पहले के ITO (आईटी आउटसोर्सिंग), BPO (बिजनेस प्रोसेस आउटसोर्सिंग), और KPO (नॉलेज प्रोसेस आउटसोर्सिंग) के चरणों पर आधारित होगा।
- AI adoption in India is driven by societal concerns and local priorities.
भारत में एआई को अपनाने की प्रक्रिया सामाजिक चिंताओं और स्थानीय प्राथमिकताओं द्वारा निर्देशित है।

India's primary focus on AI

भारत का प्राथमिक एआई फोकस

- India's primary AI focus has been on overcoming the language barrier, which is a crucial step.
भारत का प्राथमिक एआई फोकस भाषा बाधा को दूर करने पर रहा है, जो एक महत्वपूर्ण कदम है।
- The Mann Ki Baat corpus, a highly reliable and accurate dataset of text and audio in multiple Indian languages and dialects, formed the base for early AI models in India.
मन की बात कॉर्पस, जो कई भारतीय भाषाओं और बोलियों में पाठ और ऑडियो का एक अत्यधिक विश्वसनीय और सटीक डेटासेट है, भारतीय एआई मॉडल के शुरुआती प्रयासों का आधार बना।
- Bhashini, developed by MeitY (Ministry of Electronics and Information Technology), was used by PM Modi for his 2024 election speeches.
भाषिणी, जिसे इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय (MeitY) ने विकसित किया, का उपयोग प्रधानमंत्री मोदी ने 2024 के चुनावी भाषणों में किया।
- Anuvadini, created by AICTE (All India Council for Technical Education), is used to translate textbooks across schools and universities using AI.
अनुवादिनी, जिसे अखिल भारतीय तकनीकी शिक्षा परिषद (AICTE) ने बनाया, का उपयोग स्कूलों और विश्वविद्यालयों में पाठ्यपुस्तकों के अनुवाद के लिए किया जाता है।
- AI4Bharat at IIT-Madras has released a variety of AI models and datasets based on Indian languages, covering text and voice.
आईआईटी-मद्रास के AI4Bharat ने भारतीय भाषाओं पर आधारित विभिन्न एआई मॉडल और डेटासेट जारी किए हैं, जो पाठ और आवाज को कवर करते हैं।
- Sarvam AI, incubated at IIT-Madras, has been engaged by UIDAI (Unique Identification Authority of India) for multiple AI use cases.



सरवम एआई, जो आईआईटी-मद्रास में विकसित हुआ, को भारतीय विशिष्ट पहचान प्राधिकरण (UIDAI) ने कई एआई उपयोग मामलों के लिए शामिल किया है।

- mVaak, developed at IIT-Kanpur, has built an audio/voice model using Doordarshan (DD) and All India Radio (AIR) archives for various applications.

आईआईटी-कानपुर में विकसित mVaak ने दूरदर्शन (DD) और ऑल इंडिया रेडियो (AIR) के अभिलेखों का उपयोग करके एक ऑडियो/वॉयस मॉडल तैयार किया है।

- Several Indian start-ups are also working on different AI models:

कई भारतीय स्टार्टअप भी विभिन्न एआई मॉडल पर काम कर रहे हैं:

- Paralaxiom (Bengaluru): Developing a vision AI model for public spaces.
पैरालैक्सियम (बेंगलुरु): सार्वजनिक स्थानों के लिए विज़न एआई मॉडल विकसित कर रहा है।
- Pienomial (Pune): Working on a knowledge model for the life sciences industry to assist highly reliable research.
पिएनोमियल (पुणे): जीवन विज्ञान उद्योग के लिए ज्ञान मॉडल विकसित कर रहा है, जो अत्यधिक विश्वसनीय अनुसंधान में सहायता करता है।
- Innoplexus (Pune): Has secured multiple patents in AI-driven drug discovery.
इनोप्लेक्सस (पुणे): एआई-आधारित दवा अनुसंधान में कई पेटेंट प्राप्त कर चुका है।

'Data Daan' Initiative

'डाटा दान' पहल

- Indian AI start-ups face challenges beyond funding and computing power, including limited access to public datasets.
भारतीय एआई स्टार्टअप्स को फंडिंग और कंप्यूटिंग पावर से आगे सार्वजनिक डेटासेट तक सीमित पहुंच जैसी चुनौतियों का सामना करना पड़ता है।
- AI4India.Org has launched "Data Daan" (<https://datadaan.org>) to encourage Indian organizations, institutions, corporates, and public bodies to share their datasets ethically and voluntarily.
AI4India.Org ने "डाटा दान" (<https://datadaan.org>) शुरू किया है, जो भारतीय संगठनों, संस्थानों, कॉर्पोरेट्स और सार्वजनिक निकायों को अपने डेटासेट नैतिक और स्वैच्छिक रूप से साझा करने के लिए प्रेरित करता है।
- This initiative contrasts with how Large Language Models (LLMs) have been trained, often violating copyright laws.
यह पहल इस बात से अलग है कि बड़े भाषा मॉडल (LLMs) को कैसे प्रशिक्षित किया गया है, जो अक्सर कॉपीराइट कानूनों का उल्लंघन करते हैं।
- India must create conditions for AI adoption across all economic and social sectors to ensure real-world benefits in healthcare, education, and governance.
भारत को सभी आर्थिक और सामाजिक क्षेत्रों में एआई को अपनाने की स्थितियाँ बनानी होंगी ताकि स्वास्थ्य, शिक्षा और शासन में वास्तविक लाभ सुनिश्चित किए जा सकें।



- This can replicate the success of Digital Public Goods (DPGs) such as UPI (Unified Payments Interface).

यह यूपीआई (यूनिफाइड पेमेंट्स इंटरफेस) जैसे डिजिटल सार्वजनिक संसाधनों (DPGs) की सफलता को दोहरा सकता है।

Why do people get tattoos? Study of twins says it's nurture, not nature

A new study from Denmark has found genetic differences have little to do with the decision of one of a pair of identical twins to get a tattoo. Researchers from a Korean university say that they have 'shown empirically that tattooing ... is a cultural phenomenon with little to no evidence of genetic influences'

GS Paper III: S&T

D.P. Kasbekar

Why do some individuals get tattooed while others don't? Is it because of differences in their genes? Researchers from the University of Southern Denmark in Odense recently addressed these questions. Their findings, reported in February in the journal *Behavior Genetics*, showed that differences in an individual's propensity to get tattooed were not due to nature but because of nurture.

'Nature' here refers to an intrinsic, genetically-determined predisposition that affects one's behaviour. 'Nurture' denotes extrinsic factors such as one's education, culture, family, and peers.

A tattoo is an indelible design registered on the skin by injecting inks and dyes into a skin layer called the dermis. There, the pigment particles become engulfed and subsequently kept in place by cells of the body's immune system, making them permanent.

In 1991, hikers stumbled on the naturally mummified remains of a man since named Otzi the Iceman in northern Italy. Scientists found that he lived more than 5,000 years ago and had tattoos. Today, many sports and entertainment celebrities also sport tattoos – as do their fans, and indeed anyone who wishes to bear symbols they consider important or significant to themselves on their person.

Since adding any foreign substance to one's body is a health risk from a medical viewpoint, studying the long-term effects of tattooing on public health has been an important research focus.

Sorting nature from nurture

If two offspring are born from the same pregnancy, they are called twins. The offspring can be genetically identical or non-identical. Identical twins share all of their genes while non-identical twins share on average only 50% of their genes.

After the father's sperm fertilises the mother's egg, the unified cell that is formed is called the zygote. The zygote then develops into an embryo that in turn grows into the baby.

Sometimes two sperm can simultaneously fertilise two eggs to produce two zygotes, and the zygotes can go on to form non-identical twins. On the other hand, identical twins are formed when an embryo from a single zygote splits at an early stage to become two embryos, and each then grows to become a baby.

For this reason, identical twins are also known as monozygotic twins and non-identical twins are called dizygotic twins. Monozygotic twins are always of



If both members of a twin pair sport a tattoo or both don't, they are said to be concordant. But if one twin has a tattoo and the other doesn't, they are discordant. COLLINS LESULLE/UNSPASH

the same biological sex, whereas dizygotic twins – like any other pair of siblings – can be either of the same or of different sexes.

If both members of a twin pair sport a tattoo, they are further said to be concordant. They are also concordant if both don't. But if one twin has a tattoo and the other doesn't, they are said to be discordant.

The researchers behind the new study were curious as to whether there was a 'greater' concordance at work in monozygotic twins than in dizygotic twins of the same sex. Their search came up empty, i.e. there was no greater concordance, even despite the fact that monozygotic twins share twice as many genes as dizygotic ones.

The finding suggested that genetic differences have little, if anything, to do with an individual wanting to get tattooed.

Additional findings

The Danish Twin Register (DTR) is a database with details of more than 175,000 twins born between 1870 and 2009. The researchers mailed out a questionnaire to twins recorded in the DTR. They received responses from 4,790 individuals, including from both twins of 1,327 twin pairs.

Of these respondents, 1,058 (22%) were monozygotic, 3,501 (73%) were dizygotic, and the zygosity was unknown for 231 (4.8%). The researchers sorted the

twins into three cohorts based on their birth years: oldest (1925-1960), middle (1961-1980), and youngest (1981-2004). Finally, the researchers asked the respondents if their co-twin also had a tattoo, about the tattoos' colours and sizes, and the age at which they were first tattooed. The responses revealed that 22% had at least one tattoo. In the 1,327 pairs for which both twins responded, the self-reported tattoo status matched the information provided by the co-twin in 98.5% of the cases.

The researchers reported a marked increase from the oldest to the youngest cohorts, from below 6% to above 30%, in terms of the propensity for getting a tattoo. Evidently tattooing has become increasingly popular in recent times. The researchers also asked the respondents about their lifestyle factors such as education, smoking, amount of physical exercise, and alcohol consumption. They could correlate tattooing strongly only with smoking. But they also acknowledged limitations in their ability to correlate with alcohol

consumption and exercise "because the age at first tattoo and age at which the questionnaire was answered may vary up to several decades".

More concordance for some defects

In 2021, researchers from the Seoul National University College of Medicine in South Korea reported in the journal *BJOG* the concordance rates for several different birth defects found in 3,386 monozygotic and dizygotic twin pairs born between 2001 and 2019.

Birth defects affecting the nervous system, the circulatory system, cleft lip/palate, and the urinary system were found to be significantly more concordant in monozygotic than in dizygotic twins. The implication was that aberrant biological development in these systems is primarily due to one's genes.

On the other hand, the concordance rates did not significantly differ for malformations of the eye, ear, face or neck, the genital organs, and the musculoskeletal system, meaning that for these disorders, extrinsic aspects of the uterine environment, such as maternal nutrition, physiology, smoking, and infections, played a more significant role.

The researchers ended their paper writing: "we have shown empirically that tattooing ... is a cultural phenomenon with little to no evidence for genetic influences."

(D. P. Kasbekar is a retired scientist.kasbekardp@yahoo.co.in)

THE GIST

Identical twins are known as monozygotic, and non-identical twins are called dizygotic. Monozygotic twins are always of the same biological sex, whereas dizygotic twins can be either of the same or of different sexes

Researchers wanted to know if there was a 'greater' concordance at work in monozygotic than in dizygotic twins of the same sex. Their search came up empty

Researchers studied concordance rates for birth defects. Those affecting the nervous, circulatory, cleft lip/palate, and urinary systems were found to be more concordant in monozygotic than dizygotic. The implication was that aberrant development is primarily due to genes

Why do people get tattoos? Study of twins says it's nurture, not nature

लोग टैटू क्यों बनवाते हैं? जुड़वां बच्चों के अध्ययन से पता चला कि यह स्वभाव नहीं, बल्कि परवरिश का असर है



A new study from Denmark found that genetic differences have little to no role in the decision of identical twins to get a tattoo.

