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THE HINDU NEWSPAPER

03 SEPTEMBER 2026

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GS Paper 1: History	03 September 2026
TOPICS COVERED	
03S9 Quiz	



Questions and answers to the previous day's daily quiz:

1. This British constitutional initiative provided the framework for the formation of the Interim Government. **Ans: The Cabinet Mission Plan of 1946**
 2. The Commander-in-Chief of India while the Interim govt. was in operation. **Ans: General Sir Claude Auchinleck**
 3. The Muslim League finally joined the Interim Government on this date. **Ans: October 26, 1946**
 4. The members of the Constituent Assembly, from which the Interim Government was formed were chosen through this mechanism. **Ans: They were not elected directly by the public. Members were elected by the provincial legislative assemblies**
 5. The Interim Government ceased to exist on this date. Mention the major constitutional event which brought its tenure to an end. **Ans: It ceased to exist on August 15, 1947, when British India was partitioned and power was transferred to the new Dominions of India and Pakistan**
- Visual: Identify these members of the Interim Government.
Ans: (From left) Sarat Chandra Bose, Jagjivan Ram, Rajendra Prasad, Sardar Vallabhbhai Patel, Asaf Ali, Pandit Jawaharlal Nehru and Syed Ali Zaheer
Early birds: Prem Nath Tiwari| Sitaram Saharay| Neil Lall| Anan E A Rahim| Venkat Parthasarathy

03S9. Quiz

1. Constitutional Framework for the Interim Government

- The **Cabinet Mission Plan of 1946** provided the political framework for establishing an Interim Government and a Constituent Assembly.
- The mission comprised **Pethick-Lawrence, Stafford Cripps and A. V. Alexander**, representing the British government.
- Its statement of **16 May 1946** proposed an interim administration while arrangements for constitution making proceeded.
- The **Interim Government assumed office on 2 September 1946**, with Jawaharlal Nehru serving as **Vice-President of the Viceroy's Executive Council**.
- It administered British India during the transition towards independence, while the Constituent Assembly undertook the separate responsibility of framing a constitution.

2. Commander-in-Chief During the Interim Government

- **Sir Claude Auchinleck** served as Commander-in-Chief, India, during the Interim Government's tenure between September 1946 and August 1947.
- His second appointment to this office began in **June 1943** and continued until the partition of British India.
- An important correction concerns his rank: he was already a **Field Marshal in 1946**, making that designation more precise than General.
- His responsibilities included military administration and preparations for dividing the armed forces between India and Pakistan.
- His military command was distinct from the civilian **Defence portfolio**, which was held by **Sardar Baldev Singh**.

3. Muslim League's Entry into the Interim Government

- The **Muslim League** joined the Interim Government on **26 October 1946**, after initially refusing to participate when it began functioning.
- Its participation followed negotiations involving **Viceroy Lord Wavell** and the political leadership of the League and Congress.
- Five League nominees entered the administration: **Liaquat Ali Khan, I. I. Chundrigar, Abdur Rab Nishtar, Ghazanfar Ali Khan and Jogendra Nath Mandal**.
- **Liaquat Ali Khan** received the **Finance portfolio**, giving the League an influential position within the government.
- Participation in the executive did not resolve disagreements over Pakistan or secure lasting constitutional cooperation

4. Selection of Constituent Assembly Members

- The **Constituent Assembly's provincial representatives** were indirectly elected by members of the **Provincial Legislative Assemblies**, rather than directly by citizens.
- The **Cabinet Mission** scheme prescribed **proportional representation through the single transferable vote**, with separate voting by designated communities.
- The **planned strength was 389**: 292 provincial representatives, four representatives from **Chief Commissioners' provinces** and 93 from princely states.
- Princely state representation followed different arrangements, so the provincial election rule did not cover every member.



- Crucially, the Interim Government was the **reconstituted Viceroy's Executive Council**, not an executive elected by this Assembly.

5. End of the Interim Government

- The Interim Government's tenure ended on **15 August 1947**, when independence and partition transformed the constitutional structure of British India.
- The **Indian Independence Act, 1947**, provided the legal basis for establishing the independent Dominions of India and Pakistan.
- The Act received **Royal Assent on 18 July 1947** and designated 15 August as the appointed day.
- British governmental responsibility ended, and the new dominion administrations assumed authority within their respective territories.
- Independence did not immediately make India a republic; the republican Constitution came into force later, on **26 January 1950** instead.

6. Visual Question: Members of the Interim Government

- Sarat Chandra Bose** held the Works, Mines and Power portfolio in the initial Interim Government.
- Jagjivan Ram** was responsible for Labour, while **Rajendra Prasad** handled Food and Agriculture.
- Sardar Vallabhbhai Patel** held Home, including Information and Broadcasting, within the administration.
- Asaf Ali** handled communications responsibilities covering Railways and War Transport during the initial allocation.
- Jawaharlal Nehru** held External Affairs and Commonwealth Affairs and served as the Executive Council's Vice-President.
- Syed Ali Zaheer** handled Legislative matters; the initial portfolio list also assigned him Posts and Air responsibilities before subsequent ministerial changes.

GS Paper 1: Society		03 September 2026
TOPICS COVERED		
03S9	A colonial gaze: how the British imagined Bastar and its people एक औपनिवेशिक दृष्टि: अंग्रेजों ने बस्तर और उसके लोगों की कल्पना कैसे की	



A colonial gaze: how the British imagined Bastar and its people

Colonial accounts portrayed Bastar as a primitive, isolated woodland whose inhabitants were 'rude and barbarous', while a flawed census produced wildly unreliable population figures and recorded a plethora of colourful yet inaccurate professions

GS I: Society
Shantanu Nandan Sharma

For years, Bastar remained an enigma to the British, who erroneously and conveniently dismissed it as a mysterious woodland inhabited by cannibals, painting it as an island of primitiveness amidst civilisations. In his enthusiasm to author a two-volume work on India, East India Company official Henry Harpur Spry went so far as to describe the people of Bastar as those who 'sacrifice and eat their fellow creatures'.

Spread of misinformation

Consider this: Spry never set foot in Bastar, relying instead on hearsay from Company officers like Captain Crawford of the Bengal Artillery, who oversaw Chhattisgarh. Spry's armchair account reads more like lengthy chatter rather than a valuable historical document. Further, there is no evidence to suggest that Crawford himself had any first-hand experience in Bastar. It is important to put it on record that Spry also made a glaring mistake on Bastar when he called its Rajput Raja a Gond. This mistake was possibly carried over from the past. While translating the *Tarikh-i-Firishhta*, a medieval Persian history of the Deccan with intriguing references to the Bastar of 1610-11, John Briggs added an asterisk to the Bastar raja, mistakenly labelling him as a Gond chief.

The isolation of Bastar fostered the spread of misinformation. A report from the East India Company in 1812, for

example, provided a skewed perspective of the area and the people therein. The inhabitants were described as 'rude and barbarous', yet they were paradoxically praised for the staunch defence of their 'ancient rightful inheritance' - the lowlands. The report says that they, 'although rude and barbarous, may yet be denominated warlike, as they have always distinguished themselves bold, persevering champions of the great law of nature'.

It further adds: 'Being driven to their wild unwholesome fastness, among the mountains, they frequently descend in harvest time, into the lowlands, to dispute the produce of their ancient rightful inheritance with their present possessors...' Clearly, the report's author had not visited the territory.

Counting the people

The first attempt to quantify Bastar's population came on November 5, 1866 during a census in the Central Provinces. This inaugural headcount yielded a figure of 2,69,684. However, the census was plagued by significant anomalies. The administration faced a dilemma when the next census in 1872 showed an inexplicable 70 per cent drop in the population, bringing the total down to 78,856. The breakdown of this figure included 29,060 Hindus, 1,704 Muslims, and a substantial category of 48,092 classified as 'others'.

A deadly combination of cholera and famine ravaged central India in 1869, undoubtedly impacting Bastar. However,

this alone would not explain the population plunge - a staggering 1,90,828 residents vanishing in just six years. The numbers reeked of error.

J.W. Neill, officiating secretary to the Central Provinces' chief commissioner, echoed these concerns in his report on the 1872 census. He pointed out glaring inconsistencies: The 1866 Bastar figures were likely mere estimates based on area, while the 1872 census, despite claiming a more rigorous method, also appeared flawed, as in many villages 'the children were not enumerated'. The report quotes comments from the deputy commissioner of Upper Godavari district, under whose jurisdiction Bastar fell for census purposes.

Neill's report continued to expose the flaws of the 1872 census in Bastar. While forms and instructions reached the raja, 'there is no means of knowing whether houses were numbered or lists of inhabitants taken previous to the night of the Census'. Some areas, such as Jagdalpur, Bhopalpatnam and Bijapur, showed decent efforts, but the rest carried errors.

Most alarmingly, children under twelve were entirely omitted. While the Central Provinces overall saw a modest increase (from 9.06 million to 9.25 million), Bastar's dramatic decline remained an enigma. In the census exercise of early British days, a headcount was conducted on a single day.

The 1872 census wasn't just plagued by regional discrepancies; there were some structural errors too. The sheer number

of categories (caste, occupation, race, religion, remarks, etc. - a whopping nineteen) gave printers nightmares. Worse yet, a lack of training on open-ended questions led to a plethora of colourful yet inaccurate professions across the Central Provinces. Imagine finding entries like 'con man', 'pimp', 'prostitute', 'idiot', and 'thief' - a reflection more on the confusion of the enumerators than the reality of the population.

Neill's report candidly highlighted the hilarious mishaps. He blamed some of the bizarre entries on overzealous enumerators who seemed determined to write something or the other in the occupancy column against every individual. Infants, for instance, were listed as 'sucking', children as simply 'playing', and newcomers to a village as 'guests'.

Further confusion arose with the term *pesh-i-khud*, loosely translated as self-employed. Its frequent appearance left senior officers scratching their heads, unsure of the specific occupations it indicated. Neill even documented the enumerators' struggle to differentiate between lunatics and idiots, wryly noting 'it having been impossible to separate them, as the enumerators did not appreciate the distinction between the two classes'.

(Excerpted with permission from Hachette India from Shantanu Nandan Sharma's *Rebel Bastar: History, Maoism and the Search for Answers in India's Heartland*)

03S9. A colonial gaze: how the British imagined Bastar and its people

एक औपनिवेशिक दृष्टि: अंग्रेजों ने बस्तर और उसके लोगों की कल्पना कैसे की

- For years, Bastar remained an enigma to the British, who erroneously and conveniently dismissed it as a mysterious woodland inhabited by cannibals, painting it as an island of primitiveness amidst civilisations.

वर्षों तक बस्तर अंग्रेजों के लिए एक रहस्य बना रहा, जिन्होंने गलत और सुविधाजनक ढंग से इसे नरभक्षियों से आबाद एक रहस्यमय वन क्षेत्र के रूप में खारिज कर दिया और सभ्यताओं के बीच इसे आदिमता के एक द्वीप के रूप में चित्रित किया।

- In his enthusiasm to author a two-volume work on India, East India Company official Henry Harpur Spry went so far as to describe the people of Bastar as those who 'sacrifice and eat their fellow creatures'.

भारत पर दो खंडों में एक ग्रंथ लिखने के उत्साह में ईस्ट इंडिया कंपनी के अधिकारी हेनरी हार्पर स्प्राई ने बस्तर के लोगों को ऐसे लोगों के रूप में वर्णित करने तक की हद कर दी, जो 'अपने साथी मनुष्यों की बलि देते और उन्हें खाते हैं'।

Spread of misinformation

भ्रामक सूचनाओं का प्रसार

- Consider this: Spry never set foot in Bastar, relying instead on hearsay from Company officers like Captain Crawford of the Bengal Artillery, who oversaw Chhattisgarh. इस पर विचार कीजिए: स्प्राई ने कभी बस्तर में कदम तक नहीं रखा, बल्कि उन्होंने छत्तीसगढ़ की देखरेख करने वाले बंगाल आर्टिलरी के कैप्टन क्रॉफर्ड जैसे कंपनी अधिकारियों से प्राप्त सुनी-सुनाई बातों पर भरोसा किया।

- Spry's armchair account reads more like lengthy chatter rather than a valuable historical document.
स्प्राई का यह दूर बैठकर लिखा गया विवरण किसी मूल्यवान ऐतिहासिक दस्तावेज की अपेक्षा लंबे-चौड़े गपशप जैसा अधिक प्रतीत होता है।
- Further, there is no evidence to suggest that Crawford himself had any first-hand experience in Bastar.
इसके अतिरिक्त, यह संकेत देने वाला कोई प्रमाण नहीं है कि स्वयं क्रॉफर्ड को बस्तर का कोई प्रत्यक्ष अनुभव था।
- It is important to put it on record that Spry also made a glaring mistake on Bastar when he called its Rajput Raja a Gond.
यह दर्ज करना महत्वपूर्ण है कि स्प्राई ने बस्तर के संबंध में एक गंभीर गलती तब भी की, जब उन्होंने इसके राजपूत राजा को गोंड बताया।
- This mistake was possibly carried over from the past.
संभवतः यह गलती अतीत से चली आ रही थी।
- While translating the Tarikh-i-Firishta, a medieval Persian history of the Deccan with intriguing references to the Bastar of 1610-11, John Briggs added an asterisk to the Bastar raja, mistakenly labelling him as a Gond chief.
तारीख-ए-फिरिश्ता का अनुवाद करते समय, जो दक्कन का एक मध्यकालीन फारसी इतिहास है और जिसमें 1610-11 के बस्तर के रोचक संदर्भ मिलते हैं, जॉन ब्रिग्स ने बस्तर के राजा के नाम के साथ एक तारांकित चिह्न लगाया और गलती से उन्हें गोंड प्रमुख के रूप में चिह्नित कर दिया।
- The isolation of Bastar fostered the spread of misinformation.
बस्तर के अलग्गव ने भ्रामक सूचनाओं के प्रसार को बढ़ावा दिया।
- A report from the East India Company in 1812, for example, provided a skewed perspective of the area and the people therein.
उदाहरण के लिए, 1812 में ईस्ट इंडिया कंपनी की एक रिपोर्ट ने इस क्षेत्र और वहाँ के लोगों का एकपक्षीय दृष्टिकोण प्रस्तुत किया।
- The inhabitants were described as 'rude and barbarous', yet they were paradoxically praised for the staunch defence of their 'ancient rightful inheritance' – the lowlands.
वहाँ के निवासियों को 'असभ्य और बर्बर' बताया गया, फिर भी विरोधाभासी रूप से उनके 'प्राचीन वैध उत्तराधिकार' — निचले भू-भाग — की दृढ़ रक्षा के लिए उनकी प्रशंसा की गई।
- The report says that they, 'although rude and barbarous, may yet be denominated warlike, as they have always distinguished themselves bold, persevering champions of the great law of nature'.
रिपोर्ट में कहा गया है कि वे, 'यद्यपि असभ्य और बर्बर हैं, फिर भी उन्हें युद्धप्रिय कहा जा सकता है, क्योंकि उन्होंने स्वयं को सदैव प्रकृति के महान नियम के साहसी और दृढ़ योद्धाओं के रूप में प्रतिष्ठित किया है।'
- It further adds: 'Being driven to their wild unwholesome fastness, among the mountains, they frequently descend in harvest time, into the lowlands, to dispute the produce of their ancient rightful inheritance with their present possessors...'
इसमें आगे कहा गया है: 'पहाड़ों के बीच अपने जंगली और अस्वास्थ्यकर दुर्गम स्थानों की ओर खदेड़े जाने के बाद, वे अक्सर फसल के समय निचले भू-भाग में उतरते हैं, ताकि अपने प्राचीन वैध उत्तराधिकार की उपज पर उसके वर्तमान स्वामियों के साथ विवाद कर सकें...'
- Clearly, the report's author had not visited the territory.
स्पष्ट रूप से, रिपोर्ट के लेखक ने उस क्षेत्र का दौरा नहीं किया था।

Counting the people

जनसंख्या की गणना

- The first attempt to quantify Bastar's population came on November 5, 1866 during a census in the Central Provinces.

बस्तर की जनसंख्या का अनुमान लगाने का पहला प्रयास 5 नवंबर, 1866 को मध्य प्रांतों में हुई जनगणना के दौरान किया गया।

- This inaugural headcount yielded a figure of 2,69,684.
इस पहली जनगणना में 2,69,684 की जनसंख्या दर्ज की गई।
- However, the census was plagued by significant anomalies.
हालाँकि, यह जनगणना महत्वपूर्ण विसंगतियों से ग्रस्त थी।
- The administration faced a dilemma when the next census in 1872 showed an inexplicable 70 per cent drop in the population, bringing the total down to 78,856.
प्रशासन के सामने तब दुविधा उत्पन्न हो गई जब 1872 की अगली जनगणना में जनसंख्या में 70 प्रतिशत की अस्पष्ट गिरावट दिखाई दी और कुल जनसंख्या घटकर 78,856 रह गई।
- The breakdown of this figure included 29,060 Hindus, 1,704 Muslims, and a substantial category of 48,092 classified as 'others'.
इस संख्या में 29,060 हिंदू, 1,704 मुस्लिम और 48,092 लोगों की एक बड़ी श्रेणी शामिल थी, जिन्हें 'अन्य' के रूप में वर्गीकृत किया गया था।
- A deadly combination of cholera and famine ravaged central India in 1869, undoubtedly impacting Bastar.
1869 में हैजा और अकाल के घातक संयोजन ने मध्य भारत में भारी तबाही मचाई, जिसका निस्संदेह बस्तर पर भी प्रभाव पड़ा।
- However, this alone would not explain the population plunge — a staggering 1,90,828 residents vanishing in just six years.
हालाँकि, केवल इससे जनसंख्या में इतनी बड़ी गिरावट की व्याख्या नहीं की जा सकती — मात्र छह वर्षों में 1,90,828 निवासियों का गायब हो जाना अत्यंत असाधारण था।
- The numbers reeked of error.
इन आँकड़ों में त्रुटि स्पष्ट रूप से दिखाई देती थी।
- J.W. Neill, officiating secretary to the Central Provinces' chief commissioner, echoed these concerns in his report on the 1872 census.
मध्य प्रांतों के मुख्य आयुक्त के कार्यवाहक सचिव जे.डब्ल्यू. नील ने 1872 की जनगणना पर अपनी रिपोर्ट में इन चिंताओं को दोहराया।
- He pointed out glaring inconsistencies: The 1866 Bastar figures were likely mere estimates based on area, while the 1872 census, despite claiming a more rigorous method, also appeared flawed, as in many villages 'the children were not enumerated'.
उन्होंने गंभीर विसंगतियों की ओर संकेत किया: 1866 के बस्तर के आँकड़े संभवतः क्षेत्रफल के आधार पर लगाए गए मात्र अनुमान थे, जबकि 1872 की जनगणना, अधिक कठोर पद्धति अपनाने का दावा करने के बावजूद, त्रुटिपूर्ण प्रतीत हुई, क्योंकि अनेक गाँवों में 'बच्चों की गणना नहीं की गई'।
- The report quotes comments from the deputy commissioner of Upper Godavari district, under whose jurisdiction Bastar fell for census purposes.
रिपोर्ट में अपर गोदावरी जिले के डिप्टी कमिशनर की टिप्पणियाँ उद्धृत की गई हैं, जिनके अधिकार क्षेत्र में जनगणना के उद्देश्य से बस्तर आता था।
- Neill's report continued to expose the flaws of the 1872 census in Bastar.
नील की रिपोर्ट ने बस्तर में 1872 की जनगणना की खामियों को उजागर करना जारी रखा।
- While forms and instructions reached the raja, 'there is no means of knowing whether houses were numbered or lists of inhabitants taken previous to the night of the Census'.
यद्यपि प्रपत्र और निर्देश राजा तक पहुँचे थे, 'यह जानने का कोई साधन नहीं है कि क्या घरों को क्रमांकित किया गया था या जनगणना की रात से पहले निवासियों की सूचियाँ तैयार की गई थीं'।
- Some areas, such as Jagdalpur, Bhopalpatnam and Bijapur, showed decent efforts, but the rest carried errors.
जगदलपुर, भोपालपटनम और बीजापुर जैसे कुछ क्षेत्रों में उचित प्रयास किए गए, लेकिन शेष क्षेत्रों में त्रुटियाँ थीं।



- Most alarmingly, children under twelve were entirely omitted.
सबसे चिंताजनक बात यह थी कि बारह वर्ष से कम आयु के बच्चों को पूरी तरह छोड़ दिया गया था।
- While the Central Provinces overall saw a modest increase (from 9.06 million to 9.25 million), Bastar's dramatic decline remained an enigma.
जबकि मध्य प्रांतों की कुल जनसंख्या में मामूली वृद्धि हुई (9.06 मिलियन से 9.25 मिलियन तक), बस्तर की नाटकीय जनसंख्या गिरावट एक रहस्य बनी रही।
- In the census exercise of early British days, a headcount was conducted on a single day.
प्रारंभिक ब्रिटिश काल की जनगणना प्रक्रिया में एक ही दिन जनगणना की जाती थी।
- The 1872 census wasn't just plagued by regional discrepancies; there were some structural errors too.
1872 की जनगणना केवल क्षेत्रीय विसंगतियों से ही ग्रस्त नहीं थी; इसमें कुछ संरचनात्मक त्रुटियाँ भी थीं।
- The sheer number of categories (caste, occupation, race, religion, remarks, etc. — a whopping nineteen) gave printers nightmares.
श्रेणियों की अत्यधिक संख्या (जाति, व्यवसाय, नस्ल, धर्म, टिप्पणियाँ आदि — कुल उन्नीस) ने मुद्रकों के लिए भारी कठिनाइयाँ पैदा कर दीं।
- Worse yet, a lack of training on open-ended questions led to a plethora of colourful yet inaccurate professions across the Central Provinces.
इससे भी बदतर स्थिति यह थी कि खुले प्रश्नों पर प्रशिक्षण के अभाव में पूरे मध्य प्रांतों में अनेक विचित्र किंतु गलत व्यवसाय दर्ज किए गए।
- Imagine finding entries like 'con man', 'pimp', 'prostitute', 'idiot', and 'thief' — a reflection more on the confusion of the enumerators than the reality of the population.
कल्पना कीजिए कि 'ठग', 'दलाल', 'वेश्या', 'मूर्ख' और 'चोर' जैसे विवरण दर्ज पाए गए — जो जनसंख्या की वास्तविकता की तुलना में गणनाकर्मियों की भ्रमित स्थिति का अधिक प्रतिबिंब थे।
- Neill's report candidly highlighted the hilarious mishaps.
नील की रिपोर्ट ने इन हास्यास्पद भूलों को स्पष्ट रूप से उजागर किया।
- He blamed some of the bizarre entries on overzealous enumerators who seemed determined to write something or the other in the occupancy column against every individual.
उन्होंने कुछ विचित्र प्रविष्टियों के लिए अति-उत्साही गणनाकर्मियों को जिम्मेदार ठहराया, जो प्रत्येक व्यक्ति के सामने व्यवसाय वाले कॉलम में कुछ न कुछ लिखने के लिए दृढ़संकल्पित प्रतीत होते थे।
- Infants, for instance, were listed as 'sucking', children as simply 'playing', and newcomers to a village as 'guests'.
उदाहरण के लिए, शिशुओं के व्यवसाय के रूप में 'दूध पीना', बच्चों के लिए केवल 'खेलना' और गाँव में नए आए लोगों के लिए 'मेहमान' दर्ज किया गया।
- Further confusion arose with the term **pesha-i-khud**, loosely translated as self-employed.
pesha-i-khud शब्द को लेकर और भ्रम उत्पन्न हुआ, जिसका मोटे तौर पर अनुवाद स्व-रोजगार के रूप में किया गया।
- Its frequent appearance left senior officers scratching their heads, unsure of the specific occupations it indicated.
इसके बार-बार दिखाई देने से वरिष्ठ अधिकारी असमंजस में पड़ गए और यह समझ नहीं पाए कि यह किन विशिष्ट व्यवसायों को दर्शाता था।
- Neill even documented the enumerators' struggle to differentiate between lunatics and idiots, wryly noting 'it having been impossible to separate them, as the enumerators did not appreciate the distinction between the two classes'.
नील ने गणनाकर्मियों के लिए पागलों और मूर्खों के बीच अंतर करने की कठिनाई को भी दर्ज किया और व्यंग्यात्मक रूप से लिखा, 'इन दोनों को अलग करना असंभव था, क्योंकि गणनाकर्मी इन दोनों वर्गों के बीच के अंतर को समझ नहीं पाए।'

GS Paper 1: Geography	03 September 2026
TOPICS COVERED	
03S9	Godavari reaches north A.P. through Polavaram canal पोलावरम नहर के माध्यम से उत्तरी आंध्र प्रदेश पहुँचा गोदावरी का जल

Godavari reaches north A.P. through Polavaram canal

GS I: Geography
Hareesh.P
PAYAKARAOPET

Andhra Pradesh Chief Minister N. Chandrababu Naidu on Wednesday laid out a road map for augmenting water supply to the Uttarandhra region through various projects and interlinking of rivers.

Releasing the Godavari water to the north Andhra region through the Polavaram Left Main Canal at PL Puram village in Anakapalli district on Wednesday, he said: "I had promised to bring the Godavari water to Uttarandhra and fulfilled it," he said. He thanked Prime Minister Narendra Modi for the merger of seven mandals in Telangana with Andhra Pradesh, without which Polavaram project would have remained a dream.

The project, executed at a cost of ₹4,192 crore, will



N. Chandrababu Naidu joins the prayers before opening the gates of Polavaram Left Main Canal in Anakapalli on Wednesday.

ensure water for irrigating four lakh acres, drinking water to 9.23 lakh people, and will meet the industrial needs of East Godavari, Kakinada, Konaseema, Anakapalli, and Visakhapatnam districts. He said 72% of Polavaram project works had been completed by 2019, but the previous government had neglected the project.

"With the blessings of Annavaram Satyanarayana

Swamy, we have brought the Godavari river water to Anakapalli. By next year, water will reach near Simhadri Appanna (Simhachalam in Visakhapatnam) and Suryanarayana Swamy at Arasavalli in future, realising the goal of interlinking of the Godavari with the Vamsadhara river. We will offer 'Jala Harathi' to every acre of land by interlinking the Godavari with the Krishna," he said.

