





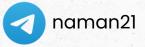
# Daily **CURRENT AFFAIRS**

📅 June 4<sup>th</sup>, 2025









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### Ladakh gets new policies on quota, domicile

### Why in the News?

In a landmark move, the Union Government notified a set of regulations for the Union Territory (UT) of Ladakh on June 4, 2025. These notifications, which address domicile eligibility, reservation in government jobs, official languages, and the structure of local governance through hill councils, are seen as a significant step toward meeting longstanding demands by civil society groups in the region for constitutional and developmental safeguards.



# President Droupadi Murmu approved four key regulations:

- The Union Territory of Ladakh Reservation (Amendment) Regulation, 2025
- The Ladakh Official Languages Regulation, 2025The Ladakh Civil Services
- Decentralisation and Recruitment (Amendment) Regulation, 2025
- The Ladakh Autonomous Hill Development Councils (Amendment) Regulation, 2025.

These notifications come against the backdrop of protests, shutdowns,



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and continued agitation in Ladakh following the abrogation of Article 370 and the reorganisation of Jammu and Kashmir in August 2019, which left Ladakh as a UT without a legislature.

### Background: Ladakh Post-August 2019

Ladakh was carved out as a separate Union Territory on October 31, 2019, following the abrogation of Article 370. While initially welcomed as longawaited administrative recognition of its unique identity, the move soon generated unease.

### Key demands by Ladakhi groups include:

- Statehood with an elected legislature
- Sixth Schedule inclusion to protect land and cultural identity
- Job reservations for local youth
- Separate parliamentary

representation for Leh and Kargil While Articles 370 and 35A protected land and job rights in the erstwhile state of Jammu and Kashmir, their removal triggered concerns about demographic change, loss of cultural heritage, and economic marginalisation.

In response, two umbrella groups, the Leh Apex Body (LAB) and the Kargil Democratic Alliance (KDA), were formed. They have consistently demanded constitutional guarantees and tribal status for the region, leveraging their political influence and public support.

### Key Features of the New Notifications

Domicile Criteria Redefined: The UT of Ladakh Reservation

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- (Amendment) Regulation, 2025 defines "domicile" as someone who has continuously resided in Ladakh for 15 years from its foundation day (October 31, 2019). This effectively sets the cutoff at October 31, 2034.
- Exemptions: Children of Central Government officials serving in Ladakh can also qualify as domiciles if they meet the residence criteria.
- This replaces the Jammu and Kashmircentric provision and aligns with Ladakh's independent administrative identity.

### **Job Reservation Uplifted to 95%**

One of the most groundbreaking provisions is that reservation in government jobs can now go up to 85%, excluding 10% for EWS and 1% for SCs, raising the total potential reservation to 95%, among the highest in India.

### **Proposed category-wise** breakdown:

- 80% for Scheduled Tribes (which comprise ~80% of Ladakh's population)
- 4% for people residing along the LoC/LAC
- 1% for Scheduled Castes
- 10% for Economically Weaker Sections (EWS)

This move effectively localises employment and ensures meaningful participation of Ladakhis in public administration.

Women's Reservation in Hill Councils The Ladakh Autonomous Hill

**Development Councils (Amendment)** Regulation, 202,5, introduces 33% reservation for women in council seats on a rotational basis. This is significant for a traditionally patriarchal region and aligns with national efforts to promote gender inclusion in governance.

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### **Official Languages Recognised** The Ladakh Official Languages Regulation, 2025, formalises the following five official languages:

- English
- Hindi
- Urdu
- Bhoti
- Purgi

The regulation also promotes the preservation and development of other native dialects, aligning with Article 29 of the Constitution, which protects the cultural and linguistic rights of minorities.