डेनमार्क के एक नए अध्ययन में पाया गया कि आनुवंशिक अंतर का एकसमान जुड़वां बच्चों के टैटू बनवाने के फैसले पर कोई खास प्रभाव नहीं पड़ता।

- Researchers from a Korean university empirically showed that **tattooing is a cultural phenomenon with minimal genetic influence.**
एक कोरियाई विश्वविद्यालय के शोधकर्ताओं ने व्यावहारिक रूप से दिखाया कि टैटू बनवाना एक सांस्कृतिक प्रक्रिया है, जिसमें आनुवंशिक प्रभाव बहुत कम या नगण्य है।

Nature vs. Nurture

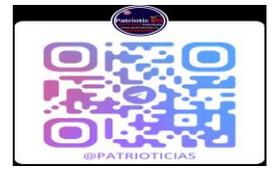
प्राकृतिक प्रवृत्ति बनाम परवरिश

- **Nature** refers to **genetically-determined predisposition**, which affects one's behavior.
प्राकृतिक प्रवृत्ति का अर्थ है आनुवंशिक रूप से निर्धारित प्रवृत्ति, जो किसी व्यक्ति के व्यवहार को प्रभावित करती है।
- **Nurture** includes **education, culture, family, and peer influence** as external factors shaping behavior.
परवरिश में शिक्षा, संस्कृति, परिवार और दोस्तों का प्रभाव जैसे बाहरी कारक शामिल होते हैं, जो व्यवहार को आकार देते हैं।
- The study, published in **February** in the journal **Behavior Genetics**, concluded that **tattooing is influenced by nurture, not nature.**
यह अध्ययन फरवरी में **Behavior Genetics** पत्रिका में प्रकाशित हुआ, जिसमें निष्कर्ष निकला कि टैटू बनवाने का प्रभाव परवरिश से आता है, न कि आनुवंशिकता से।

Tattooing in history and modern culture

इतिहास और आधुनिक संस्कृति में टैटू बनवाना

- A **tattoo** is a **permanent design** created by **injecting ink and dyes into the dermis layer of the skin.**
टैटू एक स्थायी डिजाइन होता है, जो त्वचा की डर्मिस परत में स्याही और रंग डालकर बनाया जाता है।
- The ink particles are **trapped by immune system cells**, making tattoos **permanent.**
स्याही कणों को शरीर की प्रतिरक्षा प्रणाली की कोशिकाएं पकड़ लेती हैं, जिससे टैटू स्थायी हो जाता है।
- In **1991**, hikers discovered **Ötzi the Iceman**, a naturally mummified body in **northern Italy**, who lived **over 5,000 years ago** and had **tattoos.**
1991 में, पर्वतारोहियों को उत्तरी इटली के उत्तरी भाग में मिला, जो 5,000 साल पहले जीवित था और उसके टैटू थे।



- Today, many sports and entertainment celebrities have tattoos, influencing their fans and others to get tattooed.
आज, कई खेल और मनोरंजन हस्तियों के टैटू हैं, जिससे उनके प्रशंसक और अन्य लोग भी टैटू बनवा रहे हैं।
- Since adding a foreign substance to the body is a health risk, researchers are also studying the long-term health effects of tattooing.
क्योंकि शरीर में कोई बाहरी तत्व डालना स्वास्थ्य के लिए जोखिम भरा हो सकता है, इसलिए शोधकर्ता टैटू के दीर्घकालिक स्वास्थ्य प्रभावों का अध्ययन कर रहे हैं।

Nature vs. Nurture: Studying Twins

प्राकृतिक प्रवृत्ति बनाम परवरिश: जुड़वां बच्चों पर अध्ययन

- **Twins can be either identical (monozygotic) or non-identical (dizygotic).**
जुड़वां बच्चे एकसमान (मोनोज़ायगोटिक) या असमान (डिज़ायगोटिक) हो सकते हैं।
- **Identical twins share 100% of their genes, whereas non-identical twins share 50% of their genes on average.**
एकसमान जुड़वां बच्चे अपने 100% जीन साझा करते हैं, जबकि असमान जुड़वां बच्चे औसतन 50% जीन साझा करते हैं।
- **Identical twins form when a single zygote splits into two embryos, whereas non-identical twins form when two separate eggs are fertilized by two sperm cells.**
एकसमान जुड़वां तब बनते हैं जब एक ज़ाइगोट दो भ्रूणों में विभाजित हो जाता है, जबकि असमान जुड़वां तब बनते हैं जब दो अलग-अलग अंडों का निषेचन दो शुक्राणुओं द्वारा होता है।
- **If both twins have tattoos, they are 'concordant'; if only one has a tattoo, they are 'discordant'.**
अगर दोनों जुड़वां बच्चों के टैटू हैं, तो उन्हें 'संगत' (concordant) कहा जाता है; अगर केवल एक के पास टैटू है, तो वे 'असंगत' (discordant) कहलाते हैं।
- The study examined whether identical twins had a higher tattoo concordance than non-identical twins, but found no significant difference.
अध्ययन में यह जांचा गया कि क्या एकसमान जुड़वां बच्चों में टैटू अधिक सामान्य है बनाम असमान जुड़वां बच्चों में, लेकिन कोई महत्वपूर्ण अंतर नहीं मिला।
- This suggests that genetics has little to no influence on tattoo decisions.
इससे यह निष्कर्ष निकला कि टैटू बनवाने के फैसले पर आनुवंशिकता का बहुत कम या कोई प्रभाव नहीं पड़ता।

Additional findings

अतिरिक्त निष्कर्ष

- The Danish Twin Register (DTR) contains data on more than 175,000 twins born between 1870 and 2009.



डेनिश ट्विन रजिस्टर (DTR) में 1870 से 2009 के बीच जन्मे 1,75,000 से अधिक जुड़वां बच्चों का डेटा शामिल है।

- Researchers sent a **questionnaire** to twins in the DTR, and **received responses from 4,790 individuals**, including 1,327 twin pairs.

शोधकर्ताओं ने DTR में दर्ज जुड़वां बच्चों को एक प्रश्नावली भेजी, और उन्हें 4,790 व्यक्तियों से प्रतिक्रियाएँ मिलीं, जिनमें 1,327 जुड़वां जोड़े शामिल थे।

- Among respondents:

प्रतिक्रिया देने वालों में:

- 1,058 (22%) were **monozygotic (identical twins)**.
1,058 (22%) मोनोज़ायगोटिक (एकसमान जुड़वां बच्चे) थे।
- 3,501 (73%) were **dizygotic (non-identical twins)**.
3,501 (73%) डिज़ायगोटिक (असमान जुड़वां बच्चे) थे।
- 231 (4.8%) had **unknown zygosity**.
231 (4.8%) की ज़ायगोसिटी (जीन समानता) अज्ञात थी।

- The researchers divided twins into **three cohorts** based on birth years:

शोधकर्ताओं ने जन्म वर्षों के आधार पर जुड़वां बच्चों को तीन समूहों में विभाजित किया:

- **Oldest (1925-1960)**
सबसे पुराने (1925-1960)
- **Middle (1961-1980)**
मध्य (1961-1980)
- **Youngest (1981-2004)**
सबसे युवा (1981-2004)

- They asked respondents whether their **co-twin also had a tattoo**, tattoo color and size, and age at first tattoo.

उन्होंने उत्तरदाताओं से पूछा कि क्या उनके जुड़वां भाई/बहन के पास भी टैटू था, टैटू का रंग और आकार, और पहली बार टैटू बनवाने की उम्र।

- **22% of respondents** had at least one tattoo.

22% उत्तरदाताओं के पास कम से कम एक टैटू था।

- In 1,327 twin pairs, the self-reported tattoo status matched **98.5% of the time** with what their co-twin reported.

1,327 जुड़वां जोड़ों में, स्व-रिपोर्ट किए गए टैटू की जानकारी 98.5% मामलों में उनके जुड़वां भाई/बहन द्वारा दी गई जानकारी से मेल खाती थी।

- The study found a **rise in tattooing from the oldest to the youngest cohort**, increasing from **below 6% to above 30%**.

अध्ययन में पाया गया कि सबसे पुराने समूह से सबसे युवा समूह तक टैटू बनवाने की प्रवृत्ति में वृद्धि हुई, जो 6% से कम से 30% से अधिक हो गई।



- The study examined **lifestyle factors** like **education, smoking, physical exercise, and alcohol consumption**.
अध्ययन ने शिक्षा, धूम्रपान, शारीरिक व्यायाम और शराब के सेवन जैसे जीवनशैली कारकों की जांच की।
- **Smoking had the strongest correlation with tattooing, but alcohol consumption and exercise correlations were unclear due to age differences in responses.**
धूम्रपान और टैटू बनवाने के बीच सबसे मजबूत संबंध पाया गया, लेकिन शराब सेवन और व्यायाम का संबंध स्पष्ट नहीं था, क्योंकि प्रतिक्रिया देने वालों की उम्र में अंतर था।

More concordance for some birth defects

कुछ जन्म दोषों में अधिक समानता

- In **2021**, researchers from **Seoul National University College of Medicine (South Korea)** studied **3,386 twin pairs** born between **2001 and 2019**.
2021 में, सियोल नेशनल यूनिवर्सिटी कॉलेज ऑफ मेडिसिन (दक्षिण कोरिया) के शोधकर्ताओं ने 2001 से 2019 के बीच जन्मे 3,386 जुड़वां जोड़ों का अध्ययन किया।
- The study, published in **BJOG journal**, found **higher concordance rates** for some **birth defects** in **monozygotic twins** compared to **dizygotic twins**.
यह अध्ययन, जो BJOG जर्नल में प्रकाशित हुआ, ने पाया कि कुछ जन्म दोषों की समानता दर मोनोज़ायगोटिक जुड़वां बच्चों में डिज़ायगोटिक जुड़वां बच्चों की तुलना में अधिक थी।
- **Higher concordance in monozygotic twins** was seen in defects affecting:
मोनोज़ायगोटिक जुड़वां बच्चों में अधिक समानता देखी गई:
 - **Nervous system** (तंत्रिका तंत्र)
 - **Circulatory system** (रक्त संचार तंत्र)
 - **Cleft lip/palate** (कटे होंठ/तालु)
 - **Urinary system** (मूत्र प्रणाली)
- These findings suggest that **genetics play a major role** in these defects.
ये निष्कर्ष बताते हैं कि इन जन्म दोषों में आनुवंशिकी की महत्वपूर्ण भूमिका होती है।
- However, for defects related to **eyes, ears, face, neck, genital organs, and musculoskeletal system**, **environmental factors** played a bigger role.
हालांकि, आंख, कान, चेहरा, गर्दन, जननांग, और कंकाल प्रणाली से जुड़े दोषों में पर्यावरणीय कारकों की बड़ी भूमिका थी।
- The researchers concluded: "**Tattooing is a cultural phenomenon with little to no genetic influence.**"
शोधकर्ताओं ने निष्कर्ष निकाला: "टैटू बनवाना एक सांस्कृतिक प्रक्रिया है, जिसमें आनुवंशिक प्रभाव बहुत कम या नगण्य है।"



Lapis lazuli: earth's best blues

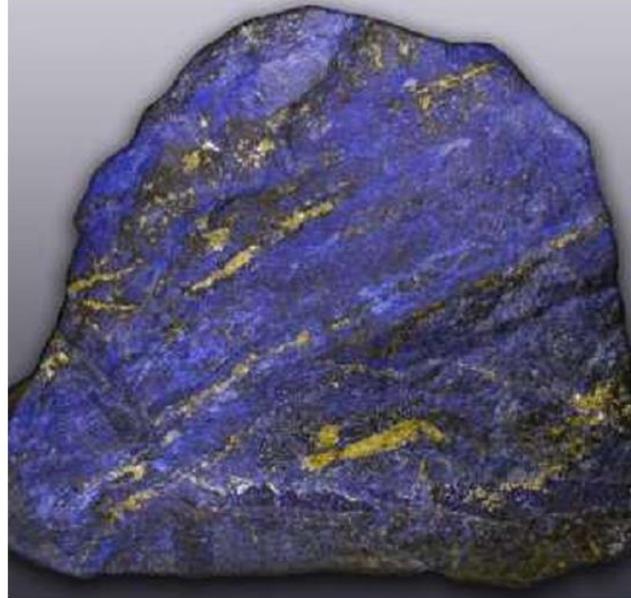
GS Paper III: S&T

Vasudevan Mukunth

Lapis lazuli is a vividly blue rock, sometimes with streaks of gold, that has been known for millennia for its eye-popping colour and use as a semi-precious gemstone.