03S9. Godavari reaches north A.P. through Polavaram canal

पोलावरम नहर के माध्यम से उत्तरी आंध्र प्रदेश पहुँचा गोदावरी का जल

- Andhra Pradesh Chief Minister **N. Chandrababu Naidu** on Wednesday laid out a road map for augmenting water supply to the **Uttarandhra region** through various projects and interlinking of rivers.
आंध्र प्रदेश के मुख्यमंत्री एन. चंद्रबाबू नायडू ने बुधवार को विभिन्न परियोजनाओं और नदियों को आपस में जोड़ने के माध्यम से उत्तरांध्र क्षेत्र में जलापूर्ति बढ़ाने की रूपरेखा प्रस्तुत की।
- Releasing the **Godavari water to the north Andhra region through the Polavaram Left Main Canal at PL Puram village in Anakapalli district** on Wednesday, he said: "I had promised to bring the Godavari water to Uttarandhra and fulfilled it," he said.
बुधवार को अनकापल्ली जिले के पीएल पुरम गाँव में पोलावरम बाई मुख्य नहर के माध्यम से उत्तरी आंध्र क्षेत्र

के लिए गोदावरी का जल छोड़ते हुए उन्होंने कहा: "मैंने उत्तरांध तक गोदावरी का जल लाने का वादा किया था और उसे पूरा किया," उन्होंने कहा।

- He thanked Prime Minister **Narendra Modi** for the merger of **seven mandals in Telangana with Andhra Pradesh**, without which **Polavaram project** would have remained a dream. उन्होंने तेलंगाना के सात मंडलों का आंध्र प्रदेश में विलय करने के लिए प्रधानमंत्री नरेंद्र मोदी को धन्यवाद दिया, जिसके बिना **पोलावरम परियोजना** एक सपना ही रह जाती।
- The project, executed at a cost of **₹4,192 crore**, will ensure water for irrigating **four lakh acres**, drinking water to **9.23 lakh people**, and will meet the industrial needs of **East Godavari, Kakinada, Konaseema, Anakapalli, and Visakhapatnam districts**. ₹4,192 करोड़ की लागत से कार्यान्वित यह परियोजना चार लाख एकड़ भूमि की सिंचाई के लिए जल और 9.23 लाख लोगों को पेयजल सुनिश्चित करेगी तथा पूर्वी गोदावरी, काकीनाडा, कोनसीमा, अनकापल्ली और विशाखापत्तनम जिलों की औद्योगिक आवश्यकताओं को पूरा करेगी।
- He said **72% of Polavaram project works** had been completed by **2019**, but the previous government had neglected the project. उन्होंने कहा कि 2019 तक **पोलावरम परियोजना के 72% कार्य** पूरे हो चुके थे, लेकिन पिछली सरकार ने परियोजना की उपेक्षा की थी।
- "With the blessings of **Annavaram Satyanarayana Swamy**, we have brought the **Godavari river water to Anakapalli**. "अन्नवरम सत्यनारायण स्वामी के आशीर्वाद से हम गोदावरी नदी का जल अनकापल्ली तक ले आए हैं।
- By next year, water will reach near **Simhadri Appanna (Simhachalam in Visakhapatnam)** and **Suryanarayana Swamy at Arasavalli** in future, realising the goal of interlinking of the **Godavari with the Vamsadhara river**. अगले वर्ष तक जल सिंहाद्री अप्पन्ना (विशाखापत्तनम स्थित सिंहाचलम) के निकट और भविष्य में अरासवल्ली स्थित सूर्यनारायण स्वामी तक पहुँचेगा, जिससे गोदावरी को वंशधारा नदी से जोड़ने का लक्ष्य साकार होगा।
- We will offer '**Jala Harathi**' to every acre of land by interlinking the **Godavari with the Krishna**," he said. हम गोदावरी को कृष्णा से जोड़कर प्रत्येक एकड़ भूमि को 'जल हारति' अर्पित करेंगे," उन्होंने कहा।

GS Paper II: Polity		03 September 2026
TOPICS COVERED		
03S9	Orthodoxy redux रूढ़िवाद की पुनर्वापसी	
03S9	Can jurists be appointed as Supreme Court judges? क्या विधिवेत्ताओं को सर्वोच्च न्यायालय के न्यायाधीश के रूप में नियुक्त किया जा सकता है?	



GS II: Polity

Orthodoxy redux

Religion is oft used as a tool to suppress women in the public sphere

Veteran Islamic cleric Kanthapuram A.P. Aboobacker Musliar's directive to restrict Muslim women's participation in public celebrations has unsettled Kerala because it strikes at a fundamental question: women's right to participate in public life. This is not merely a quarrel over how Muslims should mark Prophet Muhammad's 1,501st birth anniversary. It is a test of how far religious authority can intrude into the lives of women in a State that takes pride in its progressive social history. Kanthapuram says he is merely reminding followers of established religious norms. His supporters argue Milad celebrations have moved beyond mosques and madrasas into large public events, and that scholars have a duty to caution against such departures. That argument holds no weight. Communities have the right to preserve traditions and regulate religious practices, but they have to conform to the values enshrined in the Constitution. When women are told to remain at home because their presence could cause "chaos", the issue is no longer about religious observance; it is at variance with constitutional equality and Kerala's long struggle to expand the space in public life for women disadvantaged by social customs and religious traditions.

The Muslim community is not a monolith. It contains both orthodox and progressive currents. More Muslim women are breaking barriers in education, employment, politics and public life, but that progress is encountering a counter-current of renewed orthodoxy and social control. The CPI(M), Kerala's main Opposition party and a decades-old ally of the Kanthapuram-led faction of Samastha Kerala Jamiyyathul Ulama, a body of Sunni scholars, has responded sharply. The Congress, which leads the ruling coalition, was largely guarded until Chief Minister V.D. Satheesan rubbished the decree as antediluvian. The Indian Union Muslim League's silence is harder to defend. A party with an active women's forum and a woman legislator for the first time in the State Assembly cannot equivocate when women's right to public participation is open to challenge. Its caution may reflect political pressure over Waqf, Vande Mataram and PM-SHRI, or an attempt to improve ties with the Kanthapuram faction amid strained relations with the rival Samastha faction. Whatever the political calculation, silence carries a cost. Religious freedom does not confer on religious authorities the right to regulate women's freedom of movement, association and degree of participation in society. During Onam, social media were awash with videos of young Muslim girls celebrating the harvest festival. Kanthapuram's remarks drew criticism from a section of Muslim women on social media. Kerala cannot claim to be progressive while making exceptions for orthodoxy.

- When women are told to remain at home because their presence could cause "chaos", the issue is no longer about religious observance; it is at variance with **constitutional equality** and Kerala's long struggle to expand the space in public life for women disadvantaged by social customs and religious traditions.

जब महिलाओं से यह कहा जाता है कि उनकी उपस्थिति से "अराजकता" उत्पन्न हो सकती है, इसलिए वे घर पर रहें, तो मुद्दा अब धार्मिक आचरण तक सीमित नहीं रहता; यह संवैधानिक समानता तथा सामाजिक रीति-रिवाजों और धार्मिक परंपराओं से वंचित महिलाओं के लिए सार्वजनिक जीवन में स्थान का विस्तार करने के केरल के लंबे संघर्ष के विपरीत है।

03S9. Orthodoxy redux

रूढ़िवाद की पुनर्वापसी

Veteran Islamic cleric Kanthapuram A.P. Aboobacker Musliar's directive to restrict Muslim women's participation in public celebrations has unsettled Kerala because it strikes at a fundamental question: **women's right to participate in public life.**

वरिष्ठ इस्लामी धर्मगुरु कांथापुरम ए.पी. अबूबकर मुसलियार के मुस्लिम महिलाओं की सार्वजनिक समारोहों में भागीदारी को सीमित करने के निर्देश ने केरल में असंतोष पैदा कर दिया है, क्योंकि यह एक मूलभूत प्रश्न पर प्रहार करता है:

सार्वजनिक जीवन में महिलाओं की भागीदारी का अधिकार।

This is not merely a quarrel over how Muslims should mark **Prophet Muhammad's 1,501st birth anniversary.**

यह केवल इस बात को लेकर विवाद नहीं है कि मुसलमानों को पैगंबर मुहम्मद की 1,501वीं जयंती किस प्रकार मनानी चाहिए।

It is a test of **how far religious authority can intrude into the lives of women in a State that takes pride in its progressive social history.**

यह इस बात की परीक्षा है कि अपनी प्रगतिशील सामाजिक विरासत पर गर्व करने वाले राज्य में धार्मिक प्राधिकार महिलाओं के जीवन में किस हद तक हस्तक्षेप कर सकता है।

Kanthapuram says he is merely reminding followers of established religious norms. कांथापुरम का कहना है कि वे केवल अनुयायियों को स्थापित धार्मिक मानदंडों की याद दिला रहे हैं।

His supporters argue Milad celebrations have moved beyond mosques and madrasas into large public events, and that scholars have a duty to caution against such departures.

उनके समर्थकों का तर्क है कि मिलाद समारोह मस्जिदों और मदरसों से आगे बढ़कर बड़े सार्वजनिक आयोजनों का रूप ले चुके हैं और विद्वानों का दायित्व है कि वे ऐसे विचलनों के प्रति लोगों को सचेत करें।

That argument holds no weight. यह तर्क निराधार है।

Communities have the right to preserve traditions and regulate religious practices, but they have to conform to the values enshrined in the **Constitution.**

समुदायों को अपनी परंपराओं को संरक्षित करने और धार्मिक प्रथाओं को विनियमित करने का अधिकार है, लेकिन उन्हें संविधान में निहित मूल्यों के अनुरूप होना होगा।

- The Muslim community is not a monolith.
मुस्लिम समुदाय एकरूप नहीं है।
- It contains both orthodox and progressive currents.
इसमें रूढ़िवादी और प्रगतिशील, दोनों धाराएँ मौजूद हैं।
- More Muslim women are breaking barriers in **education, employment, politics and public life**, but that progress is encountering a counter current of renewed orthodoxy and social control.
अधिकाधिक मुस्लिम महिलाएँ शिक्षा, रोजगार, राजनीति और सार्वजनिक जीवन में बाधाओं को तोड़ रही हैं, लेकिन इस प्रगति का सामना पुनर्जीवित रूढ़िवाद और सामाजिक नियंत्रण की प्रतिधारा से हो रहा है।
- The **CPI(M)**, Keralam's main Opposition party and a decades-old ally of the Kanthapuram-led faction of **Samastha Kerala Jamiyyathul Ulama, a body of Sunni scholars**, has responded sharply.
केरल की मुख्य विपक्षी पार्टी **CPI(M)** और सुन्नी विद्वानों के संगठन **समस्त केरल जमीयतुल उलेमा** के कांथापुरम-नेतृत्व वाले गुट की दशकों पुरानी सहयोगी ने तीखी प्रतिक्रिया व्यक्त की है।
- The Congress, which leads the ruling coalition, was largely guarded until Chief Minister **V.D. Satheesan** rubbished the decree as antediluvian.
सत्तारूढ़ गठबंधन का नेतृत्व करने वाली कांग्रेस की प्रतिक्रिया अधिकांशतः सतर्क रही, जब तक कि मुख्यमंत्री वी.डी. सतीशन ने इस फरमान को पुरातनपंथी और अप्रासंगिक बताते हुए खारिज नहीं कर दिया।
- The **Indian Union Muslim League's** silence is harder to defend.
इंडियन यूनियन मुस्लिम लीग की चुप्पी का बचाव करना अधिक कठिन है।
- A party with an active women's forum and a woman legislator for the first time in the State Assembly cannot equivocate when women's right to public participation is open to challenge.
एक ऐसे दल के लिए, जिसके पास सक्रिय महिला मंच है और जिसने पहली बार राज्य विधानसभा में एक महिला विधायक को भेजा है, महिलाओं के सार्वजनिक भागीदारी के अधिकार को चुनौती दिए जाने पर अस्पष्ट रुख अपनाना उचित नहीं है।
- Its caution may reflect political pressure over **Waqf, Vande Mataram and PM-SHRI**, or an attempt to improve ties with the Kanthapuram faction amid strained relations with the rival Samastha faction.
उसकी सावधानी वक्फ, वंदे मातरम् और PM-SHRI को लेकर राजनीतिक दबाव को प्रतिबिंबित कर सकती है, या प्रतिद्वंद्वी समस्त गुट के साथ तनावपूर्ण संबंधों के बीच कांथापुरम गुट के साथ संबंध सुधारने का प्रयास हो सकती है।
- Whatever the political calculation, silence carries a cost.
राजनीतिक गणना चाहे जो भी हो, चुप्पी की एक कीमत होती है।
- Religious freedom does not confer on religious authorities the right to regulate women's freedom of movement, association and degree of participation in society.
धार्मिक स्वतंत्रता धार्मिक प्राधिकारों को महिलाओं की आवागमन की स्वतंत्रता, सामाजिक संबंधों और समाज में उनकी भागीदारी की सीमा को विनियमित करने का अधिकार प्रदान नहीं करती।
- During Onam, social media were awash with videos of young Muslim girls celebrating the harvest festival.
ओणम के दौरान सोशल मीडिया युवा मुस्लिम लड़कियों द्वारा फसल उत्सव मनाने के वीडियो से भरा हुआ था।
- Kanthapuram's remarks drew criticism from a section of Muslim women on social media.
कांथापुरम की टिप्पणियों को सोशल मीडिया पर मुस्लिम महिलाओं के एक वर्ग की आलोचना का सामना करना पड़ा।
- Keralam cannot claim to be progressive while making exceptions for **orthodoxy**.
केरल रूढ़िवाद के लिए अपवाद बनाते हुए स्वयं को प्रगतिशील होने का दावा नहीं कर सकता।



Can jurists be appointed as Supreme Court judges?

Why has the provision allowing distinguished jurists to be appointed as SC judges remained unused?

SSC Polity

Aaratrika Bhaumik

The story so far:

Supreme Court judge Justice Ujjal Bhuyan on Sunday questioned why a constitutional provision allowing a “distinguished jurist” to be appointed as a judge of the Supreme Court has remained unused for more than 76 years. Addressing the 13th convocation of National Law University, Delhi’s LL.M. programme, Justice Bhuyan pointed out that Article 124(3) of the Constitution permits the appointment of a person who, in the President’s opinion, is a “distinguished jurist” as a Supreme Court judge. However, no legal academic has so far been elevated to the top court under this provision.

What does the Constitution stipulate?
Article 124(3) of the Constitution lays down three routes through which a

person may qualify for appointment as a Supreme Court judge – a person must have served as a High Court judge for at least five years, practised as an advocate of a High Court for at least 10 years, or be, in the opinion of the President, a “distinguished jurist”.

The provision, however, does not define who qualifies as a “distinguished jurist” or prescribe any minimum period of professional experience for such a person. Its inclusion as a separate category nevertheless indicates that the framers contemplated a route to the Supreme Court beyond the conventional pathways of judicial service and legal practice, potentially opening the door to eminent legal scholars and academics.

What do Constituent Assembly debates reflect?
The “distinguished jurist” category was added to the list of persons eligible for

appointment to the Supreme Court in the draft Constitution. The Constituent Assembly debates reflect that this was intended to bring diversity in professional backgrounds among those appointed to the Bench of the Supreme Court.

Moving the amendment on May 24, 1949, Constituent Assembly member H.V. Kamath said it sought “to open a wider field of choice” for Supreme Court appointments. He noted that persons with “outstanding legal and juristic learning” were “not necessarily confined to judges or advocates”, pointing to the selection of judges of the International Court of Justice on similar terms.

The Constituent Assembly debates also referred to the appointment of Felix Frankfurter to the U.S. Supreme Court. In 1939, President Franklin D. Roosevelt appointed Frankfurter, who had been a professor at Harvard Law School for 25 years, as an Associate Justice of the U.S.

Supreme Court. Justice Frankfurter went on to become a noted advocate of the doctrine of judicial restraint – the principle that courts should respect the domain of the elected legislature and the executive, and exercise restraint in interfering with their decisions.

Assembly member M. Ananthasayanam Ayyangar cited Justice Frankfurter’s appointment as a “novel experiment” that had worked well, noting that legal expertise was not confined to practising lawyers or judges.

Can a ‘distinguished jurist’ be appointed as a High Court judge?

The Constituent Assembly had also considered allowing “distinguished jurists” to be appointed as High Court judges. On June 7, 1949, Professor Shibban Lal Saksena moved an amendment proposing their inclusion among those eligible for appointment to a High Court. The proposal, however, was not accepted.

Nearly three decades later, the Constitution (Forty-second Amendment) Act, 1976, enacted during the Emergency, amended Article 217, which lays down the qualifications for appointment as a High Court judge. The amendment allowed a person who was, in the opinion of the President, a “distinguished jurist” to be appointed to a High Court. The provision came into force in January 1977 but was omitted by the Constitution (Forty-fourth

Amendment) Act, 1978.

What limits the use of this provision?

Despite being part of the Constitution since its inception, the provision has never been invoked. Supreme Court judges have overwhelmingly been appointed from among High Court judges, with only 11 advocates directly elevated from the Bar.

The appointment process itself may also help explain why the provision has remained unused, since a jurist would first have to be recommended by the Supreme Court Collegium. Legal scholar Upendra Baxi, whose possible appointment to the court never materialised, described the provision as a “dead issue” in a 2015 interview with LiveLaw.

Another concern is that legal academics may lack courtroom and procedural experience. However, full-time law teachers themselves face restrictions on practising as advocates. Under Rule 49 of the Bar Council of India Rules, an advocate who takes up full-time salaried employment must cease to practise while such employment continues. In 2019, the Consortium of National Law Universities sought a relaxation of this restriction to allow full-time faculty to practise in courts and bridge the divide between “law in books” and “law in action”.

03S9. Can jurists be appointed as Supreme Court judges?

क्या विधिवेत्ताओं को सर्वोच्च न्यायालय के न्यायाधीश के रूप में नियुक्त किया जा सकता है?

- Supreme Court judge Justice Ujjal Bhuyan on Sunday questioned why a constitutional provision allowing a “**distinguished jurist**” to be appointed as a judge of the Supreme Court has remained unused for more than 76 years.

सर्वोच्च न्यायालय के न्यायाधीश न्यायमूर्ति उज्जल भुइयाँ ने रविवार को प्रश्न उठाया कि सर्वोच्च न्यायालय के न्यायाधीश के रूप में किसी “**प्रतिष्ठित विधिवेत्ता**” की नियुक्ति की अनुमति देने वाला संवैधानिक प्रावधान 76 वर्षों से अधिक समय से अप्रयुक्त क्यों है।

- Addressing the 13th convocation of National Law University, Delhi’s LL.M. programme, Justice Bhuyan pointed out that Article 124(3) of the Constitution permits the appointment of a person who, in the President’s opinion, is a “**distinguished jurist**” as a Supreme Court judge.

राष्ट्रीय विधि विश्वविद्यालय, दिल्ली के LL.M. कार्यक्रम के 13वें दीक्षांत समारोह को संबोधित करते हुए न्यायमूर्ति भुइयाँ ने बताया कि संविधान का **अनुच्छेद 124(3)** ऐसे व्यक्ति को सर्वोच्च न्यायालय के न्यायाधीश के रूप में नियुक्त करने की अनुमति देता है, जो राष्ट्रपति की राय में “**प्रतिष्ठित विधिवेत्ता**” हो।

- However, no legal academic has so far been elevated to the top court under this provision. हालाँकि, अब तक इस प्रावधान के तहत किसी भी **विधि शिक्षाविद्** को सर्वोच्च न्यायालय में पदोन्नत नहीं किया गया है।

What does the Constitution stipulate?

संविधान में क्या प्रावधान है?

- Article 124(3) of the Constitution lays down three routes through which a person may qualify for appointment as a Supreme Court judge — a person must have served as a High Court judge for at least five years, practised as an advocate of a High Court for at least 10 years, or be, in the opinion of the President, a “**distinguished jurist**”.

संविधान का **अनुच्छेद 124(3)** तीन ऐसे मार्ग निर्धारित करता है जिनके माध्यम से कोई व्यक्ति सर्वोच्च न्यायालय के न्यायाधीश के रूप में नियुक्ति के लिए योग्य हो सकता है — किसी व्यक्ति ने कम-से-कम पाँच वर्ष तक उच्च न्यायालय के न्यायाधीश के रूप में कार्य किया हो, कम-से-कम 10 वर्षों तक किसी उच्च न्यायालय में अधिवक्ता के रूप में वकालत की हो, या राष्ट्रपति की राय में वह “**प्रतिष्ठित विधिवेत्ता**” हो।

- The provision, however, does not define who qualifies as a “**distinguished jurist**” or prescribe any minimum period of professional experience for such a person.



हालाँकि, यह प्रावधान यह **परिभाषित नहीं करता** कि “प्रतिष्ठित विधिवेत्ता” के रूप में कौन योग्य होगा या ऐसे व्यक्ति के लिए किसी न्यूनतम व्यावसायिक अनुभव की अवधि निर्धारित नहीं करता।

- Its inclusion as a separate category nevertheless indicates that the framers contemplated a route to the Supreme Court beyond the conventional pathways of judicial service and legal practice, potentially opening the door to eminent legal scholars and academics.
फिर भी, एक अलग श्रेणी के रूप में इसका समावेश यह संकेत देता है कि संविधान निर्माताओं ने न्यायिक सेवा और कानूनी अभ्यास के पारंपरिक मार्गों से अलग **सर्वोच्च न्यायालय तक पहुँचने के एक मार्ग** की परिकल्पना की थी, जिससे प्रतिष्ठित विधि विद्वानों और शिक्षाविदों के लिए संभावित रूप से मार्ग खुल सकता था।

What do Constituent Assembly debates reflect?

संविधान सभा की बहसों क्या दर्शाती हैं?

- The “**distinguished jurist**” category was added to the list of persons eligible for appointment to the Supreme Court in the draft Constitution.
“**प्रतिष्ठित विधिवेत्ता**” की श्रेणी को प्रारूप संविधान में सर्वोच्च न्यायालय में नियुक्ति के लिए पात्र व्यक्तियों की सूची में जोड़ा गया था।
- The Constituent Assembly debates reflect that this was intended to bring diversity in professional backgrounds among those appointed to the Bench of the Supreme Court.
संविधान सभा की बहसों से स्पष्ट होता है कि इसका उद्देश्य सर्वोच्च न्यायालय की **पीठ में नियुक्त व्यक्तियों की व्यावसायिक पृष्ठभूमि में विविधता** लाना था।
- Moving the amendment on May 24, 1949, Constituent Assembly member H.V. Kamath said it sought “**to open a wider field of choice**” for Supreme Court appointments.
24 मई 1949 को संशोधन प्रस्तुत करते हुए संविधान सभा के सदस्य **एच.वी. कामथ** ने कहा कि इसका उद्देश्य सर्वोच्च न्यायालय में नियुक्तियों के लिए “**चयन का व्यापक क्षेत्र खोलना**” था।
- He noted that persons with “**outstanding legal and juristic learning**” were “not necessarily confined to judges or advocates”, pointing to the selection of judges of the International Court of Justice on similar terms.
उन्होंने कहा कि “**उत्कृष्ट कानूनी और विधिशास्त्रीय ज्ञान**” रखने वाले व्यक्ति “आवश्यक रूप से न्यायाधीशों या अधिवक्ताओं तक सीमित नहीं होते”, और उन्होंने इसी प्रकार की शर्तों पर **अंतरराष्ट्रीय न्यायालय के न्यायाधीशों के चयन** का उल्लेख किया।
- The Constituent Assembly debates also referred to the appointment of Felix Frankfurter to the U.S. Supreme Court.
संविधान सभा की बहसों में **फेलिक्स फ्रैंकफर्टर** की अमेरिकी सर्वोच्च न्यायालय में नियुक्ति का भी उल्लेख किया गया।
- In 1939, President Franklin D. Roosevelt appointed Frankfurter, who had been a professor at Harvard Law School for 25 years, as an Associate Justice of the U.S. Supreme Court.
1939 में राष्ट्रपति **फ्रैंकलिन डी. रूजवेल्ट** ने फ्रैंकफर्टर को अमेरिकी सर्वोच्च न्यायालय का एसोसिएट जस्टिस नियुक्त किया, जो 25 वर्षों तक **हार्वर्ड लॉ स्कूल में प्रोफेसर** रहे थे।
- Justice Frankfurter went on to become a noted advocate of the doctrine of judicial restraint — the principle that courts should respect the domain of the elected legislature and the executive, and exercise restraint in interfering with their decisions.
न्यायमूर्ति फ्रैंकफर्टर आगे चलकर **न्यायिक संयम के सिद्धांत** के प्रमुख समर्थक बने — यह सिद्धांत मानता है कि न्यायालयों को निर्वाचित विधायिका और कार्यपालिका के क्षेत्र का सम्मान करना चाहिए तथा उनके निर्णयों में हस्तक्षेप करते समय संयम बरतना चाहिए।
- Assembly member M. Ananthasayanam Ayyangar cited Justice Frankfurter’s appointment as a “**novel experiment**” that had worked well, noting that legal expertise was not confined to practising lawyers or judges.
संविधान सभा के सदस्य **एम. अनंतशयनम अय्यंगार** ने न्यायमूर्ति फ्रैंकफर्टर की नियुक्ति को एक “**नवीन**”

प्रयोग” बताया, जो सफल रहा था, और कहा कि कानूनी विशेषज्ञता केवल वकालत करने वाले अधिवक्ताओं या न्यायाधीशों तक सीमित नहीं है।

Can a ‘distinguished jurist’ be appointed as a High Court judge?

क्या किसी ‘प्रतिष्ठित विधिवेत्ता’ को उच्च न्यायालय का न्यायाधीश नियुक्त किया जा सकता है?

- The Constituent Assembly had also considered allowing “**distinguished jurists**” to be appointed as High Court judges.
संविधान सभा ने “**प्रतिष्ठित विधिवेत्ताओं**” को उच्च न्यायालय के न्यायाधीश के रूप में नियुक्त करने की अनुमति देने पर भी विचार किया था।
- On June 7, 1949, Professor Shibban Lal Saksena moved an amendment proposing their inclusion among those eligible for appointment to a High Court.
7 जून 1949 को प्रोफेसर **शिबबन लाल सक्सेना** ने एक संशोधन प्रस्तुत किया, जिसमें उन्हें उच्च न्यायालय में नियुक्ति के लिए पात्र व्यक्तियों में शामिल करने का प्रस्ताव था।
- The proposal, however, was not accepted.
हालाँकि, यह प्रस्ताव स्वीकार नहीं किया गया।
- Nearly three decades later, the Constitution (Forty-second Amendment) Act, 1976, enacted during the Emergency, amended Article 217, which lays down the qualifications for appointment as a High Court judge.
लगभग तीन दशक बाद, आपातकाल के दौरान अधिनियमित **संविधान (बयालीसवाँ संशोधन) अधिनियम, 1976** ने अनुच्छेद 217 में संशोधन किया, जो उच्च न्यायालय के न्यायाधीश के रूप में नियुक्ति के लिए योग्यताएँ निर्धारित करता है।
- The amendment allowed a person who was, in the opinion of the President, a “**distinguished jurist**” to be appointed to a High Court.
इस संशोधन ने ऐसे व्यक्ति को उच्च न्यायालय में नियुक्त करने की अनुमति दी, जो राष्ट्रपति की राय में “**प्रतिष्ठित विधिवेत्ता**” हो।
- The provision came into force in January 1977 but was omitted by the Constitution (Forty-fourth Amendment) Act, 1978.
यह प्रावधान जनवरी 1977 में लागू हुआ, लेकिन **संविधान (चवालीसवाँ संशोधन) अधिनियम, 1978** द्वारा इसे हटा दिया गया।

What limits the use of this provision?

