Tirumal Classes Quality education

THE HINDU
INDIA'S NATIONAL NEWSPAPER SINCE 1878

Daily News Analysis

The Hindu Important News Articles & Editorial For UPSC CSE

Teusday, 03 Feb, 2026

Edition : International Table of Contents

Page 02 Syllabus : GS III : Environment / Prelims Exam	Himachal govt. sets goal of 31% forest cover by 2030
Page 07 Syllabus : GS III : Science and Tech	General relativity survives its hardest test yet
Page 08 Syllabus : GS III : Indian Economy	A cautious nudge Only structural change can restorethe balance in fiscal federalism
Page 09 Syllabus : GS II : Governance and Social Justice	Visible progress, invisible exclusion
Page 09 Syllabus : GS III : Indian Economy	Finance Commission triples grants to urban local governments
Page 08 : Editorial Analysis Syllabus : GS III : Environment	Wetlands as a national public good

Page 02 : GS III : Environment / Prelims Exam

The Himachal Pradesh government has set an ambitious target to increase the State's forest cover from 29.5% to 31% by 2030, reflecting growing policy attention towards ecological sustainability. During a review meeting in Shimla, Sukhvinder Singh Sukhu directed the Forest Department to prepare a comprehensive, sustainable, and participatory roadmap, with special emphasis on community involvement in forest protection. This move aligns with India's broader commitments to climate action, biodiversity conservation, and sustainable development.

INBRIEF

Himachal govt. sets goal of 31% forest cover by 2030

Amid growing environmental concerns, the Himachal Pradesh government is working on a detailed plan to boost its forest cover to 31% from the existing 29.5% by 2030. During a review meeting with the Forest department in Shimla on Monday, Chief Minister Sukhvinder Singh Sukhu directed the department to prepare a comprehensive roadmap through careful and sustainable planning to increase the State's forest cover, which is currently 29.5%. He stressed the importance of getting local people involved in protecting the forest cover.

Background & Context

Himachal Pradesh is a Himalayan State with high ecological sensitivity.

Forests play a crucial role in:

Preventing landslides and soil erosion

Regulating water flow and river systems

Supporting livelihoods of forest-dependent communities

India's National Forest Policy (1988) recommends 33% forest cover nationally (and higher for hill states), making Himachal's target a step in the right direction, though still below the ideal benchmark.

Significance of the Decision

Environmental Sustainability

Enhances carbon sequestration and helps mitigate climate change.

Strengthens resilience against climate-induced disasters such as floods and landslides.

Socio-economic Dimensions

Community participation can improve livelihood security through Non-Timber Forest Produce (NTFPs).

Encourages decentralised forest governance.

Governance Perspective

Shift from mere afforestation to planned, sustainable forest management.

Emphasis on *people-centric conservation* rather than exclusionary models.

Challenges Involved

Land Constraints: Limited availability of non-forest land for afforestation.

Developmental Pressures: Roads, hydropower projects, tourism infrastructure.

Quality vs Quantity: Risk of monoculture plantations instead of biodiversity-rich forests.

Institutional Capacity: Need for scientific planning, monitoring, and long-term maintenance.

Way Forward

Promote Joint Forest Management (JFM) and community forest rights.

Use native species and avoid commercial monocultures.

Integrate forest planning with climate adaptation strategies.

Employ GIS and remote sensing for monitoring forest health.

Incentivise local communities through benefit-sharing mechanisms.

Conclusion

Himachal Pradesh's decision to enhance its forest cover represents a progressive shift towards sustainable environmental governance. However, the success of this initiative will depend not just on numerical expansion, but on ecological quality, community ownership, and institutional capacity. If implemented with scientific planning and participatory frameworks, this policy can serve as a model for hill States striving to balance development with ecological preservation.

UPSC Prelims Exam Practice Question

Ques : Consider the following statements regarding forest cover in India:

1. The National Forest Policy recommends 33% forest cover for the entire country.

2. Himalayan States are advised to maintain a higher forest cover than plains.

3. Increasing forest cover automatically ensures higher biodiversity.

Which of the statements given above are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans: a)

UPSC Mains Exam Practice Question

Ques: Increasing forest cover is not merely a quantitative exercise but also a qualitative one. In this context, analyze the Himachal Pradesh government's target of achieving 31% forest cover by 2030. Discuss the challenges and suggest a sustainable way forward. **(150 Words)**

Quality education

Page 07 : GS III : Science and Tech

In January 2025, scientists using the **Laser Interferometer Gravitational-wave Observatory (LIGO)** detected the **loudest gravitational wave signal ever recorded**, named **GW250114**. This single cosmic event enabled the **most stringent test yet of Albert Einstein's General Theory of Relativity**, especially its predictions about black holes. The findings, published in Physical Review Letters, mark a major milestone in experimental gravity and astrophysics.

This artwork imagines the event GW250114 which produced the clearest gravitational wave signal yet. AURORE SIMONNET (SSU/EDEON)/LVK/URI

General relativity survives its hardest test yet

Vasudevan Mukunth

On January 14, 2025, the Laser Interferometer Gravitational-wave Observatories (LIGOs) recorded a cosmic tremor unlike any before. Named GW250114, the signal was the 'loudest' gravitational wave scientists had ever detected.