It gets its colour from the presence of an unusual mineral called lazurite (25-40%). Its blueness depends on the amount and structure of sulphur in this mineral. The presence of calcite can reduce the blueness while the golden sparkle comes from the presence of pyrites. Some other minerals, like diopside and sodalite, are present in smaller quantities.

Lapis lazuli has been found in many countries so far, including Chile, Russia, and the US, but the highest quality rock comes from Afghanistan's Badakhshan province, where people have been mining it for more than 6,000 years. In ancient times, traders in India imported lapis lazuli from Badakhshan, perhaps as long ago as 1000 BC. Archaeologists have also found ornamental lapis lazuli ornaments in the remains of Indus Civilisation sites including Mohenjo-daro and Harappa. The ancient Egyptians were also known to



A section of lapis lazuli rock with pyrite mined in Afghanistan in January 2008. HANNES GROBE (CC BY-SA 2.5)

use it to make jewellery and to powder it to use as eye shadow.

In the Renaissance period, artistes in Europe ground lapis lazuli down into ultramarine, an expensive pigment they used in their paintings. The rock gets its name from two languages: lapis is the Latin for 'stone' whereas 'lazuli' comes from the Persian word lazward, meaning 'blue.'

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For feedback and suggestions

for 'Science', please write to
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with the subject 'Daily page'

Lapis lazuli: earth's best blues

लैपिस लैजुली: पृथ्वी का सर्वश्रेष्ठ नीला पत्थर



Lapis lazuli is a vividly blue rock, sometimes with streaks of gold, and has been valued for thousands of years as a semi-precious gemstone.

लैपिस लैजुली एक गहरे नीले रंग का पत्थर है, जिसमें कभी-कभी सुनहरी धारियां पाई जाती हैं, और इसे हजारों वर्षों से अर्ध-कीमती रत्न के रूप में सराहा गया है।

- Its blue color comes from the presence of an unusual mineral called **lazurite (25-40%)**.
इसका नीला रंग एक असामान्य खनिज लजुराइट (25-40%) की उपस्थिति के कारण होता है।
- The intensity of the blue depends on the **amount and structure of sulfur in lazurite**.
नीले रंग की गहराई लजुराइट में सल्फर की मात्रा और संरचना पर निर्भर करती है।
- **Calcite can reduce the blueness, while the golden sparkle comes from the presence of pyrites**.
कैल्साइट नीलेपन को कम कर सकता है, जबकि सुनहरी चमक पायराइट्स की उपस्थिति के कारण होती है।
- Other minerals like **diopside and sodalite** are present in **smaller quantities**.
अन्य खनिज जैसे डायोपसाइड और सोडालाइट कम मात्रा में पाए जाते हैं।

Where is Lapis Lazuli found?

लैपिस लैजुली कहाँ पाया जाता है?

- **Lapis lazuli** has been found in **many countries**, including **Chile, Russia, and the US**.
लैपिस लैजुली कई देशों में पाया गया है, जैसे चिली, रूस और अमेरिका।
- The **highest quality lapis lazuli** comes from **Badakhshan province, Afghanistan, where it has been mined for over 6,000 years**.
सबसे उत्तम गुणवत्ता का लैपिस लैजुली अफगानिस्तान के बदख़शान प्रांत से आता है, जहां इसे 6,000 वर्षों से खनन किया जा रहा है।

Lapis Lazuli in Ancient Trade and Culture

प्राचीन व्यापार और संस्कृति में लैपिस लैजुली

- In ancient times, **Indian traders imported lapis lazuli from Badakhshan**, possibly as early as **1000 BC**.
प्राचीन काल में, भारतीय व्यापारियों ने बदख़शान से लैपिस लैजुली आयात किया, संभवतः 1000 ईसा पूर्व से।
- **Archaeologists have found lapis lazuli ornaments at Indus Valley Civilization sites like Mohenjo-daro and Harappa**.
पुरातत्वविदों को सिंधु घाटी सभ्यता स्थलों जैसे मोहनजोदड़ो और हड़प्पा में लैपिस लैजुली के आभूषण मिले हैं।



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- The ancient Egyptians also valued **lapis lazuli** and used it for **jewelry, amulets, and decoration.**

प्राचीन मिस्री लोग भी लैपिस लैजुली को बहुत महत्व देते थे और इसे गहनों, ताबीज और सजावट के लिए उपयोग करते थे।

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A perspective, on the Editorial and Opinion pages, on TB control and issues. World Tuberculosis Day is observed on March 24 every year

The need for universal and equitable health coverage

GS Paper III: S&T

India has made substantial and tangible progress in Tuberculosis (TB) care, adopting new strategies to detect, treat and prevent TB. Some key areas of progress include the expansion of molecular testing for rapid detection of TB and drug-resistance; the introduction of the shorter, all-oral BPaLM regimen (a combination of four drugs Bedaquiline (B), Pretomanid (Pa), Linezolid (L), and Moxifloxacin (M)); doubling of the entitlement under the Ni-kshay Poshan Yojana (NPY) for nutrition support to ₹1,000 a month; roll-out of TB preventive therapy; and an expanded role for communities through the involvement of TB survivors and Champions. The impact of the roll-out of these strategies can be seen in the 17.7% decline in TB incidence in India, from 237 per 1,00,000 population in 2015 to 195 per 1,00,000 population in 2023, in tandem with a 21.4% reduction in TB-related deaths.

Since Independence, India's public health system has delivered disease control services through primarily vertical health programmes, such as the National Tuberculosis Elimination Programme (NTEP). While this vertical nature has allowed for concentrated focus and brought benefits in many ways, it has also been limiting. Integration of TB services within the broader public health system is key to India's pursuit of equitable, universal health coverage (UHC) for all.

Decentralising TB care for all

The ambitious Ayushman Bharat National Health Protection Scheme was launched in India in 2018 to provide UHC for the Indian population. Today, TB has been integrated within both key components of Ayushman Bharat: the Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), considered the world's largest insurance scheme, and the Ayushman Arogya Mandirs (AAMs, formerly known as Health and Wellness Centres), which provide a comprehensive basket of primary health-care services in rural and urban India.

From the perspective of a person with TB symptoms, the best experience would be accessing consistently high-quality services at the first point of contact. The integration of TB services at the AAM primary care level is designed to meet this need, bringing together diagnostic, treatment and preventive care under one umbrella. AAMs serve as sputum collection centres, where people with TB symptoms can give samples for testing. The NTEP has also been optimising sample collection and transportation methods through a diagnostics network optimisation exercise. A person diagnosed with TB at a secondary or tertiary care facility can undergo treatment at the health centre closest to their residence, again minimising time and costs. In the first two months when people with TB are weak and drop outs as well as mortality is highest, community health officers positioned at



Dr. Soumya Swaminathan

is Chairperson, M.S. Swaminathan Research Foundation (MSSRF)

the AAMs and their teams must be trained to identify and refer such patients for admission.

While TB services have been free within the public health system, over 50% of all people with TB symptoms continue to seek care in the private sector. Uneven standards of care across the vastly heterogeneous private health sector has led to delays in diagnosis and contributed to poor outcomes as well as significant out-of-pocket expenditure (OOPE) for families. It is imperative to strengthen referrals from the private to the public health system, particularly for those who cannot afford to incur substantial expenditure on health and who may not be aware that TB services are freely available in the public health system. It is equally essential to ensure that the AB-PMJAY provides full insurance coverage for those who seek care for TB in the private or public sector, particularly those who are severely ill.

Equitable and decentralised care for all

What does the road to equitable TB care look like? There are five key steps we can take to accelerate our progress towards TB elimination and universal health coverage (UHC).

First, while we work to achieve decentralisation, we must strengthen person-centred care approaches, and deliver them at scale. There have been model interventions in several States that have assessed people with TB for social and clinical vulnerabilities and linked them to care. In Tamil Nadu, the Tamil Nadu Kasanoi Erappila Thittam (TN-KET), or "TB death-free project", has been successful in achieving reduced TB mortality through a robust system of identifying those most vulnerable or sick, and referring them for a brief period of admission. Similarly, there have been other interventions focusing on tribal communities, migrants, and homeless populations. One clear pathway to achieving UHC and increased utilisation of the public health system is by strengthening investment in the traditional 'inputs' for health and streamlining their functioning – human resources, supplies and infrastructure.

Second, we must develop mechanisms to recognise intersectionalities. Multiple factors such as gender, age, caste, disability, socio-economic status, and occupation determine health seeking intent and access to health and TB services. The intersection of these aspects of identity can both positively and adversely impact TB outcomes. The NTEP has adopted the national framework for a gender-responsive approach to TB, recognising that women, men, and LGBTQIA persons experience TB differently. Improving understanding of gender will take time, and inevitably challenge personal behaviours and

norms, but is essential to equitable care.

Similarly, there has been some early work to better understand TB and disability, which must be built upon.

Third, integrated care remains a challenge for India's health system, as we continue to build our primary care services. How do we ensure that someone who comes with TB symptoms is tested for Chronic obstructive pulmonary disease (COPD) or asthma? How can a person with TB be screened for depression or hypertension and

linked to appropriate services and counselling? We must adopt models of integrated general health screening in community settings, for example, test for TB and COPD through validated Artificial Intelligence (AI)-enabled chest x-rays and upfront molecular testing, along with screening of common non-communicable diseases through blood pressure, blood glucose, and body mass index (BMI) monitoring.

Fourth, UHC approaches are centred around minimising OOPE, thereby eliminating health-related debt. Schemes such as the NPY have helped alleviate the financial burden on families, by providing monetary support for access to nutritious food. Case-finding approaches, such as the ongoing '100 Days' campaign, can help reduce OOPE prior to diagnosis. However, there are still several significant indirect costs that remain. Expanding social protection by extending nutrition support to the family, piloting wage-loss schemes to offset a loss of income during TB treatment and introducing livelihood programmes for TB survivors are potential future actions.