### **Decentralised Recruitment** Mechanism

The Ladakh Civil Services Decentralisation and Recruitment (Amendment) Regulation, 2025 clarifies:

- Recruitment for both Gazetted and Non-Gazetted posts within Ladakh
- The institutionalisation of decentralised recruitment to allow flexibility in local hiring processes, which previously remained ambiguous in the absence of a statelevel Public Service Commission

Legal and Constitutional Context The new policies are enabled by Section 96 of the Jammu and Kashmir Reorganisation Act, 2019, which allows the President to make regulations for Union Territories.

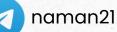
However, the substitution of the J&K Reservation Act, 2004, with Ladakhspecific provisions reflects the need to "territorialise governance" in line with the region's distinct demography and geography.

Yet, the absence of statehood or legislative autonomy still leaves Ladakhis with limited say in policymaking core grievance that remains unresolved.



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#### Challenges Lack of Legislative Autonomy

The regulations were centrally notified, bypassing any local legislative process, as Ladakh lacks a legislature. Civil society groups fear that this top-down governance model may lack sustainability and inclusiveness over time.

Absence of Sixth Schedule Status Although Scheduled Tribes constitute nearly 80% of Ladakh's population, the region is not included in the Sixth Schedule, which would have quaranteed:

- Tribal self-governance
- Protection of land and natural resources
- Local legislative powers

While the new domicile and reservation rules are welcome, they do not constitutionally protect Ladakhi identity and resources as Sixth Schedule inclusion would.

### **Operational Delays in** Notification of Rules

Though the overarching regulations have been notified, the implementation rules (e.g., domicile application processes, exact reservation quotas) are still awaited. raising the risk of bureaucratic delays and administrative ambiguity.

### Perceived Exclusion of Kargil Aspirations

Some voices from Kargil, particularly within the KDA, argue that decisionmaking remains Leh-centric. The rotational provision for women's reservation in councils may not adequately address the gender participation challenges unique to Kargil.

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### **Central Appointments vs. Local** Recruitment

Many key administrative positions in Ladakh- such as in the police and civil services- are still filled through central deputation, not by local cadres. This undermines the localisation goals that the new rules aim to achieve.

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Significance and Implications

#### Strengthening Local Empowerment

Redefining domicile and significantly enhancing ST reservations reflect a tribalfirst governance model, directly addressing local employment concerns and building public trust.

### **Gender Inclusivity**

The introduction of a one-third reservation for women in hill councils marks a progressive shift and can serve as a precedent for other hill regions.

### Language and Identity Recognition

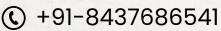
- The inclusion of Bhoti and Purgi in official use affirms cultural identity and supports the preservation of endangered languages.
- Security and Strategic Implications
- Located along sensitive borders with China and Pakistan, ensuring the socioeconomic well-being of locals is crucial to India's national security strategy in the region.

### Way Forward

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- Grant Statehood or Legislative Powers
- To ensure true democratic governance, Ladakh must be granted Statehood or at least a legislative assembly with powers akin to Delhi or Puducherry.

 Include Ladakh in the Sixth Schedule Given its tribal composition, Parliament should consider bringing Ladakh under the Sixth





### Schedule to constitutionally safeguard:

- Land ownership
- Resource control

 Cultural preservation Fast-track Notification of Implementation Rules The Centre should immediately release detailed Rules under each Regulation to ensure clarity regarding:

- Domicile certification
- Job recruitment mechanisms
- Language promotion policies

### **Establish a Dedicated Ladakh** Public Service Commission (PSC)

A regional PSC would streamline recruitment and enhance transparency, reducing dependence on central agencies.

### Hill Councils should be granted more autonomy in:

- Taxation
- Land regulation

 Planning and budgeting Additionally, regular Gram Sabha meetings should be institutionalised to empower Panchayati Raj institutions.

### **Build Trust Through Transparent** Dialogue

Ongoing engagement with the Leh Apex Body and the Kargil Democratic Alliance through structured dialogue can help bridge administrative intent with public aspirations.