In a study published in *Physical Review Letters* on January 29, an international team of researchers reported that it had used this powerful signal to conduct the most rigorous test of Albert Einstein's general theory of relativity and the nature of black holes to date.

For more than a century, the theory, also called general relativity, has been the gold standard for understanding gravity. It predicts that when two black holes merge, they will form a single, distorted survivor that settles down by 'ringing', much like a bell that has been struck, emitting gravitational waves in a process called ringdown.

The researchers wanted to use the exceptional clarity of GW250114 to check whether black holes truly are as simple as Einstein predicted or if they hide more complex features

According to the no-hair theorem, a black hole in vacuum can be characterised only by its mass and spin. This means its 'ringing' should follow a specific, predictable pattern, which is called the Kerr metric. The researchers wanted to use the exceptional clarity of GW250114 to check whether black holes truly are as simple as Einstein predicted or if they hide more complex features that might point to new physics.

To analyse the signal, the researchers used a technique called black hole spectroscopy. Gravitational-wave scientists look for specific frequencies and decay times in the 'sound' of a black hole's ringdown.

The team also used several advanced mathematical tools. Software packages called RINGDOWN and pyRing were used to fit specific models to the post-merger data to identify individual notes in the signal. A method called pSEOBNR analysed the entire signal to check if its beginning and end told a consistent story.

The researchers also compared the real-world data against supercomputer simulations of black hole mergers to see how well they matched, a technique called numerical relativity.

The study's results were a resounding victory for general relativity. The team successfully identified at least three distinct 'notes' in the black hole's ringing, the dominant tone, its first overtone, and a mode at a higher pitch.

The frequencies and damping times of these modes matched the predictions for a Kerr black hole within just a few percent. Because the signal was so loud, the single event also allowed the team to run other tests that were 2-3 times more stringent than previous studies that combined dozens of weaker events.

The data also confirmed Hawking's area theorem — which states that a black hole's surface area can't decrease — at a high statistical significance of 4.8 sigma.

"In summary, the single, loud event GW250114 has yielded the scientific return of dozens of previous detections, offering a preview of the unprecedented science that upcoming LIGO-Virgo-KAGRA observing runs will unlock," the researchers wrote in their paper.

A new LIGO observatory, the third after the two in the U.S., is coming up in Maharashtra. Once it's online it's expected to improve the precision with which the network of observatories can identify the source of gravitational waves by an order of magnitude.

What is the Scientific Context?

General Relativity (1915) explains gravity as the curvature of spacetime.

When **two black holes merge**, they form a distorted black hole that settles by emitting gravitational waves — a phase called **ringdown**.

According to the **no-hair theorem**, a black hole in vacuum is fully described only by **mass and spin**, and its ringdown must follow the **Kerr metric**.

Any deviation would hint at **new physics beyond Einstein**.

What Makes GW250114 Special?

Exceptional Signal Strength

Loudest gravitational-wave detection so far.

One event yielded scientific precision comparable to **dozens of earlier detections combined**.

Black Hole Spectroscopy

Scientists identified **three distinct ringdown modes** (fundamental tone + overtones).

Frequencies and damping times matched Kerr black hole predictions within a few percent.

Advanced Analytical Tools

RINGDOWN & pyRing: extracted individual ringdown modes.

pSEOBNR: ensured consistency between inspiral and post-merger phases.

Numerical relativity: supercomputer simulations validated observations.

Key Scientific Outcomes

Strong confirmation of General Relativity in the most extreme gravity regime known.

Validation of the no-hair theorem with unprecedented precision.

Confirmation of Hawking's Area Theorem (black hole surface area never decreases) at **4.8 sigma** significance — a very high confidence level.

No evidence of exotic objects or deviations from classical black holes.

Significance for India

A **new LIGO observatory in Maharashtra (LIGO-India)** is under development.

Expected benefits:

Improves **source localization accuracy** by ~10 times.

Strengthens India's role in **frontline fundamental physics**.

Boosts indigenous capability in **precision instrumentation, data science, and supercomputing**.

Strategic value for **science diplomacy and global collaborations**.

Broader Implications

Reinforces confidence in Einstein's theory even after 100+ years.

Opens the era of **precision gravitational-wave astronomy**.

Future detectors may:

Detect subtle deviations → clues to **quantum gravity**.

Probe **dark matter candidates**, exotic compact objects, or extra dimensions.

The detection of **GW250114** represents a **defining moment in modern physics**, where theory, observation, and computation converge with extraordinary precision. By passing its toughest observational test yet, **General Relativity once again proves its robustness**, while gravitational-wave astronomy emerges as a powerful tool to probe the deepest mysteries of the universe. With upcoming facilities like **LIGO-India**, the future promises even sharper tests — and possibly, the first cracks in Einstein's century-old masterpiece.

UPSC Prelims Exam Practice Question

Ques: With reference to gravitational waves and black holes, consider the following statements:

1.The ringdown phase of a black hole merger is used to test the no-hair theorem.

2.According to general relativity, black holes can be characterised only by mass and spin.

3.Hawking's area theorem states that the event horizon area of a black hole can decrease during mergers.