Lessons from COVID-19, communication

Finally, equity in terms of access to information and knowledge is critical. TB remains severely misunderstood. Recall how swiftly we were able to ensure public understanding of COVID-19, through a flood of science-based information using a multitude of platforms. We need similar approaches for TB, to encourage people to seek care and adopt simple measures to reduce transmission within homes and communities. Promoting knowledge about drug-resistant TB, in the context of growing anti-microbial resistance (AMR) is vital. Decimating TB stigma is critical to ensuring early detection and successful treatment outcomes for people with TB.

An equitable TB programme is one where every individual receives the highest quality of person-centred care that takes into account individual needs. Equity is a cornerstone of health care, and is essential to achieving TB elimination and universal health coverage. India's TB response is well poised to define global standards and benchmarks. Applying the equity lens will only accelerate our progress.



Integration of TB services within the broader public health system is key to India's pursuit of equitable, universal health coverage for all

The need for universal and equitable health coverage

सार्वभौमिक और समान स्वास्थ्य कवरेज की आवश्यकता

India has made significant progress in Tuberculosis (TB) care, adopting new strategies for detection, treatment, and prevention.



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भारत ने क्षय रोग (टीबी) देखभाल में महत्वपूर्ण प्रगति की है, जिसमें नए तरीकों को अपनाकर इसकी पहचान, उपचार और रोकथाम की जा रही है।

Key advancements include:

मुख्य प्रगति में शामिल हैं:

- **Expansion of molecular testing for rapid TB and drug-resistance detection.**
टीबी और दवा प्रतिरोधी संक्रमण की तेजी से पहचान के लिए आणविक परीक्षण का विस्तार।
- **Introduction of the **BPaLM regimen** (a combination of **Bedaquiline (B)**, **Pretomanid (Pa)**, **Linezolid (L)**, and **Moxifloxacin (M)**).**
BPaLM उपचार पद्धति का परिचय, जिसमें बेडाक्विलिन (B), प्रेटोमेनिड (Pa), लाइनजोलिड (L), और मोक्सिफ्लॉक्ससिन (M) का संयोजन शामिल है।
- **Doubling of entitlement under **Ni-kshay Poshan Yojana (NPY)** to **₹1,000 per month for nutrition support**.**
नि-क्षय पोषण योजना (NPY) के तहत सहायता राशि को बढ़ाकर ₹1,000 प्रति माह किया गया ताकि पोषण सहायता दी जा सके।
- **Roll-out of TB preventive therapy and enhanced community participation through TB Champions and survivors.**
टीबी की रोकथाम के लिए थेरेपी लागू की गई और टीबी चैंपियंस और ठीक हुए मरीजों के माध्यम से सामुदायिक भागीदारी को बढ़ाया गया।
- **TB incidence in India has declined by 17.7%, from 237 per 1,00,000 people in 2015 to 195 per 1,00,000 people in 2023.**
भारत में टीबी के मामलों में 17.7% की गिरावट आई है, जो 2015 में प्रति 1,00,000 जनसंख्या पर 237 से घटकर 2023 में 195 हो गई है।
- **TB-related deaths have decreased by 21.4%.**
टीबी से होने वाली मौतों में 21.4% की कमी आई है।

Integrating TB Services in the Health System

स्वास्थ्य प्रणाली में टीबी सेवाओं का समावेश

- Since Independence, India has relied on **vertical health programmes** like the **National Tuberculosis Elimination Programme (NTEP)**.
स्वतंत्रता के बाद से, भारत ने राष्ट्रीय क्षय रोग उन्मूलन कार्यक्रम (NTEP) जैसे विशिष्ट स्वास्थ्य कार्यक्रमों पर निर्भर किया है।
- While these programmes provided **focused benefits**, they also had **limitations** in reaching all communities.
हालांकि, इन कार्यक्रमों ने विशिष्ट लाभ प्रदान किए, लेकिन सभी समुदायों तक पहुंचने में सीमाएं भी थीं।

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- Integrating TB services within the broader public health system is key to achieving Universal Health Coverage (UHC).

टीबी सेवाओं को व्यापक सार्वजनिक स्वास्थ्य प्रणाली में एकीकृत करना सार्वभौमिक स्वास्थ्य कवरेज (UHC) प्राप्त करने के लिए आवश्यक है।

Decentralising TB care for all

सभी के लिए टीबी देखभाल का विकेंद्रीकरण

- **Ayushman Bharat National Health Protection Scheme**, launched in 2018, aims to provide UHC for India.
2018 में शुरू की गई आयुष्मान भारत राष्ट्रीय स्वास्थ्य सुरक्षा योजना का उद्देश्य भारत में सार्वभौमिक स्वास्थ्य कवरेज (UHC) प्रदान करना है।
- **TB services are now integrated into both components of Ayushman Bharat:**
अब टीबी सेवाओं को आयुष्मान भारत की दोनों योजनाओं में शामिल किया गया है:
 - **Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)** – the world's largest insurance scheme.
प्रधानमंत्री जन आरोग्य योजना (AB-PMJAY) – जो दुनिया की सबसे बड़ी बीमा योजना है।
 - **Ayushman Arogya Mandirs (AAMs) (formerly Health and Wellness Centres)** – providing primary healthcare in rural and urban areas.
आयुष्मान आरोग्य मंदिर (AAMs) (पहले स्वास्थ्य और कल्याण केंद्र) – जो ग्रामीण और शहरी क्षेत्रों में प्राथमिक स्वास्थ्य सेवा प्रदान करते हैं।
- **TB integration at AAMs ensures early diagnosis, treatment, and prevention at the first point of contact.**
AAMs में टीबी सेवाओं के समावेश से, प्राथमिक स्तर पर शीघ्र निदान, उपचार और रोकथाम सुनिश्चित की जाती है।
- **AAMs function as sputum collection centres, helping people with TB symptoms give samples for testing.**
AAMs बलगम संग्रह केंद्र के रूप में कार्य करते हैं, जिससे टीबी के लक्षणों वाले लोग परीक्षण के लिए नमूने दे सकते हैं।
- **Patients diagnosed at higher facilities can now receive treatment at health centres near their residence, reducing travel time and cost.**
उच्च स्तरीय अस्पतालों में टीबी की पुष्टि होने पर, मरीज अपने घर के पास के स्वास्थ्य केंद्रों में उपचार प्राप्त कर सकते हैं, जिससे समय और खर्च कम होता है।
- **Community health officers at AAMs need training to identify and refer critically ill TB patients in the first two months, when dropout and mortality rates are highest.**
AAMs के सामुदायिक स्वास्थ्य अधिकारी को उन मरीजों की पहचान करने और रेफर करने के लिए प्रशिक्षित किया जाना चाहिए, जो शुरुआती दो महीनों में सबसे कमजोर होते हैं, जब छोड़ने और मृत्यु दर सबसे अधिक होती है।



Strengthening TB care in the private sector

निजी क्षेत्र में टीबी देखभाल को मजबूत बनाना

- Over 50% of TB patients still seek care in the private sector, leading to delayed diagnosis and higher out-of-pocket expenditure (OOPE).
50% से अधिक टीबी मरीज अभी भी निजी क्षेत्र में उपचार प्राप्त करते हैं, जिससे निदान में देरी और अधिक जेब खर्च (OOPE) होता है।
- Uneven standards of care in the private sector contribute to poor health outcomes.
निजी क्षेत्र में असमान देखभाल मानक खराब स्वास्थ्य परिणामों का कारण बनते हैं।
- Better referral systems are needed to link private sector patients to public health services, ensuring free TB care for those who cannot afford treatment.
बेहतर रेफरल प्रणाली की आवश्यकता है ताकि निजी क्षेत्र के मरीजों को सार्वजनिक स्वास्थ्य सेवाओं से जोड़ा जा सके, जिससे जो लोग खर्च नहीं उठा सकते, उन्हें निःशुल्क टीबी उपचार मिले।
- AB-PMJAY should provide full insurance coverage for TB patients in both private and public sectors, especially for critically ill patients.
AB-PMJAY को निजी और सार्वजनिक दोनों क्षेत्रों में टीबी रोगियों के लिए पूर्ण बीमा कवरेज प्रदान करना चाहिए, विशेष रूप से गंभीर रूप से बीमार मरीजों के लिए।

Equitable and decentralised care for all

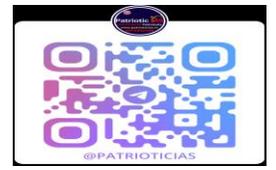
सभी के लिए समान और विकेंद्रीकृत देखभाल

- Five key steps can help accelerate progress towards TB elimination and universal health coverage (UHC).
पांच प्रमुख कदम टीबी उन्मूलन और सार्वभौमिक स्वास्थ्य कवरेज (UHC) की दिशा में प्रगति को तेज कर सकते हैं।

1. Strengthening person-centred care

1. व्यक्ति-केंद्रित देखभाल को मजबूत करना

- Decentralisation of TB care must be accompanied by strengthened person-centred care at a larger scale.
टीबी देखभाल का विकेंद्रीकरण, व्यक्ति-केंद्रित देखभाल को बड़े पैमाने पर मजबूत करने के साथ किया जाना चाहिए।



- Successful models include:
सफल मॉडल में शामिल हैं:
 - **Tamil Nadu Kasanoi Erappila Thittam (TN-KET) or "TB death-free project"**, which has reduced TB mortality by identifying vulnerable patients and referring them for short-term admission.
तमिलनाडु कसनोई एरप्पिला थिट्टम (TN-KET) या "टीबी मृत्यु-मुक्त परियोजना", जिसने संवेदनशील मरीजों की पहचान और अल्पकालिक भर्ती के माध्यम से टीबी मृत्यु दर कम की।
 - Other interventions targeting tribal communities, migrants, and homeless populations.
आदिवासी समुदायों, प्रवासियों और बेघर आबादी के लिए अन्य हस्तक्षेप।
- Strengthening investment in human resources, supplies, and infrastructure is key to achieving UHC and public health system efficiency.
मानव संसाधन, आपूर्ति और बुनियादी ढांचे में निवेश को मजबूत करना, UHC और सार्वजनिक स्वास्थ्य प्रणाली की दक्षता प्राप्त करने के लिए आवश्यक है।

2. Recognising intersectionalities

2. विभिन्न कारकों की भूमिका को समझना

- **Health-seeking behaviour is influenced by gender, age, caste, disability, socio-economic status, and occupation.**
स्वास्थ्य सेवाओं की खोज करने की प्रवृत्ति, लिंग, उम्र, जाति, विकलांगता, सामाजिक-आर्थिक स्थिति और पेशे से प्रभावित होती है।
- NTEP has adopted a **gender-responsive approach** to TB, recognising that women, men, and LGBTQIA persons experience TB differently.
NTEP ने लिंग-संवेदनशील दृष्टिकोण अपनाया है, यह मानते हुए कि महिलाएं, पुरुष और LGBTQIA समुदाय के लोग टीबी को अलग-अलग तरीके से अनुभव करते हैं।
- **TB and disability** research has begun and needs further development.
टीबी और विकलांगता पर शोध प्रारंभ हो चुका है, जिसे और आगे बढ़ाने की आवश्यकता है।

3. Integrating TB care with general healthcare

3. टीबी देखभाल को सामान्य स्वास्थ्य सेवाओं के साथ जोड़ना

- **Primary healthcare services** must be integrated so that TB patients are also tested for related conditions like:
प्राथमिक स्वास्थ्य सेवाओं को इस तरह एकीकृत किया जाना चाहिए कि टीबी मरीजों की अन्य संबंधित बीमारियों के लिए भी जांच हो, जैसे:
 - **Chronic obstructive pulmonary disease (COPD) and asthma**
क्रॉनिक ऑब्स्ट्रक्टिव पल्मोनरी डिजीज (COPD) और अस्थमा



- Depression and hypertension

अवसाद और उच्च रक्तचाप

- AI-enabled chest X-rays and molecular testing can be used for simultaneous TB and COPD screening.