इस प्रावधान के उपयोग को क्या सीमित करता है?

- Despite being part of the Constitution since its inception, the provision has never been invoked.
संविधान के प्रारंभ से ही इसका हिस्सा होने के बावजूद, इस प्रावधान का **कभी उपयोग नहीं किया गया है**।
- Supreme Court judges have overwhelmingly been appointed from among High Court judges, with only 11 advocates directly elevated from the Bar.
सर्वोच्च न्यायालय के न्यायाधीशों की नियुक्ति मुख्यतः **उच्च न्यायालय के न्यायाधीशों** में से हुई है, जबकि केवल 11 अधिवक्ताओं को सीधे बार से सर्वोच्च न्यायालय में पदोन्नत किया गया है।
- The appointment process itself may also help explain why the provision has remained unused, since a jurist would first have to be recommended by the Supreme Court Collegium.
नियुक्ति प्रक्रिया स्वयं भी यह समझाने में सहायता कर सकती है कि यह प्रावधान अप्रयुक्त क्यों रहा है, क्योंकि किसी विधिवेत्ता के नाम की पहले **सर्वोच्च न्यायालय कॉलेजियम** द्वारा सिफारिश की जानी होगी।
- Legal scholar Upendra Baxi, whose possible appointment to the court never materialised, described the provision as a “**dead issue**” in a 2015 interview with LiveLaw.



विधि विद्वान **उपेंद्र बक्सी**, जिनकी न्यायालय में संभावित नियुक्ति कभी साकार नहीं हुई, ने 2015 में LiveLaw को दिए एक साक्षात्कार में इस प्रावधान को “मृत मुद्दा” बताया था।

- Another concern is that legal academics may lack courtroom and procedural experience. एक अन्य चिंता यह है कि विधि शिक्षाविदों में न्यायालयीन और प्रक्रियात्मक अनुभव का अभाव हो सकता है।
- However, full-time law teachers themselves face restrictions on practising as advocates. हालाँकि, पूर्णकालिक विधि शिक्षकों को स्वयं अधिवक्ता के रूप में वकालत करने पर प्रतिबंधों का सामना करना पड़ता है।
- Under Rule 49 of the Bar Council of India Rules, an advocate who takes up full-time salaried employment must cease to practise while such employment continues. **बार काउंसिल ऑफ इंडिया नियमों के नियम 49** के तहत, पूर्णकालिक वेतनभोगी रोजगार स्वीकार करने वाले अधिवक्ता को ऐसी नौकरी जारी रहने के दौरान वकालत करना बंद करना होता है।
- In 2019, the Consortium of National Law Universities sought a relaxation of this restriction to allow full-time faculty to practise in courts and bridge the divide between “law in books” and “law in action”. 2019 में **कंसोर्टियम ऑफ नेशनल लॉ यूनिवर्सिटीज** ने इस प्रतिबंध में ढील देने की माँग की, ताकि पूर्णकालिक संकाय सदस्य न्यायालयों में वकालत कर सकें और “किताबी कानून” तथा “व्यवहार में कानून” के बीच के अंतर को पाट सकें।

GS Paper II: Governance		03 September 2026
TOPICS COVERED		
03S9	Constitutional faultlines in FCRA Bill FCRA विधेयक में संवैधानिक अंतर्विरोध	

Constitutional faultlines in FCRA Bill

The FCRA Amendment Bill, 2026 provides for a 'Designated Authority' to oversee the management and disposal of foreign contributions and assets when an organisation's FCRA certificate is cancelled or ceases to exist; raising questions about the extent of State intervention and the need for sufficient safeguards against overreach

GS II: Governance

LETTER & SPIRIT

Thajawini C.B.
Siddharth Dev Prasad

It is hard to deny that the state has a legitimate concern in regulating foreign contributions in India, as foreign donations raise issues concerning national security, transparency in democracy, and public accountability. For decades, the Foreign Contribution (Regulation) Act has been the instrument through which this interest has been pursued. However, the Foreign Contribution (Regulation) Amendment Bill, 2026 raises a different question altogether. It goes beyond regulating foreign contributions, to the extent to which the state may intervene in assets and institutional activities associated with them.

The fundamental issue, therefore, is not a debate between civil society and national security. It is about where the State, in pursuit of its legitimate regulatory goal, may cross the boundary from regulating foreign contributions to exercising undue executive control over the institutions that receive them.

The Bill's most important aspect is a statutory framework for the vesting, supervision, management and disposal of foreign contributions and assets through a 'Designated Authority'. Where an organisation's FCRA certificate is cancelled, surrendered or ceases to exist, including due to non-renewal, the Central government may appoint an authority to which the foreign contribution and assets created from it may vest provisionally. The measure is framed as an accountability mechanism to prevent the diversion or abuse of such properties.

Expansion of statutory consequences

However, the constitutional difficulty lies elsewhere.

The FCRA has always empowered the state to scrutinise foreign funding. If there are any violations in this regard, registrations can be withdrawn,



Opposition MPs protest in New Delhi on April 1, demanding the withdrawal of the FCRA Amendment Bill.

cancellation can follow continuing non-compliance, and penalties can attach to the diversion or misappropriation of foreign contributions. The Bill, however, represents a significant expansion of the statutory consequences that can follow the loss of FCRA registration. Importantly, the existing FCRA law already contains a provision for vesting assets created from foreign funds upon cancellation. What is new is the detailed statutory framework for their provisional vesting, possession, management, restoration and ultimately, permanent vesting and disposal.

In case of cancellation, surrender, or cessation of registration, the government may, through the Designated Authority, take possession of and manage assets created from foreign contributions and, where considered necessary or expedient in the public interest, undertake the management of the concerned organisation's activities. This is not merely a change in administrative policy; it raises a constitutional question about the extent to which a statute regulating foreign contributions may permit executive authorities to assume possession and, in specified circumstances, management of institutional assets and activities.

Even if the dichotomy between ownership and custody may have some legal relevance, its practical consequences are not. An entity whose success is dependent on the continuity of management will place greater emphasis on control than ownership. Ownership may remain formally undisturbed, but a change in management control fundamentally alters the relationship between the institution and the state. A hospital, school or laboratory is not made effective by ownership alone; it depends on its independence to administer, for charitable ends, what it owns.

Evaluation of proportionality

This is where the doctrine of constitutional proportionality may be relevant. The Supreme Court has repeatedly held that even where the state pursues a legitimate objective, the means it adopts must bear a reasonable connection to that objective and must maintain an appropriate balance between the public purpose and the burden imposed on rights. The amendment raises difficult questions when measured against the said rationale. If the consequence of losing FCRA registration is the provisional vesting of assets in, and potentially the

management of institutional activities by a government-appointed authority, the safeguards attending that transfer must be commensurately robust.

Therefore, the Bill warrants scrutiny of the extent of the discretion delegated to the executive, the safeguards governing its exercise and the standards applicable to decisions concerning possession, management, and permanent vesting. The Bill provides for the restoration of assets when registration is obtained, renewed, or restored within the prescribed period, as well as mechanisms for revision and judicial appeal. The constitutional question is whether these safeguards are sufficiently clear, timely and effective.

This concern becomes more significant against the broader regulatory landscape. Over the past decade, thousands of FCRA registrations have ceased to operate for reasons ranging from non-renewal to alleged statutory violations. While many regulatory actions may be justified, the Bill may increase the consequences arising from the cessation of registration. What might previously have been limited to the loss of eligibility to receive foreign funds could, under the proposed framework, extend to provisional management and, if registration is not restored within the prescribed period, permanent vesting and disposal of assets.

None of this suggests that the government lacks the authority to strengthen financial oversight or ensure that funds from abroad are used for lawful and proper ends. But in a constitutional order, any regime that reaches into the management of civil society's institutional infrastructure must operate within clear legislative standards.

Ultimately, the constitutional question posed by the FCRA Amendment Bill is not whether foreign contributions should be regulated, but how far the state may go in regulating institutions and their assets. (Thajawini C.B. is an advocate practising before the Supreme Court, Madras and Delhi High Courts. Siddharth Dev Prasad is a 4th year law student at Gujarat National Law University.)

THE GIST

The FCRA has always empowered the state to scrutinise foreign funding. The amendment Bill, however, represents a significant expansion of the statutory consequences that can follow the loss of FCRA registration.

Therefore, the Bill warrants scrutiny of the extent of the discretion delegated to the executive, the safeguards governing its exercise and the standards applicable to decisions concerning possession, management, and permanent vesting.

03S9. Constitutional faultlines in FCRA Bill

FCRA विधेयक में संवैधानिक अंतर्विरोध

- It is hard to deny that the state has a legitimate concern in regulating foreign contributions in India, as foreign donations raise issues concerning **national security**, transparency in democracy, and public accountability.
इस बात से इनकार करना कठिन है कि भारत में विदेशी अंशदान को विनियमित करने में राज्य की एक वैध चिंता है, क्योंकि विदेशी दान से राष्ट्रीय सुरक्षा, लोकतंत्र में पारदर्शिता और सार्वजनिक जवाबदेही से संबंधित मुद्दे उत्पन्न होते हैं।
- For decades, the Foreign Contribution (Regulation) Act has been the instrument through which this interest has been pursued.
दशकों से विदेशी अंशदान (विनियमन) अधिनियम वह साधन रहा है जिसके माध्यम से इस हित को आगे बढ़ाया गया है।
- However, the Foreign Contribution (Regulation) Amendment Bill, 2026 raises a different question altogether.
हालाँकि, विदेशी अंशदान (विनियमन) संशोधन विधेयक, 2026 एक बिल्कुल अलग प्रश्न उठाता है।
- It goes beyond regulating foreign contributions, to the extent to which the state may intervene in assets and institutional activities associated with them.
यह विदेशी अंशदान के विनियमन से आगे बढ़कर इस प्रश्न तक पहुँचता है कि राज्य उनसे संबंधित संपत्तियों और संस्थागत गतिविधियों में किस सीमा तक हस्तक्षेप कर सकता है।
- The fundamental issue, therefore, is not a debate between civil society and national security.
इसलिए, मूलभूत मुद्दा नागरिक समाज और राष्ट्रीय सुरक्षा के बीच बहस नहीं है।
- It is about where the State, in pursuit of its legitimate regulatory goal, may cross the boundary from regulating foreign contributions to exercising undue executive control over the institutions that receive them.
यह इस बात से संबंधित है कि राज्य अपने वैध नियामक उद्देश्य को पूरा करते हुए उस सीमा को कहाँ पार कर सकता है, जहाँ विदेशी अंशदान के विनियमन से आगे बढ़कर वह उन्हें प्राप्त करने वाली संस्थाओं पर अनुचित कार्यकारी नियंत्रण स्थापित करने लगे।
- The Bill's most important aspect is a statutory framework for the vesting, supervision, management and disposal of foreign contributions and assets through a 'Designated Authority'.
विधेयक का सबसे महत्वपूर्ण पहलू 'नामित प्राधिकरण' के माध्यम से विदेशी अंशदान और संपत्तियों के निहितकरण, पर्यवेक्षण, प्रबंधन और निपटान के लिए एक वैधानिक ढाँचा तैयार करना है।
- Where an organisation's FCRA certificate is cancelled, surrendered or ceases to exist, including due to non-renewal, the Central government may appoint an authority to which the foreign contribution and assets created from it may vest provisionally.
जहाँ किसी संगठन का FCRA प्रमाणपत्र रद्द कर दिया जाता है, समर्पित कर दिया जाता है या वह समाप्त हो जाता है, जिसमें नवीनीकरण न होने के कारण समाप्त होना भी शामिल है, वहाँ केंद्र सरकार एक ऐसे प्राधिकरण की नियुक्ति कर सकती है जिसमें विदेशी अंशदान और उससे निर्मित संपत्तियाँ अस्थायी रूप से निहित की जा सकती हैं।
- The measure is framed as an accountability mechanism to prevent the diversion or abuse of such properties.
इस उपाय को ऐसी संपत्तियों के दुरुपयोग या विचलन को रोकने के लिए एक जवाबदेही तंत्र के रूप में प्रस्तुत किया गया है।

Expansion of statutory consequences

वैधानिक परिणामों का विस्तार

- However, the constitutional difficulty lies elsewhere.
हालाँकि, **संवैधानिक कठिनाई** कहीं और निहित है।
- The FCRA has always empowered the state to scrutinise foreign funding.
FCRA ने हमेशा राज्य को **विदेशी वित्तपोषण की जाँच-पड़ताल** करने का अधिकार दिया है।
- If there are any violations in this regard, registrations can be withdrawn, cancellation can follow continuing non-compliance, and penalties can attach to the diversion or misappropriation of foreign contributions.
यदि इस संबंध में कोई उल्लंघन होता है, तो पंजीकरण वापस लिया जा सकता है, निरंतर अनुपालन न करने पर पंजीकरण रद्द किया जा सकता है और विदेशी अंशदान के **विचलन या दुरुपयोग** पर दंड लगाया जा सकता है।
- The Bill, however, represents a significant expansion of the statutory consequences that can follow the loss of FCRA registration.
हालाँकि, यह विधेयक FCRA पंजीकरण समाप्त होने के बाद उत्पन्न होने वाले **वैधानिक परिणामों के महत्वपूर्ण विस्तार** का प्रतिनिधित्व करता है।
- Importantly, the existing FCRA law already contains a provision for vesting assets created from foreign funds upon cancellation.
महत्वपूर्ण रूप से, मौजूदा FCRA कानून में पहले से ही पंजीकरण रद्द होने पर विदेशी निधियों से निर्मित संपत्तियों के **निहितकरण** का प्रावधान है।
- What is new is the detailed statutory framework for their provisional vesting, possession, management, restoration and ultimately, permanent vesting and disposal.
नया यह है कि उनके **अस्थायी निहितकरण, कब्जे, प्रबंधन, पुनर्स्थापन और अंततः स्थायी निहितकरण तथा निपटान** के लिए विस्तृत वैधानिक ढाँचा प्रस्तावित किया गया है।
- In case of cancellation, surrender, or cessation of registration, the government may, through the Designated Authority, take possession of and manage assets created from foreign contributions and, where considered necessary or expedient in the public interest, undertake the management of the concerned organisation's activities.
पंजीकरण रद्द होने, समर्पित किए जाने या समाप्त होने की स्थिति में, सरकार **नामित प्राधिकरण** के माध्यम से विदेशी अंशदान से निर्मित संपत्तियों का कब्जा ले सकती है और उनका प्रबंधन कर सकती है तथा जहाँ इसे **जनहित में आवश्यक या समीचीन** माना जाए, वहाँ संबंधित संगठन की गतिविधियों का प्रबंधन भी अपने हाथ में ले सकती है।
- This is not merely a change in administrative policy; it raises a constitutional question about the extent to which a statute regulating foreign contributions may permit executive authorities to assume possession and, in specified circumstances, management of institutional assets and activities.
यह केवल **प्रशासनिक नीति में परिवर्तन** नहीं है; यह एक संवैधानिक प्रश्न उठाता है कि विदेशी अंशदान को विनियमित करने वाला कानून कार्यकारी प्राधिकरणों को किस सीमा तक संस्थागत संपत्तियों और गतिविधियों का कब्जा लेने तथा निर्दिष्ट परिस्थितियों में उनका प्रबंधन संभालने की अनुमति दे सकता है।
- Even if the dichotomy between ownership and custody may have some legal relevance, its practical consequences are not.
भले ही **स्वामित्व और अभिरक्षा** के बीच अंतर का कुछ कानूनी महत्व हो सकता है, लेकिन इसके व्यावहारिक परिणामों में ऐसा अंतर नहीं है।
- An entity whose success is dependent on the continuity of management will place greater emphasis on control than ownership.
जिस संस्था की सफलता **प्रबंधन की निरंतरता** पर निर्भर करती है, वह स्वामित्व की तुलना में नियंत्रण को अधिक महत्व देगी।
- Ownership may remain formally undisturbed, but a change in management control fundamentally alters the relationship between the institution and the state.
स्वामित्व औपचारिक रूप से अप्रभावित रह सकता है, लेकिन **प्रबंधन नियंत्रण में परिवर्तन** संस्था और राज्य के बीच संबंध को मूल रूप से बदल देता है।

- A hospital, school or laboratory is not made effective by ownership alone; it depends on its independence to administer, for charitable ends, what it owns.
किसी अस्पताल, विद्यालय या प्रयोगशाला की प्रभावशीलता केवल स्वामित्व से सुनिश्चित नहीं होती; यह इस बात पर निर्भर करती है कि वह अपनी स्वामित्व वाली संपत्तियों का परोपकारी उद्देश्यों के लिए स्वतंत्र रूप से प्रशासन कर सके।

Evaluation of proportionality आनुपातिकता का मूल्यांकन

- This is where the doctrine of **constitutional proportionality** may be relevant.
यहीं संवैधानिक आनुपातिकता के सिद्धांत की प्रासंगिकता सामने आती है।
- The Supreme Court has repeatedly held that even where the state pursues a legitimate objective, the means it adopts must bear a reasonable connection to that objective and must maintain an appropriate balance between the public purpose and the burden imposed on rights.
सर्वोच्च न्यायालय ने बार-बार कहा है कि भले ही राज्य किसी वैध उद्देश्य को प्राप्त करने का प्रयास कर रहा हो, उसके द्वारा अपनाए गए साधनों का उस उद्देश्य के साथ उचित संबंध होना चाहिए और उन्हें जनहित के उद्देश्य तथा अधिकारों पर लगाए गए भार के बीच उचित संतुलन बनाए रखना चाहिए।
- The amendment raises difficult questions when measured against the said rationale.
उक्त तर्क के आधार पर मूल्यांकन करने पर यह संशोधन कठिन प्रश्न उठाता है।
- If the consequence of losing FCRA registration is the provisional vesting of assets in, and potentially the management of institutional activities by a government-appointed authority, the safeguards attending that transfer must be commensurately robust.
यदि FCRA पंजीकरण खोने का परिणाम संपत्तियों का किसी सरकारी नियुक्त प्राधिकरण में अस्थायी निहितकरण और संभावित रूप से संस्थागत गतिविधियों का उसके द्वारा प्रबंधन है, तो इस हस्तांतरण से संबंधित सुरक्षोपाय भी समान रूप से सुदृढ़ होने चाहिए।
- Therefore, the Bill warrants scrutiny of the extent of the discretion delegated to the executive, the safeguards governing its exercise and the standards applicable to decisions concerning possession, management, and permanent vesting.
इसलिए, विधेयक में कार्यपालिका को प्रदान किए गए विवेकाधिकार की सीमा, उसके प्रयोग को नियंत्रित करने वाले सुरक्षोपायों तथा कब्जे, प्रबंधन और स्थायी निहितकरण से संबंधित निर्णयों पर लागू होने वाले मानकों की गहन जाँच आवश्यक है।
- The Bill provides for the restoration of assets when registration is obtained, renewed, or restored within the prescribed period, as well as mechanisms for revision and judicial appeal.
विधेयक में निर्धारित अवधि के भीतर पंजीकरण प्राप्त होने, नवीनीकृत होने या पुनर्स्थापित होने पर संपत्तियों की पुनर्बहाली का प्रावधान है, साथ ही पुनरीक्षण और न्यायिक अपील के तंत्र भी उपलब्ध कराए गए हैं।
- The constitutional question is whether these safeguards are sufficiently clear, timely and effective.
संवैधानिक प्रश्न यह है कि क्या ये सुरक्षोपाय पर्याप्त रूप से स्पष्ट, समयबद्ध और प्रभावी हैं।
- This concern becomes more significant against the broader regulatory landscape.
व्यापक नियामक परिदृश्य को देखते हुए यह चिंता और अधिक महत्वपूर्ण हो जाती है।
- Over the past decade, thousands of FCRA registrations have ceased to operate for reasons ranging from non-renewal to alleged statutory violations.
पिछले दशक में हजारों FCRA पंजीकरण नवीनीकरण न होने से लेकर कथित वैधानिक उल्लंघनों तक के विभिन्न कारणों से प्रभावहीन हो गए हैं।
- While many regulatory actions may be justified, the Bill may increase the consequences arising from the cessation of registration.
यद्यपि कई नियामक कार्रवाइयाँ उचित हो सकती हैं, लेकिन विधेयक पंजीकरण समाप्त होने से उत्पन्न होने वाले परिणामों को बढ़ा सकता है।



- What might previously have been limited to the loss of eligibility to receive foreign funds could, under the proposed framework, extend to provisional management and, if registration is not restored within the prescribed period, permanent vesting and disposal of assets.
जो स्थिति पहले केवल विदेशी निधि प्राप्त करने की पात्रता समाप्त होने तक सीमित हो सकती थी, वह प्रस्तावित ढाँचे के तहत अस्थायी प्रबंधन तक विस्तारित हो सकती है और यदि निर्धारित अवधि के भीतर पंजीकरण बहाल नहीं किया जाता है, तो संपत्तियों के स्थायी निहितकरण और निपटान तक पहुँच सकती है।
- None of this suggests that the government lacks the authority to strengthen financial oversight or ensure that funds from abroad are used for lawful and proper ends.
इनमें से किसी भी बात का यह अर्थ नहीं है कि सरकार के पास वित्तीय निगरानी को मजबूत करने या यह सुनिश्चित करने का अधिकार नहीं है कि विदेशों से प्राप्त निधियों का उपयोग कानूनी और उचित उद्देश्यों के लिए किया जाए।
- But in a constitutional order, any regime that reaches into the management of civil society's institutional infrastructure must operate within clear legislative standards.
लेकिन एक संवैधानिक व्यवस्था में नागरिक समाज के संस्थागत ढाँचे के प्रबंधन तक पहुँचने वाली किसी भी व्यवस्था को स्पष्ट विधायी मानकों के भीतर कार्य करना चाहिए।
- Ultimately, the constitutional question posed by the FCRA Amendment Bill is not whether foreign contributions should be regulated, but how far the state may go in regulating institutions and their assets.
अंततः, FCRA संशोधन विधेयक द्वारा उठाया गया संवैधानिक प्रश्न यह नहीं है कि विदेशी अंशदान को विनियमित किया जाना चाहिए या नहीं, बल्कि यह है कि संस्थाओं और उनकी संपत्तियों को विनियमित करने में राज्य कितनी दूर तक जा सकता है।

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'Bihar's concerns on Ganga treaty will be considered'

External Affairs Minister writes to JD(U) MP Sanjay Jha after he complained that treaty between India and Bangladesh had 'negatively impacted' Bihar; Jha has said pact should not be renewed

GS II: IR

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India will decide on the renewal of the 1996 Ganga Water Treaty while keeping Bihar's interests in consideration, stated External Affairs Minister S. Jaishankar in a recent letter to Janata Dal (United) MP Sanjay Jha who had called upon the government not to renew the treaty, asserting that it had "negatively impacted" the State.

The India-Bangladesh Ganga Water Treaty will expire on December 31, 2026. Renewal of the treaty is one of the major items on this year's diplomatic calendar of the two countries.

Responding to Mr. Jaishankar's letter dated August 28, Mr. Jha expressed the hope that the Government of India will factor in Bihar's interests "fully and fairly" while going ahead with the treaty. "Bihar is not seeking a favour. We are asking only for what our own scientific assessment establishes, so that 13



The treaty has contributed to silt accumulation upstream of the Ganga, the JD(U) leader has said. ANI

crore people are not left short of water for drinking, irrigation and industrial supply for another 30 years," Mr. Jha said.

Consultations held

In the letter to Mr. Jha, Mr. Jaishankar said: "We fully understand your concerns regarding the Ganga Water Treaty. I would like to bring to your attention that under the leadership of the Jal Shakti Ministry, inter-ministerial consultations involving relevant stakeholders have taken place to ensure broad-based consultation on the future of

the treaty." He added that an authorised representative of the Government of Bihar participated in the inter-ministerial consultations held on August 22, 2023, October 30, 2023, March 15, 2024, and on May 31, 2024.

"The government will take the appropriate decision while keeping these factors in focus," said Mr. Jaishankar regarding the renewal of the treaty.

Earlier Mr. Jha, who was the Bihar Water Resources Minister from 2021 to 2024, had strongly opposed the renewal of the

treaty, arguing that it had hurt Bihar's interests. In his remarks to *The Hindu*, he had described the treaty, which was signed during the first prime ministerial tenure of Sheikh Hasina in 1996, as a remnant of the 'Gujral Doctrine' era that projected a generous image of India but did not serve Bihar's interests.

Mr. Jha had said that "if you look at the data in the last 30 years of the treaty being in place, you can clearly see that the interests of Bihar have been negatively impacted", and argued that India should allow the treaty to expire.

Apart from objection from Mr. Jha, the treaty is also in focus because of the lack of top-level political meetings between India and Bangladesh. India and Bangladesh were in talks for a New Delhi visit by Prime Minister Tarique Rahman, but the talks broke down over a virtual press conference by deposed Prime Minister Sheikh Hasina at the Foreign Correspondents Club in New Delhi on August 5.

03S9. 'Bihar's concerns on Ganga treaty will be considered'

'गंगा संधि पर बिहार की चिंताओं पर विचार किया जाएगा'

- External Affairs Minister writes to JD(U) MP Sanjay Jha after he complained that treaty between India and Bangladesh had 'negatively impacted' Bihar; Jha has said pact should not be renewed

भारत और बांग्लादेश के बीच संधि से बिहार पर 'नकारात्मक प्रभाव' पड़ने की शिकायत के बाद विदेश मंत्री ने जदयू सांसद संजय झा को पत्र लिखा; झा ने कहा है कि समझौते का नवीनीकरण नहीं किया जाना चाहिए

- India will decide on the renewal of the 1996 Ganga Water Treaty while keeping Bihar's interests in consideration, stated External Affairs Minister S. Jaishankar in a recent letter to Janata Dal (United) MP Sanjay Jha who had called upon the government not to renew the treaty, asserting that it had "negatively impacted" the State.