Which of the statements given above are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans: a)

UPSC Mians Exam Practice Question

Ques: Gravitational-wave astronomy has opened a new window to test fundamental laws of physics. In this context, examine the significance of the GW250114 event in validating General Relativity and discuss its implications for future astrophysical research. **(150 Words)**

Page 07 : GS III : Indian Economy

The recommendations of the **Sixteenth Finance Commission (FC-16)** for the period **2026–31** have once again brought the debate on **fiscal federalism** to the forefront. By retaining the **vertical devolution ratio at 41%**, despite persistent demands by States to raise it to 50%, the Commission has adopted a **cautious and incremental approach**. While it acknowledges the fiscal stress faced by States—especially under the GST regime—the recommendations fall short of initiating the **structural correction** required to rebalance Centre–State financial relations.

Key Recommendations and Rationale

1. Vertical Devolution: Status Quo at 41%

States' share in the divisible pool of Central taxes remains unchanged at **41%**.

This comes despite:

- Reduced fiscal autonomy of States post-GST.
- Rising expenditure responsibilities without commensurate assured revenues.

As a result, States increasingly rely on **market borrowings** as the main adjustment mechanism.

2. Horizontal Devolution: A Calibrated Shift

FC-16 has tweaked the criteria for inter-State distribution:

- Replaced **"tax effort"** with **"contribution to GDP"**.
- Increased its weight sharply from **2.5% (FC-15) to 10%**.

Objective: Reward **productive, efficient, and growth-oriented States** and link governance outcomes with fiscal transfers.

3. Demographic Criteria Rebalanced

Reduced weight to **demographic performance** (population control).

Increased weight to **population size**.

Rationale:

- India is nearing the peak of its **demographic dividend**.
- Penalising population growth may no longer be normatively appropriate.

Outcome: Industrialised States like **Tamil Nadu and Maharashtra** gain only **marginally**.

A cautious nudge

Only structural change can restore the balance in fiscal federalism

In its much-awaited recommendations, which were also tabled on Sunday, the Sixteenth Finance Commission (FC-16), as anticipated, has recommended that the vertical devolution ratio – the States' share in the divisible pool of Central taxes – be retained at 41% for the period 2026-31. States want this to be 50%. This is despite the Commission acknowledging the tightening fiscal space States face under the GST framework, and that the growing mismatch between expenditure responsibilities and assured revenues has increasingly left them with "recourse to market borrowings" as the principal adjustment mechanism. Predictably, several States have criticised the projected devolutions for the coming fiscal but have also cautiously welcomed a tweak in the horizontal devolution formula. The FC-16 has reworked the earlier "tax effort" criterion into a broader "contribution to GDP" measure and raised its weight sharply – from 2.5% under the FC-15 to 10%. This change is intended to reward productive and efficient States and represents a modest but meaningful attempt to link governance outcomes with fiscal transfers.

However, the resulting gains are deliberately restrained. The FC-16 makes it clear that any restructuring of horizontal devolution must be undertaken "gradually", to avoid abrupt redistributive shocks to States that are more dependent on transfers. Accordingly, the weight accorded to demographic performance has been reduced, reflecting the view that penalising population growth is no longer appropriate at a time when India is close to the peak of its demographic dividend. Conversely, the weight for population size has been modestly increased. The net effect is that industrialised States such as Tamil Nadu and Maharashtra see only incremental improvements in their inter-State shares. This caution is understandable but also underscores the limits of the Commission's ambition. A stronger signal could have been sent through a staggered increase in vertical devolution, for instance by committing to raise the States' share to 45% by 2031, expanding discretionary fiscal space while preserving stability. The FC-16 flags the shrinking of the effective divisible pool due to cesses and surcharges but stops short of correcting this by recommending their inclusion in the pool. To be sure, total transfers to States are budgeted to rise by 12.2% between 2025-26 (RE) and 2026-27 (BE). But ₹1.2 lakh crore – or about 42% of this increase – is from revenue transfers under Centrally Sponsored Schemes, reinforcing a governance model in which States act as implementers of priorities set in New Delhi. The FC-16's recommendations recognise the stresses in State finances but do not push for the structural change needed to restore the balance in fiscal federalism.

Critical Evaluation

Positive Aspects

Recognition of:

- Shrinking fiscal space of States.
- Distortions created by GST and growing use of cesses and surcharges.

Introduction of GDP contribution criterion is a **normatively sound reform**.

Gradualism avoids **redistributive shocks** to transfer-dependent States.

Limitations

No increase in vertical devolution, despite structural imbalance.

Shrinking **effective divisible pool** due to cesses and surcharges remains unaddressed.

About **42% of the increase in transfers (₹1.2 lakh crore)** comes via **Centrally Sponsored Schemes (CSS)**:

- Reinforces a **top-down governance model**.
- States remain implementers of centrally determined priorities.

Missed opportunity to signal long-term reform, e.g., a **phased rise to 45%** by 2031.

Implications for Fiscal Federalism

Indicates a preference for **stability over restructuring**.

Deepens concerns about:

- Erosion of State autonomy.
- Increasing centralisation of fiscal power.

Without reforming the **structure of revenue sharing**, incremental changes may not resolve systemic stress in State finances.

Conclusion

The FC-16's recommendations represent a **measured but minimalist intervention** in India's evolving fiscal architecture. While the recalibration of horizontal devolution signals a recognition of efficiency and productivity, the reluctance to expand vertical devolution or correct the shrinking divisible pool highlights the **limits of incrementalism**. At a time when States shoulder expanding developmental responsibilities, only **structural reform—greater tax sharing, reduced reliance on cesses, and enhanced fiscal autonomy—can restore balance in India's fiscal federalism**.

