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STANDING COMMITTEE ON HOUSING AND URBAN AFFAIRS (2025-26)

EIGHTEENTH LOK SABHA

MINISTRY OF HOUSING AND URBAN AFFAIRS

Review of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with special emphasis on Urban Drinking Water

SEVENTH REPORT

LOK SABHA SECRETARIAT
NEW DELHI

December, 2025/ Agrahayana, 1947 (Saka)

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Presented to Lok Sabha on 12.12.2025

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LOK SABHA SECRETARIAT
NEW DELHI

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KEY ABBREVIATIONS

Abbreviation	Expanded version
AMR	Automated Meter Reader
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
A&OE	Administrative and Other Expenses
AP	Annual Plan
BOD	Biochemical Oxygen Demand
CPCB	Central Pollution Control Board
CWBP	City Water Balance Plan
CPHEEO	Central Public Health and Environmental Engineering Organisation
DMA	District Metered Area
DISHA	District Development Coordination and Monitoring Committee
DPR	Detailed Project Report
FC (14th FC)	Fourteenth Finance Commission
FSTP	Faecal Sludge Treatment Plant
HPEC	High-Powered Expert Committee
IoT	Internet of Things
IS 10500:2012	Indian Standard Specification for Drinking Water
JSA	Jal Shakti Abhiyan
KLD	Kilolitre per Day
LPCD	Litres Per Capita Per Day
MLD	Million Litres per Day
MoHUA	Ministry of Housing and Urban Affairs
NRW	Non-Revenue Water
NIT	Notice Inviting Tender
NRSC	National Remote Sensing Centre
PDMC	Project Development and Management Consultant
PPP	Public–Private Partnership
RWH	Rainwater Harvesting
SAAP	State Annual Action Plan
SCADA	Supervisory Control and Data Acquisition
SDG	Sustainable Development Goal
SHG	Self-Help Group
SHPSC	State High Powered Steering Committee
SNA	Single Nodal Agency
SPARSH	System for Processing, Accounting, Reporting & Spending for Holistic management
SLB	Service Level Benchmark
SLIPs	Service Level Improvement Plans
SLTC	State Level Technical Committee
STP	Sewage Treatment Plant
SWAP	State Water Action Plan
ULBs	Urban Local Bodies
UTs	Union Territories
UWAIS	Urban Waterbody Information System
WHO	World Health Organization
WTP	Water Treatment Plant

INTRODUCTION

I, the Chairperson of the Standing Committee on Housing and Urban Affairs (2025-26), having been authorized by the Committee, present the Seventh Report (18th Lok Sabha) on the subject, 'Review of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with special emphasis on Urban Drinking Water' relating to the Ministry of Housing and Urban Affairs.

2. The Committee examined this subject to undertake a focused review of the Mission, particularly its provisions relating to urban drinking water. This focused approach on a specific component of the Mission was adopted to allow for a more in-depth and meaningful analysis of a sector that directly affects the health, dignity and daily lives of urban citizens.

3. The Committee were briefed on the subject by the representatives of Ministry of Housing and Urban Affairs on 03 April 2025. The Committee also took oral evidence of the representatives of Ministry of Housing and Urban Affairs on 04 November 2025.

4. The Committee wish to express their thanks to the officials of the Ministry of Housing and Urban Affairs for appearing before them and furnishing the information that were sought in connection with the examination of the subject.

5. The Committee would also like to place on record their deep sense of appreciation for the invaluable assistance rendered to them by the Officials of Lok Sabha Secretariat attached to the Committee.

6. The Committee considered and adopted Draft Report at their Sitting held on 10 December 2025.

7. For facility of reference, the observations/recommendations of the Committee are highlighted in bold letters in Part II of the Report.