### Conclusion

The 2025 notifications for Ladakh mark a watershed moment in centre-local relations. They symbolise a growing recognition of regional identity while aiming to balance tribal rights, cultural preservation, and national unity.

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However, without accompanying structural reforms such as legislative autonomy or Sixth Schedule inclusion, these administrative policies may remain insufficient in fulfilling the constitutional and democratic aspirations of Ladakhis. For Ladakh to emerge as a model of sustainable, inclusive, and secure frontier governance, New Delhi must move beyond incrementalism. Only through deeper structural empowerment can protest transform into participation, and marginalisation into ownership.

### **Main Question**

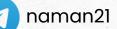
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Critically examine the recent regulations notified by the Union Government for the Union Territory of Ladakh in June 2025. To what extent do these reforms address the region's demand for constitutional and developmental safeguards? What challenges remain in achieving inclusive and sustainable governance in Ladakh?

### Question: The constitutional provision that enables the President to make regulations for Union Territories like Ladakh is found under:

A. Article 356 B. Article 239A C. Section 96 of the Jammu and Kashmir Reorganisation Act, 2019 D. Article 371D **Correct Answer: C** 







### "India-Australia Defence Ties: Shaping Indo-Pacific Security Beyond the American Shadow"

### Why in the News?

Donald Trump's likely return as U.S. President has raised uncertainty over America's traditional alliance commitments, particularly in the Indo-Pacific. This offers India and Australia an opportunity to deepen their bilateral defence partnership and contribute more independently to regional security.

### Background

### India-Australia Strategic Relations:

Upgraded to a Comprehensive Strategic Partnership (CSP) in 2020.

Defence relations have been institutionalised through 2+2 Ministerial Dialogues since 2021. Collaborations in Malabar, AUSINDEX, and AUSTRAHIND exercises.

### **Contextual Global Trends:**

Rise of China's assertiveness in the Indo-Pacific.

AUKUS formation indicates realignment of strategic priorities.

U.S. unpredictability under Trump's transactional diplomacy urges regional players to assume greater responsibilities

### Feature: Key Areas of Cooperation

- Strategic Autonomy and Regional Security
- India and Australia are pivoting toward self-reliant security mechanisms.
- Their shared threat perception of China's maritime ambitions enhances convergence.



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- Operational and Institutional Mechanisms
- Mutual Logistics Support Agreement (MLSA) enables operational synergy.
- Air-to-Air Refuelling Agreement (2024) enhances force projection capabilities.
- Tri-Service and Multilateral Military Engagements
- Regular bilateral and multilateral joint exercises: AUSINDEX (Navy), AUSTRAHIND (Army), Malabar, and Pitch Black.
- Defence Adviser (DA) Role and Strategic Representation
- Currently, Navy-centric and overstretched (managing both Australia and the Pacific Islands).
- Calls for a one-star rank DA, tri-service representation, and Pacific-focused staffing.
- Industrial and Technological Collaboration via MSMEs
- Potential in co-developing dual-use tech (e.g. drones, surveillance, AI).
- Aligning the indigenous defence initiatives of both countries.
- Proposal for a dedicated India-Australia Defence MSME Forum akin to INDUS X.

### Challenges

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Over-reliance on Naval Cooperation: Limited Army and Air Force joint projects.

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Lack of Institutional Support for MSMEs: No bilateral funding or incubation mechanisms.

Strategic Ambiguity due to U.S. Policies: Trump's approach may disrupt broader Indo-Pacific alignments.

Underrepresentation at Diplomatic Level: The current Defence Adviser's structure is inadequate for expanding roles.

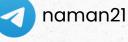
### **Way Forward**

- Deepen Tri-Service Integration
- Plan a large-scale integrated exercise involving all services to enhance interoperability.
- Strengthen MSME Engagement
- Launch joint funding initiatives for defence startups and dual-use tech developers.
- Promote hackathons and innovation challenges to foster bilateral R&D.
- Upgrade Defence Representation in Canberra
- Appoint a higher-ranked, tri-service DA team with a separate Pacific outreach cell.
- Expand MRO and Joint Manufacturing Projects
- Use India's MRO capabilities to serve Australian needs and third countries in the Indian Ocean Region.