UPSC Mains Exam Practice Question

Ques: The Sixteenth Finance Commission has acknowledged fiscal stress faced by States but stopped short of recommending structural reforms. Critically examine the implications of its recommendations for the future of fiscal federalism in India. **(150 Words)**

Tirumal Classes Quality education

Page 09 : GS II : Governance and Social Justice

The Union Budget 2026–27 marks a decisive shift from pandemic-era crisis management towards a **capex-driven growth doctrine**, with public capital expenditure scaled up to **₹12.2 lakh crore** and the fiscal deficit guided to **4.3% of GDP**. While this strategy reinforces macroeconomic stability and long-term productivity, it also exposes a deepening fault line in India's growth model: **visible progress in infrastructure and GDP growth, but invisible exclusion of labour from meaningful employment gains**.

Visible progress, invisible exclusion

Deepanshu Mohan

Professor and Dean, O.P. Jindal Global University

Ankur Singh

Research Analyst with the Centre for New Economics Studies

Budget 2026-27 signals a transition away from pandemic-era crisis management to what is now a borrowing-heavy doctrine for financing growth and capital expenditure (capex) spending.

By guiding fiscal deficit to 4.3% of GDP and scaling public capital expenditure to ₹12.2 lakh crore, the government aims to project a broader infra-capex enabled vision of a 'Viksit Bharat' while giving a necessary push to MSMEs in manufacturing this time. That public infrastructure and MSME growth are no longer framed as areas of temporary stimulus, but part of the structural backbone of the economy is reassuring.

And yet, beneath the veneer of macro-economic stability, the fiscal math, as projected by the Finance Minister, masks a more precarious reality. As manufacturing scales in strategic frontiers like MSMEs, semiconductors, and biopharma, the mechanism connecting this massive capital expansion to actual employment outcomes has become increasingly tenuous. While capital formation successfully drives headline GDP, absorption of labour is stalled. This suggests that India is perfecting a growth model designed to function with clinical efficiency, while quietly leaving its vast labour force behind.

Towards a growth doctrine

For much of India's fiscal history, capex played a secondary role. It expanded when revenues permitted and was restrained when deficits widened. That changed after the pandemic. From 2020-21 onwards, capex expenditure ceased to function as a counter-cyclical instrument and instead became the organising principle of fiscal policy.

The data capture this shift. Capex expenditure as a share of total expenditure rose from roughly 12% in 2020-21 to over 22% in recent estimates. The underlying logic is well established. Public infrastructure spending is expected to crowd in private investment, raise productivity, and generate employment. Yet, the labour indicators running alongside this expansion reveal a disconnect. The youth NEET rate (share of people who are not in education, employment, or training) for ages 15-29 remains in the 23%-25% range, materially higher than several peer economies. Nearly one in four young Indians is structurally outside employment, education, or training even as public investment accelerates.

India is perfecting a growth model designed to function with clinical efficiency, while quietly leaving its vast labour force behind

Structural U-turn

Construction reflects the sector most directly fuelled by public investment in the post-2015 infrastructure push. Agriculture reflects the sector a developing economy typically sheds labour from as productivity rises elsewhere. The trajectories of the two have moved in directions opposite to what development theory would anticipate across periods.

Construction's employment elasticity declined from 0.59 in the pre-COVID period of 2011-12 to 2019-20 to 0.42 in the post-COVID years of 2021-22 to 2023-24. This occurred when infrastructure spending was at record levels. The implication is stark: each additional unit of capex is now associated with fewer construction jobs than before.

Agriculture is the more troubling story. Employment elasticity rose sharply from 0.04 during 2011-12 to 2019-20 to 1.51 during 2021-22 to 2023-24. Rather than releasing labour, the sector has been reabsorbing it. This reflects distress-driven fallback into low-productivity activity. Taken together, the pattern resembles a structural U-turn. India is modernising its physical asset base while its workforce is being pulled back towards subsistence.

The weak employment is rooted in the kind of production structure the capex turn reinforces. Public investment, as currently configured, systematically favours capital intensity. This is visible in the widening gap between productivity and wages. Net value added per worker has risen sharply, while average emoluments remain far lower. The divergence suggests that efficiency gains enabled by infrastructure are being captured largely as profits rather than transmitted as labour income.

The industrial structure compounds this bias. The Annual Survey of Industries shows that a large majority of factories remain small, employing fewer than 100 workers, yet contribute modestly to output. Large firms, capable of integrating into new logistics and infrastructure networks, dominate value creation while remaining relatively labour light. Labour-intensive MSMEs struggle to scale, automate, or compete.

The result is a dual economy: a capital-intensive upper layer drives headline GDP growth with limited employment generation, while a vast lower layer absorbs labour through informality and self-employment with low productivity and weak income growth.

New economic citizen?

Read together, fiscal strategy and labour outcomes point to an implicit reordering of priorities. Employment no longer appears as a variable that must be directly engineered and the state is quite incapacitated in doing that at this point. It is treated as an eventual by-product of growth rather than a co-equal objective.

Official projections reinforce this orientation. Formal skills, urban location, and compatibility with automation determine inclusion. Those outside this profile adjust downward, into informal work, own-account activity, or agriculture. Even within the organised sector, wage growth remains subdued.