Magunta Sreenivasulu Reddy
Chairperson
Standing Committee on Housing and Urban Affairs

New Delhi;
10 December, 2025
19 Agrahayana, 1947 (Saka)

PART-I

I. INTRODUCTORY

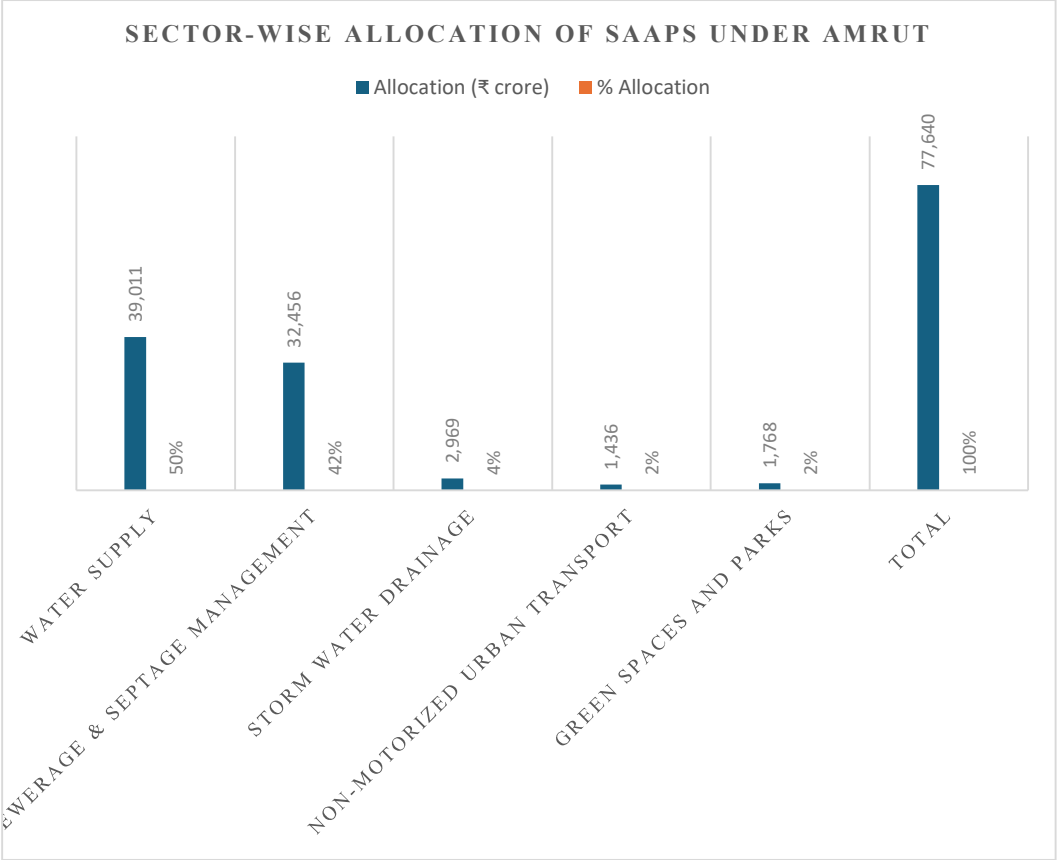
As reported in the NITI Aayog's Composite Water Management Index, India is home to 17% of world's population but has only 4% of the world's freshwater resources. According to a study titled "Reassessment of Water Availability in India using Space Inputs, 2019" conducted by Central Water Commission, the average annual per capita water availability in the country for year 2021 and 2031 has been assessed as 1486 cubic meter and 1367 cubic meter respectively. Annual per-capita water availability of less than 1700 cubic meter is considered as water stressed condition whereas annual per-capita water availability below 1000 cubic meters is considered as a water scarcity condition.

2. This broader national context is particularly pronounced in urban India, which is facing an increasingly critical challenge in ensuring safe, adequate and equitable access to drinking water. Rapid urbanisation, deteriorating water resources, fragmented institutional responsibilities and aging infrastructure have led to acute water stress in many cities. Urban water demand is projected to double by 2030, significantly widening the demand-supply gap. The Composite Water Management Index by NITI Aayog warns that several urban hubs are likely to face severe water shortages, posing serious threats to quality of life and economic growth. By 2030, India's urban population is expected to reach 600 million, with domestic water demand projected to exceed supply by nearly 50 billion cubic meters (BCM). The report further underlines that five of the world's 20 most water-stressed cities are in India, including Delhi, which ranks second globally. Poor water access also places nearly 8 million children under the age of 14 in urban India at direct risk due to health and hygiene vulnerabilities.

3. In response to this growing crisis, the Ministry of Housing and Urban Affairs launched the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) in June 2015 as a centrally sponsored scheme to address urban infrastructure needs. AMRUT was India's first urban water-focused mission aimed at ensuring universal and equitable access to water supply, improved sewerage infrastructure and enhanced urban liveability across 500 selected cities, covering 65% of the urban population. The mission targeted all Urban

Local Bodies (ULBs) with populations exceeding one lakh, including capital cities, river-stem cities, hill towns, island cities and tourist destinations.