विदेश मंत्री एस. जयशंकर ने जनता दल (यूनाइटेड) के सांसद संजय झा को हाल में लिखे एक पत्र में कहा कि भारत बिहार के हितों को ध्यान में रखते हुए 1996 की गंगा जल संधि के नवीनीकरण पर निर्णय लेगा; झा ने यह कहते हुए सरकार से संधि का नवीनीकरण नहीं करने का आग्रह किया था कि इससे राज्य पर "नकारात्मक प्रभाव" पड़ा है।

- The India-Bangladesh Ganga Water Treaty will expire on **December 31, 2026**.
भारत-बांग्लादेश गंगा जल संधि की अवधि 31 दिसंबर, 2026 को समाप्त हो जाएगी।
- Renewal of the treaty is one of the major items on this year's **diplomatic calendar** of the two countries.
संधि का नवीनीकरण दोनों देशों के इस वर्ष के **कूटनीतिक कार्यक्रम** के प्रमुख विषयों में से एक है।
- Responding to Mr. Jaishankar's letter dated **August 28**, Mr. Jha expressed the hope that the Government of India will factor in **Bihar's interests "fully and fairly"** while going ahead with the treaty.
श्री जयशंकर के 28 अगस्त के पत्र पर प्रतिक्रिया देते हुए श्री झा ने आशा व्यक्त की कि भारत सरकार संधि के संबंध में आगे बढ़ते समय बिहार के हितों को "पूरी तरह और निष्पक्ष रूप से" ध्यान में रखेगी।
- "Bihar is not seeking a favour."
"बिहार कोई विशेष कृपा नहीं माँग रहा है।"
- We are asking only for what our own **scientific assessment** establishes, so that **13 crore people** are not left short of water for **drinking, irrigation and industrial supply** for another **30 years**," Mr. Jha said.
हम केवल वही माँग रहे हैं, जिसे हमारा अपना वैज्ञानिक आकलन प्रमाणित करता है, ताकि 13 करोड़ लोगों को अगले 30 वर्षों तक पेयजल, सिंचाई और औद्योगिक आपूर्ति के लिए पानी की कमी का सामना न करना पड़े," श्री झा ने कहा।

Consultations held

परामर्श आयोजित किए गए

- In the letter to Mr. Jha, Mr. Jaishankar said: "We fully understand your concerns regarding the **Ganga Water Treaty**.
श्री झा को लिखे पत्र में श्री जयशंकर ने कहा: "हम गंगा जल संधि के संबंध में आपकी चिंताओं को पूरी तरह समझते हैं।"
- I would like to bring to your attention that under the leadership of the **Jal Shakti Ministry**, **interministerial consultations** involving relevant stakeholders have taken place to ensure broad-based consultation on the future of the treaty."
मैं आपका ध्यान इस तथ्य की ओर आकर्षित करना चाहूँगा कि संधि के भविष्य पर व्यापक परामर्श सुनिश्चित करने के लिए **जल शक्ति मंत्रालय** के नेतृत्व में संबंधित हितधारकों को शामिल करते हुए **अंतर-मंत्रालयी परामर्श** आयोजित किए गए हैं।"
- He added that an **authorised representative of the Government of Bihar** participated in the inter-ministerial consultations held on **August 22, 2023, October 30, 2023, March 15, 2024, and on May 31, 2024**.
उन्होंने आगे कहा कि **बिहार सरकार के एक अधिकृत प्रतिनिधि** ने 22 अगस्त, 2023, 30 अक्टूबर, 2023, 15 मार्च, 2024 और 31 मई, 2024 को आयोजित अंतर-मंत्रालयी परामर्शों में भाग लिया था।
- "The government will take the **appropriate decision** while keeping these factors in focus," said Mr. Jaishankar regarding the renewal of the treaty.
संधि के नवीनीकरण के संबंध में श्री जयशंकर ने कहा, "सरकार इन कारकों को ध्यान में रखते हुए **उचित निर्णय** लेगी।"
- Earlier Mr. Jha, who was the **Bihar Water Resources Minister from 2021 to 2024**, had strongly opposed the renewal of the treaty, arguing that it had hurt Bihar's interests.
इससे पहले, 2021 से 2024 तक बिहार के जल संसाधन मंत्री रहे श्री झा ने यह तर्क देते हुए संधि के नवीनीकरण का कड़ा विरोध किया था कि इससे बिहार के हितों को नुकसान पहुँचा है।
- In his remarks to **The Hindu**, he had described the treaty, which was signed during the **first prime ministerial tenure of Sheikh Hasina in 1996**, as a remnant of the '**Gujral Doctrine**' era that projected a generous image of India but did not serve Bihar's interests.
द हिंदू से बातचीत में उन्होंने 1996 में शेख हसीना के पहले प्रधानमंत्रित्व काल के दौरान हस्ताक्षरित इस संधि



को 'गुजराल सिद्धांत' के दौर का अवशेष बताया था, जिसने भारत की उदार छवि प्रस्तुत की, लेकिन बिहार के हितों की पूर्ति नहीं की।

- Mr. Jha had said that "if you look at the data in the **last 30 years** of the treaty being in place, you can clearly see that the interests of Bihar have been **negatively impacted**", and argued that India should allow the treaty to expire.
श्री झा ने कहा था कि "यदि आप संधि लागू रहने के पिछले 30 वर्षों के आँकड़ों को देखें, तो आप स्पष्ट रूप से देख सकते हैं कि बिहार के हितों पर **नकारात्मक प्रभाव पड़ा है**", और उन्होंने तर्क दिया था कि भारत को संधि की अवधि समाप्त होने देनी चाहिए।
- Apart from objection from Mr. Jha, the treaty is also in focus because of the **lack of top-level political meetings between India and Bangladesh**.
श्री झा की आपत्ति के अतिरिक्त, भारत और बांग्लादेश के बीच शीर्ष-स्तरीय राजनीतिक बैठकों के अभाव के कारण भी यह संधि चर्चा में है।
- India and Bangladesh were in talks for a **New Delhi visit by Prime Minister Tarique Rahman**, but the talks broke down over a **virtual press conference by deposed Prime Minister Sheikh Hasina at the Foreign Correspondents Club in New Delhi on August 5**.
भारत और बांग्लादेश के बीच प्रधानमंत्री तारिक रहमान की नई दिल्ली यात्रा को लेकर बातचीत चल रही थी, लेकिन 5 अगस्त को नई दिल्ली स्थित फॉरेन कॉर्रेस्पॉन्डेंट्स क्लब में अपदस्थ प्रधानमंत्री शेख हसीना के वर्चुअल संवाददाता सम्मेलन को लेकर यह बातचीत टूट गई।

'Early Harvest' — larger but not necessarily safer

ON 25 AUGUST 2026, in Beijing, National Security Adviser Ajit Doval and China's Foreign Minister Wang Yi held the 25th round of talks between the Special Representatives (SRs) on the India-China boundary question. That evening's readouts from both sides were anodyne and notably avoided a phrase that has dominated this discussion for a year: early harvest. A day later, the two sides released an "Eight Points of Outcomes and Consensus". Point 3 restored and enhanced the phrase: the Expert Group on Boundary Delimitation and the Working Group on Border Management, set up under the Working Mechanism for Consultation and Coordination (WMCC) a year ago, would "respectively advance discussions on an Early and Substantial Harvest of boundary delimitation and Border Management". Their first task, it adds, is to agree on their own terms of reference, one year after they were constituted, suggesting that whatever is being contemplated remains at an early stage.

An uncertain Early Harvest

The phrase "Early and Substantial Harvest" is significant because it is India's own coinage. When Beijing first proposed settling the Sikkim Sector alone, India's considered response, around 2019, was a counter-proposal on an "Early and Substantial Harvest" covering the Sikkim Sector together with the entire Middle Sector, with the boundary delineated along the watershed. China rejected the proposal. In subsequent discussions on an "Early Harvest," China reportedly agreed only to include the Sikkim Sector and some undisputed areas of the Middle Sector – a proposal that was unacceptable to India.

The exact Indian formulation has now resurfaced in a joint document. This could mean that Beijing has accepted India's terms – which this writer doubts – as that would involve China giving up its claim to approximately 2,450 square kilometres of territory in the Middle Sector, all south of the watershed boundary (Barahoti, Giu-Kaurik, Nilang-Jadhang, Sangcha Malla, and Laphal). It could equally mean something the Indian side had rejected earlier: an "agreement with holes", a settlement nominally covering both sectors but confined to stretches where the claims already coincide, leaving the trijunctions and contested pockets of the Middle Sector undefined.

If that is the case, we will have the same asymmetric outcome as with a Sikkim-only settlement – India conceding ground where its position is strong, without any progress in the Eastern and Western Sectors, where China maintains its headline position, "long tiao xi rang", meaning "meaningful adjustments by India in the East and corresponding concessions by China in the West". It would also jettison a key provision (Article III) of the 2005 Agreement on



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India-China boundary talks suggest movement, but hard questions remain over strategic costs and concessions

Political Parameters and Guiding Principles for the Settlement of the India-China Boundary, which calls for a "package settlement ...covering all sectors of the India-China boundary", opting instead to bank the easy gains immediately while leaving the hard issues open on China's terms. The package clause exists precisely because the boundary's four sectors are strategically interlinked, requiring cross-sector give and take.

No open-and-shut case

The Sikkim Sector is also not the open-and-shut case that some suggest. The two sides agree that the Anglo-Chinese Convention of 1890 is the "basis of the alignment" of the boundary in this sector. However, Article I of the Convention contains two stipulations that are mutually contradictory. Its first sentence makes the watershed crest the boundary, while its second names Mount Gipmochi as the starting point on the Bhutan frontier. Yet, British Indian maps of 1907 and 1913 placed the trijunction not at Gipmochi but roughly 6.5 kilometres to its north, on the true watershed crest. India and Bhutan read the watershed principle as controlling and place the trijunction at Batang La; China seizes on the literal reference to Gipmochi to push the trijunction southwards, onto the Jamphri Ridge. A Sikkim delimitation built on the 1890 text, unless it repudiates Gipmochi, would be read by Beijing as conceding the southern trijunction.

Even a trijunction-reserved settlement would strip India of the standing to counsel Bhutan against a bilateral deal, having itself settled out of turn nearby. China's "package proposal" to Bhutan – relinquishing roughly 495 sq km of claims in the north in exchange for Bhutan ceding about 269 sq km in the northwest, including the Doklam Plateau – would gain fresh momentum, deepening China's presence in the Chumbi Valley and opening a path to the Jamphri Ridge, from which the entire Siliguri Corridor, India's sole overland link to its northeastern States, would come under direct observation. This is not hypothetical: since the 2017 Doklam standoff, China has spent years building roads, villages, and military facilities across western Bhutan, gaining de facto control over Doklam.

A genuine "Early and Substantial Harvest" requires three things. First, delineation must proceed on the highest-watershed principle across the entire stretch in both sectors, rather than selectively along segments where the two positions already converge, which would serve no purpose for India. Second, trijunction points, at Batang La and any comparable third-country-adjacent points in the Middle Sector, must be explicitly excluded from the Expert Group's mandate and settled only in consultation with the country concerned, as stipulated in the 2012 Common Understanding between the two SRs. However, unless the highest-watershed principle is accepted, silence

on the trijunction will, on the ground, be filled in Beijing's favour in Bhutan. Third, the terms of reference for the Expert Group must extend India's 2019 proposal in good faith, rather than dilute it beyond recognition.

Several questions about these negotiations remain unanswered. The Chinese readout of August 25 reiterates a commitment to a "package" settlement, but how will that commitment be reconciled with a piecemeal approach to settlement? How is the setting up of an Expert Group on Delimitation consistent with the instructions given to the SRs in Article X of the 2005 Agreement, which require them to "continue consultations in an earnest manner with the objective of arriving at an agreed framework for a boundary settlement, which will provide the basis for the delineation and demarcation of the India-China boundary to be subsequently undertaken by civil and military officials and surveyors of the two sides"? There is no agreed framework yet, but it is proposed to commence the process of "delimitation", a term that the Chinese use interchangeably with "demarcation". Indeed, the 2005 Agreement does not use the term "delimitation" at all. Will the SRs earnestly pursue negotiations on the "agreed framework", or will they, in effect, leave it in abeyance while officials grapple with a partial delimitation exercise without such a framework? The other elements of the Eight Points – additional meeting points and hotlines for the General Level Mechanisms in the Eastern and Middle Sectors, continued pilgrimage and border trade, and a September meeting on trans-border rivers – are useful, incremental confidence-building measures. But they belong to a different track from boundary settlement and should not be conflated in public discussion.

The Eight Points are silent on the Medog County project on the Yarlung Tsangpo River, while referring to both sides agreeing to "maintain communication on (trans-border river) issues, including hydrological data sharing and renewal of the relevant MoUs", without reporting any progress. The September meeting should convey India's concerns about the project – the world's largest hydropower plant – being built close to the border in the Eastern Sector, in a highly earthquake-prone zone, a risk underscored by the flash floods in Nepal on August 26.

Avoid optics

Two points bear reiteration. First, the 2005 agreement – the only substantive outcome of 23 years of SR talks – must not be diluted; China has sought to reinterpret and undermine it since its conclusion. Second, Indian negotiators must guard against the temptation to project contrived progress. Diplomacy that trades long-term strategic interests for short-term optics is self-defeating.

03S9. Early Harvest' — larger but not necessarily safer

‘अर्ली हार्वेस्ट’ — व्यापक, लेकिन जरूरी नहीं कि अधिक सुरक्षित हो

- On August 25, 2026, in Beijing, **National Security Adviser Ajit Doval** and China's Foreign Minister **Wang Yi** held the 25th round of talks between the Special Representatives (SRs) on the **India-China boundary question**.
25 अगस्त, 2026 को बीजिंग में राष्ट्रीय सुरक्षा सलाहकार अजीत डोभाल और चीन के विदेश मंत्री वांग यी ने भारत-चीन सीमा प्रश्न पर विशेष प्रतिनिधियों (SRs) के बीच 25वें दौर की वार्ता की।
- That evening's readouts from both sides were anodyne and notably avoided a phrase that has dominated this discussion for a year: **early harvest**.
उस शाम दोनों पक्षों द्वारा जारी किए गए विवरण सामान्य थे और उन्होंने विशेष रूप से उस शब्दावली से परहेज किया, जिसने एक वर्ष से इस चर्चा पर प्रमुखता से प्रभाव डाला है: **अर्ली हार्वेस्ट**।
- A day later, the two sides released an **"Eight Points of Outcomes and Consensus"**.
एक दिन बाद, दोनों पक्षों ने **"परिणाम और सहमति के आठ बिंदु"** जारी किए।
- Point 3 restored and enhanced the phrase: the **Expert Group on Boundary Delimitation and the Working Group on Border Management, set up under the Working Mechanism for Consultation and Coordination (WMCC)** a year ago, would "respectively advance discussions on an Early and Substantial Harvest of boundary delimitation and Border Management".
बिंदु 3 में इस शब्दावली को पुनः शामिल करते हुए और विस्तार देते हुए कहा गया कि **सीमा परिसीमन पर विशेषज्ञ समूह और सीमा प्रबंधन पर कार्य समूह**, जिन्हें एक वर्ष पहले परामर्श एवं समन्वय के लिए कार्य तंत्र (WMCC) के तहत स्थापित किया गया था, "क्रमशः सीमा परिसीमन और सीमा प्रबंधन के संबंध में **अर्ली एंड सब्सटैंशियल हार्वेस्ट** पर चर्चा को आगे बढ़ाएंगे।"
- Their first task, it adds, is to agree on their own terms of reference, one year after they were constituted, suggesting that whatever is being contemplated remains at an early stage
इसमें आगे कहा गया है कि उनका पहला कार्य अपने-अपने **संदर्भ-शर्तों (Terms of Reference)** पर सहमत होना है, जबकि उनके गठन को एक वर्ष बीत चुका है, जिससे संकेत मिलता है कि जो भी विचार किया जा रहा है, वह अभी प्रारंभिक चरण में है।

An uncertain Early Harvest

एक अनिश्चित अर्ली हार्वेस्ट

- The phrase **"Early and Substantial Harvest"** is significant because it is India's own coinage.
"अर्ली एंड सब्सटैंशियल हार्वेस्ट" शब्दावली महत्वपूर्ण है क्योंकि यह भारत द्वारा स्वयं गढ़ी गई है।
- When Beijing first proposed settling the **Sikkim Sector** alone, India's considered response, around 2019, was a counter-proposal on an **"Early and Substantial Harvest"** covering the **Sikkim Sector together with the entire Middle Sector, with the boundary delineated along the watershed**.
जब बीजिंग ने पहली बार केवल **सिक्किम सेक्टर** के समाधान का प्रस्ताव रखा, तो लगभग 2019 में भारत की विचारपूर्वक दी गई प्रतिक्रिया एक **"अर्ली एंड सब्सटैंशियल हार्वेस्ट"** संबंधी प्रति-प्रस्ताव थी, जिसमें सिक्किम सेक्टर के साथ-साथ पूरे **मध्य सेक्टर** को शामिल किया गया था और सीमा का निर्धारण **जलविभाजक** के साथ किया जाना था।
- China rejected the proposal.
चीन ने इस प्रस्ताव को अस्वीकार कर दिया।
- In subsequent discussions on an **"Early Harvest,"** China reportedly agreed only to include the Sikkim Sector and some undisputed areas of the Middle Sector — a proposal that was unacceptable to India.
इसके बाद **"अर्ली हार्वेस्ट"** पर हुई चर्चाओं में, कथित रूप से चीन केवल सिक्किम सेक्टर और मध्य सेक्टर के कुछ **अविवादित क्षेत्रों** को शामिल करने पर सहमत हुआ — यह प्रस्ताव भारत के लिए स्वीकार्य नहीं था।

- The exact Indian formulation has now resurfaced in a joint document.
भारत द्वारा प्रस्तुत वही सटीक शब्दावली अब एक **संयुक्त दस्तावेज** में फिर से सामने आई है।
- This could mean that Beijing has accepted India's terms — which this writer doubts — as that would involve **China giving up its claim to approximately 2,450 square kilometres of territory** in the Middle Sector, all south of the watershed boundary (Barahoti, Giu-Kaurik, Nilang-Jadhang, Sangcha Malla, and Lapthal).
इसका अर्थ यह हो सकता है कि बीजिंग ने भारत की शर्तें स्वीकार कर ली हैं — जिस पर इस लेखक को संदेह है — क्योंकि ऐसा करने पर चीन को मध्य सेक्टर में लगभग **2,450 वर्ग किलोमीटर क्षेत्र** पर अपना दावा छोड़ना पड़ेगा, जो पूरा का पूरा जलविभाजक सीमा के दक्षिण में स्थित है (बाराहोटी, गिउ-कौरिक, नीलांग-जाधंग, सांगचा मल्ला और लापथल)।
- It could equally mean something the Indian side had rejected earlier: **an “agreement with holes”, a settlement nominally covering both sectors but confined to stretches where the claims already coincide, leaving the trijunctions and contested pockets of the Middle Sector undefined.**
इसका समान रूप से यह अर्थ भी हो सकता है कि यह वही व्यवस्था है जिसे भारतीय पक्ष ने पहले अस्वीकार कर दिया था: एक **“छिद्रयुक्त समझौता”**, अर्थात् ऐसा समझौता जो नाममात्र रूप से दोनों सेक्टरों को कवर करता हो, लेकिन केवल उन क्षेत्रों तक सीमित हो जहाँ दोनों पक्षों के दावे पहले से ही समान हैं, जबकि **त्रि-जंक्शन** और मध्य सेक्टर के विवादित हिस्सों को अनिर्धारित छोड़ दिया जाए।
- If that is the case, we will have the same asymmetric outcome as with a Sikkim-only settlement — India conceding ground where its position is strong, without any progress in the Eastern and Western Sectors, where China maintains its hardline position, **“dong tiao xi rang”**, meaning “meaningful adjustments by India in the East and corresponding concessions by China in the West”.
यदि ऐसा है, तो हमें सिक्किम-केवल समाधान जैसा ही **असममित परिणाम** प्राप्त होगा — भारत उन क्षेत्रों में अपनी स्थिति छोड़ देगा जहाँ उसका पक्ष मजबूत है, जबकि पूर्वी और पश्चिमी सेक्टरों में कोई प्रगति नहीं होगी, जहाँ चीन अपना **कठोर रुख**, **“dong tiao xi rang”**, बनाए रखता है, जिसका अर्थ है “पूर्व में भारत द्वारा सार्थक समायोजन और पश्चिम में चीन द्वारा उसके अनुरूप रियायतें।”
- It would also jettison a key **provision (Article III) of the 2005 Agreement on Political Parameters and Guiding Principles for the Settlement of the India-China Boundary**, which calls for a **“package settlement ...covering all sectors of the India-China boundary”**, opting instead to bank the easy gains immediately while leaving the hard issues open on China's terms.
यह 2005 के **भारत-चीन सीमा के समाधान के लिए राजनीतिक मानदंडों और मार्गदर्शक सिद्धांतों संबंधी समझौते** के एक महत्वपूर्ण प्रावधान (अनुच्छेद III) को भी त्याग देगा, जिसमें **“भारत-चीन सीमा के सभी सेक्टरों को कवर करने वाले एक पैकेज समाधान”** का आह्वान किया गया है; इसके बजाय, यह आसान उपलब्धियों को तत्काल सुरक्षित करने का विकल्प चुनेगा, जबकि कठिन मुद्दों को चीन की शर्तों पर खुला छोड़ देगा।
- The **package clause** exists precisely because the boundary's four sectors are strategically interlinked, requiring cross-sector give and take.
पैकेज प्रावधान ठीक इसी कारण मौजूद है क्योंकि सीमा के चारों सेक्टर रणनीतिक रूप से परस्पर जुड़े हुए हैं और इनके समाधान के लिए **सेक्टरों के बीच लेन-देन एवं पारस्परिक रियायतों** की आवश्यकता है।

No open-and-shut case

यह कोई निर्विवाद मामला नहीं है

- The Sikkim Sector is also not the open-and-shut case that some suggest.
सिक्किम क्षेत्र भी ऐसा निर्विवाद मामला नहीं है, जैसा कि कुछ लोग इसे प्रस्तुत करते हैं।
- The two sides agree that the **Anglo-Chinese Convention of 1890 is the “basis of the alignment” of the boundary in this sector.**

दोनों पक्ष इस बात पर सहमत हैं कि 1890 का एंग्लो-चाइनीज़ कन्वेंशन इस क्षेत्र में सीमा के “संरेखण का आधार” है।

- However, Article I of the Convention contains two stipulations that are mutually contradictory. हालाँकि, कन्वेंशन के अनुच्छेद I में दो ऐसी शर्तें हैं, जो परस्पर विरोधाभासी हैं।

- Its first sentence makes the watershed crest the boundary, while its second names Mount Gipmochi as the starting point on the Bhutan frontier.

इसके पहले वाक्य में जल-विभाजक की शिखर रेखा को सीमा बनाया गया है, जबकि दूसरे वाक्य में भूटान सीमा पर माउंट जिपमोची को प्रारंभिक बिंदु बताया गया है।

- Yet, British Indian maps of 1907 and 1913 placed the trijunction not at Gipmochi but roughly 6.5 kilometres to its north, on the true watershed crest.

फिर भी, 1907 और 1913 के ब्रिटिश भारतीय मानचित्रों में त्रि-जंक्शन को जिपमोची पर नहीं, बल्कि उसके लगभग 6.5 किलोमीटर उत्तर में वास्तविक जल-विभाजक शिखर पर दर्शाया गया था।

- India and Bhutan read the watershed principle as controlling and place the trijunction at Batang La; China seizes on the literal reference to Gipmochi to push the trijunction southwards, onto the Jampheri Ridge.

भारत और भूटान जल-विभाजक सिद्धांत को निर्णायक मानते हैं और त्रि-जंक्शन को बाटांग ला पर स्थित करते हैं; चीन जिपमोची के स्पष्ट उल्लेख को आधार बनाकर त्रि-जंक्शन को दक्षिण की ओर जमफेरी रिज तक ले जाने का प्रयास करता है।

- A Sikkim delimitation built on the 1890 text, unless it repudiates Gipmochi, would be read by Beijing as conceding the southern trijunction.

1890 के पाठ पर आधारित सिक्किम सीमा-निर्धारण, जब तक कि वह जिपमोची के उल्लेख को अस्वीकार न करे, बीजिंग द्वारा दक्षिणी त्रि-जंक्शन को स्वीकार करने के रूप में देखा जाएगा।

- Even a trijunction-reserved settlement would strip India of the standing to counsel Bhutan against a bilateral deal, having itself settled out of turn nearby.

यहाँ तक कि त्रि-जंक्शन को सुरक्षित रखते हुए किया गया समझौता भी भारत को भूटान को किसी द्विपक्षीय समझौते के विरुद्ध सलाह देने की स्थिति से वंचित कर देगा, क्योंकि भारत ने स्वयं निकटवर्ती क्षेत्र में पहले ही अपने स्तर पर समझौता कर लिया होगा।

- China's “package proposal” to Bhutan — relinquishing roughly 495 sq km of claims in the north in exchange for Bhutan ceding about 269 sq km in the northwest, including the Doklam Plateau — would gain fresh momentum, deepening China's presence in the Chumbi Valley and opening a path to the Jampheri Ridge, from which the entire Siliguri Corridor, India's sole overland link to its northeastern States, would come under direct observation.

भूटान के लिए चीन का “पैकेज प्रस्ताव” — उत्तर में लगभग 495 वर्ग किमी के दावों को छोड़ने के बदले भूटान द्वारा उत्तर-पश्चिम में लगभग 269 वर्ग किमी क्षेत्र, जिसमें डोकलाम पठार भी शामिल है, चीन को सौंपना — नई गति प्राप्त करेगा, जिससे चुंबी घाटी में चीन की उपस्थिति और गहरी होगी तथा जमफेरी रिज तक पहुँच का मार्ग खुलेगा, जहाँ से संपूर्ण सिलीगुड़ी कॉरिडोर, जो भारत के पूर्वोत्तर राज्यों से उसका एकमात्र स्थल-आधारित संपर्क है, प्रत्यक्ष निगरानी के अधीन आ जाएगा।

- This is not hypothetical: since the 2017 Doklam standoff, China has spent years building roads, villages, and military facilities across western Bhutan, gaining de facto control over Doklam.

यह कोई काल्पनिक स्थिति नहीं है: 2017 के डोकलाम गतिरोध के बाद से चीन ने पश्चिमी भूटान में सड़कें, गाँव और सैन्य सुविधाएँ बनाने में वर्षों बिताए हैं तथा डोकलाम पर वास्तविक नियंत्रण प्राप्त कर लिया है।

- A genuine “Early and Substantial Harvest” requires three things.

एक वास्तविक “प्रारंभिक और महत्वपूर्ण उपलब्धि” के लिए तीन चीजें आवश्यक हैं।

- First, delineation must proceed on the highest-watershed principle across the entire stretch in both sectors, rather than selectively along segments where the two positions already converge, which would serve no purpose for India.