The economy does not stall. It simply advances without requiring broad-based labour absorption.

Core Features of the Budget Strategy

Capex as the Organising Principle

Public capital expenditure has risen from about **12% of total expenditure (2020–21)** to over **22% in recent years**.

Infrastructure investment is no longer counter-cyclical but **structural**, aimed at crowding in private investment and enhancing productivity.

Borrowing-led Growth Model

Expansion is increasingly financed through **market borrowings**, reflecting confidence in growth but also raising medium-term fiscal sustainability questions.

Targeted Push to MSMEs

Manufacturing MSMEs, semiconductors, and biopharma are positioned as strategic growth frontiers under the 'Viksit Bharat' narrative.

The Employment Disconnect

Despite headline growth, labour outcomes reveal a troubling divergence:

Youth NEET Rate (15–29 years): Persistently high at **23–25%**, indicating weak school-to-work and skill-to-job transitions.

Construction Sector Paradox:

Employment elasticity fell from **0.59 (2011–12 to 2019–20)** to **0.42 (2021–22 to 2023–24)** despite record infrastructure spending.

Capex is becoming **less labour-absorbing**, reflecting mechanisation and capital intensity.

Agricultural Re-absorption:

Employment elasticity surged from **0.04 to 1.51**, suggesting distress-driven fallback into low-productivity agriculture rather than productive structural transformation.

This reversal resembles a **structural U-turn**: modernisation of assets without commensurate modernisation of employment.

Structural Causes

Capital-Intensive Bias

Infrastructure-led growth disproportionately rewards capital over labour.

Productivity gains are captured as **profits**, not wages, evidenced by a widening productivity–wage gap.

Dual Industrial Structure

Large firms dominate output but are **labour-light**.

MSMEs remain small, under-capitalised, and unable to scale or integrate into new logistics networks.

Implicit Policy Reordering

Employment is treated as a **by-product of growth**, not a co-equal policy objective.

Inclusion increasingly depends on formal skills, urban location, and automation compatibility.

Implications for Development

Emergence of a **dual economy**:

A capital-intensive upper tier driving GDP growth.

A vast lower tier absorbing labour through informality, self-employment, and agriculture with low productivity.

Risk of **demographic dividend turning into demographic stress** if job creation does not keep pace.

Conclusion

Budget 2026–27 reflects a confident, infrastructure-first vision of development, signalling India's transition to a productivity-led growth regime. However, the emerging evidence suggests that **growth is increasingly decoupled from employment**, producing prosperity without participation. Unless fiscal strategy is recalibrated to explicitly integrate **labour-intensive growth, MSME scaling, wage growth, and skill–industry linkages**, India risks consolidating a model where the economy advances efficiently—but leaves a large share of its workforce behind.

UPSC Mains Exam Practice Question

Ques: "India's capex-led growth model has improved macroeconomic stability but weakened labour absorption." Critically examine this statement in the context of Budget 2026–27. Suggest measures to align growth with employment generation. **(150 Words)**

Page 09 : GS III : Indian Economy

In a significant shift recognising India's accelerating urbanisation, the **Sixteenth Finance Commission (FC-16)** has recommended a **record allocation of ₹3.5 lakh crore** to **Urban Local Governments (ULGs)** for the period 2026–31. Tabled in Parliament by **Nirmala Sitharaman**, this marks a **230% increase** over the Fifteenth Finance Commission's allocation and signals a renewed policy emphasis on strengthening cities and towns as engines of growth and service delivery.

Finance Commission triples grants to urban local governments

A record allocation of ₹3.5 lakh crore and a higher share of local grants signal a policy shift towards India's rapidly urbanising towns and cities

DATA POINT

The Hindu Data Team

On February 1, Finance Minister Nirmala Sitharaman tabled the 16th Finance Commission report in the Lok Sabha, setting the framework for tax devolution between the Centre and the States. The Commission also recommended an allocation of ₹3.5 lakh crore to urban local governments (ULGs) for the next five years. Generally, funds are devolved to ULGs through transfer by the Central and State governments in the form of grants. According to an analysis by Janaagraha, a non-profit organisation, the Commission's allocation for the coming five years matches the spending of centrally sponsored schemes through the Centre's share over the last 13 years combined **(Chart 1)**. The report expands on how this could improve first-mile infrastructure and services for smaller towns and cities. It also notes the allocation of ₹10,000 crore to the urbanisation premium grant, which could incentivise the process of rural-urban transition.

The Commission has also allocated 45% of local government grants to ULGs, which is a noted increase from its previous share of 36% **(Chart 2)**.

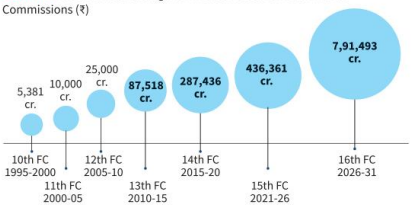
The 15th Finance Commission allocated ₹1.5 lakh crore to ULGs for the years 2021-26. The 16th Finance Commission recommended increasing the allocation by 230% **(Chart 3)**. Among the major States, Kerala received the highest increase in allocation of more than 400%, while Himachal Pradesh saw a near 50% decline in such funds **(Table 4)**.