4. Under AMRUT, total State Annual Action Plans (SAAPs) of ₹77,640 crore have been approved for projects including central share of ₹35,990 crore. Of total SAAP size, ₹39,011 crore (50%) has been allocated to water supply, ₹32,456 crore (42%) to sewerage & septage management, ₹2,969 crore (4%) towards storm water drainage, ₹1,436 crore (2%) for non-motorized urban transport and ₹1,768 crore (2%) has been allocated for green spaces and parks.

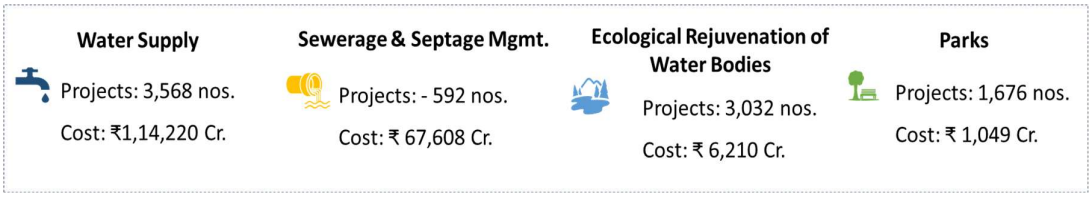


5. AMRUT Mission's core objectives included providing tap water connections to all 4.68 crore households, thus addressing a gap of 1.39 crore, enhancing sewerage and septage coverage from 31% to 62%, reducing waterlogging through stormwater drainage systems, and developing green spaces, parks and walkways. AMRUT also focused on energy efficiency through non-motorised transport, improved service delivery, financial sustainability of ULBs and efficient urban planning. States were empowered to plan,

approve and implement projects, with project funding kept separate from reform agendas and a mandatory five-year operations and maintenance provision for all assets created. AMRUT was subsumed under AMRUT 2.0 in October 2021. As reported by the Ministry, as on 01.10.2021, 2,020 ongoing projects worth ₹38,995.80 crore under AMRUT were subsumed under AMRUT 2.0. Of these works worth ₹ 34,922.27 crore have been completed and work worth ₹ 4073.13 are in progress and at advance stage of completion.

6. Launched in October 2021, AMRUT 2.0 is a five-year mission focused on ensuring urban water security, strengthening urban governance through reforms, building institutional and technical capacities and promoting community participation. With a total projected investment of ₹2,77,000 crore (including land costs) and a central share of ₹76,760 crore, the mission aims to make cities "water secure" and "self-reliant." Further, AMRUT 2.0 mandates the preparation of City Water Balance Plans (CWBP), City Water Action Plans (CWAP) and State Water Action Plans (SWAP) to guide targeted investment decisions and ensure effective planning and implementation. According to the Ministry, under AMRUT 2.0, a total of 4,883 CWBPs have been prepared to assess the water demand-supply gaps across urban areas. Furthermore, SWAPs from 35 States and Union Territories have been approved, covering 8,868 projects across 3,352 ULBs with a total investment commitment of approximately ₹1,90,084 crore.

Sector-wise Projects under AMRUT 2.0



7. The mission seeks to provide 2.68 crore functional household tap connections across approximately 4,900 statutory towns and 2.64 crore sewerage and septage connections in 500 AMRUT cities. Key thrust areas include source sustainability through rejuvenation of water bodies and aquifer management, development of green spaces and parks, and the creation of new water by recycling used water. AMRUT 2.0 also focuses on establishing a 24x7 water supply system and strengthening digital monitoring through infrastructure digitization using Supervisory Control and Data Acquisition (SCADA), IoT and sensor-based technologies. Infrastructure components cover the laying and

rehabilitation of water and sewer networks with last-mile connectivity, as well as construction of Water and Sewage Treatment Plants with definitive reuse provisions. The mission promotes innovation through partnerships with start-ups and encourages community engagement by involving women self-help groups and youth in operations and feedback mechanisms. Capacity building is a central feature, with training provided to contractors, plumbers and municipal officials. Service level benchmarking is undertaken through citizen-level surveys such as Pey Jal Survekshan. Also, a dedicated urban planning sub-scheme covers 675 cities with populations between 50,000 and 99,000 to enhance local planning capacity and ensure sustainable urban water governance.