एआई-सक्षम छाती एक्स-रे और आणविक परीक्षण का उपयोग एक साथ टीबी और COPD की जांच के लिए किया जा सकता है।

- Non-communicable disease screening, such as blood pressure, blood glucose, and BMI monitoring, should be integrated into TB care.

गैर-संचारी रोगों की जांच, जैसे रक्तचाप, रक्त शर्करा और बीएमआई निगरानी, को टीबी देखभाल में जोड़ा जाना चाहिए।

4. Reducing out-of-pocket expenditure (OOPE)

4. जब से होने वाले खर्च को कम करना

- Minimising health-related debt is crucial for UHC.

स्वास्थ्य संबंधी ऋण को कम करना UHC के लिए आवश्यक है।

- Ni-kshay Poshan Yojana (NPY) has helped reduce financial burden by providing nutrition support.

नि-क्षय पोषण योजना (NPY) ने पोषण सहायता प्रदान करके वित्तीय बोझ को कम करने में मदद की है।

- '100 Days' campaign is helping reduce OOPE before diagnosis.

'100 दिन' अभियान निदान से पहले होने वाले खर्च को कम करने में मदद कर रहा है।

- Future steps should include:

भविष्य के कदमों में शामिल होना चाहिए:

- Expanding social protection by providing nutrition support to families.

सामाजिक सुरक्षा का विस्तार, जिसमें परिवारों को पोषण सहायता प्रदान करना।

- Piloting wage-loss schemes to compensate for income loss during TB treatment.

मजदूरी-हानि योजनाओं का परीक्षण, जिससे टीबी उपचार के दौरान होने वाली आय की हानि की भरपाई की जा सके।

- Introducing livelihood programmes for TB survivors.

टीबी से ठीक हुए मरीजों के लिए आजीविका कार्यक्रम शुरू करना।

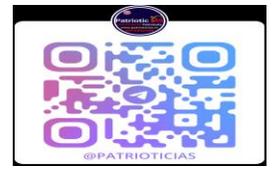
5. Lessons from COVID-19: Communication and Awareness

5. कोविड-19 से मिली सीख: संचार और जागरूकता

- Access to information and knowledge is critical for TB awareness.

सूचना और ज्ञान तक पहुंच, टीबी जागरूकता के लिए आवश्यक है।

- During COVID-19, rapid public awareness was created using science-based communication on multiple platforms.



कोविड-19 के दौरान, विज्ञान-आधारित संचार और विभिन्न प्लेटफार्मों का उपयोग करके त्वरित जन जागरूकता फैलाई गई।

- Similar strategies should be used to:

इसी तरह की रणनीतियों का उपयोग किया जाना चाहिए:

- Encourage people to seek TB care.
लोगों को टीबी उपचार प्राप्त करने के लिए प्रेरित करने के लिए।
- Promote drug-resistant TB awareness, especially regarding antimicrobial resistance (AMR).
ड्रग-प्रतिरोधी टीबी के बारे में जागरूकता बढ़ाने के लिए, विशेष रूप से एंटीमाइक्रोबियल प्रतिरोध (AMR) के संदर्भ में।
- Reduce TB stigma to ensure early detection and treatment success.
टीबी से जुड़ी सामाजिक वर्जनाओं को कम करने के लिए, जिससे शीघ्र निदान और उपचार की सफलता सुनिश्चित हो सके।

Conclusion: Towards an equitable TB programme

निष्कर्ष: समानता पर आधारित टीबी कार्यक्रम की ओर

- An equitable TB programme ensures that every individual receives high-quality, person-centred care.
एक समान टीबी कार्यक्रम, यह सुनिश्चित करता है कि प्रत्येक व्यक्ति को उच्च गुणवत्ता वाली, व्यक्ति-केंद्रित देखभाल मिले।
- Equity is a fundamental principle of healthcare, essential for TB elimination and UHC.
समानता स्वास्थ्य देखभाल का एक मौलिक सिद्धांत है, जो टीबी उन्मूलन और सार्वभौमिक स्वास्थ्य कवरेज (UHC) के लिए आवश्यक है।
- India's TB response can set global standards for TB care.
भारत की टीबी प्रतिक्रिया, वैश्विक स्तर पर टीबी देखभाल के मानक स्थापित कर सकती है।
- Applying an equity lens will accelerate progress towards TB elimination.
समानता के दृष्टिकोण को अपनाने से टीबी उन्मूलन की दिशा में प्रगति तेज होगी।



'Social stigma is a reality even today'

GS Paper III: S&T

Himani Verma from Chhattisgarh, Kailash Chandra Mishra from Odisha, G. Poongodi from Tamil Nadu (T.N.), and Sudeshwar Kumar Singh from Bihar are all Tuberculosis (TB) survivors-turned-champions, which means they are actively working to support communities affected by TB. They are founding members of their respective State-level TB survivor-led networks. These are excerpts from interviews with them:

Tell us your experience with TB. How did it affect your life?

Himani: I had TB when I was in Class 12. I stopped meeting my friends, and my family did not share my TB status with others. In 2018, when I first attended the TB survivor to TB Champion training, my perspective changed.

Kailash: When I was diagnosed with TB, I was studying in school. TB impacted my studies a lot.

Sudeshwar: I was working in the social sector and thought of TB as just another disease. But things changed when my family learnt about my condition. At home the social pressure was overwhelming.

Poongodi: I'm from a village in Vellore, T.N. My father is a farmer. I found out I had TB after three pregnancies, all of which ended in loss. When my husband and his family came to know that I had TB, I faced constant verbal and physical abuse. In 2013, I was diagnosed with TB for the third time and it was drug-resistant.

Who is a TB Champion, what do TB Champions do, and why do we need them?

Himani: A TB survivor is one who has defeated TB. A TB Champion is one who helps others fight TB. The TB Programme provides free diagnosis and treatment. But people with TB need counselling. They need someone who can listen to them and confidentially answer their questions. Our

Anupama Srinivasan

is Deputy Director, REACH and a member of the 2024-25 India WomenLift Health cohort

personal stories give confidence to those who are seeking TB care.

Kailash: A person with TB is vulnerable and anxious and wonders 'what will happen to me and my family, and how will I complete such a long treatment?' As TB Champions, we provide psychosocial support to them.

Do people with TB experience stigma today?

Sudeshwar: Social stigma is a reality even today. Recently, a doctor in Patna called me. His household help was diagnosed with TB and he wanted to send her back to her village. Whenever we do a community awareness programme, we share our phone numbers because they don't ask us anything during the meeting. Sometimes they stay back and talk to us alone. People call up and enquire about the facilities and how to initiate diagnosis.

Poongodi: Even today, when I eat, my father is the only one who sits with me and shares a meal. My sister either eats at a distance or skips meals with me altogether. Two years ago, a woman in my village was diagnosed with TB and became severely ill. Her family built a small hut for her outside their home. She died soon after.

Tell us a little about what your network has done so far.

Himani: We have grown from 30 people to over 400 in the TB Mukta Chhattisgarh Foundation network. We do advocacy work for improvement in TB care and services.

Kailash: The Kalinga TB Survivors Network in Odisha began working in 2018. We have 14 district chapters and more than 800 members. We recently mobilised funds and set up a grocery store for the family of a person with TB who was paralysed. His son who had left school was able to start

studying again.

Sudeshwar: Currently, as TB Mukta Vahini, we are active in 35 districts of Bihar. We became the first registered network in India and have been able to support over 80,000 people with TB.

Poongodi: We launched our network in 2022 with a small group of TB survivors from six districts of Tamil Nadu. Today, we are 2,000-strong. We identified that many people with TB were malnourished. Through local donors, we mobilised nutritional supplements for those who needed it most.

If you were in-charge of the TB programme for a day, what are the policy changes that you would change or introduce?

Himani: We still use smear microscopy for TB testing which delays the diagnosis – rapid diagnosis like CBNAAT must be offered upfront. I would also like to add transportation costs in the Nikshay Poshan Yojana.

Kailash: Nutrition support is given to the person with TB. If they are the head of the family and 4-5 family members are dependent on them, who will take care of their nutrition? I would make some policy-level changes here. For the diagnosis of TB, several tests have to be done and they are all in different places in the facility. If all of them can be done in one place at the hospital, it will be a game changer.

Sudeshwar: I will strengthen the turnaround time for various aspects from diagnosis to treatment initiation. Like COVID-19, TB needs a campaign with multi-sectoral action.

Poongodi: I will appoint one male and one female TB Champion in each block. There is no proper space for the TB programme in most hospitals, and no privacy. I will construct a separate building for TB in each district.



'Social stigma is a reality even today'

'सामाजिक कलंक आज भी एक सच्चाई है'

TB Champions and their experiences

टीबी चैंपियंस और उनके अनुभव

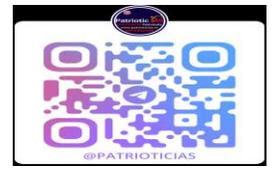
• Himani Verma (Chhattisgarh), Kailash Chandra Mishra (Odisha), G. Poongodi (Tamil Nadu), and Sudeshwar Kumar Singh (Bihar) are TB survivors-turned-champions.

हिमानी वर्मा (छत्तीसगढ़), कैलाश चंद्र मिश्रा (ओडिशा), जी. पूंगोडी (तमिलनाडु)

और सुदेश्वर कुमार सिंह (बिहार) टीबी से ठीक हुए मरीजों से चैंपियंस बने हैं।

- They actively support TB-affected communities and are founding members of State-level TB survivor-led networks.

वे टीबी प्रभावित समुदायों की सहायता करते हैं और राज्य-स्तरीय टीबी सर्वाइवर नेटवर्क्स के संस्थापक सदस्य हैं।



Their journey with TB

टीबी के साथ उनकी यात्रा

- **Himani:** Diagnosed with **TB in Class 12**, she faced **social isolation** as her family hid her illness. Her perspective changed after **TB survivor to Champion training in 2018**.
हिमानी: कक्षा 12 में टीबी का पता चला, सामाजिक अलगाव झेलना पड़ा क्योंकि परिवार ने बीमारी छिपाई। 2018 में टीबी चैंपियन प्रशिक्षण के बाद उनका नजरिया बदला।
- **Kailash:** TB affected his **studies significantly** as he was diagnosed during **school years**.
कैलाश: स्कूली शिक्षा के दौरान टीबी होने के कारण पढ़ाई पर बड़ा प्रभाव पड़ा।
- **Sudeshwar:** Initially thought TB was **just another disease**, but faced **social pressure at home** once his family found out.
सुदेश्वर: पहले टीबी को सामान्य बीमारी समझते थे, लेकिन जब परिवार को पता चला तो भारी सामाजिक दबाव झेलना पड़ा।
- **Poongodi:** After **three pregnancy losses**, she was diagnosed with TB. Faced **physical and verbal abuse** from in-laws after disclosure. Diagnosed **thrice, last time with drug-resistant TB in 2013**.
पूंगोडी: तीन बार गर्भपात होने के बाद टीबी का पता चला। जब पति और ससुराल वालों को पता चला, तो शारीरिक और मानसिक प्रताड़ना झेलनी पड़ी। 2013 में दवा-प्रतिरोधी टीबी की पुष्टि हुई।

Who is a TB Champion and why do we need them?