More than 60% of the grants to ULGs were basic grants, of which "tied" grants can be used for basic services such as sanitation and water supply, while "untied" grants can be used by for location-specific felt needs, excluding salary and establishment expenses.

Urban windfall

The data for the charts were sourced from Janaagraha's report titled 'The XVI Finance Commission's Recommendations for Urban India: Analysis and Implications (2026 -31)'

CHART 1: Allocations to local governments across various Finance Commissions (₹)



Total local government allocations increased to ₹7.91 lakh crore (2026-31) from ₹4.36 lakh crore (2021-26)

CHART 2: Allocations to Rural and Urban Local Governments in % across various Finance Commissions

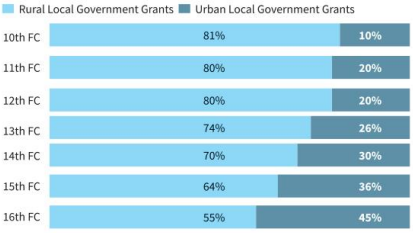
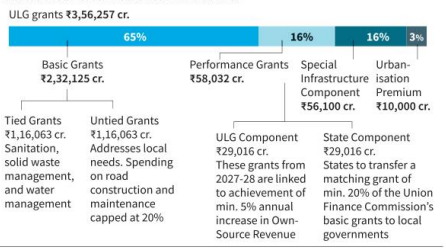


CHART 3: Allocations to Urban Local Governments across Finance Commissions (₹)

TABLE 4: State-wise allocations to Urban Local Governments across Finance Commissions. ULG allocations under 16th Finance Commission increased to ₹3.56 lakh crore from ₹1.55 lakh crore. Data for select States

State	15th FC (₹cr.)	16th FC (₹cr.)	Change
Kerala	3,242	16,683	415%
Goa	149	726	387%
Maharashtra	11,611	46,803	303%
Gujarat	6,367	23,764	273%
Tamil Nadu	7,187	25,069	249%
Telangana	3,682	11,548	214%
Haryana	2,520	7,834	211%
Karnataka	6,409	18,483	188%
Punjab	2,764	7,834	183%
Nagaland	249	667	168%
Manipur	353	609	73%
Uttar Pradesh	19,432	33,543	73%
Chhattisgarh	2,900	4,990	72%
Rajasthan	7,696	12,680	65%
Odisha	4,498	5,078	13%
Meghalaya	363	377	4%
Assam	3,197	3,249	2%
Bihar	9,999	9,169	-8%
Arunachal Pradesh	459	233	-49%
Himachal Pradesh	855	435	-49%

CHART 5: Component-wise breakdown of the 16th Finance Commission's allocations to Urban Local Governments in %



Key Recommendations

1. Quantum Jump in Urban Grants

Allocation to ULGs: **₹3.5 lakh crore (2026–31)**

Compared to **₹1.5 lakh crore (2021–26)** under FC-15.

According to analysis by **Janaagraha**, this allocation equals the Centre's share of spending on urban Centrally Sponsored Schemes over the **last 13 years combined**.

2. Higher Share for Urban Local Governments

45% of total local government grants earmarked for ULGs.

Increased from **36%** under FC-15.

Reflects recognition of:

Rapid urban population growth

Infrastructure deficits in small and medium towns

3. Urbanisation Premium Grant

₹10,000 crore allocated to incentivise **rural–urban transition**.

Aims to support census towns and fast-growing peri-urban areas lacking municipal capacity.

4. Nature of Grants

Over **60% are basic grants**:

Tied grants: For essential services (water supply, sanitation).

Untied grants: For local, felt needs (excluding salaries and establishment costs).

Enhances **local discretion and responsiveness**.

Inter-State Distribution: Uneven Gains

Kerala: Over **400% increase** in ULG allocations.

Himachal Pradesh: Nearly **50% decline**.

Highlights persistent inter-State variation based on:

Urban population share

Governance capacity

Finance Commission criteria

Significance of the Move

Strengthening Grassroots Urban Governance

Improves **first-mile infrastructure** and service delivery.

Reduces excessive dependence on Centrally Sponsored Schemes.

Advancing Cooperative Federalism

Empowers the **third tier of government**, aligning with the 74th Constitutional Amendment.

Managing Urbanisation Pressures

Supports sustainable urban growth amid rising migration.

Addresses service gaps in smaller towns, not just megacities.

Economic Multiplier Effects

Better urban infrastructure enhances productivity, employment, and quality of life.

Concerns and Challenges

Capacity Constraints: Many ULGs lack technical and financial management capability.

Absorptive Capacity: Risk of underutilisation or inefficient spending.

State Intermediation: Actual fund flow depends on State-level transfers and compliance.

Accountability: Need for robust monitoring and outcome-based evaluation.

Conclusion

The FC-16's decision to **triple grants to Urban Local Governments** represents a decisive acknowledgment that India's development trajectory is increasingly urban. By raising both the **quantum and share of urban grants**, the Commission strengthens the fiscal foundations of cities and towns. However, without parallel reforms in **ULG capacity, accountability, and State–local fiscal relations**, higher allocations alone may not deliver commensurate outcomes. The success of this shift will ultimately depend on whether empowered cities can convert enhanced fiscal space into **inclusive, efficient, and sustainable urban development**.