8. With a view to study, assess and evaluate the progress and performance of the AMRUT Mission, both AMRUT 1.0 and AMRUT 2.0, the Committee took up the subject with special emphasis on urban drinking water for detailed examination and report. This focused approach on a specific component of the Mission was adopted to allow for a more in-depth and meaningful analysis of a sector that directly affects the health, dignity and daily lives of urban citizens.

9. To comprehensively assess these efforts, the Committee examined relevant background materials, took oral evidence of representatives and obtained post evidence written replies from the Ministry of Housing and Urban Affairs. Based on these inputs, the Committee have reviewed the status of implementation, systemic issues, institutional interventions and the effectiveness of AMRUT in enhancing access to and quality of urban drinking water. The report further analyses the extent to which the Mission align India's urban water sector with national development objectives and global commitments such as Sustainable Development Goal (SDG) 6.1, which aspires to ensure universal and equitable access to safe and affordable drinking water for all. The Committee's detailed analysis, observations and recommendations in this regard are presented in the succeeding paragraphs.

II. ISSUES CONFRONTING THE URBAN DRINKING WATER SCENARIO AND AMRUT'S INTERVENTION

10. As per the High-Powered Expert Committee (HPEC) Report 2011 on Indian Urban Infrastructure and Services, despite the strategic importance of water in urban development, the overall state of urban water service delivery in India remains sub-optimal when compared globally. Only about 64% of the urban population is covered through individual connections or public standposts, significantly lagging behind countries like China (91%) and Brazil (80%). Water supply is intermittent, typically ranging from 1 to 6 hours per day, as against continuous 24-hour supply in Brazil and China. Per capita supply varies widely from 37 to 298 Litre Per Capita per Day (LPCD) but often for limited hours. Most Indian cities lack metering, and nearly 70% of leakages stem from faulty household connections or malfunctioning meters. Non-revenue water (NRW) levels in Indian cities are alarmingly high at around 50% of total production, compared to 5% in Singapore. Long-distance water sourcing, inadequate infrastructure maintenance and absence of robust monitoring systems further exacerbate technical and commercial losses.

11. These inefficiencies highlight a deeper, systemic issues in achieving universal, equitable and sustainable urban water delivery. These challenges confronting the urban drinking water scenario and the interventions made under AMRUT and AMRUT 2.0 to address them have been detailed out in succeeding paragraphs.

(i) Excessive extraction of Groundwater and its Depletion

12. Citing concerns over excessive groundwater extraction and falling groundwater levels and the contamination of both surface and groundwater sources, the Committee sought details on the specific interventions undertaken under AMRUT and AMRUT 2.0 to address these issues, along with the outcomes achieved. In response, the Ministry informed that a multi-pronged strategy was adopted under both Missions to enhance source sustainability and reduce aquifer stress. To reduce excessive dependence on groundwater, AMRUT 1.0 supported 490 projects that successfully transitioned water supply from groundwater to surface water sources, collectively drawing over 6,700 MLD. Complementing this, awareness campaigns were conducted to promote water conservation.

13. The Ministry also submitted that in response to declining groundwater levels, both AMRUT 1.0 and 2.0 provisioned creation of permeable green spaces—5,092 acres under AMRUT 1.0 and 2,481 acres under AMRUT 2.0—along with the construction of rainwater harvesting structures and large-scale rejuvenation of water bodies.

14. The Ministry further stated that under AMRUT 2.0, a total number of 3,032 water bodies (1.17 lakh Acre area) are being rejuvenated to enhance local recharge, stormwater retention and climate resilience. To a query about the strategies and technologies adopted for aquifer recharge and groundwater management under AMRUT 1.0 and 2.0, the Ministry informed as under:

> "Shallow Aquifer Management (SAM) initiative under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) was launched as a pilot project across 9 diverse Indian cities. The initiative aimed to demonstrate the effectiveness of strategic interventions in managing shallow aquifers, focusing on aquifer mapping, the construction and restoration of recharge structures, and the integration of groundwater management into urban planning frameworks. Building on the successes and the lessons learned, initiative has been taken under SAM 2.0 to scale these efforts to 75 additional cities. ...
>
> Revival of the shallow aquifers through implementation of suitable recharge structures is an important strategy under the aquifer management plans, which will not only help cities to augment the water supply, but is also expected to address urban flooding issues.
>
> Under AMRUT/ AMRTUT 2.0, States/UTs are empowered to select, design, and implement groundwater projects tailored to local conditions and constraints. MoHUA supports States through spatial planning and performance tracking, with NRSC facilitating GIS and remote sensing-based mapping."