### Conclusion

 India-Australia defence cooperation is evolving into a robust middlepower partnership amid uncertain global dynamics. With proactive strategic alignment, joint defence manufacturing, and MSME-led innovation, both nations can shape an autonomous Indo-Pacific security order that goes beyond the shadow of traditional U.S.-led alliances.

### **Main Question**



"In the backdrop of changing U.S. strategic commitments under a potential Trump presidency, critically analyse how India and Australia can redefine their bilateral defence partnership to shape the Indo-Pacific regional security architecture independently of American influence."

# Which of the following statements regarding the India-Australia defence partnership is/are correct?

- 1. The India-Australia Comprehensive Strategic Partnership (CSP) was established in 2021 during the first 2+2 Ministerial Dialogue.
- 2. The Mutual Logistics Support Agreement (MLSA) enables both nations to share logistics during military exercises and humanitarian missions.
- 3. The Air-to-Air Refuelling Agreement, signed in 2024, enhances India's ability to conduct long-range air missions with Australian support.
- 4. India and Australia currently hold only naval exercises under their defence cooperation framework.

### Select the correct option:

- A.1 and 4 only
- B. 2 and 3 only
- C. 1, 2, and 3 only
- D. 2, 3, and 4 only

### Correct Answer: B. 2 and 3 only

### **Explanation:**

- Statement 1 is incorrect: The CSP was established in 2020, not 2021.
- Statement 2 is correct: The MLSA allows for logistics sharing and operational cooperation.
- Statement 3 is correct: The 2024 Air-to-Air Refuelling Agreement enhances India's air operational range.
- Statement 4 is incorrect: India and Australia conduct tri-service exercises, not just naval (e.g., AUSTRAHIND – Army, AUSINDEX – Navy, and participate in Malabar and Pitch Black.



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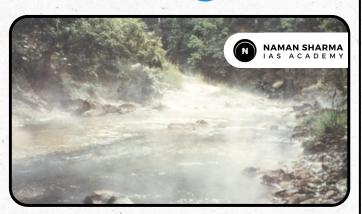
### Bacteria found at Rajgir hot spring lake show antimicrobial activity.

### Why in the News?

- In a significant breakthrough for microbial research and public health, scientists at the Vellore Institute of Technology (VIT), Tamil Nadu, have discovered potent antibiotic-producing bacteria from the Rajgir hot spring lake in Nalanda district, Bihar.
- This underexplored site has revealed a rich diversity of thermophilic microorganisms, particularly Actinobacteria, known globally for producing life-saving antibiotics like streptomycin and tetracycline. The study, recently published in the Indian Journal of Microbiology, opens exciting possibilities in combating the growing threat of antimicrobial resistance (AMR).

### Background: Hot Springs as Reservoirs of Thermophiles

- Thermophiles, microorganisms that thrive in high-temperature environments (45–70°C), are known to inhabit hostile habitats such as hot springs, deep-sea thermal vents, and compost heaps.
- These environments, while extreme for most life forms, provide a competitive ecological niche for thermophiles.



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- To outcompete other organisms in these low-biodiversity zones, some thermophiles have evolved the ability to produce potent antimicrobial compounds.
- Globally, several hot springs, such as those in Saudi Arabia's Asir and Jizan regions, have yielded new strains of bacteria that produce antibiotics effective against major pathogens.
- However, Indian hot springs remain grossly underexplored. Rajgir, known primarily for its religious significance and geothermally active springs, has now gained scientific prominence due to this microbial discovery.