UPSC Mains Exam Practice Question

Ques: The Sixteenth Finance Commission's enhanced allocation to Urban Local Governments marks a shift in India's fiscal federalism. Discuss its significance for urban governance and highlight the challenges in translating higher grants into improved urban service delivery. **(150 Words)**

Wetlands as a national public good

Dr. Soumya Swaminathan

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

Rupesh K. Bhomia

is Director – Wetlands, M.S. Swaminathan Research Foundation (MSSRF)

On February 2, 2026, the world marked World Wetlands Day 2026 under the theme, 'Wetlands and traditional knowledge: Celebrating cultural heritage'. In India, this theme feels especially apt. There is a rich history of communities sustaining themselves through wetlands following practices that inherently safeguarded ecosystems.

Traditional practices in Tamil Nadu's wetlands revolve around ancient water management and community livelihoods, human-made tanks or *kulams*, forming cascading irrigation networks for paddy and other crops. In Wayanad, Kerala, shallow wells called *kenis*, crafted over 200 years ago, support drinking water, rituals, and festivals, while wetlands in Srikakulam, Andhra Pradesh, sustain traditional fishing practices. Such stories can be told from any part of India, where communities have thrived for generations around wetlands that are both ecology and economy, habitat and heritage, essential to social wellbeing.

But we must be honest. Although the benefits and services of wetlands abound, wetlands remain among the most threatened ecosystems because they sit at the intersection of land, water, and development.

Policy background, challenges at home

Policy and regulatory frameworks are often blamed, but India does not lack laws. It lacks consistent, high-quality implementation. The Wetlands (Conservation and Management) Rules, 2017 provide a framework for identifying, notifying, and managing wetlands through authorities to restrict damaging activities. However, nearly 40% of India's wetlands have vanished over the last three decades, and around 50% of what remains show signs of ecological degradation.

Updated guidelines under the National Plan for Conservation of Aquatic Ecosystems (NPCA) push for structured planning, monitoring and outcome-oriented management. The Coastal Regulation Zone (CRZ) framework aims to maintain the ecological integrity of coastal wetlands, while Ramsar site designation offers global recognition and responsibility. The 98 Ramsar sites in India are not just badges but commitments that encourage action.

These instruments span freshwater, coastal, urban, natural, riparian and high-altitude wetland but must be coordinated into a single operational rhythm that starts with mapping, leads to notification and enhanced protection, enables restoration where needed, and continues monitoring through adaptive management.

Through site-based wetland conservation and restoration initiatives, organisations such as the M.S. Swaminathan Research Foundation have worked with State governments, local communities and stakeholders to support wetland mapping, participatory management planning, and livelihood-linked conservation.

> There is a need to shift the focus from 'projects' to programmes and 'beautification' to ecological functionality, and ensure watershed-scale governance

Wetlands are "multiple-use" systems, which make them valuable and vulnerable. In a highly populated country, encroachment and land conversion have already erased around 40% of natural wetlands, replacing them with infrastructure, real estate and road networks. Even where wetlands persist, their catchments are often irreversibly altered, and old cadastral maps rarely match current ground realities.

Wetlands rely on timing and flow of water. Dams, embankments, channelisation, sand mining and groundwater over-extraction disrupt these flows, eroding their natural characteristics. Riparian wetlands and floodplains are especially vulnerable because they are treated as spare land rather than active river space. Urban wetlands are expected to store floodwater, receive storm runoff, absorb sewage, and remain clean and biodiverse, often without legal buffers.

Growing pollution results in the eutrophication of water bodies when untreated sewage, industrial effluents, agricultural runoff, and solid waste are pushed into wetlands. When a wetland becomes a dumping ground, its biodiversity collapses, along with its ability to buffer floods and purify water. In coastal areas, sea-level rise, cyclones and shoreline change collide with ports, tourism, aquaculture and settlement growth. Mangroves and lagoons face a double bind: development pressure on landward sides and rising seas on seaward sides, leaving them little room to migrate.

Lastly, a major challenge is capacity constraints. State wetland authorities are often understaffed, underfunded, and stretched across competing mandates. Training gaps in hydrology, ecology, GIS, legal enforcement, and community engagement often translate into weak management plans, weaker implementation and continued degradation of valuable wetlands.

Pragmatic and contextual approaches

There is an urgent need to shift from "projects" to programmes, from "beautification" to ecological functionality, and from "departmental silos" to watershed-scale governance. Through coordinated, efficiently monitored approaches, we can begin to address this complex problem.

Here are some ideas to start with.

First, notification and safety of wetland boundaries. The 2017 Rules are only as strong as notification and demarcation, which should be paired with publicly accessible maps, grievance redress and participatory ground-truthing with communities where disputes are likely.

Second, treat wastewater before it meets wetlands. For urban and peri-urban wetlands, a key action is ensuring treated inflows. Wetlands cannot substitute for sewage treatment plants. Where feasible, constructed wetlands can complement but not replace primary treatment.

Third, protect the wetland's catchment and hydrological connectivity. Wetlands must be managed as part of a basin or catchment system – restore feeder channels, prevent blockages by roads and embankments, stop solid waste dumping, and regulate extraction that alters water regimes.

Fourth, make coastal and riparian wetlands central to disaster risk reduction. Mangroves, mudflats, floodplains, and urban wetlands are nature-based infrastructure. Planning authorities should treat them as risk buffers, worthy of investment comparable to "grey" infrastructure. CRZ enforcement should be paired with livelihood-sensitive approaches that support coastal communities while defending ecological no-go areas.