पहला, दोनों क्षेत्रों के पूरे विस्तार में उच्चतम जल-विभाजक सिद्धांत के आधार पर सीमा-रेखा का निर्धारण

होना चाहिए, न कि केवल उन हिस्सों में चुनिंदा रूप से जहाँ दोनों पक्षों की स्थितियाँ पहले से ही एक-दूसरे से मिलती हैं, क्योंकि इससे भारत को कोई लाभ नहीं होगा।

- Second, trijunction points, at Batang La and any comparable third-country-adjacent points in the Middle Sector, must be explicitly excluded from the Expert Group's mandate and settled only in consultation with the country concerned, as stipulated in the 2012 Common Understanding between the two SRs.
दूसरा, त्रि-जंक्शन बिंदुओं, बाटांग ला तथा मध्य क्षेत्र में किसी अन्य समान तृतीय-देश-सन्निकट बिंदु को विशेषज्ञ समूह के अधिकार-क्षेत्र से स्पष्ट रूप से बाहर रखा जाना चाहिए और 2012 में दोनों SRs के बीच हुए साझा समझौते के अनुसार संबंधित देश के परामर्श से ही उनका निपटारा किया जाना चाहिए।
- However, unless the highest-watershed principle is accepted, silence on the trijunction will, on the ground, be filled in Beijing's favour in Bhutan.
हालाँकि, जब तक उच्चतम जल-विभाजक सिद्धांत को स्वीकार नहीं किया जाता, तब तक त्रि-जंक्शन पर मौन की स्थिति भूटान में जमीनी स्तर पर बीजिंग के पक्ष में भर दी जाएगी।
- Third, the terms of reference for the Expert Group must extend India's 2019 proposal in good faith, rather than dilute it beyond recognition.
तीसरा, विशेषज्ञ समूह के संदर्भ की शर्तों को भारत के 2019 के प्रस्ताव को सद्भावना के साथ आगे बढ़ाना चाहिए, न कि उसे इस हद तक कमजोर कर देना चाहिए कि उसकी मूल पहचान ही समाप्त हो जाए।
- Several questions about these negotiations remain unanswered.
इन वार्ताओं से संबंधित कई प्रश्न अभी भी अनुत्तरित हैं।
- The Chinese readout of August 25 reiterates a commitment to a "package" settlement, but how will that commitment be reconciled with a piecemeal approach to settlement?
25 अगस्त के चीनी आधिकारिक विवरण में "पैकेज" समझौते के प्रति प्रतिबद्धता दोहराई गई है, लेकिन इस प्रतिबद्धता का समझौते के टुकड़ों में किए जाने वाले दृष्टिकोण के साथ कैसे सामंजस्य स्थापित किया जाएगा?
- How is the setting up of an Expert Group on Delimitation consistent with the instructions given to the SRs in Article X of the 2005 Agreement, which require them to "continue consultations in an earnest manner with the objective of arriving at an agreed framework for a boundary settlement, which will provide the basis for the delineation and demarcation of the India-China boundary to be subsequently undertaken by civil and military officials and surveyors of the two sides"?
सीमा-निर्धारण पर एक विशेषज्ञ समूह की स्थापना 2005 के समझौते के अनुच्छेद X में SRs को दिए गए निर्देशों के अनुरूप कैसे है, जिनके तहत उन्हें "सीमा समझौते के लिए एक सहमत ढाँचे तक पहुँचने के उद्देश्य से गंभीरता से परामर्श जारी रखना है, जो आगे दोनों पक्षों के नागरिक और सैन्य अधिकारियों तथा सर्वेक्षकों द्वारा भारत-चीन सीमा के सीमा-निर्धारण और सीमांकन का आधार प्रदान करेगा"?
- There is no agreed framework yet, but it is proposed to commence the process of "delimitation", a term that the Chinese use interchangeably with "demarcation".
अभी तक कोई सहमत ढाँचा नहीं है, लेकिन "सीमा-निर्धारण" की प्रक्रिया शुरू करने का प्रस्ताव है, जबकि चीनी पक्ष इस शब्द का प्रयोग "सीमांकन" के साथ परस्पर विनिमेय रूप से करता है।
- Indeed, the 2005 Agreement does not use the term "delimitation" at all.
वास्तव में, 2005 के समझौते में "delimitation" शब्द का प्रयोग बिल्कुल नहीं किया गया है।
- Will the SRs earnestly pursue negotiations on the "agreed framework", or will they, in effect, leave it in abeyance while officials grapple with a partial delimitation exercise without such a framework?
क्या SRs "सहमत ढाँचे" पर गंभीरता से वार्ता आगे बढ़ाएँगे, या व्यवहार में इसे लंबित छोड़ देंगे, जबकि अधिकारी ऐसे ढाँचे के बिना आंशिक सीमा-निर्धारण प्रक्रिया से जूझते रहेंगे?
- The other elements of the Eight Points — additional meeting points and hotlines for the General Level Mechanisms in the Eastern and Middle Sectors, continued pilgrimage and border trade, and a September meeting on trans-border rivers — are useful, incremental confidence-building measures.

आठ सूत्री योजना के अन्य तत्व — पूर्वी और मध्य क्षेत्रों में सामान्य स्तर के तंत्रों के लिए अतिरिक्त बैठक बिंदु और हॉटलाइन, तीर्थयात्रा और सीमा व्यापार की निरंतरता तथा सीमा-पार नदियों पर सितंबर में बैठक — उपयोगी और क्रमिक विश्वास-निर्माण उपाय हैं।

- But they belong to a different track from boundary settlement and should not be conflated in public discussion.
लेकिन वे सीमा समझौते से अलग मार्ग से संबंधित हैं और सार्वजनिक चर्चा में उन्हें आपस में नहीं मिलाया जाना चाहिए।
- The Eight Points are silent on the Medog County project on the Yarlung Tsangpo River, while referring to both sides agreeing to “maintain communication on (trans-border river) issues, including hydrological data sharing and renewal of the relevant MoUs”, without reporting any progress.
आठ सूत्री योजना यारलुंग त्सांगपो नदी पर मेडोग काउंटी परियोजना के संबंध में मौन है, जबकि इसमें दोनों पक्षों द्वारा “जल-वैज्ञानिक आँकड़ों को साझा करने और संबंधित समझौता ज्ञापनों (MoUs) के नवीनीकरण सहित (सीमा-पार नदी) मुद्दों पर संचार बनाए रखने” पर सहमति का उल्लेख है, लेकिन किसी प्रगति की जानकारी नहीं दी गई है।
- The September meeting should convey India’s concerns about the project — the world’s largest hydropower plant — being built close to the border in the Eastern Sector, in a highly earthquake-prone zone, a risk underscored by the flash floods in Nepal on August 26.
सितंबर की बैठक में भारत को इस परियोजना को लेकर अपनी चिंताएँ व्यक्त करनी चाहिए — दुनिया का सबसे बड़ा जलविद्युत संयंत्र, जो पूर्वी क्षेत्र में सीमा के निकट अत्यधिक भूकंप-संवेदनशील क्षेत्र में बनाया जा रहा है; इस जोखिम को 26 अगस्त को नेपाल में आई अचानक बाढ़ ने और रेखांकित किया है।

Avoid optics

दिखावटी प्रगति से बचें

- Two points bear reiteration.
दो बिंदुओं को दोहराना आवश्यक है।
- First, the 2005 agreement — the only substantive outcome of 23 years of SR talks — must not be diluted; China has sought to reinterpret and undermine it since its conclusion.
पहला, 2005 का समझौता — SR वार्ताओं के 23 वर्षों का एकमात्र ठोस परिणाम — कमजोर नहीं किया जाना चाहिए; चीन ने इसके संपन्न होने के बाद से ही इसकी पुनर्व्याख्या करने और इसे कमजोर करने का प्रयास किया है।
- Second, Indian negotiators must guard against the temptation to project contrived progress.
दूसरा, भारतीय वार्ताकारों को कृत्रिम या दिखावटी प्रगति प्रदर्शित करने के प्रलोभन से सावधान रहना चाहिए।
- Diplomacy that trades long-term strategic interests for short-term optics is self-defeating.
जो कूटनीति अल्पकालिक दिखावे के लिए दीर्घकालिक रणनीतिक हितों का सौदा करती है, वह अंततः आत्मघाती सिद्ध होती है।

India–China Boundary: Historical Evolution, British-Era Boundary Lines and Agreements

1. Why is the India–China Boundary Question



Complicated?

- The **India–China boundary** is one of the most important unresolved territorial questions in Asia.
- The Ministry of Home Affairs describes India's border with China as approximately **3,488 km**, running along **Ladakh, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh**.
- India and China have **not concluded a mutually accepted final boundary settlement** for the entire frontier.
- India maintains that its boundary is based on **customary and traditional alignment, geographical principles, treaties and agreements, and historical usage and practice**.
- China maintains that much of the boundary was never formally delimited and disputes India's interpretation of the traditional boundary in important sectors.
- The present boundary problem cannot be understood without distinguishing four different concepts: **International Boundary, Line of Actual Control (LAC), British-era proposed boundary lines, and historical treaties/conventions**.

2. Three Major Sectors of the India–China Boundary

Western Sector

- The Western Sector broadly concerns **Ladakh and the adjoining Xinjiang and Tibet regions**.
- The principal territorial dispute in this sector concerns **Aksai Chin**.
- India regards **Aksai Chin as part of the Union Territory of Ladakh**.
- China controls Aksai Chin.
- According to the Government of India, China is in occupation of approximately **38,000 sq km of Indian territory in Ladakh**.
- This sector is historically associated particularly with the **Johnson Line, Johnson–Ardagh Line and Macartney–MacDonald Line**.

Middle or Central Sector

- The Middle Sector concerns the boundary adjoining **Himachal Pradesh and Uttarakhand**.
- It is considerably smaller and historically less contentious than the Western and Eastern

sectors.

- Important areas traditionally discussed in this sector include **Barahoti in Uttarakhand** and certain smaller areas along the Himachal Pradesh frontier.

Eastern Sector

- The Eastern Sector primarily concerns **Arunachal Pradesh and the Tibet Autonomous Region**.
- The major historical boundary associated with this sector is the **McMahon Line**.
- India considers Arunachal Pradesh an integral part of India.
- China disputes approximately **90,000 sq km** in the Eastern Sector, substantially corresponding to Arunachal Pradesh.

3. British India's Boundary Problem

- During the nineteenth and early twentieth centuries, British India was concerned about the northern frontier because of the geopolitical rivalry commonly called the **Great Game**.
- British policymakers were particularly concerned about possible Russian influence expanding towards **Central Asia, Xinjiang and Tibet**.
- The British therefore attempted at different times to define strategically favourable boundaries along India's northern frontier.
- However, British policy was **not consistent**.
- Different British officials proposed different lines according to changing strategic calculations.
- This explains why several different boundary lines appear in the historical record.

4. Johnson Line – 1865

- The earliest major British proposal relevant to the Aksai Chin dispute is generally known as the **Johnson Line**.
- It is associated with **W. H. Johnson**, an official of the Survey of India.
- In **1865**, Johnson proposed a boundary placing **Aksai Chin within the princely state of Jammu and Kashmir**.
- Under this conception, the boundary ran considerably farther north and east than some later British proposals.

- It placed the **Kunlun Mountains broadly along the northern frontier of Kashmir**, thereby leaving most or essentially all of Aksai Chin on the Kashmir side.

Why was the Johnson Line important?

- The line represented a relatively **forward British claim**.
- From the British strategic perspective, a farther-north boundary provided a larger buffer against possible external expansion towards Kashmir.
- However, the Johnson Line was essentially a **British cartographic/administrative proposal**.
- It was **not a bilateral boundary treaty concluded between Britain and Qing China**.

UPSC Trap

- **Johnson Line = Western Sector = Aksai Chin = placed Aksai Chin on the Kashmir/British Indian side.**

5. Johnson–Ardagh Line

- The **Johnson–Ardagh Line** was a later strategic development of the Johnson approach.
- It became associated particularly with **Major-General Sir John Charles Ardagh**, who served as Director of Military Intelligence.
- During the **1890s**, especially around **1897**, Ardagh advocated a forward strategic boundary broadly following the **Kunlun mountain range**.
- This approach again placed **Aksai Chin within the territory claimed for Jammu and Kashmir/British India**.

Why did Ardagh support it?

- British strategists were concerned about **Russian expansion and influence in Central Asia**.
- Ardagh believed that a defensible frontier should be located farther north.
- The **Kunlun Mountains** provided a strong geographical barrier.
- Therefore, strategic defence rather than simply administrative convenience strongly influenced this proposal.

Johnson Line vs Johnson–Ardagh Line

- They are frequently discussed together because both represented broadly **forward**

British claims and placed Aksai Chin on the Kashmir side.

- The **Johnson Line** originated with W. H. Johnson's mid-nineteenth-century survey work.
- The **Johnson–Ardagh formulation** represented a later strategic endorsement/refinement of a broadly similar northern boundary concept.

6. Macartney–MacDonald Line – 1899

- Britain later considered a significantly different boundary proposal.
- This became known as the **Macartney–MacDonald Line**.
- It is associated with **George Macartney**, the British representative at Kashgar, and **Sir Claude MacDonald**, the British Minister in Beijing.
- In **1899**, the British government formally communicated a proposed boundary settlement to the Qing government.

What did the Macartney–MacDonald proposal do?

- Unlike the Johnson–Ardagh approach, it did **not place all of Aksai Chin on the Kashmir side**.
- It proposed a compromise in which much of the **Aksai Chin plateau would lie on the Chinese side**, while territory farther west/southwest associated with the **Karakoram system** would remain on the Kashmir side.
- The proposal therefore represented a **less expansive British claim** than the Johnson–Ardagh Line.

Why did British policy change?

- British assessments of the strategic situation had changed.
- London was willing to consider a compromise with Qing China over areas where actual administration was weak.
- The objective was to obtain a clearer frontier while preserving strategically important areas closer to Kashmir.

Did China accept it?

- The Qing government did **not formally communicate acceptance** of the proposal.
- Therefore, the Macartney–MacDonald Line did **not become a mutually ratified international boundary treaty**.



Major Examination Point

Johnson–Ardagh Line → Aksai Chin largely/all on Kashmir side.

Macartney–MacDonald Line → much of Aksai Chin on Chinese side.

This contrast is extremely important for UPSC and UPPCS.

7. 1890 Anglo-Chinese Convention: Sikkim–Tibet

Convention of Calcutta, 17 March 1890

- A different development occurred in the **Sikkim–Tibet sector**.
- Britain and Qing China concluded the **Convention between Great Britain and China relating to Sikkim and Tibet** at Calcutta on **17 March 1890**. The existence, title and date of the Convention are confirmed in the British treaty archive.
- Unlike the Johnson–Ardagh and Macartney–MacDonald proposals, this was an actual **formal convention between Great Britain and China**.
- **Article I** addressed the boundary between **Sikkim and Tibet**.
- Broadly, it followed the **watershed principle**, using the mountain crest separating waters flowing into Sikkim's **Teesta system** from waters flowing towards Tibet.

Importance

- It is one of the most important colonial-era agreements relevant to the **Sikkim sector**.
- Therefore:

1890 Convention → **Sikkim–Tibet sector**.

Johnson/Macartney–MacDonald → **Aksai Chin/Western Sector**.

McMahon Line → **Eastern Sector**.

8. Simla Conference, 1913–1914

- The next major development concerned the **Eastern Sector**.
- Representatives of **British India, Tibet and China** met at the **Simla Conference of 1913–1914**.
- The principal British representative was **Sir Henry McMahon**, Foreign Secretary of the Government of India.



- The negotiations dealt extensively with the political status and territorial arrangements concerning Tibet.
- During these negotiations, McMahon and the Tibetan representative worked out the boundary between Tibet and the northeastern frontier of British India.
- This boundary became known as the **McMahon Line**.

9. McMahon Line – 1914

- The **McMahon Line** broadly separates **Tibet from the northeastern frontier of India**, corresponding substantially to the present **Arunachal Pradesh–Tibet boundary**.
- It generally followed major geographical features and Himalayan watershed principles.
- The line was drawn on maps associated with the Simla negotiations.

China's Position

- The Chinese representative participated in the Simla negotiations but China did **not accept the final Simla Convention**.
- China subsequently rejected the validity of the McMahon Line.
- The Government of India has officially acknowledged that **China does not recognise the McMahon Line as the India–China boundary**.

India's Position

- Independent India inherited and recognises the **McMahon Line as the boundary in the Eastern Sector**.
- Arunachal Pradesh is an **integral part of India**.
- Consequently, the dispute is not merely about drawing a line on a modern map; it arises from fundamentally different interpretations of the legal and historical validity of colonial-era arrangements.

10. Tibet: Why It Is Central to Understanding the Boundary

- Historically, **Tibet functioned as the geographical region separating British India from much of China proper**.
- Many British-era frontier negotiations therefore involved Tibet directly or indirectly.
- This is why the legal status of Tibet at different historical periods became closely



connected with competing interpretations of the India–China boundary.

- The **1914 Simla arrangements** are particularly controversial because China disputes Tibet's authority at that time to conclude an independent boundary arrangement with British India.

11. Quick Comparison of the Four Major British-Era Lines/Arrangements

Line/Agreement	Year	Sector	Basic Effect	Nature
Johnson Line	1865	Western/Aksai Chin	Aksai Chin placed on Kashmir side	British proposal/survey line
Johnson–Ardagh Line	c. 1897	Western/Aksai Chin	Forward boundary; Aksai Chin on Kashmir side	British strategic proposal
Macartney–MacDonald Line	1899	Western/Aksai Chin	Much of Aksai Chin proposed on Chinese side	British proposal communicated to Qing China
Anglo–Chinese Convention	1890	Sikkim–Tibet	Defined Sikkim–Tibet boundary	Formal Britain–China Convention
McMahon Line / Simla arrangements	1914	Eastern Sector	Tibet–NE India boundary	Agreed by British India and Tibet; China rejected final settlement

12. The Most Important Conceptual Distinction

Not every British-era line was an “agreement with China.”

- This distinction is essential.
- The **Johnson Line** was not a treaty with China.
- The **Johnson–Ardagh Line** was not a treaty with China.
- The **Macartney–MacDonald Line** was proposed to China, but it did not mature into a mutually concluded boundary treaty.
- The **1890 Sikkim–Tibet Convention**, by contrast, was formally concluded between Great Britain and Qing China.
- The **McMahon Line** arose from the 1913–14 Simla process and was agreed between the British Indian and Tibetan representatives, but **China did not accept the final Simla settlement.**



This distinction prevents one of the most common errors in examinations.

13. What Happened after Indian Independence in 1947?

- Independent India inherited the frontiers of British India.
- India considered its northern boundary to be based on established historical, customary and geographical foundations.
- The People's Republic of China was established in **1949**.
- During the 1950s, differences over the boundary became increasingly apparent.
- A major strategic development was China's consolidation of control over **Aksai Chin**, through which it constructed a road connecting **Xinjiang and Tibet**.
- The Western and Eastern sectors consequently emerged as the principal areas of disagreement.

14. India–China War of 1962

- The boundary dispute culminated in the **India–China War of October–November 1962**.
- Fighting occurred principally in the **Western Sector in Ladakh** and the **Eastern Sector in the then North-East Frontier Agency (NEFA)**.
- China declared a unilateral ceasefire in **November 1962**.
- In the Western Sector, China retained control over **Aksai Chin**.
- In the Eastern Sector, Chinese forces withdrew from much of the territory they had occupied during the conflict.
- The war did **not produce a mutually accepted final boundary settlement**.

15. Aksai Chin: Why Is It Strategically Important?

- **Aksai Chin** is a high-altitude, cold and sparsely populated plateau.
- Despite its harsh physical environment, its strategic importance is considerable.
- For China, the region provides an important land connection between **Xinjiang and Tibet**.
- For India, it forms part of the historical territory of **Ladakh**.



- Thus, Aksai Chin illustrates an important geographical principle:

Low population does not mean low strategic value.

- A barren high-altitude plateau may be extremely important because of its **location, connectivity, military geography and access routes.**

16. Pakistan–China Boundary Agreement, 1963

- Another dimension was added when Pakistan and China concluded a boundary agreement on **2 March 1963.**
- India rejects this agreement because it concerned territory in **Pakistan-occupied Kashmir over which India claims sovereignty.**
- According to the Government of India, Pakistan illegally ceded approximately **5,180 sq km of Indian territory in Pakistan-occupied Kashmir to China** under the 1963 arrangement.
- This area is associated with the **Trans-Karakoram Tract/Shaksgam Valley.**

17. International Boundary vs Line of Actual Control

International Boundary

- An international boundary is the legally recognised territorial boundary separating two sovereign states.
- India and China have **not mutually settled and demarcated their entire international boundary.**

Line of Actual Control

- The **Line of Actual Control (LAC)** refers broadly to the line separating areas under the actual control of India and China in the disputed border regions.
- The LAC is **not the same as a mutually agreed international boundary.**
- Most importantly, there is **no commonly delineated LAC and no common perception of its entire alignment** between India and China.

Why does this create problems?

- Indian and Chinese patrols may patrol up to their respective perceptions of the LAC.
- Where those perceptions overlap, patrols can encounter each other.
- The Government of India has repeatedly explained that differences in perception of the

LAC have historically produced **transgressions** and face-to-face situations.

18. Major Post-Independence Border Agreements

1993 Agreement

- India and China signed the **Agreement on the Maintenance of Peace and Tranquillity along the Line of Actual Control** on 7 September 1993.
- It represented an important attempt to manage the border dispute without prejudicing either side's territorial claims.

1996 Agreement

- On 29 November 1996, the two countries concluded an agreement on **Confidence-Building Measures in the Military Field along the LAC**.
- Its objective was to reduce the possibility of military confrontation.

2005 Protocol

- On 11 April 2005, India and China signed a protocol laying down modalities for implementing military confidence-building measures.

2005 Political Parameters Agreement

- India and China also concluded the **Agreement on Political Parameters and Guiding Principles for the Settlement of the India-China Boundary Question** in 2005.

2012 Working Mechanism

- The **Working Mechanism for Consultation and Coordination on India-China Border Affairs (WMCC)** was established in 2012.

2013 Border Defence Cooperation Agreement

- The **Border Defence Cooperation Agreement (BDCA)** was signed on 23 October 2013.
- It provided mechanisms including **flag meetings, border personnel meetings, military contacts and consultations**.
- It also provided that when forces came face-to-face in areas without a common understanding of the LAC, they should exercise **maximum self-restraint and avoid provocative actions**.

19. The Boundary Question in One Conceptual Diagram



British India–China Frontier

Western Sector — Ladakh/Aksai Chin



Johnson Line, 1865



Aksai Chin on **Kashmir side**



Johnson–Ardagh Line, c. 1897



Forward British claim; Aksai Chin on **Kashmir side**



Macartney–MacDonald Line, 1899



Compromise proposal; much of Aksai Chin on **Chinese side**

Sikkim Sector



Anglo-Chinese Convention, 1890



Formal agreement concerning **Sikkim–Tibet boundary**

Eastern Sector — Arunachal Pradesh/Tibet



Simla Conference, 1913–14



McMahon Line, 1914





Accepted by British India and Tibet



Rejected by China

20. Why Did the British Propose Different Boundaries in Aksai Chin?

- The central reason was that the high-altitude Aksai Chin region had **weak administrative presence, difficult terrain and uncertain historical delimitation.**
- British strategic priorities also changed over time.
- When fear of Russian expansion was greater, British strategists preferred the more forward **Johnson–Ardagh Line.**
- When compromise with China appeared strategically desirable, the British proposed the less expansive **Macartney–MacDonald Line.**
- Therefore, the Aksai Chin boundary was not simply a product of physical geography.
- It was also influenced by **imperial strategy, security calculations, cartography and the Great Game.**

21. Important Geographical Features to Associate with the Boundary

- **Karakoram Range** is important in the Western Sector.
- **Karakoram Pass** historically connected Ladakh with Xinjiang.
- **Aksai Chin** lies in the high-altitude Western Sector.
- **Kunlun Mountains** are important for understanding the Johnson–Ardagh conception.
- **Pangong Tso** lies across the India–China LAC region in Ladakh.
- **Spanggur area, Depsang Plains and Demchok** are other strategically significant names associated with the Western Sector.
- **Barahoti** in Uttarakhand is associated with the Middle Sector.
- **Sikkim–Tibet watershed** is associated with the 1890 Convention.
- **Tawang** is strategically and historically important in the Eastern Sector.



- **McMahon Line** is associated with the Arunachal Pradesh–Tibet frontier.

22. India's Official Position on the Territorial Dispute

- India maintains that **China is in illegal occupation of approximately 38,000 sq km of Indian territory in Ladakh.**
- India also rejects the **1963 China–Pakistan boundary arrangement** involving approximately **5,180 sq km** of territory claimed by India.
- China, meanwhile, claims approximately **90,000 sq km in the Eastern Sector**, substantially corresponding to Arunachal Pradesh. India rejects this claim.
- Both countries nevertheless formally recognise that the boundary question remains unresolved and requires a **fair, reasonable and mutually acceptable solution through dialogue and peaceful negotiations.**

GS Paper III: Economy		03 September 2026
TOPICS COVERED		
03S9	What's the reason behind the sudden surge in onion prices? प्याज़ की कीमतों में अचानक उछाल का क्या कारण है?	
03S9	Decoding Russia's reliance on Indian petroleum products भारतीय पेट्रोलियम उत्पादों पर रूस की निर्भरता को समझना	
03S9	Forex swap rakes in over \$136 bn विदेशी मुद्रा स्वैप से \$136 अरब से अधिक जुटाए गए	

What's the reason behind the sudden surge in onion prices?

GS III: Economy

EXPLAINER

A. M. Jigeeesh
NEW DELHI

The story so far: Days after sugar prices increased sharply, the price of onion, an essential commodity whose prices are considered a politically sensitive topic, nearly doubled from last year's.

On September 1, the all-India average price was ₹49.59 a kg, registering an over 74% increase from ₹28.48 on the corresponding day in 2025.

On August 1, the price was ₹35.47 a kg. In Kolkata and Chennai, the price has now reached ₹60. What has worried the Centre is the fact that over the past two weeks, the price has gone beyond ₹70 in certain retail markets, particularly in North India. This increase is unprecedented, and according to some offi-



Big farmers, traders try to keep the stock in cold storage, hoping to release it at better prices. PTI

cials, has left the Centre searching for reasons behind this surge, as the Opposition says the government has failed to curb the price rise of essentials.

What could be reason for the increase?

The production of onion is estimated at 307.37 lakh tonnes (lt) in 2025-26, which is in line with the previous year's production of 307.67 lt. The produc-

tion is adequate for the domestic consumption and for export, which comes to about 15 lt. However, industry sources claim that the quality of onions, particularly after the delay in the rain and the subsequent delay in harvest in Maharashtra (the largest onion producing State), was not up to the standard. The fact that quality onions are less than last year is considered a reason for the price rise.