### Feature: What the Study Found Rich Diversity of Actinobacteria

- The VIT researchers collected water and soil samples from the Rajgir hot spring lake, where water temperatures reached up to 45°C. Using 16S rRNA metagenomic sequencing, they identified a wide spectrum of bacterial species.
- Notably, Actinobacteria constituted 40-43% of the microbial population, an unusually high proportion compared to other global studies, where it is often only around 20%.
- This bacterial group is renowned for its capacity to produce secondary metabolites, especially antibiotics.

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 Classic antibiotics like streptomycin, tetracycline, and erythromycin originated from Actinobacteria, particularly from the Streptomyces genus. The high concentration of this group at Rajgir makes it a potential hotspot for novel drug discovery.

### **Antibacterial Efficacy** Experiments

To identify functional antibiotic producers, the team cultured isolates with known pathogenic bacteria, including:

- Escherichia coli
- Salmonella typhimurium
- Klebsiella pneumoniae
- Pseudomonas aeruginosa
- Staphylococcus aureus

Through inhibition assays on culture plates, seven strains of Actinobacteria were confirmed to possess potent antimicrobial activity, indicating the secretion of effective antibiotic compounds.

### Isolation of an Antibacterial Compound

 In a follow-up study published in Chemical Papers, a compound called diethyl phthalate was isolated from a bacterium belonging to the Actinomycetales spp., one of the strains from Rajgir. The compound demonstrated significant inhibitory activity against Listeria monocytogenes, a foodborne pathogen responsible for listeriosis, a potentially fatal infection. This is a remarkable finding given the scarcity of effective treatments against Listeria.

#### Beyond Antibiotics: Industrial and Agricultural Applications

- The scope of thermophilic bacteria is not confined to antibiotic development. For instance:
- The enzyme Tag polymerase, central to PCR testing (used extensively during the COVID-19 pandemic), originates from a thermophile, Thermus aquaticus.
- A study by BHU researchers showed that bacteria from Leh's hot springs can promote plant growth, indicating agricultural relevance.

Thus, thermophiles offer a multidimensional value across industries-pharmaceuticals, biotechnology, agriculture, and environmental science.

### Challenges

### **Under-Exploration of Indian Hot Springs**

- Despite the geophysical diversity of India, few of its hot springs have been explored for microbial biodiversity. This lack of sampling and baseline data severely limits our understanding of India's potential contribution to antimicrobial innovation.
- Limited Research Infrastructure
- Metagenomic sequencing, gas chromatography-mass spectrometry (GC-MS), and antimicrobial efficacy tests require advanced lab infrastructure. Institutions across India lack uniform access to these facilities, which hinders nationwide exploration.

### **Threat of Antimicrobial Resistance** (AMR)

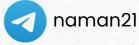
 According to WHO projections, AMR is expected to cost the world over \$1 trillion in healthcare expenses by 2050. Bacteria develop resistance faster than we can develop new antibiotics. On average, a new antibiotic takes a decade to reach the market, but resistance can arise in months or years.



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- The VIT findings are a ray of hope, but must be scaled and accelerated to keep pace with resistance.
- Environmental and Ethical Considerations
- Hot springs are often sacred spaces, used for holy baths. Over-sampling or exploitation for commercial purposes may provoke resistance from local communities or degrade the ecosystem. A balance between exploration and preservation must be maintained.

### **Toxicity and Safety Concerns**

 While diethyl phthalate showed antimicrobial activity, it is also known to be a plasticiser with documented toxicological effects in high concentrations. Therefore, any compound identified must undergo rigorous toxicity testing before clinical or agricultural use.

### Way Forward Comprehensive Microbial Mapping of Indian Hot Springs

 A national-level initiative similar to India's Biotech Parks or Genome India Project should be launched to map microbial diversity in geothermal zones. Collaborative efforts involving IISc, CSIR labs, IITs, and agricultural universities can scale up discovery and conservation.

### Create a Microbial Biodiversity Repository

 Inspired by global models like the ATCC (American Type Culture Collection), India should develop a Hot Spring Microbial Resource Centre to archive and supply newly discovered thermophilic strains for research and industrial use.