टीबी चैंपियन कौन होते हैं और उनकी आवश्यकता क्यों है?

- **Himani:** A **TB survivor** is someone who has **defeated TB**, while a **TB Champion** helps others fight the disease.
हिमानी: टीबी से ठीक हुआ व्यक्ति सर्वाइवर कहलाता है, जबकि टीबी चैंपियन अन्य मरीजों को ठीक होने में सहायता करता है।
- **TB Programme** provides **free diagnosis and treatment**, but **patients need counseling and emotional support**.
टीबी कार्यक्रम निःशुल्क जांच और उपचार प्रदान करता है, लेकिन मरीजों को परामर्श और मानसिक समर्थन की जरूरत होती है।
- **Kailash:** People with TB are often **vulnerable and anxious**, wondering about their **future and long treatment**. **TB Champions provide psychosocial support**.
कैलाश: टीबी मरीज कमजोर और चिंतित होते हैं, कि उनका भविष्य और लंबा इलाज कैसा रहेगा। टीबी चैंपियंस उन्हें मानसिक और सामाजिक समर्थन देते हैं।



Does TB stigma still exist?

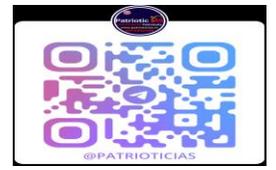
क्या टीबी से जुड़ा सामाजिक कलंक आज भी मौजूद है?

- **Sudeshwar:** Yes, social stigma still exists. A doctor in Patna wanted to send his TB-positive house help back to her village.
सुदेश्वर: हां, सामाजिक कलंक आज भी है। पटना में एक डॉक्टर ने अपनी टीबी-संक्रमित नौकरानी को गांव भेजने की कोशिश की।
- People avoid asking questions in public meetings but later call for information on facilities and diagnosis.
लोग सार्वजनिक बैठकों में सवाल नहीं पूछते लेकिन बाद में फोन कर जानकारी लेते हैं।
- **Poongodi:** Even today, only her father eats with her, while her sister avoids meals with her.
पूंगोडी: आज भी, सिर्फ उनके पिता उनके साथ खाना खाते हैं, जबकि बहन दूर बैठती है या साथ खाना छोड़ देती है।
- A TB patient in her village was isolated in a hut by family and later died.
उनके गांव में एक महिला को टीबी होने पर परिवार ने झोपड़ी में अलग कर दिया, और बाद में उसकी मृत्यु हो गई।

Work done by their TB networks

उनके टीबी नेटवर्क द्वारा किए गए कार्य

- **Himani:** The TB Mukht Chhattisgarh Foundation grew from 30 to 400 members. Works on advocacy and TB care improvements.
हिमानी: टीबी मुक्त छत्तीसगढ़ फाउंडेशन 30 से बढ़कर 400 सदस्य हो गया है। यह टीबी देखभाल में सुधार और जागरूकता पर काम करता है।
- **Kailash:** The Kalinga TB Survivors Network (Odisha), founded in 2018, has 14 district chapters and 800+ members.
कैलाश: कलिंग टीबी सर्वाइवर्स नेटवर्क (ओडिशा) 2018 में स्थापित हुआ, इसमें 14 जिला शाखाएं और 800+ सदस्य हैं।
- **Sudeshwar:** TB Mukht Vahini (Bihar) operates in 35 districts and is India's first registered TB network, supporting 80,000+ people.
सुदेश्वर: टीबी मुक्त वाहिनी (बिहार) 35 जिलों में सक्रिय है और भारत का पहला पंजीकृत टीबी नेटवर्क है, जिसने 80,000+ मरीजों की सहायता की।
- **Poongodi:** Tamil Nadu's network (2022) started with 6 districts and now has 2,000 members.
पूंगोडी: तमिलनाडु का नेटवर्क (2022) 6 जिलों से शुरू हुआ और अब 2,000 सदस्य हैं।
- Identified malnourished TB patients and arranged nutritional support through local donors.
कुपोषित टीबी मरीजों की पहचान की और स्थानीय दाताओं से पोषण सहायता दिलाई।



Policy changes they would introduce

वे कौन-से नीतिगत बदलाव लाना चाहेंगे?

- Himani:
 - Smear microscopy delays diagnosis – CBNAAT should be offered upfront.
स्मियर माइक्रोस्कोपी से निदान में देरी होती है – CBNAAT परीक्षण तुरंत उपलब्ध कराया जाए।
 - Nikshay Poshan Yojana should cover transportation costs.
निक्षय पोषण योजना में परिवहन लागत को भी जोड़ा जाए।
- Kailash:
 - Nutrition support should extend to the family, especially if TB patient is the sole breadwinner.
टीबी मरीज के साथ उसके परिवार को भी पोषण सहायता मिले, खासकर अगर मरीज घर का एकमात्र कमाने वाला सदस्य हो।
 - All diagnostic tests should be available in one place to simplify the process.
सभी जांच एक ही स्थान पर उपलब्ध हो, जिससे प्रक्रिया आसान हो।
- Sudeshwar:
 - Reduce delays in diagnosis and treatment initiation.
निदान और उपचार शुरू करने की प्रक्रिया में देरी कम की जाए।
 - A national TB awareness campaign like COVID-19 should be launched.
कोविड-19 की तरह राष्ट्रीय टीबी जागरूकता अभियान चलाया जाए।
- Poongodi:
 - One male and one female TB Champion should be appointed in each block.
प्रत्येक ब्लॉक में एक पुरुष और एक महिला टीबी चैंपियन नियुक्त किए जाएं।
 - Separate TB treatment buildings should be constructed in all districts.
सभी जिलों में अलग से टीबी उपचार केंद्र बनाए जाएं।



When genes wield a sickle

Sickle Cell Anaemia, a severe genetic blood disorder, has been crushing many tribal families in Alluri Sitharama Raju district in Andhra Pradesh. Patients suffer immense trauma and, sometimes, early death, while treatment costs push their families deeper into poverty. Currently, over 1,300 people live with this condition, many of them children, finds Harish Gilai

GS Paper III: S&T

Kumar was travelling for work in 2016 when he received a call from his daughter's school. An urgent voice on the other end informed him that the six-year-old had fallen unconscious.

Far away from his home in Araku Valley, he frantically called his wife and asked her to rush to the school. It took him a few hours to reach the school, with worry gnawing through his heart.

He found that his daughter's legs had swelled and lumps had formed on several parts of her body. With no major medical facilities available in the tribal area, a frightened Kumar decided to take his daughter to King George Hospital (KGH) in Visakhapatnam, about 120 km away. It was at the hospital that he first came to know about the malady afflicting his child, a name that has not left his mind since: Sickle Cell Anaemia.

"We were unaware of the disorder, but I have since enquired about it and learnt that there are more such cases in Anantaghiri, Pedabayalu and Paderu. In some cases, children have even died," says Kumar, stress and fatigue weighing him down. He later took his daughter to a retired paediatric doctor in Visakhapatnam, who, he says, had a vast experience treating such children.

The child underwent treatment for over two weeks, and Kumar, his wife and the rest of the family were told to get tested. The results showed that Kumar and his wife were 'traits', which means they are in safe zone and asymptomatic.

"Jaundice is the most common health issue she suffers. If she gets stressed owing to studies, games or any other reason, she develops swelling on her body, joint ache and fever. Sometimes, there is a drop in platelets, and we need to monitor blood levels regularly," Kumar explains.

Even a change in temperature triggers health complications in a person with Sickle Cell Anaemia, he says. During November-February, when temperature drops to single digits in the Agency areas, his now 15-year-old daughter battles with breathing difficulties in the mornings.

"Every month, we go to Visakhapatnam from Araku Valley for health check-up. We had even tried taking her for advanced treatment in Hyderabad. Once one develops this disorder, the patient needs lifelong treatment," says Kumar, who is a pastor.

According to sources, a number of children in the Agency areas of Alluri Sitharama Raju district suffer from Sickle Cell Anaemia, a genetic blood disorder in individuals who inherit mutated hae-

GS Paper I: Alluri Sitharama Raju



Jaundice is the most common health issue. If she gets stressed owing to studies, games or any other reason, she develops swelling on her body, joint ache and fever.

KUMAR
Parent of a child suffering from the condition

moglobin genes from their parents. It causes the red blood cells to take the form of a crescent or a sickle. These misshapen cells have a shorter survival rate and can clog small blood vessels, leading to anaemia, severe pain and other major health complications.

Kumar says he and his wife are constantly worried about their daughter. "We are tense till she returns home from school. We had even submitted a representation to the school, requesting the management to call us even if it's a small health issue," he says.

15 years of struggle

K. Praveen, another resident of Araku Valley Mandal, recalls how he and his sister were diagnosed with Sickle Cell Anaemia in 2010 when they were around 15 years old. He becomes emotional when he talks about how she suffered for 15 years before passing away in September last. "It cost us about ₹25,000 a month for her treatment and diet. She often suffered joint pains, high fever and jaundice; PMS added to her health problems every month," he recalls.

The disorder has become a challenge faced by

several tribal communities in the district, and each year, a significant number of new cases are diagnosed.

District Medical and Health Officer Jamal Basha says consanguineous marriages are the primary reason why the condition is prevalent among tribespeople. Individuals in the communities continue to marry their blood relatives as part of their tradition.

This leads to persistence of the disorder in the next generation. Nutritional deficiencies, especially a lack of essential vitamins, minerals and iron in their diets, exacerbate the condition, making it harder for the affected children to fight the symptoms, he adds.

Jamal Basha says tests are being taken up throughout the year to find Sickle Cell Anaemia's prevalence among schoolchildren and pregnant women. A massive drive was organised a year ago to find adolescents with the condition.

"Over the past two years, we screened about 4.01 lakh cases, of which 12,595 cases came out as 'traits'. As of now, there are about 1,372 positive cases [individuals with Sickle Cell Anaemia]," the DMHO says.

For mild and moderate cases of anaemia, the department provides the patients with iron-and-folic acid tablets, and their condition is monitored time to time through tests. Severe cases should be treated more carefully. They are given iron sucrose and monitored regularly. Some times, the patients require blood transfusion, he says.

"Earlier, severe cases used to be handled by the KGH in Visakhapatnam. Now, however, the government has made diagnosis available at Go-

KILLO SURENDRA
A member of A.P. Girijana Sangham

iron sucrose and monitored regularly. Some times, the patients require blood transfusion, he says.

"Earlier, severe cases used to be handled by the KGH in Visakhapatnam. Now, however, the government has made diagnosis available at Go-

vernment Paderu Hospital. We have physicians and testing equipment such as HPLC at the hospital. However, we shift critical patients who require blood transfusion to the KGH," he adds.

A vicious cycle

About two years ago, the State government introduced a scheme to provide a financial assistance of ₹10,000 to the families of patients, which, according to many parents, is insufficient.

Anil, a poultry farmer from Pedabayalu, says it costs him around ₹20,000 a month to take care of his 12-year-old daughter, who suffers from the condition. The money goes into buying nutritious food, medication and travel.