Historically, according to the government, onion prices have exhibited a seasonal uptick and volatility from August-September owing to increased demand during festive season, weather, supply-chain movements, and other demand conditions.

This year, as soon as the price of sugar increased, there was a tendency not to release the onion stocks, particularly among the big traders. Union Agriculture

Minister Shivraj Singh Chouhan and Union Consumer Affairs Secretary Nidhi Khare have outlined hoarding and black marketing as the reasons for the sudden increase in the prices of onion.

What steps are being taken to ease the prices?

As it is natural for traders and big farmers to look for better prices of what they produce and sell, the government says that it was expecting such a problem in the case of onions. Big farmers and big traders try to keep the stock in cold storage, hoping to release it when prices are right.

To counter this, the government has started a calibrated release of onion from its buffer stocks. It is selling onions at ₹35 a kg, to give a message to the consumer that it is the real price of onion and put pressure on those hoarding it, a senior official said.

03S9. What's the reason behind the sudden surge in onion prices?

प्याज़ की कीमतों में अचानक उछाल का क्या कारण है?

- **The story so far:** Days after sugar prices increased sharply, the price of **onion**, an essential commodity whose prices are considered a politically sensitive topic, nearly doubled from last year's.
अब तक की स्थिति: चीनी की कीमतों में तेज़ वृद्धि के कुछ दिनों बाद, आवश्यक वस्तु प्याज़ की कीमत पिछले वर्ष की तुलना में लगभग दोगुनी हो गई; इसकी कीमतों को राजनीतिक रूप से संवेदनशील विषय माना जाता है।
- On **September 1**, the **allIndia average price** was **₹49.59 a kg**, registering an **over 74% increase** from **₹28.48** on the corresponding day in **2025**.
1 सितंबर को **अखिल भारतीय औसत कीमत ₹49.59 प्रति किलोग्राम** थी, जो **2025** के इसी दिन की **₹28.48** की कीमत से **74% से अधिक की वृद्धि** दर्शाती है।
- On **August 1**, the price was **₹35.47 a kg**.
1 अगस्त को कीमत **₹35.47 प्रति किलोग्राम** थी।
- In **Kolkata and Chennai**, the price has now reached **₹60**.
कोलकाता और चेन्नई में कीमत अब **₹60** तक पहुँच गई है।
- What has worried the Centre is the fact that over the past **two weeks**, the price has gone beyond **₹70** in certain retail markets, particularly in **North India**.
केंद्र की चिंता का कारण यह है कि पिछले **दो सप्ताह** में कुछ खुदरा बाज़ारों, विशेष रूप से **उत्तर भारत** में, कीमत **₹70** से अधिक हो गई है।
- This increase is **unprecedented**, and according to some officials, has left the Centre searching for reasons behind this surge, as the Opposition says the government has failed to curb the **price rise of essentials**.
यह वृद्धि **अभूतपूर्व** है और कुछ अधिकारियों के अनुसार, इसने केंद्र को इस उछाल के कारण तलाशने पर मजबूर कर दिया है, जबकि विपक्ष का कहना है कि सरकार **आवश्यक वस्तुओं की महँगाई** पर अंकुश लगाने में विफल रही है।

What could be the reason for the increase?

कीमतों में वृद्धि का क्या कारण हो सकता है?

- The production of onion is estimated at **307.37 lakh tonnes (lt) in 2025-26**, which is in line with the previous year's production of **307.67 lt**.
2025-26 में प्याज़ का उत्पादन 307.37 लाख टन (एलटी) रहने का अनुमान है, जो पिछले वर्ष के **307.67 लाख टन** उत्पादन के लगभग बराबर है।
- The production is adequate for domestic **consumption** and for **export**, which comes to about **15 lt**.
यह उत्पादन **घरेलू खपत** और लगभग **15 लाख टन निर्यात** के लिए पर्याप्त है।
- However, industry sources claim that the **quality of onions**, particularly after the delay in the rain and the subsequent delay in harvest in **Maharashtra (the largest onion producing State)**, was not up to the standard.

हालाँकि, उद्योग से जुड़े सूत्रों का दावा है कि विशेष रूप से महाराष्ट्र (सबसे बड़ा प्याज़ उत्पादक राज्य) में वर्षा में देरी और उसके बाद फसल की कटाई में हुई देरी के कारण प्याज़ की गुणवत्ता मानक के अनुरूप नहीं थी।

- The fact that **quality onions are less than last year** is considered a reason for the price rise. अच्छी गुणवत्ता वाले प्याज़ की उपलब्धता पिछले वर्ष की तुलना में कम होने को कीमतों में वृद्धि का एक कारण माना जा रहा है।
- Historically, according to the government, onion prices have exhibited a **seasonal uptick and volatility from August-September** owing to increased demand during festive season, weather, supply-chain movements, and other demand conditions. सरकार के अनुसार, ऐतिहासिक रूप से त्योहारी मौसम में बढ़ती माँग, मौसम, आपूर्ति शृंखला में आवाजाही और माँग संबंधी अन्य परिस्थितियों के कारण प्याज़ की कीमतों में अगस्त-सितंबर से मौसमी बढ़ोतरी और अस्थिरता देखी जाती रही है।
- This year, as soon as the **price of sugar increased**, there was a tendency **not to release the onion stocks**, particularly among the big traders. इस वर्ष चीनी की कीमत बढ़ते ही, विशेष रूप से बड़े व्यापारियों के बीच प्याज़ का भंडार बाज़ार में नहीं उतारने की प्रवृत्ति दिखाई दी।
- Union Agriculture Minister **Shivraj Singh Chouhan** and Union Consumer Affairs Secretary **Nidhi Khare** have outlined **hoarding and black marketeering** as the reasons for the sudden increase in the prices of onion. केंद्रीय कृषि मंत्री शिवराज सिंह चौहान और केंद्रीय उपभोक्ता मामले सचिव निधि खरे ने प्याज़ की कीमतों में अचानक वृद्धि के कारणों के रूप में जमाखोरी और कालाबाज़ारी को चिह्नित किया है।

What steps are being taken to ease the prices?
कीमतों में कमी लाने के लिए क्या कदम उठाए जा रहे हैं?

- As it is natural for traders and big farmers to look for **better prices** of what they produce and sell, the government says that it was expecting such a problem in the case of onions. व्यापारियों और बड़े किसानों का अपने द्वारा उत्पादित और बेची जाने वाली उपज के लिए बेहतर कीमतों की अपेक्षा करना स्वाभाविक है; इसलिए सरकार का कहना है कि उसे प्याज़ के मामले में ऐसी समस्या की आशंका थी।
- Big farmers and big traders try to keep the stock in **cold storage**, hoping to release it when prices are right. बड़े किसान और बड़े व्यापारी उपयुक्त कीमत मिलने पर भंडार बाज़ार में उतारने की आशा में उसे शीत भंडारों में रखने का प्रयास करते हैं।
- To counter this, the government has started a **calibrated release of onion from its buffer stocks**. इस स्थिति से निपटने के लिए सरकार ने अपने बफ़र भंडार से प्याज़ की नियंत्रित मात्रा में निकासी शुरू की है।
- It is selling onions at **₹35 a kg**, to give a message to the consumer that it is the real price of onion and put pressure on those **hoarding it**, a senior official said. एक वरिष्ठ अधिकारी ने कहा कि सरकार उपभोक्ताओं को यह संदेश देने के लिए कि यही प्याज़ की वास्तविक कीमत है और इसकी जमाखोरी करने वालों पर दबाव बनाने के लिए प्याज़ ₹35 प्रति किलोग्राम की दर से बेच रही है।



Decoding Russia's reliance on Indian petroleum products

Ukraine's recent relentless attacks on Russia's oil refineries has led the country to rely on India for petroleum imports

03S9: Economy

DATA POINT

Nitika Francis

Recent Ukrainian attacks on Russia's oil refineries has resulted in the latter importing refined petroleum products from India in significant quantities for the first time, at least since the Russia-Ukraine war started in February 2022.

As per multiple media reports, including one by the *Press Trust of India*, Indian refiners sent about one million barrels over the last two months, alongside Turkey and Morocco. Russia's import of petroleum products from India has remained negligible in the past, accounting for less than one per cent of India's petroleum exports. The bulk of exports went to countries like the Netherlands, Australia and the UAE (Chart 1).

Though the Indian government's export and import-related data for the last two months is yet to be released, reports have confirmed that the country's export of refined petroleum products to Russia has sharply increased in the last two months. This has tilted the huge imbalance that existed between the two countries in oil trade, albeit marginally. India continues to remain hugely dependent on Russia for crude.

One-fourth of India's petroleum imports since January 2022 were from Russia and this number remained high before U.S. President Donald Trump imposed additional tariffs on India in October 2025 for buying crude from Russia.

Though this resulted in India sharply cutting down its crude import from Russia, the imports resumed in full swing soon after. In fact, after the U.S. and Israel launched a war with Iran in February this year, the former did a U-turn in its stance and tacitly encouraged Russian crude supplies into the market to negate the impact of Iran's blockade in the Strait of Hormuz.

Chart 2 shows how Russia accounted for nearly one-third (31.6%) of India's crude imports as of June 2026. India imported \$531 million worth of crude from Russia in June 2026, which is roughly double that of its import from the country in January 2022, a month before Russia's invasion of Ukraine.

Amid Ukraine's continued targeting of Russia's oil refining infrastructure, the Russian Federation's Deputy Prime Minister Alexander Novak said in July that the country would begin importing oil products to help stabilise the domestic market.

Consistent attacks

According to the International Strategic Action Network for Security, there were at least 17 attacks on 16 different oil refineries in Russia. Eight attacks were targeted at oil depots and oil pumping stations in July (Chart 3). Though reliable data on similar attacks in August are not available yet, they seem to have continued at the same rate, resulting in petrol and diesel shortages.

Data from the Organization of the Petroleum Exporting Countries (OPEC) show that Russia's refinery crude throughput went from about 5.18 million barrels per day in Q12026 (January to March) in the beginning of the year, to about 3.88 million barrels per day in Q32026. The attacks also seem to have contributed to a surge in crude exports from Russia, as unplanned refinery outages diverted higher volumes of crude to the export market. India, which ranks fourth in oil-refining capacity in the world, has utilised Russia's sudden demand to export refined petroleum products, mainly from private refineries (Chart 4). Considering the time it would take for Russia to bring its refining capacity back to its earlier capacity, the surge in exports could continue, which will help India in easing its pressure on foreign exchange in the coming months.

A refining relationship

The data were sourced from India's Ministry of Commerce and Industry, the International Strategic Action Network for Security, the Statistical Review of World Energy BP, and the Organization of the Petroleum Exporting Countries. With inputs from Gandia Saez, who is collaborating with The Hindu's Data Team



CHART 1: Russia's share in India's petroleum exports has traditionally been less than 1% (not visible in the chart)

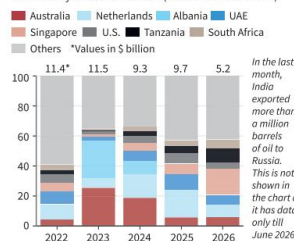


CHART 2: Russia accounted for more than one-fourth of India's total crude imports since January 2022

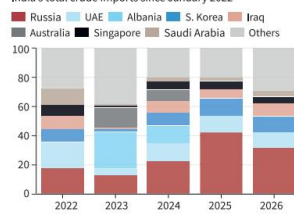


CHART 3: A total of 17 attacks were recorded against 16 different oil refineries in Russia in July

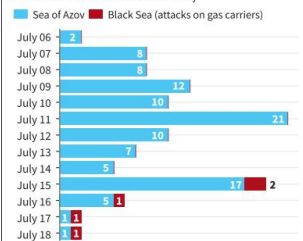
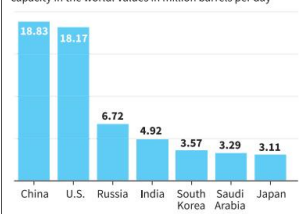


CHART 4: The seven countries with the highest oil refining capacity in the world. Values in million barrels per day



03S9. Decoding Russia's reliance on Indian petroleum products

भारतीय पेट्रोलियम उत्पादों पर रूस की निर्भरता को समझना

- **Recent Ukrainian attacks on Russia's oil refineries** has resulted in the latter importing refined petroleum products from India in significant quantities for the first time, at least since the Russia-Ukraine war started in February 2022.
हाल में रूस की तेल रिफाइनरियों पर यूक्रेनी हमलों के कारण रूस ने पहली बार, कम-से-कम फरवरी 2022 में रूस-यूक्रेन युद्ध शुरू होने के बाद से, भारत से परिष्कृत पेट्रोलियम उत्पादों का बड़ी मात्रा में आयात करना शुरू किया है।
- As per multiple media reports, including one by the **Press Trust of India**, Indian refiners sent about one million barrels over the last two months, alongside Turkey and Morocco.
प्रेस ट्रस्ट ऑफ इंडिया सहित कई मीडिया रिपोर्टों के अनुसार, भारतीय रिफाइनरों ने पिछले दो महीनों में तुर्किये और मोरक्को के साथ मिलकर लगभग 10 लाख बैरल उत्पाद भेजे हैं।
- Russia's import of petroleum products from India has remained negligible in the past, accounting for less than one per cent of India's petroleum exports.
अतीत में भारत से रूस का पेट्रोलियम उत्पाद आयात नगण्य रहा है और यह भारत के पेट्रोलियम निर्यात का एक प्रतिशत से भी कम रहा है।

- The bulk of exports went to countries like the Netherlands, Australia and the UAE (Chart 1). निर्यात का अधिकांश हिस्सा **नीदरलैंड, ऑस्ट्रेलिया और UAE** जैसे देशों को गया है (चार्ट 1)।
- Though the Indian government's export and import-related data for the last two months is yet to be released, reports have confirmed that the country's export of refined petroleum products to Russia has sharply increased in the last two months.
हालाँकि पिछले दो महीनों से संबंधित भारत सरकार के निर्यात और आयात संबंधी आँकड़े अभी जारी किए जाने बाकी हैं, लेकिन रिपोर्टों ने पुष्टि की है कि पिछले दो महीनों में रूस को देश का **परिष्कृत पेट्रोलियम उत्पादों का निर्यात** तेजी से बढ़ा है।
- This has tilted the huge imbalance that existed between the two countries in oil trade, albeit marginally.
इससे दोनों देशों के बीच तेल व्यापार में मौजूद भारी असंतुलन में मामूली बदलाव आया है।
- India continues to remain hugely dependent on Russia for crude.
भारत कच्चे तेल के लिए रूस पर अत्यधिक निर्भर बना हुआ है।
- One-fourth of India's petroleum imports since January 2022 were from Russia and this number remained high before U.S. President Donald Trump imposed additional tariffs on India in October 2025 for buying crude from Russia.
जनवरी 2022 से भारत के पेट्रोलियम आयात का **एक-चौथाई** रूस से आया है और यह संख्या तब भी ऊँची बनी रही, जब अमेरिकी राष्ट्रपति **डोनाल्ड ट्रम्प** ने रूस से कच्चा तेल खरीदने के लिए अक्टूबर 2025 में भारत पर अतिरिक्त **टैरिफ** लगाए थे।
- Though this resulted in India sharply cutting down its crude import from Russia, the imports resumed in full swing soon after.
हालाँकि इसके परिणामस्वरूप भारत ने रूस से अपने **कच्चे तेल के आयात में भारी कटौती** की, लेकिन इसके तुरंत बाद आयात फिर से बड़े पैमाने पर शुरू हो गया।
- In fact, after the U.S. and Israel launched a war with Iran in February this year, the former did a U-turn in its stance and tacitly encouraged Russian crude supplies into the market to negate the impact of Iran's blockade in the Strait of Hormuz.
वास्तव में, इस वर्ष फरवरी में अमेरिका और इज़राइल द्वारा ईरान के साथ युद्ध शुरू करने के बाद, अमेरिका ने अपने रुख में **यू-टर्न** लिया और होर्मुज जलडमरूमध्य में ईरान की नाकाबंदी के प्रभाव को निष्प्रभावी करने के लिए रूसी कच्चे तेल की बाजार में आपूर्ति को मौन रूप से प्रोत्साहित किया।
- Chart 2 shows how Russia accounted for nearly one-third (31.6%) of India's crude imports as of June 2026.
चार्ट 2 दर्शाता है कि जून 2026 तक भारत के **कच्चे तेल के आयात में रूस की हिस्सेदारी लगभग एक-तिहाई (31.6%)** थी।
- India imported \$531 million worth of crude from Russia in June 2026, which is roughly double that of its import from the country in January 2022, a month before Russia's invasion of Ukraine.
भारत ने जून 2026 में रूस से **531 मिलियन डॉलर मूल्य का कच्चा तेल** आयात किया, जो जनवरी 2022 में इस देश से किए गए उसके आयात का लगभग दोगुना है; जनवरी 2022 रूस द्वारा यूक्रेन पर आक्रमण से एक महीने पहले का समय था।
- Amid Ukraine's continued targeting of Russia's oil refining infrastructure, the Russian Federation's Deputy Prime Minister **Alexander Novak** said in July that the country would begin importing oil products to help stabilise the domestic market.
यूक्रेन द्वारा रूस के **तेल शोधन अवसंरचना** को लगातार निशाना बनाए जाने के बीच, रूसी संघ के उपप्रधानमंत्री **अलेक्जेंडर नोवाक** ने जुलाई में कहा कि देश घरेलू बाजार को स्थिर करने में सहायता के लिए **तेल उत्पादों का आयात** शुरू करेगा।

**Consistent attacks
लगातार हमले**



- According to the **International Strategic Action Network for Security**, there were at least 17 attacks on 16 different oil refineries in Russia.
इंटरनेशनल स्ट्रैटेजिक एक्शन नेटवर्क फॉर सिक्योरिटी के अनुसार, रूस में 16 अलग-अलग तेल रिफाइनरियों पर कम-से-कम 17 हमले हुए।
- Eight attacks were targeted at oil depots and oil pumping stations in July (Chart 3).
जुलाई में आठ हमले तेल डिपो और तेल पंपिंग स्टेशनों को निशाना बनाकर किए गए (चार्ट 3)।
- Though reliable data on similar attacks in August are not available yet, they seem to have continued at the same rate, resulting in petrol and diesel shortages.
हालाँकि अगस्त में इसी तरह के हमलों से संबंधित विश्वसनीय आँकड़े अभी उपलब्ध नहीं हैं, लेकिन ऐसा प्रतीत होता है कि ये हमले उसी दर से जारी रहे, जिसके परिणामस्वरूप पेट्रोल और डीजल की कमी उत्पन्न हुई।
- Data from the **Organization of the Petroleum Exporting Countries (OPEC)** show that Russia's refinery crude throughput went from about 5.18 million barrels per day in Q1 2026 (January to March) in the beginning of the year, to about 3.88 million barrels per day in Q3 2026.
पेट्रोलियम निर्यातक देशों के संगठन (OPEC) के आँकड़े बताते हैं कि रूस की रिफाइनरियों में कच्चे तेल का प्रसंस्करण वर्ष की शुरुआत में Q1 2026 (जनवरी से मार्च) में लगभग 5.18 मिलियन बैरल प्रतिदिन से घटकर Q3 2026 में लगभग 3.88 मिलियन बैरल प्रतिदिन हो गया।
- The attacks also seem to have contributed to a surge in crude exports from Russia, as unplanned refinery outages diverted higher volumes of crude to the export market.
ऐसा भी प्रतीत होता है कि इन हमलों ने रूस से कच्चे तेल के निर्यात में वृद्धि में योगदान दिया है, क्योंकि अनियोजित रिफाइनरी बंदी के कारण अधिक मात्रा में कच्चा तेल निर्यात बाजार की ओर मोड़ दिया गया।
- India, which ranks fourth in oil-refining capacity in the world, has utilised Russia's sudden demand to export refined petroleum products, mainly from private refineries (Chart 4).
भारत, जो विश्व में तेल शोधन क्षमता में चौथे स्थान पर है, ने रूस की अचानक उत्पन्न मांग का उपयोग मुख्य रूप से निजी रिफाइनरियों से परिष्कृत पेट्रोलियम उत्पादों के निर्यात के लिए किया है (चार्ट 4)।
- Considering the time it would take for Russia to bring its refining capacity back to its earlier capacity, the surge in exports could continue, which will help India in easing its pressure on foreign exchange in the coming months.
रूस को अपनी शोधन क्षमता को पूर्व स्तर पर वापस लाने में लगने वाले समय को देखते हुए, निर्यात में यह वृद्धि जारी रह सकती है, जिससे आने वाले महीनों में भारत को विदेशी मुद्रा पर दबाव कम करने में सहायता मिलेगी।



Forex swap rakes in over \$136 bn

According to RBI data, this includes \$1,27,226 mn via FCNR(B) deposits, \$5,260 mn through OFCBS and \$3,891 mn via ECBs; central bank may prioritise closing its short forward dollar positions with the FCNR(B) deposits received, say insiders

GS III: Economy

Lalatendu Mishra
Ashokamithran
MUMBAI

Foreign exchange inflows via foreign currency non-resident (Bank) FCNR(B) deposits, overseas foreign currency borrowings (OFCBs) and external commercial borrowings (ECBs) under the Reserve Bank of India's (RBI) swap facility have crossed \$136 billion, surpassing all projections.

A total of \$1,36,377 million has been mobilised, as per data released by the RBI. This includes \$1,27,226 million through FCNR (B) deposits, \$5,260 million through OFCBS and \$3,891 million through ECB.



Cushioning impact: The RBI has already begun absorbing rupee liquidity to ensure call rates did not fall below policy rate. REUTERS

The RBI had introduced a special USD-INR forex swap facility covering these instruments on June 8 this year to deal with forex outflows due to high oil prices and flight of capital owing to exit of Foreign

Portfolio Investors (FOIs) from the stock market.

The central bank may prioritise closing its \$137 billion short forward dollar positions with the FCNR (B) deposits received, according to experts and

industry insiders. "The RBI has an outstanding short forward position of \$137 billion. If the regulator decides not to roll over the outstanding positions, the rupee liquidity will be absorbed from the banking system and RBI may use the excess forex reserves generated from the FCNR (B) scheme for delivering the dollars," said Shashi Dhar, Chief General Manager of Treasury & Global Markets at Bank of Baroda.

Short forward dollars are currency derivative contracts, wherein the RBI commits to sell dollars at a future date at a predetermined rate. This is used to defend the rupee without drawing down spot reserves immediately.

The central bank had already begun absorbing rupee liquidity to make sure call rates did not fall below policy rate, Mr. Dhar said.

Mr. Dhar further informed that liquidity was at ₹6.5 lakh crore and the RBI might absorb some of this to make sure short-term money supply did not feed into inflation and to keep the borrowing cost aligned with policy rate.

Meanwhile, banks may be inclined to use this to "bolster their asset-side books and reduce their dependence on wholesale deposits in the immediate term," he said, adding that in the long term, they could use the excessive liquidity to fund credit growth.

03S9. Forex swap rakes in over \$136 bn

विदेशी मुद्रा स्वैप से \$136 अरब से अधिक जुटाए गए

- According to **RBI data**, this includes **\$1,27,226 mn via FCNR(B) deposits**, **\$5,260 mn through OFCBS** and **\$3,891 mn via ECBs**; central bank may prioritise closing its **short forward dollar positions** with the FCNR(B) deposits received, say insiders

आरबीआई के आँकड़ों के अनुसार, इसमें एफसीएनआर(बी) जमाओं के माध्यम से \$1,27,226 मिलियन,

ओएफसीबीएस के माध्यम से \$5,260 मिलियन और ईसीबी के माध्यम से \$3,891 मिलियन शामिल हैं;

मामले से जुड़े जानकारों का कहना है कि केंद्रीय बैंक प्राप्त एफसीएनआर(बी) जमाओं से अपनी डॉलर की वायदा

बिक्री संबंधी खुली स्थितियों का निपटान करने को प्राथमिकता दे सकता है

- Foreign exchange inflows via **foreign currency non-resident (Bank) FCNR(B) deposits**, **overseas foreign currency borrowings (OFCBs)** and **external commercial borrowings (ECBs)** under the Reserve Bank of India's (RBI) swap facility have crossed **\$136 billion**, surpassing all projections.

भारतीय रिज़र्व बैंक (आरबीआई) की स्वैप सुविधा के अंतर्गत विदेशी मुद्रा अनिवासी (बैंक) एफसीएनआर(बी) जमाओं, विदेशों से विदेशी मुद्रा उधारी (ओएफसीबी) और बाह्य वाणिज्यिक उधारी (ईसीबी) के माध्यम से विदेशी मुद्रा का अंतर्प्रवाह सभी अनुमानों को पार करते हुए **\$136 अरब से अधिक** हो गया है।

- A total of **\$1,36,377 million** has been mobilised, as per data released by the **RBI**.

आरबीआई द्वारा जारी आँकड़ों के अनुसार, कुल **\$1,36,377 मिलियन** जुटाए गए हैं।

- This includes **\$1,27,226 million through FCNR (B) deposits**, **\$5,260 million through OFCBS** and **\$3,891 million through ECB**.

इसमें एफसीएनआर (बी) जमाओं के माध्यम से \$1,27,226 मिलियन, ओएफसीबीएस के माध्यम से \$5,260 मिलियन और ईसीबी के माध्यम से \$3,891 मिलियन शामिल हैं।

- The RBI had introduced a **special USD-INR forex swap facility** covering these instruments on **June 8 this year** to deal with forex outflows due to **high oil prices** and **flight of capital** owing to exit of **Foreign Portfolio Investors (FOIs)** from the stock market.