Fifth, build skills and institutions. A national capacity mission for wetland managers with accredited training in hydrology, restoration ecology, GIS/remote sensing, environmental law and community-led governance. NPCA investments can be more transformative if paired with systematic capacity building and measurable performance indicators, including direct livelihood benefits to local communities.

There are already strides in this direction, with enhanced attention being given to wetlands by various state and non-state actors, and it deserves amplification. Better mapping and monitoring are now possible through satellite remote sensing, drones, and time-series analytics to track encroachment, inundation, and vegetation change.

Updated NPCA guidelines enable science-based, monitorable management plans for outcome-oriented design, while Ramsar's focus on clear boundaries and wise use aligns with India's needs – especially through community stewardship.

The 2026 World Wetlands Day theme highlights traditional knowledge that can strengthen restoration and compliance when treated as evidence.

Align science and policy

World Wetlands Day 2026 may have passed but let us make a societal pact. Governments must notify, enforce, fund, and coordinate; cities must stop treating wetlands as wastelands; industry must prevent pollution at source; research and education institutions must train the next cadre of wetland managers; and citizens must defend local lakes, ponds, floodplains, mangroves, and springs as shared heritage.

If we align science with policy, and policy with people drawing strength from both modern tools and traditional wisdom, we can restore wetlands not as museum pieces, but as thriving, working ecosystems. The future of India's water – and a significant part of India's resilience – depends on it.

Environment

Wetlands are increasingly recognised as national public goods rather than wastelands. In this context, examine the challenges to wetland conservation in India and suggest measures to integrate traditional knowledge with modern governance frameworks. **(250 Words)**

Context :

World Wetlands Day 2026, observed on February 2 under the theme **"Wetlands and traditional knowledge: Celebrating cultural heritage"**, underscores the centrality of wetlands to India's ecological security and social wellbeing. As highlighted by **M. S. Swaminathan Research Foundation**, Indian wetlands have historically been sustained through community-led practices—such as tank (kulam) systems in Tamil Nadu, kenis in Wayanad, and traditional fishing wetlands in Srikakulam—where ecology and livelihoods evolved together. Yet, despite their immense value, wetlands remain among India's **most threatened ecosystems**, raising questions about governance, implementation, and development priorities.

Why Wetlands Matter

Wetlands function as **national public goods** due to their multiple ecosystem services:

Hydrological functions: Flood buffering, groundwater recharge, water purification

Ecological services: Biodiversity habitats, carbon sequestration

Economic & social roles: Fisheries, agriculture, cultural practices, disaster resilience

Their degradation imposes costs far beyond local boundaries, justifying strong public intervention.

Policy Framework in India

India does not lack legal instruments; it faces an **implementation deficit**.

Wetlands (Conservation and Management) Rules, 2017

Provide for identification, notification, and regulation of activities.

Weak demarcation and enforcement undermine effectiveness.

National Plan for Conservation of Aquatic Ecosystems (NPCA)

Promotes science-based planning, monitoring, and outcome-oriented management.

Coastal Regulation Zone (CRZ) Framework

Aims to protect coastal wetlands such as mangroves and lagoons.

Ramsar Convention Sites

India has **98 Ramsar sites**, representing global responsibility, not symbolic recognition.

Despite this, nearly **40% of India's wetlands have disappeared in three decades**, and about **half of the remaining wetlands are degraded**.

Key Challenges

Encroachment and Land Conversion

Infrastructure, real estate, and roads replace wetlands.

Cadastral maps often do not reflect ground realities.

Hydrological Disruption

Dams, embankments, sand mining, and groundwater overuse disturb natural water flows.

Floodplains treated as "spare land" rather than active river space.

Pollution and Eutrophication

Untreated sewage, industrial effluents, agricultural runoff degrade wetlands.

Loss of biodiversity reduces flood-mitigation and purification capacity.

Climate Change Pressures

Coastal wetlands face sea-level rise and cyclones alongside development pressures.

Institutional Capacity Constraints

Understaffed State Wetland Authorities.

Skill gaps in hydrology, GIS, ecology, and community engagement.

Way Forward: From Projects to Programmes

Boundary Notification & Protection: Publicly accessible maps, participatory ground-truthing.

Treat Wastewater at Source: Wetlands cannot replace sewage treatment plants.

Catchment-Based Management: Restore feeder channels and hydrological connectivity.

Nature-based Disaster Risk Reduction: Treat wetlands as infrastructure, not wastelands.

Capacity Building: National mission for wetland managers; skill development under NPCA.

Leverage Technology & Tradition: Remote sensing, GIS, and traditional knowledge as evidence.

Conclusion

Wetlands lie at the intersection of **ecology, economy, and culture**, making their conservation a matter of national resilience rather than local aesthetics. While India has a reasonably robust policy framework, fragmented implementation, capacity constraints, and development pressures continue to erode these ecosystems. Treating wetlands as **living, working systems**—supported by science, traditional knowledge, and participatory governance—can restore them as vital assets for water security, disaster risk reduction, and sustainable development. The future of India's environmental resilience depends on this alignment of **policy, people, and planet**.

Tirumal Classes Quality education