Anil, who gets his daughter treated at a private hospital in Visakhapatnam, says he spends two days every month for her treatment. "We include a lot of vegetables, mutton and dry fruits in her diet. Daily medicine should never be missed," Anil explains, adding that his income from the farm is insufficient to meet the expenses and that he often borrows money.

Many parents also turn to various doctors in Telangana and Maharashtra, seeking advanced care, the costs of which are making them poorer by the day.

Satish Kumar, a resident of Hukumpeta who has a son suffering from the disease, throws light on the devastating effect the disorder has on childhood. "Children are under a lot of pressure from a young age... My son wants to play and have fun with his friends but is unable to do any of that. He is not fully aware of his condition but knows he has some health issue," he says.

Intergenerational problem

"Sickle Cell Anaemia has been ravaging tribal communities for decades. Though the government has conducted tests and provided medication, no proper research has been taken up. There has to be a permanent solution, now that ASR district has a medical college," says Killo Surendra, a member of A.P. Girijana Sangham and a resident of Araku Valley.

Surendra also opines that more awareness should be spread among the tribespeople about the disease. It is vital that the communities that bear the brunt of the disorder receive more support so that they can fight it and ensure a better future for their children.

Jamal Basha says the department has been spreading awareness about the disorder through posters and pictures on RTC buses, at weekly shandies and through ANMs and ASHA workers. This apart, awareness programmes are held at students hostels as well.

A Senior Health Assistant from Alluri Sitharama Raju district, who did not want to be quoted, claims that many tribal families in the interior areas of the district are unaware of the condition and lack access to proper healthcare. Owing to a delayed diagnosis and treatment, the consequences are often devastating. "In some cases, early deaths happen, but this does not come to light," he adds.

Rama Rao Dora, a tribal activist from Paderu, says Sickle Cell Anaemia deals a crushing blow to many tribal families who already live in poverty. "There have been cases wherein people ignored it, leading to fatalities. The government should regard those with the condition as special cases and come up with more measures to help them. Testing centres and doctors who can treat the condition should be made available in the interior areas as well," he adds.



When genes wield a sickle

जब जीन बना देते हैं दरांती का आकार

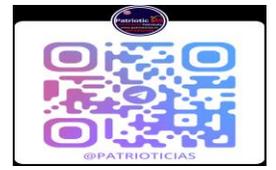
Sickle Cell Anaemia in Andhra Pradesh

आंध्र प्रदेश में सिकल सेल एनीमिया

- Sickle Cell Anaemia is a severe genetic blood disorder affecting over 1,300 people in Alluri Sitharama Raju district, many of them children.

सिकल सेल एनीमिया एक गंभीर अनुवांशिक रक्त विकार है, जिससे आंध्र प्रदेश के अल्लूरी सीताराम राजू जिले में 1,300 से अधिक लोग प्रभावित हैं, जिनमें से कई बच्चे हैं।

- Patients suffer from severe pain, anaemia, and early death, while treatment costs push families into poverty.



मरीजों को भारी दर्द, एनीमिया और समय से पहले मृत्यु का सामना करना पड़ता है, जबकि इलाज का खर्च परिवारों को गरीबी में धकेल देता है।

Kumar's Daughter's Struggle

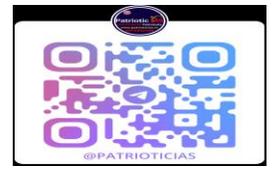
कुमार की बेटी का संघर्ष

- In 2016, Kumar's six-year-old daughter fell unconscious at school.
2016 में, कुमार की छह वर्षीय बेटी स्कूल में बेहोश हो गई।
- She was rushed to King George Hospital (KGH) in Visakhapatnam (120 km away), where she was diagnosed with Sickle Cell Anaemia.
उसे विशाखापट्टनम के किंग जॉर्ज अस्पताल (KGH) (120 किमी दूर) ले जाया गया, जहाँ उसे सिकल सेल एनीमिया होने का पता चला।
- Kumar and his wife were found to be "traits" (carriers) of the disease, meaning they were asymptomatic but passed the gene to their daughter.
कुमार और उनकी पत्नी "ट्रेट" (रोग वाहक) पाए गए, जिसका अर्थ है कि वे स्वयं लक्षणहीन थे, लेकिन उन्होंने जीन को अपनी बेटी में स्थानांतरित कर दिया।
- His daughter suffers from jaundice, swelling, joint pain, fever, and platelet drops, requiring regular blood monitoring.
उनकी बेटी को पीलिया, सूजन, जोड़ों में दर्द, बुखार और प्लेटलेट्स में गिरावट होती है, जिससे नियमित रक्त जांच आवश्यक होती है।
- During winter (November-February), cold temperatures worsen her breathing difficulties.
सर्दियों (नवंबर-फरवरी) में, ठंडे तापमान से उसकी सांस लेने में कठिनाई बढ़ जाती है।
- The family travels monthly from Araku Valley to Visakhapatnam for check-ups.
परिवार को हर महीने अराकू वैली से विशाखापट्टनम जाना पड़ता है जाँच के लिए।

What is Sickle Cell Anaemia?

सिकल सेल एनीमिया क्या है?

- It is a genetic blood disorder caused by mutated haemoglobin genes, leading to crescent (sickle)-shaped red blood cells.
यह एक अनुवांशिक रक्त विकार है, जो हीमोग्लोबिन जीन में उत्परिवर्तन के कारण होता है, जिससे लाल रक्त कोशिकाएँ दरांती के आकार की बन जाती हैं।
- These abnormal cells clog blood vessels, causing anaemia, severe pain, and organ damage.
ये असामान्य कोशिकाएँ रक्त वाहिकाओं को अवरुद्ध करती हैं, जिससे एनीमिया, गंभीर दर्द और अंगों को नुकसान होता है।



A Family's 15-Year Struggle

15 वर्षों का संघर्ष

- **K. Praveen**, a resident of **Araku Valley**, and his **sister** were diagnosed with **Sickle Cell Anaemia in 2010** at the age of 15.
अराकू वैली के के. प्रवीन और उनकी बहन को 2010 में 15 वर्ष की आयु में सिकल सेल एनीमिया का पता चला।
- His sister **suffered for 15 years** before **passing away in September**.
उनकी बहन ने 15 वर्षों तक संघर्ष किया और सितंबर में उनका निधन हो गया।
- **Monthly treatment and diet cost ₹25,000**, making survival **economically challenging**.
मासिक इलाज और आहार पर ₹25,000 का खर्च आता था, जिससे जीवनयापन आर्थिक रूप से कठिन हो गया।
- She frequently suffered from **joint pains, high fever, jaundice**, and additional complications due to **PMS (Premenstrual Syndrome)**.
उन्हें अक्सर जोड़ों में दर्द, तेज बुखार, पीलिया और PMS के कारण अतिरिक्त स्वास्थ्य समस्याएँ होती थीं।

Conclusion

निष्कर्ष

- **Sickle Cell Anaemia remains a serious health crisis in tribal areas like Alluri Sitharama Raju district**, requiring **lifelong treatment**.
सिकल सेल एनीमिया जनजातीय क्षेत्रों, जैसे अल्लूरी सीताराम राजू जिले में एक गंभीर स्वास्थ्य संकट बना हुआ है, जिससे आजन्म उपचार आवश्यक होता है।
- **Limited medical facilities force families to travel long distances**, adding **financial burden**.
सीमित चिकित्सा सुविधाएँ परिवारों को लंबी दूरी तय करने के लिए मजबूर करती हैं, जिससे आर्थिक बोझ बढ़ता है।
- **Awareness and early diagnosis** are crucial to preventing **child mortality and financial hardship**.
जागरूकता और शीघ्र निदान से बच्चों की मृत्यु दर और आर्थिक कठिनाइयों को रोका जा सकता है।

The Persistence of Sickle Cell Anaemia in Tribal Communities

जनजातीय समुदायों में सिकल सेल एनीमिया की स्थायित्व

Causes and Spread

कारण और प्रसार

- **Sickle Cell Anaemia** has become a **major challenge for tribal communities**, with a **significant number of new cases diagnosed each year**.



सिकल सेल एनीमिया जनजातीय समुदायों के लिए एक बड़ी चुनौती बन गया है, और हर साल बड़ी संख्या में नए मामले सामने आ रहे हैं।

- District Medical and Health Officer (DMHO) Jamal Basha states that consanguineous marriages (marriage between blood relatives) are the primary reason for the high prevalence of the disorder.

जिला चिकित्सा और स्वास्थ्य अधिकारी (DMHO) जमाल बाशा के अनुसार, रक्त संबंधियों के बीच विवाह इस बीमारी के अधिक प्रसार का मुख्य कारण है।

- **Nutritional deficiencies, especially lack of essential vitamins, minerals, and iron, worsen the condition, making it harder for affected children to fight symptoms.**
पोषण की कमी, विशेष रूप से आवश्यक विटामिन, खनिज और आयरन की कमी, इस स्थिति को और गंभीर बना देती है, जिससे प्रभावित बच्चों के लिए लक्षणों से लड़ना कठिन हो जाता है।

Screening and Treatment Efforts

जाँच और उपचार के प्रयास

- Screening drives are conducted throughout the year to detect Sickle Cell Anaemia among schoolchildren and pregnant women.

स्कूल के बच्चों और गर्भवती महिलाओं में सिकल सेल एनीमिया का पता लगाने के लिए पूरे वर्ष स्क्रीनिंग अभियान चलाए जाते हैं।

- Over the past two years, 4.01 lakh cases were screened, out of which 12,595 were found to be carriers ("traits"), while 1,372 people were diagnosed with the disease. पिछले दो वर्षों में 4.01 लाख मामलों की जाँच की गई, जिनमें से 12,595 लोग वाहक ("ट्रेट्स") पाए गए, जबकि 1,372 लोग इस बीमारी से ग्रसित मिले।

- Mild and moderate cases receive iron and folic acid tablets, with regular health monitoring.

हल्के और मध्यम मामलों के लिए आयरन और फोलिक एसिड की गोलियाँ दी जाती हैं, और नियमित स्वास्थ्य निगरानी की जाती है।

- Severe cases require iron sucrose therapy, frequent monitoring, and sometimes blood transfusions.

गंभीर मामलों में आयरन सुक्रोज थेरेपी, नियमित निगरानी और कभी-कभी रक्त आधान (ब्लड ट्रांसफ्यूजन) की आवश्यकता होती है।

- Previously, critical cases were treated at King George Hospital (KGH), Visakhapatnam, but now diagnosis and treatment are available at Government Paderu Hospital.