आरबीआई ने तेल की ऊँची कीमतों के कारण विदेशी मुद्रा के बहिर्प्रवाह और शेयर बाज़ार से विदेशी पोर्टफोलियो



निवेशकों (एफओआई) के बाहर निकलने से होने वाले पूँजी पलायन से निपटने के लिए इस वर्ष 8 जून को इन साधनों को शामिल करते हुए एक विशेष अमेरिकी डॉलर-भारतीय रुपया विदेशी मुद्रा स्वैप सुविधा शुरू की थी।

- The central bank may prioritise closing its **\$137 billion short forward dollar positions** with the **FCNR (B) deposits received**, according to experts and industry insiders.
विशेषज्ञों और उद्योग से जुड़े जानकारों के अनुसार, केंद्रीय बैंक प्राप्त एफसीएनआर (बी) जमाओं से अपनी **\$137 अरब की डॉलर वायदा बिक्री संबंधी खुली स्थितियों के निपटान** को प्राथमिकता दे सकता है।
- "The RBI has an **outstanding short forward position of \$137 billion**.
"आरबीआई की **\$137 अरब की वायदा बिक्री संबंधी स्थिति बकाया** है।
- If the regulator decides not to **roll over the outstanding positions**, the **rupee liquidity will be absorbed from the banking system** and RBI may use the **excess forex reserves generated from the FCNR (B) scheme** for delivering the dollars," said **Shashi Dhar, Chief General Manager of Treasury & Global Markets at Bank of Baroda**.
यदि नियामक बकाया स्थितियों को आगे नहीं बढ़ाने का निर्णय लेता है, तो बैंकिंग प्रणाली से रुपये की तरलता अवशोषित होगी और आरबीआई डॉलर की सुपुर्दगी के लिए एफसीएनआर (बी) योजना से सृजित अतिरिक्त विदेशी मुद्रा भंडार का उपयोग कर सकता है," बैंक ऑफ़ बड़ौदा में ट्रेज़री एवं ग्लोबल मार्केट्स के मुख्य महाप्रबंधक शशि धर ने कहा।
- Short forward dollars are currency derivative contracts**, wherein the RBI commits to sell dollars at a future date at a predetermined rate.
डॉलर की वायदा बिक्री स्थितियाँ ऐसे मुद्रा व्युत्पन्न अनुबंध हैं, जिनके अंतर्गत आरबीआई पूर्वनिर्धारित दर पर भविष्य की किसी तारीख को डॉलर बेचने की प्रतिबद्धता व्यक्त करता है।
- This is used to **defend the rupee without drawing down spot reserves immediately**.
इसका उपयोग हाज़िर विदेशी मुद्रा भंडार को तत्काल घटाए बिना रुपये को समर्थन देने के लिए किया जाता है।
- The central bank had already begun **absorbing rupee liquidity** to make sure **call rates did not fall below policy rate**, Mr. Dhar said.
श्री धर ने कहा कि केंद्रीय बैंक ने यह सुनिश्चित करने के लिए पहले ही रुपये की तरलता का अवशोषण शुरू कर दिया था कि कॉल मनी दरें नीतिगत दर से नीचे न जाएँ।
- Mr. Dhar further informed that liquidity was at **₹6.5 lakh crore** and the RBI might absorb some of this to make sure **shortterm money supply did not feed into inflation** and to keep the **borrowing cost aligned with policy rate**.
श्री धर ने आगे बताया कि तरलता **₹6.5 लाख करोड़** थी और आरबीआई इसका कुछ हिस्सा अवशोषित कर सकता है, ताकि अल्पकालिक मुद्रा आपूर्ति मुद्रास्फीति को बढ़ावा न दे और उधारी की लागत नीतिगत दर के अनुरूप बनी रहे।
- Meanwhile, banks may be inclined to use this to **"bolster their asset-side books and reduce their dependence on wholesale deposits in the immediate term,"** he said, adding that in the long term, they could use the excessive liquidity to **fund credit growth**.
इस बीच, उन्होंने कहा कि बैंक इसका उपयोग "अपने परिसंपत्ति पक्ष को मज़बूत करने और तत्काल अवधि में थोक जमाओं पर अपनी निर्भरता कम करने" के लिए कर सकते हैं; उन्होंने यह भी कहा कि दीर्घकाल में वे अतिरिक्त तरलता का उपयोग ऋण विस्तार के वित्तपोषण के लिए कर सकते हैं।

GS Paper III: Science and Technology		03 September 2026
TOPICS COVERED		
03S9	Moving towards a universal vaccine against pneumonia and meningitis निमोनिया और मैनिन्जाइटिस के विरुद्ध सार्वभौमिक टीके की दिशा में आगे बढ़ना	

Moving towards a universal vaccine against pneumonia and meningitis

Scientists are looking for a universal pneumococcal vaccine that can target all the hundred or so forms of *Streptococcus pneumoniae* bacteria, and prevent some undesirable outcomes created by existing vaccines that keep the threat of pneumococcal diseases alive in the human population

GS III: S&T
S. Swaminathan

There is a bacterium called *Streptococcus pneumoniae*. It comes in at least a hundred different forms, or serotypes, and lives in the tissue lining our nose and throat. *S. pneumoniae* is normally harmless. But when your body's immune system becomes weaker, for example when you have a viral fever, these bacteria may invade your lungs and cause pneumonia, your brain and spinal cord to cause meningitis, and your bloodstream to cause sepsis.

These diseases are called pneumococcal diseases, and fortunately, they can be prevented by vaccines. Each of these vaccines contains a unique sugary substance called a capsular polysaccharide, aimed at each serotype of *S. pneumoniae*. That is, they offer protection specific to each serotype.

And the current crop of pneumococcal vaccines protect against only a subset of the 100-odd serotypes. To increase coverage, scientists need to include additional serotype-specific capsular polysaccharides in the vaccine. And covering all the serotypes in a single shot would be extremely challenging, not to mention extremely expensive as well.

Sugary shot

Recently, a team of British scientists reported an important first step in this direction. They did two things: first, they switched the polysaccharide with proteins and, second, they adopted an approach called reverse vaccinology.

Basically, two kinds of pneumococcal vaccines are available today. One is a mix of purified capsular polysaccharides from multiple serotypes. Pneumovax 23 is an example. It does not work well in infants and offers short-lived protection.

To help boost the effects as well as the durability of the immune response, scientists have linked the polysaccharides to a carrier protein. Such vaccines are known as pneumococcal conjugate vaccines (PCVs). Typical examples include PCV10 and PCV14; the numerals denote the number of serotypes included.

When these vaccines target and eliminate some serotypes of *S. pneumoniae*, it also opens the door for other serotypes to mount an infection. These non-vaccine serotypes also face less biological competition for space and resources, so they multiply and eventually replace the vaccine-targeted serotypes, rendering the vaccines obsolete.

Second, many non-vaccine serotypes either possess antibiotic resistance genes or can acquire them from their resistant counterparts. This leads to the rise of both vaccine- and antibiotic-resistant serotypes.

Thus, scientists are looking for a universal pneumococcal vaccine that can target all serotypes and prevent these outcomes, which keep the threat of pneumonia, meningitis, and other pneumococcal diseases alive in the population.



The agar plate with red blood cells on the left shows a positive *Staphylococcus* infection and on the right shows a positive *Streptococcus* infection. NC/JUNSLASH

Reverse vaccinology starts from the germ's genome to identify proteins that can be included in vaccines. Scientists demonstrated an example of this in the recent COVID-19 pandemic: once the virus's genome was sequenced in early 2020, scientists around the world could analyse it and zero in on the spike-protein gene to make COVID-19 vaccines. The approach completely bypassed the need to culture the germs in large bioreactors and purify molecular components from them to make the vaccine.

The *S. pneumoniae* genome encodes more than 2,000 genes. Of them, around 1,300 are common across serotypes. The genomic data of more than 20,000 *S. pneumoniae* isolates across nearly a hundred serotypes are also available in the public domain.

The scientists deployed extensive computational analysis using an arsenal of bioinformatic tools to analyse these sequences.

They reasoned that the best candidate genes for creating their universal vaccine would need to encode for proteins with three attributes: (i) it must be located on the surface so that the immune system can easily access it; (ii) it must have low or no similarity to human proteins, so that the immune system does not attack the body's tissue, and (iii) it must be capable of eliciting a robust and durable anti-pneumococcal immunity.

The team shortlisted some candidates and further whittled the list down based on their predicted shapes and stability. From this, the team picked three

candidate genes. They were: zinc metalloprotease B (Z), pneumococcal adherence virulence factor A (P), and a protein which the scientists designated YfhO-like (Y) due to its similarity to another bacterial protein.

The team produced proteins Z, P, and Y in the laboratory and made an experimental vaccine by mixing them together. They also added two non-protein immune response boosters: a small piece of synthetic DNA called CpG and a sugary polymer called chitosan. They named this formulation ZPY-CpG-Ch.

Potent antibodies

To test whether the vaccine could elicit protective anti-pneumococcal antibodies, the scientists vaccinated laboratory mice. After some time, they exposed the mice to a lethal dose of *S. pneumoniae* serotype 1, which is known to be hypervirulent. Compared to unvaccinated mice, all of which succumbed to the lethal dose, vaccinated mice showed 80-100% survival.

Importantly, the scientists found that the level of protection offered by ZPY-CpG-Ch was comparable to that of PCV13.

The team also found that antibodies from the mice vaccinated with ZPY-CpG-Ch could help kill *S. pneumoniae* bacteria in a test tube. When injected into unvaccinated mice, the antibodies could also protect them against a lethal dose of serotype 1.

Third, ZPY-CpG-Ch fully protected

vaccinated mice exposed to lethal doses of two non-vaccine serotypes, 11A and 33F. It also offered 50% protection against a third non-vaccine serotype, called serotype 8.

In all mouse experiments, measures of the vaccine's protective effect based on the bacterial load in lungs and blood mirrored the rodents' survival rates. However, the ZPY-CpG-Ch vaccine did not reduce the load of pneumococcal bacteria in the upper respiratory passages of vaccinated mice. That is, despite being protected, vaccinated mice have the ability to still spread the infection to uninfected mice.

Worthy goal

Finally, the team also reported that vaccinating mice with ZPY-CpG-Ch stimulated a subset of immune cells that are implicated in pneumococcal immunity.

The results from this work are too preliminary for ZPY-CpG-Ch to be a universal pneumococcal vaccine. It has also been tested against a very small subset of serotypes, four to be precise. Vaccine data from laboratory mice also may not truly reflect the human situation.

Nevertheless, this work represents a baby step towards the worthy goal of developing a universal pneumococcal vaccine.

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03S9. Moving towards a universal vaccine against pneumonia and meningitis निमोनिया और मैनिन्जाइटिस के विरुद्ध सार्वभौमिक टीके की दिशा में आगे बढ़ना

- There is a bacterium called **Streptococcus pneumoniae**.
Streptococcus pneumoniae नामक एक जीवाणु होता है।
- It comes in at least a hundred different forms, or serotypes, and lives in the tissue lining our nose and throat.
यह कम-से-कम सौ अलग-अलग रूपों या सीरोटाइप में पाया जाता है और हमारी नाक तथा गले की आंतरिक सतह को ढकने वाले ऊतक में रहता है।



- **S. pneumoniae** is normally harmless.
S. pneumoniae सामान्यतः हानिरहित होता है।
- But when your body's immune system becomes weaker, for example when you have a viral fever, these bacteria may invade your lungs and cause **pneumonia**, your brain and spinal cord to cause **meningitis**, and your bloodstream to cause **sepsis**.
लेकिन जब आपके शरीर की प्रतिरक्षा प्रणाली कमजोर हो जाती है, उदाहरण के लिए जब आपको वायरल बुखार होता है, तब ये जीवाणु आपके फेफड़ों में प्रवेश करके **निमोनिया**, आपके मस्तिष्क और मेरुरज्जु में प्रवेश करके **मैनिन्जाइटिस**, तथा आपके रक्तप्रवाह में प्रवेश करके **सेप्सिस** उत्पन्न कर सकते हैं।
- These diseases are called **pneumococcal diseases**, and fortunately, they can be prevented by vaccines.
इन रोगों को **न्यूमोकोकल रोग** कहा जाता है और सौभाग्य से, इन्हें टीकों द्वारा रोका जा सकता है।
- Each of these vaccines contains a unique sugary substance called a **capsular polysaccharide**, aimed at each serotype of **S. pneumoniae**.
इनमें से प्रत्येक टीके में **कैप्सुलर पॉलीसैकराइड** नामक एक विशिष्ट शर्करायुक्त पदार्थ होता है, जो **S. pneumoniae** के प्रत्येक सीरोटाइप को लक्षित करता है।
- That is, they offer protection specific to each serotype.
अर्थात्, ये प्रत्येक सीरोटाइप के लिए विशिष्ट सुरक्षा प्रदान करते हैं।
- And the current crop of **pneumococcal vaccines** protect against only a subset of the 100-odd serotypes.
और वर्तमान में उपलब्ध **न्यूमोकोकल टीके** लगभग 100 सीरोटाइप में से केवल कुछ के विरुद्ध ही सुरक्षा प्रदान करते हैं।
- To increase coverage, scientists need to include additional serotype-specific capsular polysaccharides in the vaccine.
सुरक्षा के दायरे को बढ़ाने के लिए वैज्ञानिकों को टीके में अतिरिक्त **सीरोटाइप-विशिष्ट कैप्सुलर पॉलीसैकराइड** शामिल करने की आवश्यकता है।
- And covering all the serotypes in a single shot would be extremely challenging, not to mention extremely expensive as well.
और एक ही टीके की खुराक में सभी सीरोटाइप को शामिल करना अत्यंत चुनौतीपूर्ण होगा, साथ ही यह अत्यधिक महंगा भी होगा।

Sugary shot शर्करायुक्त टीका

- Recently, a team of British scientists reported an important first step in this direction.
हाल ही में, ब्रिटिश वैज्ञानिकों की एक टीम ने इस दिशा में एक महत्वपूर्ण **प्रथम कदम** की जानकारी दी।
- They did two things: first, they switched the polysaccharide with proteins and, second, they adopted an approach called **reverse vaccinology**.
उन्होंने दो कार्य किए: पहला, उन्होंने पॉलीसैकराइड के स्थान पर **प्रोटीन** का उपयोग किया और दूसरा, उन्होंने **रिवर्स वैक्सीनोलॉजी** नामक दृष्टिकोण अपनाया।
- Basically, two kinds of pneumococcal vaccines are available today.
मूलतः, आज दो प्रकार के **न्यूमोकोकल टीके** उपलब्ध हैं।
- One is a mix of purified capsular polysaccharides from multiple serotypes.
एक प्रकार कई सीरोटाइप से प्राप्त **शुद्धीकृत कैप्सुलर पॉलीसैकराइड** का मिश्रण है।
- Pneumovax 23 is an example.
Pneumovax 23 इसका एक उदाहरण है।
- It does not work well in infants and offers short-lived protection.
यह शिशुओं में अच्छी तरह प्रभावी नहीं होता और अल्पकालिक सुरक्षा प्रदान करता है।
- To help boost the effects as well as the durability of the immune response, scientists have linked the polysaccharides to a carrier protein.

प्रतिरक्षा प्रतिक्रिया के प्रभाव तथा उसकी स्थायित्व अवधि को बढ़ाने के लिए वैज्ञानिकों ने पॉलीसैकराइड को एक वाहक प्रोटीन से जोड़ दिया है।

- Such vaccines are known as **pneumococcal conjugate vaccines (PCVs)**. ऐसे टीकों को **न्यूमोकोकल कॉन्जुगेट वैक्सीन (PCVs)** के रूप में जाना जाता है।
- Typical examples include **PCV10 and PCV14**; the numerals denote the number of serotypes included. इसके सामान्य उदाहरणों में **PCV10 और PCV14** शामिल हैं; इनमें प्रयुक्त अंक शामिल किए गए सीरोटाइप की संख्या को दर्शाते हैं।
- When these vaccines target and eliminate some serotypes of **S. pneumoniae**, it also opens the door for other serotypes to mount an infection. जब ये टीके **S. pneumoniae** के कुछ सीरोटाइप को लक्षित करके समाप्त करते हैं, तो इससे अन्य सीरोटाइप के संक्रमण उत्पन्न करने का मार्ग भी खुल जाता है।
- These non-vaccine serotypes also face less biological competition for space and resources, so they multiply and eventually replace the vaccine-targeted serotypes, rendering the vaccines obsolete. इन गैर-टीका सीरोटाइप को स्थान और संसाधनों के लिए कम जैविक प्रतिस्पर्धा का सामना करना पड़ता है, इसलिए वे तेजी से बढ़ते हैं और अंततः टीके द्वारा लक्षित सीरोटाइप का स्थान ले लेते हैं, जिससे टीके अप्रभावी हो जाते हैं।
- Second, many non-vaccine serotypes either possess **antibiotic resistance genes** or can acquire them from their resistant counterparts. दूसरा, कई गैर-टीका सीरोटाइप या तो एंटीबायोटिक प्रतिरोधी जीन रखते हैं या उन्हें अपने प्रतिरोधी समकक्षों से प्राप्त कर सकते हैं।
- This leads to the rise of both vaccine- and antibiotic-resistant serotypes. इससे टीका-प्रतिरोधी तथा एंटीबायोटिक-प्रतिरोधी सीरोटाइप, दोनों के बढ़ने की स्थिति उत्पन्न होती है।
- Thus, scientists are looking for a **universal pneumococcal vaccine** that can target all serotypes and prevent these outcomes, which keep the threat of pneumonia, meningitis, and other pneumococcal diseases alive in the population. इसलिए वैज्ञानिक ऐसे **सार्वभौमिक न्यूमोकोकल टीके** की तलाश कर रहे हैं, जो सभी सीरोटाइप को लक्षित कर सकें और इन परिणामों को रोक सकें, जो आबादी में निमोनिया, मैनिन्जाइटिस तथा अन्य न्यूमोकोकल रोगों के खतरे को बनाए रखते हैं।
- Reverse vaccinology** starts from the germ's genome to identify proteins that can be included in vaccines. **रिवर्स वैक्सीनोलॉजी** ऐसे प्रोटीनों की पहचान करने के लिए रोगाणु के जीनोम से शुरुआत करती है, जिन्हें टीकों में शामिल किया जा सकता है।
- Scientists demonstrated an example of this in the recent COVID-19 pandemic: once the virus's genome was sequenced in early 2020, scientists around the world could analyse it and zero in on the **spike-protein gene** to make COVID-19 vaccines. वैज्ञानिकों ने हालिया **COVID-19 महामारी** के दौरान इसका एक उदाहरण प्रस्तुत किया: एक बार 2020 की शुरुआत में वायरस के जीनोम का अनुक्रमण हो जाने के बाद, दुनिया भर के वैज्ञानिक इसका विश्लेषण कर सके और **स्पाइक-प्रोटीन जीन** पर ध्यान केंद्रित करके COVID-19 टीके बना सके।
- The approach completely bypassed the need to culture the germs in large bioreactors and purify molecular components from them to make the vaccine. इस दृष्टिकोण ने टीका बनाने के लिए बड़े बायोरिएक्टरों में रोगाणुओं को संवर्धित करने और उनसे आणविक घटकों को शुद्ध करने की आवश्यकता को पूरी तरह समाप्त कर दिया।
- The **S. pneumoniae genome** encodes more than 2,000 genes. **S. pneumoniae जीनोम** 2,000 से अधिक जीनों को कूटबद्ध करता है।
- Of them, around 1,300 are common across serotypes. इनमें से लगभग 1,300 जीन सभी सीरोटाइप में समान होते हैं।

- The genomic data of more than 20,000 **S. pneumoniae isolates** across nearly a hundred serotypes are also available in the public domain.
लगभग सौ सीरोटाइप में फैले 20,000 से अधिक **S. pneumoniae आइसोलेट्स** के जीनोमिक आँकड़े भी सार्वजनिक क्षेत्र में उपलब्ध हैं।
- The scientists deployed extensive computational analysis using an arsenal of **bioinformatic tools** to analyse these sequences.
वैज्ञानिकों ने इन अनुक्रमों का विश्लेषण करने के लिए विभिन्न **जैव-सूचनाविज्ञान उपकरणों** का व्यापक उपयोग करते हुए विस्तृत कम्प्यूटेशनल विश्लेषण किया।
- They reasoned that the best candidate genes for creating their universal vaccine would need to encode for proteins with three attributes: (i) it must be located on the surface so that the immune system can easily access it; (ii) it must have low or no similarity to human proteins, so that the immune system does not attack the body's tissue, and (iii) it must be capable of eliciting a robust and durable anti-pneumococcal immunity.
उन्होंने तर्क दिया कि उनके सार्वभौमिक टीके के निर्माण के लिए सर्वश्रेष्ठ संभावित जीनों को ऐसे प्रोटीनों के लिए कूटबद्ध करना चाहिए, जिनमें तीन विशेषताएँ हों: (i) यह सतह पर स्थित होना चाहिए ताकि **प्रतिरक्षा प्रणाली** उस तक आसानी से पहुँच सके; (ii) इसमें मानव प्रोटीनों के साथ बहुत कम या कोई समानता नहीं होनी चाहिए, ताकि प्रतिरक्षा प्रणाली शरीर के ऊतकों पर हमला न करे; और (iii) यह मजबूत तथा दीर्घकालिक **न्यूमोकोकल-रोधी प्रतिरक्षा** उत्पन्न करने में सक्षम होना चाहिए।
- The team shortlisted some candidates and further whittled the list down based on their predicted shapes and stability.
टीम ने कुछ संभावित उम्मीदवारों को चुना और उनके अनुमानित आकार तथा स्थिरता के आधार पर सूची को और सीमित किया।
- From this, the team picked three candidate genes.
इसके आधार पर टीम ने तीन संभावित जीन चुने।
- They were: **zinc metalloprotease B (Z)**, **pneumococcal adherence virulence factor A (P)**, and a protein which the scientists designated **YfhO-like (Y)** due to its similarity to another bacterial protein.
वे थे: **जिंक मेटालोप्रोटीएज़ B (Z)**, **न्यूमोकोकल एड्हीरेंस विरुलेंस फैक्टर A (P)**, और एक प्रोटीन जिसे वैज्ञानिकों ने एक अन्य जीवाणु प्रोटीन के साथ इसकी समानता के कारण **YfhO-like (Y)** नाम दिया।
- The team produced proteins **Z, P, and Y** in the laboratory and made an experimental vaccine by mixing them together.
टीम ने प्रयोगशाला में **Z, P और Y प्रोटीन** तैयार किए और उन्हें मिलाकर एक प्रायोगिक टीका बनाया।
- They also added two non-protein immune response boosters: a small piece of synthetic DNA called **CpG** and a sugary polymer called **chitosan**.
उन्होंने प्रतिरक्षा प्रतिक्रिया को बढ़ाने वाले दो गैर-प्रोटीन पदार्थ भी जोड़े: **CpG** नामक सिंथेटिक DNA का एक छोटा टुकड़ा और **काइटोसान** नामक एक शर्करायुक्त पॉलिमर।
- They named this formulation **ZPY-CpG-Ch**.
उन्होंने इस फॉर्मूलेशन का नाम **ZPY-CpG-Ch** रखा।

Potent antibodies शक्तिशाली एंटीबॉडी

- To test whether the vaccine could elicit protective anti-pneumococcal antibodies, the scientists vaccinated laboratory mice.
यह जाँचने के लिए कि क्या टीका **न्यूमोकोकस-विरोधी सुरक्षात्मक एंटीबॉडी** उत्पन्न कर सकता है, वैज्ञानिकों ने प्रयोगशाला में चूहों को टीका लगाया।
- After some time, they exposed the mice to a lethal dose of *S. pneumoniae* serotype 1, which is known to be hypervirulent.

कुछ समय बाद, उन्होंने चूहों को **S. pneumoniae सेरोटाइप 1** की घातक मात्रा के संपर्क में लाया, जिसे अत्यधिक विषाणुजनक माना जाता है।

- Compared to unvaccinated mice, all of which succumbed to the lethal dose, vaccinated mice showed **80-100% survival**.

टीका न लगाए गए चूहों की तुलना में, जिनमें से सभी घातक मात्रा के कारण मर गए, टीका लगाए गए चूहों में **80-100% जीवित रहने की दर** देखी गई।

- Importantly, the scientists found that the level of protection offered by **ZPY-CpG-Ch** was comparable to that of PCV13.

महत्वपूर्ण रूप से, वैज्ञानिकों ने पाया कि **ZPY-CpG-Ch** द्वारा प्रदान की गई सुरक्षा का स्तर PCV13 के समान था।

- The team also found that antibodies from the mice vaccinated with ZPY-CpG-Ch could help kill *S. pneumoniae* bacteria in a test tube.

दल ने यह भी पाया कि ZPY-CpG-Ch से टीका लगाए गए चूहों की **एंटीबॉडी टेस्ट ट्यूब** में *S. pneumoniae* बैक्टीरिया को नष्ट करने में सहायता कर सकती हैं।

- When injected into unvaccinated mice, the antibodies could also protect them against a lethal dose of serotype 1.

जब इन एंटीबॉडी को टीका न लगाए गए चूहों में प्रविष्ट कराया गया, तो वे उन्हें **सेरोटाइप 1 की घातक मात्रा** से भी बचाने में सक्षम थीं।

- Third, ZPY-CpG-Ch fully protected vaccinated mice exposed to lethal doses of two non-vaccine serotypes, 11A and 33F.

तीसरे, ZPY-CpG-Ch ने दो **गैर-टीका सेरोटाइप**, 11A और 33F, की घातक मात्रा के संपर्क में आए टीका लगाए गए चूहों को पूरी तरह सुरक्षित रखा।

- It also offered 50% protection against a third non-vaccine serotype, called serotype 8. इसने तीसरे गैर-टीका सेरोटाइप, जिसे **सेरोटाइप 8** कहा जाता है, के विरुद्ध भी 50% सुरक्षा प्रदान की।

- In all mouse experiments, measures of the vaccine's protective effect based on the bacterial load in lungs and blood mirrored the rodents' survival rates.

चूहों पर किए गए सभी प्रयोगों में, फेफड़ों और रक्त में **बैक्टीरियल भार** के आधार पर टीके के सुरक्षात्मक प्रभाव के माप चूहों की जीवित रहने की दर के अनुरूप थे।

- However, the ZPY-CpG-Ch vaccine did not reduce the load of pneumococcal bacteria in the upper respiratory passages of vaccinated mice.

हालाँकि, ZPY-CpG-Ch टीके ने टीका लगाए गए चूहों के **ऊपरी श्वसन मार्ग** में न्यूमोकोकल बैक्टीरिया के भार को कम नहीं किया।

- That is, despite being protected, vaccinated mice have the ability to still spread the infection to uninfected mice.

अर्थात्, सुरक्षित होने के बावजूद, टीका लगाए गए चूहों में अभी भी **असंक्रमित चूहों में संक्रमण फैलाने की क्षमता** बनी रहती है।

Worthy goal

महत्वपूर्ण लक्ष्य

- Finally, the team also reported that vaccinating mice with ZPY-CpG-Ch stimulated a subset of immune cells that are implicated in pneumococcal immunity.

अंततः, दल ने यह भी बताया कि ZPY-CpG-Ch से चूहों का टीकाकरण करने से **प्रतिरक्षा कोशिकाओं के एक उपसमूह** को सक्रिय किया गया, जो न्यूमोकोकल प्रतिरक्षा में भूमिका निभाता है।

- The results from this work are too preliminary for ZPY-CpG-Ch to be a universal pneumococcal vaccine.