#### Public-Private Partnerships (PPPs)

The pharmaceutical industry must be encouraged to partner with academic institutions for drug discovery from extremophiles. PPPs can bring in both funding and infrastructure to speed up the translational pipeline from lab to clinic.

### Develop Thermophile-Based Agricultural Inputs

• Thermophiles that promote plant growth or degrade pollutants should be harnessed to create biofertilisers, biopesticides, and compost accelerators, helping achieve India's goals under the National Mission on Sustainable Agriculture.

### Ethics and Community Involvement

 Ensure that local communities are consulted and involved in microbial research projects, especially in areas of spiritual or cultural importance. Deploy benefit-sharing models to ensure fair returns to local

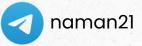
### Conclusion

stakeholders.

 The discovery of antibioticproducing thermophilic bacteria in the Rajgir hot spring represents a breakthrough for India in the global race against antimicrobial resistance. The presence of Actinobacteria in such high proportions is scientifically significant and offers multiple pathways, from antibiotic development to agricultural biotechnology.

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 Yet, this discovery also underlines the urgent need to scale up hot spring microbiome exploration across India. With the right policy push, institutional investment, and community engagement, India can transform its natural geothermal assets into bio-innovation hubs. The next generation of antibiotics and industrial enzymes may well be hiding in the steam-filled corners of India's ancient hot springs.

### Which of the following statements best explains the significance of the bacteria discovered at the Rajgir hot spring lake in Bihar?

A. They are genetically modified strains engineered for industrial enzyme production.

B. They belong to the Actinobacteria group, known for producing potent antibiotics, and showed antimicrobial activity against several human pathogens.

C. These bacteria are primarily used for geothermal energy generation and environmental remediation.

D. They are pathogenic strains contributing to waterborne diseases in the region.

Correct Answer: B. They belong to the Actinobacteria group, known for producing potent antibiotics, and showed antimicrobial activity against several human pathogens.



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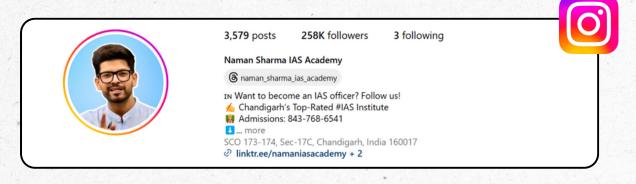


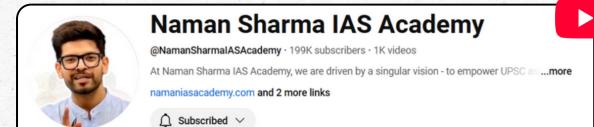
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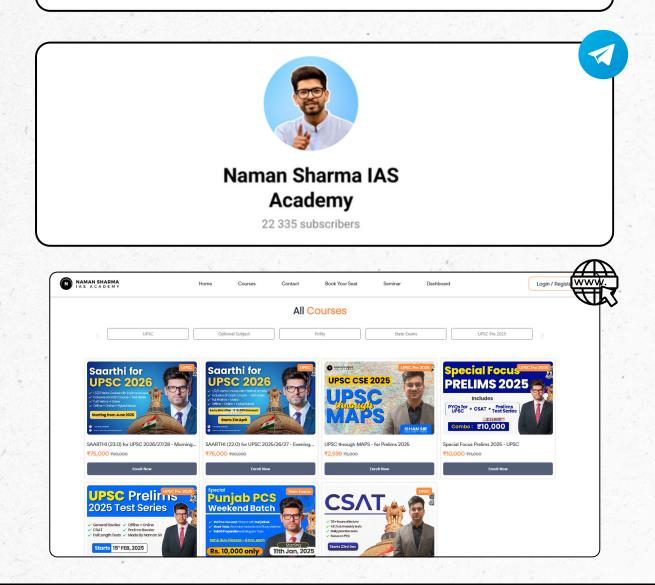




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