15. In response to a query on the specific activities that have been undertaken under these components and measurable outcomes achieved so far in various States/UTs, the Ministry stated as under:

> "Under AMRUT 2.0, multiple on-ground, planning-level and capacity building activities have been undertaken to advance aquifer recharge and groundwater management. More than 35 pilot recharge structures have been completed in 6 cities under SAM pilot phase In SAM 2.0, 75 cities have been identified for scaling groundwater interventions, with detailed groundwater recharge plans being prepared. So far, projects worth ₹4.5 crore have been sanctioned across 9 cities. These activities include aquifer mapping, restoration of defunct wells, construction of recharge wells and rainwater harvesting systems, and formulation of Managed Aquifer Recharge (MAR) strategies.

The National Remote Sensing Centre (NRSC), through Urban Water body Information System (UWAIS) has mapped 28,761 urban water bodies over 7.13 lakh hectares, aiding ULBs in identifying recharge zones. NIUA is concurrently supporting ULBs with training, knowledge sharing, and project implementation support."

16. When enquired about the number of water bodies that have been rejuvenated and their contribution to drinking water supply, the additional groundwater recharge potential created (in MCM/year) and the number of AMRUT cities in each State/UT which have integrated these rejuvenated water bodies into their main water supply systems, the Ministry furnished the following data:

"Under AMRUT 2.0, a total of 3,032 water bodies (1.17 lakh Acre area) rejuvenation projects have been approved so far. State/UT-Wise no. of waterbodies completed so far under AMRUT 2.0 are as below:

#	State/ UT	No. of projects completed	Area rejuvenated in acre
1	ANDHRA PRADESH	69	3,083.40
2	ARUNACHAL PRADESH	2	2.60
3	ASSAM	13	271.52
4	DELHI	15	22.20
5	GUJARAT	41	2,993.28
6	HIMACHAL PRADESH	9	24.82
7	JAMMU AND KASHMIR	15	3.16
8	JHARKHAND	24	71.63
9	KERALA	76	100.47
10	MADHYA PRADESH	118	2,837.06
11	MAHARASHTRA	4	13.82
12	ODISHA	4	5.45
13	PUDUCHERRY	3	4.61
14	RAJASTHAN	18	886.42
15	SIKKIM	1	43.98
16	TAMIL NADU	261	2,058.81
17	TRIPURA	2	0.99
18	WEST BENGAL	3	3.30
	Grand Total	**678**	**12,427.52**

17. In continuation, the Ministry added that while most rejuvenated water bodies under AMRUT are not directly used for drinking water, they play a vital indirect role in enhancing urban water security. By improving groundwater recharge, these water bodies help restore depleted aquifers, reduce pressure on over-extracted sources, and support municipal supply systems. This enables more efficient allocation of treated water for drinking purposes. Additionally, the restored water bodies support non-potable uses like horticulture, cleaning,

and recreation, effectively reducing pressure on potable supplies. Although exact volumes of drinking water contribution are not quantified and State/UT-wise data is not monitored under AMRUT 2.0, their cumulative impact is likely to strengthen urban water resilience and indirectly expanded the water available for drinking by freeing up existing sources and improving recharge potential.

18. As noted above, the National Remote Sensing Centre (NRSC), through the Urban Water body Information System (UWAIS) platform, has mapped 28,761 urban water bodies covering 7.13 lakh hectares, facilitating ULBs in identifying recharge zones. Under AMRUT 2.0, rejuvenation of 3,032 water bodies, spanning 1.17 lakh acres, is being approved so far. However, work has been completed on only 678 water bodies, covering 12,427 acres across 18 States/UTs, indicating that just around 22 % of the targeted water bodies have seen completion. Moreover, despite the mapping of nearly 29,000 urban water bodies, rejuvenation has been planned for only about 10.5% of them so far.