इस कार्य के परिणाम अभी इतने **प्रारंभिक** हैं कि ZPY-CpG-Ch को सार्वभौमिक न्यूमोकोकल टीका माना जा सके।

- It has also been tested against a very small subset of serotypes, four to be precise. इसका परीक्षण भी सेरोटाइप के बहुत छोटे समूह, अर्थात् सटीक रूप से चार सेरोटाइप, के विरुद्ध ही किया गया है।
- Vaccine data from laboratory mice also may not truly reflect the human situation. प्रयोगशाला के चूहों से प्राप्त टीका संबंधी आँकड़े मानव स्थिति को वास्तविक रूप से प्रतिबिंबित भी नहीं कर सकते हैं।
- Nevertheless, this work represents a baby step towards the worthy goal of developing a **universal pneumococcal vaccine**. फिर भी, यह कार्य सार्वभौमिक न्यूमोकोकल टीका विकसित करने के महत्वपूर्ण लक्ष्य की दिशा में एक प्रारंभिक कदम है।

Universal Pneumococcal Vaccine: Why Scientists Are Trying a New Approach

Streptococcus pneumoniae (pneumococcus) is a bacterium that commonly lives in our **nose and throat** and has around **100 different serotypes**. Usually it causes no harm, but when immunity weakens, it can invade other parts of the body and cause serious diseases such as **pneumonia, meningitis and sepsis**.

Why are present vaccines imperfect?

Think of the 100 serotypes as **100 criminals wearing different uniforms**. Existing pneumococcal vaccines recognise only selected “uniforms.” They mainly target the **capsular polysaccharide**, a sugary outer coating that differs among serotypes. Therefore, protecting against every serotype using this approach would require adding many different components to one vaccine, making it complicated and expensive.

Another problem is **serotype replacement**. When vaccination suppresses some serotypes, other non-vaccine serotypes face less competition and can expand. Some may also possess or acquire **antibiotic-resistance genes**.

New idea: Reverse Vaccinology

Instead of focusing on the variable sugary capsule, researchers searched the bacterium's **genome** for proteins shared across many serotypes. This genome-first method is called **reverse vaccinology**. *S. pneumoniae* has more than **2,000 genes**, about **1,300 of which are common across serotypes**.

Scientists selected three proteins—**Z, P and Y**—and combined them with immune boosters **CpG and chitosan**, creating the experimental **ZPY-CpG-Ch vaccine**.

Did it work?

In mice, the vaccine produced **80–100% survival** against lethal serotype-1 exposure and also protected against some **non-vaccine serotypes**.

However, it **did not eliminate bacteria from the upper respiratory tract**, meaning



protected animals could potentially continue transmitting pneumococcus.

Bottom line: This is **not yet a universal vaccine**. It has been tested against only four serotypes and mainly in mice, but it demonstrates a promising strategy: **target proteins common to many serotypes rather than making a separate target for every bacterial capsule**.

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03S9	Pichavaram mangroves valued at ₹2,485 crore: study पिचावरम के मैंग्रोव का मूल्य ₹2,485 करोड़ आँका गया: अध्ययन	

UN sets pathway to tackle 'inevitable breach' of the 1.5°C global warming limit

SSS Environment
Jacob Koshy
NEW DELHI

Warning that a possible breach of the 1.5 degrees Celsius global warming limit will bring irreversible ecological losses that no adaptation initiatives could undo, the **United Nations Environment Programme (UNEP)** on Wednesday, for the first time, set out a detailed "overshoot, peak, and decline" pathway.

The pathway projects a trajectory where the world overshoots the **2015 Paris Agreement's** central goal of limiting the rise in average global temperatures to 1.5 degrees Celsius above pre-industrial levels — which a UNEP report said was now unavoidable. The pathway seeks to hold peak temperatures after the overshoot as low as possible and then bring it back down below the limit by 2100.

The report, **Limiting Overshoot**, said global warming would cross 1.5 degrees Celsius "in the next few years". Even a scenario in which every country delivers on its national climate plan and net-zero target puts peak warming at 1.8 degrees Celsius, it said. According to the report, current policies point to a rise of about 2.6 degrees Celsius by 2100 with a range of 1.9-3.6 degrees Celsius.

"Overshoot, peak, and decline", the report said, "is by no means an acceptable or preferred pathway; it is simply the best remaining option". "This summer's scorching heat, raging wildfires, and deadly floods are a warning of

Climate concerns

The UN report proposes a pathway to hold peak global temperature as low as possible in the coming years and bring it back within the accepted limit by 2100.

- The report says global warming will cross 1.5°C in the next few years and that this is no longer avoidable
- Current policies point to about 2.6°C global warming by 2100, with a range of 1.9-3.6°C
- A scenario in which every country delivers on its national climate plan and its net-zero target still puts peak global warming at 1.8°C
- 'Overshoot, peak, and decline' is simply 'the best remaining option', the report says



what lies ahead. We must make the overshoot as small and short as possible," UN Secretary-General Antonio Guterres said in a statement.

The diplomatic grounds for that framing were laid at the 30th UN Climate Change Conference, COP30, held in 2025 in Brazil's Belém, where the consensus "Global Mutirão (collective effort)" decision became the first COP text to concede that a temporary overshoot of the 1.5 degrees Celsius limit was likely, given how fast the remaining carbon budget was being spent.

Compounding costs
Given that cuts alone will no longer suffice, a steep scaling up of nature-based removals such as large reforestation programmes was needed, COP30 CEO Ana Toni said.

The UNEP report suggested that time spent above 1.5 degrees Celsius carries compounding costs such as faster sea-level rise,

coral reef collapse, glacier loss exceeding a quarter of global mass by 2100, declines of up to 14% in global food production by 2050 without effective adaptation, and rising odds of irreversible tipping points in the West Antarctic and Greenland ice sheets, the Atlantic Meridional Overturning Circulation and the Amazon.

Moreover, it gets harder to roll back the effects of a tonne of emitted carbon. The report said every five years of continued high emissions adds roughly 0.1°C to peak warming. Reversing that same 0.1°C afterwards means pulling about 220 billion tonnes of carbon dioxide back out of the atmosphere over and above whatever is still being emitted.

The report, in a first for the UN, placed significant stress on methane, which contributes about 0.5°C of warming. Cutting it is described as the most effective way to slow warming in the near term.

03S9. UN sets pathway to tackle 'inevitable breach' of the 1.5°C global warming limit

संयुक्त राष्ट्र ने वैश्विक तापन की 1.5°C सीमा के 'अपरिहार्य उल्लंघन' से निपटने की रूपरेखा प्रस्तुत की

- Warning that a possible breach of the **1.5 degrees Celsius global warming limit** will bring irreversible ecological losses that no adaptation initiatives could undo, the **United Nations Environment Programme (UNEP)** on Wednesday, for the first time, set out a detailed "overshoot, peak, and decline" pathway.

यह चेतावनी देते हुए कि वैश्विक तापन की 1.5 डिग्री सेल्सियस सीमा का संभावित उल्लंघन ऐसी अपरिवर्तनीय पारिस्थितिक क्षतियाँ उत्पन्न करेगा, जिन्हें अनुकूलन की कोई भी पहल पूर्ववत् नहीं कर सकेगी, संयुक्त राष्ट्र पर्यावरण कार्यक्रम (यूएनईपी) ने बुधवार को पहली बार "सीमा का अतिक्रमण, चरम स्तर और गिरावट" की विस्तृत रूपरेखा प्रस्तुत की।

- The pathway projects a trajectory where the world overshoots the **2015 Paris Agreement's** central goal of limiting the rise in average global temperatures to **1.5 degrees Celsius above preindustrial levels** — which a UNEP report said was now unavoidable.

यह रूपरेखा ऐसी स्थिति का अनुमान प्रस्तुत करती है, जिसमें विश्व 2015 के पेरिस समझौते के उस केंद्रीय लक्ष्य का अतिक्रमण कर जाता है, जिसके अंतर्गत औसत वैश्विक तापमान में वृद्धि को पूर्व-औद्योगिक स्तरों से 1.5 डिग्री सेल्सियस ऊपर तक सीमित रखना था — यूएनईपी की एक रिपोर्ट के अनुसार, अब यह अतिक्रमण अपरिहार्य है।

- The pathway seeks to hold **peak temperatures** after the



overshoot as low as possible and then bring it back down below the limit by **2100**.

इस रूपरेखा का उद्देश्य सीमा के अतिक्रमण के बाद तापमान के चरम स्तर को यथासंभव कम रखना और फिर 2100 तक उसे घटाकर पुनः निर्धारित सीमा से नीचे लाना है।

- The report, **Limiting Overshoot**, said global warming would cross **1.5 degrees Celsius** “in the next few years”.
‘लिमिटिंग ओवरशूट’ (सीमा-अतिक्रमण को सीमित करना) शीर्षक वाली रिपोर्ट में कहा गया कि वैश्विक तापन “अगले कुछ वर्षों में” 1.5 डिग्री सेल्सियस को पार कर जाएगा।
- Even a scenario in which every country delivers on its **national climate plan and netzero target** puts peak warming at **1.8 degrees Celsius**, it said.
रिपोर्ट के अनुसार, ऐसी स्थिति में भी, जब प्रत्येक देश अपनी राष्ट्रीय जलवायु योजना और शुद्ध-शून्य उत्सर्जन लक्ष्य को पूरा करता है, तापन का चरम स्तर 1.8 डिग्री सेल्सियस तक पहुँचता है।
- According to the report, **current policies** point to a rise of about **2.6 degrees Celsius by 2100** with a range of **1.9–3.6 degrees Celsius**.
रिपोर्ट के अनुसार, वर्तमान नीतियाँ 2100 तक लगभग 2.6 डिग्री सेल्सियस की वृद्धि का संकेत देती हैं, जिसकी संभावित सीमा 1.9–3.6 डिग्री सेल्सियस है।
- “**Overshoot, peak, and decline**”, the report said, “is by no means an acceptable or preferred pathway; it is simply the **best remaining option**”.
रिपोर्ट में कहा गया कि “सीमा का अतिक्रमण, चरम स्तर और गिरावट” “किसी भी प्रकार से स्वीकार्य या पसंदीदा मार्ग नहीं है; यह केवल शेष विकल्पों में सर्वोत्तम विकल्प है।”
- “This summer’s **scorching heat, raging wildfires, and deadly floods** are a warning of what lies ahead.”
“इस ग्रीष्म ऋतु की झुलसा देने वाली गर्मी, भीषण वनाग्नियाँ और प्राणघातक बाढ़ें आने वाले समय की चेतावनी हैं।”
- We must make the overshoot **as small and short as possible**,” UN Secretary-General **Antonio Guterres** said in a statement.
हमें सीमा के अतिक्रमण की मात्रा और अवधि को यथासंभव कम रखना होगा,” संयुक्त राष्ट्र महासचिव एंटोनियो गुतेर्रेस ने एक बयान में कहा।
- The diplomatic grounds for that framing were laid at the **30th UN Climate Change Conference, COP30**, held in **2025 in Brazil’s Belém**, where the consensus “**Global Mutirão (collective effort)**” decision became the first COP text to concede that a **temporary overshoot of the 1.5 degrees Celsius limit** was likely, given how fast the remaining **carbon budget** was being spent.
इस दृष्टिकोण का कूटनीतिक आधार 2025 में ब्राज़ील के बेलेम में आयोजित 30वें संयुक्त राष्ट्र जलवायु परिवर्तन सम्मेलन, कॉप30, में रखा गया था, जहाँ सर्वसम्मति से लिया गया “ग्लोबल मुतिराओ (सामूहिक प्रयास)” निर्णय पहला ऐसा कॉप दस्तावेज़ बना, जिसने शेष कार्बन बजट के तीव्र गति से उपयोग को देखते हुए स्वीकार किया कि 1.5 डिग्री सेल्सियस की सीमा का अस्थायी अतिक्रमण होने की संभावना है।

Compounding costs

बढ़ती हुई संचयी लागतें

- Given that **cuts alone will no longer suffice**, a steep scaling up of **nature-based removals** such as large reforestation programmes was needed, COP30 CEO **Ana Toni** said.
कॉप30 की मुख्य कार्यकारी अधिकारी आना टोनी ने कहा कि अब केवल उत्सर्जन कटौती पर्याप्त नहीं होगी, इसलिए बड़े पैमाने के पुनर्वनीकरण कार्यक्रमों जैसे प्रकृति-आधारित कार्बन निष्कासन उपायों का तीव्र विस्तार आवश्यक है।
- The UNEP report suggested that time spent above **1.5 degrees Celsius** carries compounding costs such as **faster sea-level rise, coral reef collapse, glacier loss exceeding a quarter of global mass by 2100, declines of up to 14% in global food production by 2050 without effective adaptation**, and rising odds of **irreversible tipping**



points in the West Antarctic and Greenland ice sheets, the Atlantic Meridional Overturning Circulation and the Amazon.

यूएनईपी की रिपोर्ट ने संकेत दिया कि 1.5 डिग्री सेल्सियस से ऊपर बने रहने की अवधि के साथ संचयी लागतें बढ़ती हैं, जिनमें समुद्र-स्तर में अधिक तीव्र वृद्धि, प्रवाल भित्तियों का ध्वंस, 2100 तक हिमनदों के वैश्विक द्रव्यमान के एक-चौथाई से अधिक की हानि और प्रभावी अनुकूलन के अभाव में 2050 तक वैश्विक खाद्य उत्पादन में 14% तक की गिरावट शामिल हैं; साथ ही पश्चिमी अंटार्कटिका और ग्रीनलैंड की हिम चादरों, अटलांटिक मेरिडियनल ओवरटर्निंग परिसंचरण तथा अमेज़न में अपरिवर्तनीय निर्णायक सीमाओं के पार होने की आशंका भी बढ़ती है।

- Moreover, it gets harder to roll back the effects of a **tonne of emitted carbon**. इसके अतिरिक्त, **उत्सर्जित कार्बन के एक टन** के प्रभावों को पूर्ववत करना अधिक कठिन होता जाता है।
- The report said **every five years of continued high emissions adds roughly 0.1°C to peak warming**. रिपोर्ट में कहा गया कि **उच्च उत्सर्जन लगातार जारी रहने के प्रत्येक पाँच वर्ष** तापन के चरम स्तर में लगभग **0.1°C की वृद्धि** करते हैं।
- Reversing that same **0.1°C** afterwards means pulling about **220 billion tonnes of carbon dioxide** back out of the atmosphere over and above whatever is still being emitted. बाद में उसी **0.1°C** की वृद्धि को उलटने का अर्थ है कि उस समय भी जारी उत्सर्जन की भरपाई के अतिरिक्त वायुमंडल से लगभग **220 अरब टन कार्बन डाइऑक्साइड** बाहर निकालनी होगी।
- The report, in a first for the UN, placed significant stress on **methane**, which contributes about **0.5°C of warming**. संयुक्त राष्ट्र के स्तर पर पहली बार इस रिपोर्ट में **मीथेन** पर विशेष बल दिया गया, जिसका तापन में योगदान लगभग **0.5°C** है।
- Cutting it is described as the **most effective way to slow warming in the near term**. इसके उत्सर्जन में कटौती को **निकट अवधि में तापन की गति धीमी करने का सबसे प्रभावी तरीका** बताया गया है।

Pichavaram mangroves valued at ₹2,485 crore: study

GS III: Environment
K.C. Deepika
BENGALURU

How valuable are mangroves? A recent study of the Pichavaram mangrove ecosystem in Tamil Nadu estimated its total economic value (TEV) at ₹2,485.38 crore, with a per-hectare value of ₹1.83 crore, reflecting the ecological, economic, and social benefits it provides.

The Pichavaram Mangrove Forest is deemed one of the most ecologically significant coastal wetland ecosystems in India and plays a vital role in supporting biodiversity conservation, fisheries productivity, coastal protection, climate regulation,

blue carbon sequestration, and livelihood security for coastal communities.

"Mangrove ecosystems provide a wide range of provisioning, regulating, supporting, and cultural ecosystem services that contribute significantly to ecological sustainability and human well-being. Despite their importance, many ecosystem services remain undervalued in conventional development planning because several ecological benefits are non-market in nature and are not reflected in market transactions," says the study "Economic valuation and blue carbon assessment of ecosystem services (ESV) in the Pichavaram



Green gold: Pichavaram Mangrove Forest is a highly significant coastal wetland ecosystem in India. FILE PHOTO

Mangrove Forest". The study, by M. Balasubramanian, Associate Professor, Centre for Ecological Economics and Natural Resources, Institute for Social and Economic Change, Bengaluru, was funded by

the Deputy Conservator of Forests, Forest Genetics Division, Coimbatore. It was based on primary and secondary data; primary information was collected from 302 households across five mangrove-de-

pendent villages: MGR Thittu, Kalaingar Nagar, Chinnavaikal, Patriadi, and Mudasalodai.

Carbon sink

"The blue carbon assessment highlights the critical role of the Pichavaram mangroves as a significant natural carbon sink and a valuable climate regulation asset," says the study.

The analysis further revealed that mangrove sediments constitute an even more substantial carbon reservoir. The average soil organic carbon stock of 251.14 tonnes of carbon per hectare was estimated to generate an economic value of ₹90.24 lakh per hectare, resulting in a total soil

organic carbon value of ₹1,224.63 crore. When vegetation and soil carbon pools are combined, the total blue carbon asset value of the Pichavaram Mangrove Ecosystem is estimated at ₹1,612.40 crore.

The study recommends the integration of ecosystem service valuation into coastal development planning and environmental decision-making, the recognition of mangroves as key nature-based solutions for climate adaptation and disaster risk reduction, and the development of blue carbon financing mechanisms, carbon credit programmes, and Payment for Ecosystem Services schemes.

03S9. Pichavaram mangroves valued at ₹2,485 crore: study

पिचावरम के मैंग्रोव का मूल्य ₹2,485 करोड़ आँका गया: अध्ययन

How valuable are mangroves?

मैंग्रोव कितने मूल्यवान हैं?

- A recent study of the **Pichavaram mangrove ecosystem in Tamil Nadu** estimated its **total economic value (TEV)** at **₹2,485.38 crore**, with a **per-hectare value of ₹1.83 crore**, reflecting the ecological, economic, and social benefits it provides.
तमिलनाडु के पिचावरम मैंग्रोव पारिस्थितिकी तंत्र के एक हालिया अध्ययन में इसका कुल आर्थिक मूल्य (टीईवी) ₹2,485.38 करोड़ और प्रति हेक्टेयर मूल्य ₹1.83 करोड़ आँका गया है, जो इससे प्राप्त होने वाले पारिस्थितिक, आर्थिक और सामाजिक लाभों को दर्शाता है।
- The **Pichavaram Mangrove Forest** is deemed one of the most ecologically significant coastal wetland ecosystems in India and plays a vital role in supporting **biodiversity conservation, fisheries productivity, coastal protection, climate regulation, blue carbon sequestration, and livelihood security** for coastal communities.
पिचावरम मैंग्रोव वन को भारत के पारिस्थितिक दृष्टि से सर्वाधिक महत्वपूर्ण तटीय आर्द्रभूमि पारिस्थितिकी तंत्रों में से एक माना जाता है और यह जैव विविधता संरक्षण, मत्स्य उत्पादकता, तटीय सुरक्षा, जलवायु विनियमन, नीले कार्बन के पृथक्करण एवं भंडारण तथा तटीय समुदायों की आजीविका सुरक्षा में महत्वपूर्ण भूमिका निभाता है।
- "Mangrove ecosystems provide a wide range of **provisioning, regulating, supporting, and cultural ecosystem services** that contribute significantly to ecological sustainability and human well-being.
"मैंग्रोव पारिस्थितिकी तंत्र विविध प्रकार की प्रदायकारी, विनियामक, सहायक और सांस्कृतिक पारिस्थितिकी तंत्र सेवाएँ प्रदान करते हैं, जो पारिस्थितिक स्थिरता और मानव कल्याण में महत्वपूर्ण योगदान देती हैं।
- Despite their importance, many ecosystem services remain **undervalued in conventional development planning** because several ecological benefits are **non-market in nature** and are not reflected in market transactions," says the study "**Economic valuation and blue carbon assessment of ecosystem services (ESV) in the Pichavaram Mangrove Forest**".
इनके महत्व के बावजूद, अनेक पारिस्थितिकी तंत्र सेवाओं का पारंपरिक विकास नियोजन में कम मूल्यांकन होता है, क्योंकि कई पारिस्थितिक लाभों की प्रकृति गैर-बाज़ार आधारित होती है और वे बाज़ार लेन-देन में प्रतिबिंबित नहीं होते," "पिचावरम मैंग्रोव वन में पारिस्थितिकी तंत्र सेवाओं (ईएसवी) का आर्थिक मूल्यांकन और नीले कार्बन का आकलन" शीर्षक वाला अध्ययन कहता है।
- The study, by M. Balasubramanian, Associate Professor, Centre for Ecological Economics and Natural Resources, Institute for Social and Economic Change, Bengaluru, was funded by the Deputy Conservator of Forests, Forest Genetics Division, Coimbatore.
यह अध्ययन बेंगलुरु स्थित सामाजिक एवं आर्थिक परिवर्तन संस्थान के पारिस्थितिक अर्थशास्त्र एवं प्राकृतिक संसाधन केंद्र के एसोसिएट प्रोफेसर एम. बालसुब्रमण्यम ने किया और इसे कोयंबटूर स्थित वन आनुवंशिकी प्रभाग के उप वन संरक्षक द्वारा वित्तपोषित किया गया।
- It was based on **primary and secondary data**; primary information was collected from **302 households** across five mangrove-dependent villages: MGR Thittu, Kalaighar Nagar, Chinnavaikal, Patriadi, and Mudasalodai.
यह प्राथमिक और द्वितीयक आँकड़ों पर आधारित था; प्राथमिक जानकारी मैंग्रोव पर निर्भर पाँच गाँवों—एमजीआर थिट्टू, कलैग्नर नगर, चिन्नावैकल, पत्रियाडी और मुदासलोडई—के 302 परिवारों से एकत्र की गई।

Carbon sink

कार्बन सिंक

- "The blue carbon assessment highlights the critical role of the **Pichavaram mangroves** as a significant **natural carbon sink** and a valuable **climate regulation asset**," says the study.
अध्ययन कहता है, "नीले कार्बन का आकलन एक महत्वपूर्ण प्राकृतिक कार्बन सिंक और मूल्यवान जलवायु विनियमन परिसंपत्ति के रूप में पिचावरम के मैंग्रोव की अत्यंत महत्वपूर्ण भूमिका को रेखांकित करता है।"
- The analysis further revealed that **mangrove sediments** constitute an even more substantial **carbon reservoir**.
विश्लेषण से यह भी पता चला कि मैंग्रोव तलछट और भी अधिक विशाल कार्बन भंडार का निर्माण करती है।

- The average **soil organic carbon stock of 251.14 tonnes of carbon per hectare** was estimated to generate an economic value of **₹90.24 lakh per hectare**, resulting in a **total soil organic carbon value of ₹1,224.63 crore**.
प्रति हेक्टेयर 251.14 टन कार्बन के औसत मृदा जैविक कार्बन भंडार का आर्थिक मूल्य ₹90.24 लाख प्रति हेक्टेयर आँका गया, जिससे मृदा जैविक कार्बन का कुल मूल्य ₹1,224.63 करोड़ निर्धारित हुआ।
- When vegetation and soil carbon pools are combined, the **total blue carbon asset value of the Pichavaram Mangrove Ecosystem** is estimated at **₹1,612.40 crore**
वनस्पति और मृदा के कार्बन भंडारों को सम्मिलित करने पर पिचावरम मैंग्रोव पारिस्थितिकी तंत्र की कुल नीला कार्बन परिसंपत्ति का मूल्य ₹1,612.40 करोड़ आँका गया है।
- The study recommends the **integration of ecosystem service valuation into coastal development planning and environmental decision-making**, the recognition of mangroves as key **nature-based solutions for climate adaptation and disaster risk reduction**, and the development of **blue carbon financing mechanisms, carbon credit programmes, and Payment for Ecosystem Services schemes**.
अध्ययन तटीय विकास नियोजन और पर्यावरण संबंधी निर्णय-निर्माण में पारिस्थितिकी तंत्र सेवाओं के मूल्यांकन को एकीकृत करने, मैंग्रोव को जलवायु अनुकूलन और आपदा जोखिम न्यूनीकरण के प्रमुख प्रकृति-आधारित समाधानों के रूप में मान्यता देने तथा नीला कार्बन वित्तपोषण तंत्रों, कार्बन क्रेडिट कार्यक्रमों और पारिस्थितिकी तंत्र सेवाओं के लिए भुगतान योजनाओं के विकास की अनुशंसा करता है।
- organic carbon value of **₹1,224.63 crore**.
जैविक कार्बन का मूल्य ₹1,224.63 करोड़।
- When vegetation and soil carbon pools are combined, the **total blue carbon asset value of the Pichavaram Mangrove Ecosystem** is estimated at **₹1,612.40 crore**
वनस्पति और मृदा के कार्बन भंडारों को सम्मिलित करने पर पिचावरम मैंग्रोव पारिस्थितिकी तंत्र की कुल नीला कार्बन परिसंपत्ति का मूल्य ₹1,612.40 करोड़ आँका गया है।
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अध्ययन तटीय विकास नियोजन और पर्यावरण संबंधी निर्णय-निर्माण में पारिस्थितिकी तंत्र सेवाओं के मूल्यांकन को एकीकृत करने, मैंग्रोव को जलवायु अनुकूलन और आपदा जोखिम न्यूनीकरण के प्रमुख प्रकृति-आधारित समाधानों के रूप में मान्यता देने तथा नीला कार्बन वित्तपोषण तंत्रों, कार्बन क्रेडिट कार्यक्रमों और पारिस्थितिकी तंत्र सेवाओं के लिए भुगतान योजनाओं के विकास की अनुशंसा करता है।

PCS Special:	03 September
03S9	Hong Kong activist Joshua Wong pleads guilty to 'foreign collusion' हांगकांग के कार्यकर्ता जोशुआ वॉंग ने 'विदेशी शक्तियों से मिलीभगत' का अपराध स्वीकार किया



Hong Kong activist Joshua Wong pleads guilty to 'foreign collusion'



PCS

AFF

Prominent Hong Kong pro-democracy activist Joshua Wong pleaded guilty on Wednesday to conspiracy to collude with foreign forces to endanger national security under a Beijing-imposed law. It was the second prosecution of Mr. Wong, a former student leader in the pro-democracy movement. AP

03S9. Hong Kong activist Joshua Wong pleads guilty to 'foreign collusion'

हांगकांग के कार्यकर्ता जोशुआ वॉंग ने 'विदेशी शक्तियों से मिलीभगत' का अपराध स्वीकार किया

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हांगकांग के प्रमुख लोकतंत्र समर्थक कार्यकर्ता जोशुआ वॉंग ने बुधवार को बीजिंग द्वारा लागू किए गए एक कानून के तहत राष्ट्रीय सुरक्षा को खतरे में डालने के लिए विदेशी शक्तियों से मिलीभगत करने की साजिश का अपराध स्वीकार किया।

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लोकतंत्र समर्थक आंदोलन के पूर्व छात्र नेता श्री वॉंग के विरुद्ध यह दूसरा अभियोजन था।