पहले गंभीर मामलों का इलाज विशाखापट्टनम के किंग जॉर्ज अस्पताल (KGH) में किया जाता था, लेकिन अब सरकारी पादेरु अस्पताल में भी जाँच और उपचार की सुविधा उपलब्ध है।

Financial Burden on Families

परिवारों पर आर्थिक बोझ



- In 2022, the Andhra Pradesh government introduced a financial assistance scheme, providing ₹10,000 per year to affected families.
2022 में, आंध्र प्रदेश सरकार ने एक वित्तीय सहायता योजना शुरू की, जिसके तहत प्रभावित परिवारों को ₹10,000 प्रति वर्ष दिए जाते हैं।
- Many parents say this amount is insufficient, as monthly treatment costs can go up to ₹20,000 for medicines, nutrition, and travel expenses.
कई माता-पिता का कहना है कि यह राशि अपर्याप्त है, क्योंकि मासिक उपचार लागत ₹20,000 तक पहुँच सकती है, जिसमें दवाइयाँ, पोषण और यात्रा व्यय शामिल हैं।
- Parents often travel to Telangana and Maharashtra seeking advanced medical care, which is pushing them deeper into poverty.
माता-पिता उन्नत चिकित्सा उपचार के लिए अक्सर तेलंगाना और महाराष्ट्र जाते हैं, जिससे वे और अधिक गरीबी में धकेले जा रहे हैं।

Impact on Childhood

बचपन पर प्रभाव

- Children with Sickle Cell Anaemia face severe physical limitations—they struggle to play, attend school regularly, and engage in daily activities.
सिकल सेल एनीमिया से पीड़ित बच्चों को गंभीर शारीरिक कठिनाइयों का सामना करना पड़ता है—वे खेलने, नियमित रूप से स्कूल जाने और दैनिक गतिविधियों में भाग लेने में असमर्थ होते हैं।
- Satish Kumar from Hukumpeta says his son wants to play like other children but cannot due to his condition.
हुकुमपेटा के सतीश कुमार कहते हैं कि उनका बेटा दूसरे बच्चों की तरह खेलना चाहता है, लेकिन बीमारी के कारण नहीं खेल पाता।

Need for Awareness and Better Healthcare

जागरूकता और बेहतर स्वास्थ्य देखभाल की आवश्यकता

- A.P. Girijana Sangham member Killo Surendra emphasizes that Sickle Cell Anaemia has affected tribal communities for decades, but no long-term research has been conducted.
ए.पी. गिरिजना संघम के सदस्य किल्लो सुरेंद्र बताते हैं कि सिकल सेल एनीमिया दशकों से जनजातीय समुदायों को प्रभावित कर रहा है, लेकिन कोई दीर्घकालिक शोध नहीं किया गया।
- Surendra urges the government to ensure a permanent solution, now that ASR district has a medical college.
सुरेंद्र सरकार से इस बीमारी के स्थायी समाधान की माँग करते हैं, क्योंकि अब ए.एस.आर. जिले में एक मेडिकल कॉलेज है।
- The health department is spreading awareness through posters, RTC buses, weekly markets (shandies), and ASHA workers.



स्वास्थ्य विभाग पोस्टर, RTC बसों, साप्ताहिक बाजारों (शांडी) और आशा कार्यकर्ताओं के माध्यम से जागरूकता फैला रहा है।

- A Senior Health Assistant states that many interior tribal families remain unaware of the disease, leading to delayed diagnosis and early deaths.

एक वरिष्ठ स्वास्थ्य सहायक के अनुसार, कई दूरदराज के जनजातीय परिवार इस बीमारी से अनजान हैं, जिसके कारण देर से निदान और समय से पहले मौतें हो रही हैं।

Call for Government Action

सरकार से ठोस कदम उठाने की माँग

- Tribal activist Rama Rao Dora from Paderu states that Sickle Cell Anaemia is devastating poor tribal families.
पादेरू के जनजातीय कार्यकर्ता रामा राव डोरा कहते हैं कि सिकल सेल एनीमिया गरीब जनजातीय परिवारों को भारी नुकसान पहुँचा रहा है।
- He urges the government to provide special aid, more doctors, and diagnostic centers in remote areas.
वे सरकार से विशेष सहायता, अधिक डॉक्टरों और दूरस्थ क्षेत्रों में जाँच केंद्रों की माँग करते हैं।

Conclusion

निष्कर्ष

- Sickle Cell Anaemia continues to devastate tribal communities in Andhra Pradesh, requiring urgent intervention from the government.
सिकल सेल एनीमिया आंध्र प्रदेश में जनजातीय समुदायों को तबाह कर रहा है, और इसके लिए सरकार से त्वरित हस्तक्षेप की आवश्यकता है।
- Financial aid, better medical infrastructure, and increased awareness are essential to prevent child mortality and economic hardship.
वित्तीय सहायता, बेहतर चिकित्सा बुनियादी ढाँचा और अधिक जागरूकता आवश्यक हैं ताकि बच्चों की मृत्यु दर और आर्थिक कठिनाइयों को रोका जा सके।

Sickle Cell Anaemia

सिकल सेल एनीमिया

- Sickle Cell Anaemia is a genetic blood disorder where red blood cells (RBCs) take on a crescent (sickle) shape instead of the normal round shape, leading to blockages in blood flow and oxygen deficiency in the body.



सिकल सेल एनीमिया एक आनुवंशिक रक्त विकार (genetic blood disorder) है, जिसमें लाल रक्त कोशिकाएँ (RBCs) सामान्य गोल आकार के बजाय अर्धचंद्र (सिकल) आकार ले लेती हैं, जिससे रक्त प्रवाह में रुकावट और शरीर में ऑक्सीजन की कमी हो जाती है।

Causes of Sickle Cell Anaemia

सिकल सेल एनीमिया के कारण

- Caused by a mutation in the **HBB gene**, which affects the production of **haemoglobin**, the oxygen-carrying protein in RBCs.
यह **HBB जीन** में उत्परिवर्तन (mutation) के कारण होता है, जो लाल रक्त कोशिकाओं में ऑक्सीजन ले जाने वाले प्रोटीन हीमोग्लोबिन के उत्पादन को प्रभावित करता है।
- A child **inherits the disease if both parents** carry the defective gene. If only one parent has the gene, the child becomes a **carrier** but does not develop the disease.
आनुवंशिक संचरण: यदि दोनों माता-पिता दोषपूर्ण जीन लेकर चलते हैं, तो बच्चा इस रोग से प्रभावित होता है। यदि केवल एक माता-पिता में यह जीन हो, तो बच्चा **वाहक (carrier)** बनता है, लेकिन उसे बीमारी नहीं होती।

Symptoms of Sickle Cell Anaemia

सिकल सेल एनीमिया के लक्षण

- **Severe Pain Episodes (Sickle Cell Crises):** Blocked blood flow leads to **intense pain**, especially in **joints, chest, and bones**.
तीव्र दर्द के दौर (सिकल सेल क्राइसिस): रक्त प्रवाह बाधित होने से तेज दर्द होता है, विशेष रूप से जोड़ों, छाती और हड्डियों में।
- **Anaemia:** Due to rapid breakdown of sickle-shaped RBCs, leading to **fatigue, weakness, and dizziness**.
एनीमिया: सिकल आकार की RBCs तेजी से टूटने के कारण थकान, कमजोरी और चक्कर आना।
- **Frequent Infections:** The spleen, which helps fight infections, gets **damaged** in sickle cell patients, making them vulnerable to diseases.
बार-बार संक्रमण: तिल्ली (spleen) क्षतिग्रस्त हो जाती है, जिससे रोगी को संक्रमण का खतरा बढ़ जाता है।
- **Delayed Growth and Puberty:** Oxygen deficiency can lead to **slower growth in children** and **delayed puberty**.
विकास में देरी और विलंबित यौवन: ऑक्सीजन की कमी के कारण बच्चों में विकास धीमा हो सकता है और यौवन देरी से आता है।
- **Vision Problems:** Blocked blood flow in eye vessels can cause **retinal damage and vision loss**.



दृष्टि समस्याएँ: आँखों की रक्त वाहिकाओं में रुकावट के कारण रेटिना को नुकसान और दृष्टिहीनता हो सकती है।

Diagnosis of Sickle Cell Anaemia

सिकल सेल एनीमिया की जाँच

- **Blood Test:** A haemoglobin electrophoresis test detects abnormal haemoglobin (HbS) in the blood.
रक्त परीक्षण: हीमोग्लोबिन इलेक्ट्रोफोरेसिस टेस्ट से असामान्य हीमोग्लोबिन (HbS) की पहचान होती है।
- **Genetic Testing:** Identifies mutations in the HBB gene to confirm the disease or carrier status.
आनुवांशिक परीक्षण: HBB जीन में उत्परिवर्तन की पहचान करके रोग या वाहक स्थिति की पुष्टि की जाती है।
- **Newborn Screening:** In many countries, a mandatory blood test is conducted on newborns to detect the disease early.
नवजात स्क्रीनिंग: कई देशों में नवजात शिशुओं पर अनिवार्य रक्त परीक्षण किया जाता है ताकि बीमारी का शीघ्र पता लगाया जा सके।

Treatment and Management

इलाज और प्रबंधन

- **Medications:**
 - **Hydroxyurea:** Increases fetal haemoglobin (HbF) to reduce sickle cell formation and pain episodes.
हाइड्रॉक्सीयूरिया: भ्रूण हीमोग्लोबिन (HbF) को बढ़ाकर सिकल सेल बनने और दर्द को कम करता है।
 - **Pain Relievers:** Used to manage severe pain crises.
दर्द निवारक दवाएँ: तीव्र दर्द को नियंत्रित करने के लिए दी जाती हैं।
 - **Antibiotics & Vaccines:** To prevent infections, especially in children.
एंटीबायोटिक्स और टीके: संक्रमण को रोकने के लिए, विशेष रूप से बच्चों में।
- **Blood Transfusions:** Used to replace sickle-shaped RBCs with normal RBCs, reducing complications like stroke.
रक्त आधान (Blood Transfusion): सिकल आकार की RBCs को सामान्य RBCs से बदलने के लिए किया जाता है, जिससे स्ट्रोक जैसी जटिलताओं को कम किया जाता है।
- **Bone Marrow Transplant (BMT):** The only potential cure, but it requires a compatible donor and has risks.



अस्थि मज्जा प्रत्यारोपण (BMT): एकमात्र संभावित इलाज, लेकिन इसके लिए *अनुकूल दाता* की आवश्यकता होती है और इसमें जोखिम होता है।

Prevention and Awareness

रोकथाम और जागरूकता

- **Genetic Counseling:** Couples with a family history should undergo **genetic screening** before planning a child.
आनुवांशिक परामर्श: जिन दंपतियों के परिवार में यह बीमारी रही है, उन्हें *गर्भधारण से पहले आनुवांशिक परीक्षण* कराना चाहिए।
- **Carrier Screening Programs:** Many countries conduct screening programs in **high-risk populations**.
वाहक जाँच कार्यक्रम: कई देश *उच्च जोखिम वाले समुदायों* में स्क्रीनिंग कार्यक्रम चलाते हैं।
- **Healthy Lifestyle:** Drinking plenty of water, avoiding extreme temperatures, and managing stress can help prevent crises.
स्वस्थ जीवनशैली: *पर्याप्त पानी पीना, अत्यधिक तापमान से बचना और तनाव प्रबंधन* से सिकल सेल संकट को रोका जा सकता है।

Global and Indian Perspective

वैश्विक और भारतीय परिप्रेक्ष्य

- **India** has a high prevalence of sickle cell anaemia, especially among **tribal communities** in states like **Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, and Maharashtra**.
भारत में *सिकल सेल एनीमिया का अधिक प्रचलन* है, विशेष रूप से **मध्य प्रदेश, छत्तीसगढ़, झारखंड, ओडिशा और महाराष्ट्र** जैसे राज्यों की *आदिवासी जनसंख्या* में।
- **WHO Estimates:** Over **20 million** people worldwide are affected, with **high cases in Africa, India, and the Middle East**.
WHO अनुमान: *दुनियाभर में 2 करोड़ से अधिक लोग प्रभावित हैं*, जिसमें **अफ्रीका, भारत और मध्य पूर्व** में उच्च मामले देखे जाते हैं।