(ii) Contamination of Surface and Groundwater Resources

19. The 2017 United Nations World Water Development Report highlights that around 80% of global wastewater is released into the environment without being treated. Moreover, the World Health Organization (WHO) estimates that nearly 2 billion people worldwide depend on drinking water sources that are contaminated with faecal matter. ln view of the same, the Committee inquired about the extent to which the AMRUT Scheme has addressed the issue of untreated wastewater discharge in Indian cities, given that globally 80% of wastewater goes untreated. In response, the Ministry submitted as under:

> "Sanitation is a State subject, and its planning, execution, and operation lie with the Urban Local Bodies (ULBs). The Ministry of Housing and Urban Affairs (MoHUA) supplements the efforts of States and ULBs by supporting infrastructure development for sewerage and septage management through flagship schemes like AMRUT and AMRUT 2.0. The mission empowers the States/UTs to select, appraise, and implement projects based on local conditions and requirements, as per Mission guidelines.
>
> Under AMRUT (launched in 2015), in the sewerage sector, a total of 890 projects worth ₹34,447 crore were undertaken, resulting in the laying of approximately 19,598 km of sewer network. These efforts have contributed to the creation of 6,231 MLD of sewage treatment plant (STP) capacity, of which 4,447 MLD has been completed and 1,784 MLD is under progress. Additionally, 1,437 MLD of capacity for the recycle and reuse of treated wastewater has been developed

under AMRUT 1.0. The Mission has also enabled the provision of around 157 lakh household sewer connections and taken up 55 Faecal Sludge Treatment Plants (FSTPs) with a total treatment capacity of 2,630 KLD.

So far under AMRUT 2.0 has taken up 586 sewerage and used water management projects with a total investment of ₹68,461.77 crore. Planned infrastructure includes the augmentation or development of 6,964 MLD of STP capacity and the addition or rehabilitation of 35,268 km of sewer networks, provide or improve 1.59 crore sewer connections across AMRUT cities."

(iii) Water Quality Standards and Norms

20. The Committee inquired about the mechanisms established under AMRUT to monitor and enforce compliance with water quality standards in rapidly urbanizing cities. Clarification was also sought on whether a robust and transparent water quality testing framework exists across towns covered under the Mission. In response, the Ministry provided the following information:

"AMRUT does not prescribe separate guidelines for water quality. States and ULBs are expected to adhere to IS 10500:2012 standards for drinking water and for waste water quality norms set by CPCB. Further, under AMRUT and AMRUT 2.0 advocates to monitor and ensure compliance with water quality standards in urban areas."

21. The Ministry further stated that key initiatives for ensuring water quality under AMRUT include the deployment of Supervisory Control and Data Acquisition (SCADA) and IoT-based systems for real-time monitoring of water supply and sewerage networks; establishment of dedicated water quality testing laboratories at Water Treatment Plants (WTPs) and Sewage Treatment Plants (STPs); community engagement through women Self Help Groups (SHGs) under the *AMRUT Mitra* initiative; incentive-driven quality compliance through the *Jal Hi AMRIT* initiative; and focused capacity building efforts.

22. However, during the Committee's sitting held on 04 November 2025, on the issue of drinking water quality, at one point, the Ministry submitted that 99% of water-quality samples had passed at the WTP level and 98.82% at the household level, yet, in another instance within the same presentation, only 66% of household-level samples were shown to meet BIS drinking water standards at household level. When the Committee sought clarification regarding these on these divergent datasets, the Ministry deposed as under:

"That data we have fetched from the WTP labs. That is a purely different data covering different cities. This is a purely different data with different cities."

23. In response to the Committee's query on how the success of AMRUT is assessed in terms of actual health outcomes, specifically regarding waterborne diseases linked to poor water quality and whether there is any evidence of improved public health indicators in AMRUT cities following implementation, the Ministry submitted the following reply:

"As per the recent study by World Health Organization on Jal Jeevan Mission on urban and rural areas, it is concluded that provision of safely managed drinking-water to all households in the country, would result in averting almost 4,00,000 diarrheal disease deaths. Averting these deaths would lead to savings of almost 14 million Disability Adjusted Life Years (DALYs), resulting in estimated economic savings of up to US $101 billion (~₹8,25,000 crore). The WHO study also estimates that provision of tap water to all households in the country is likely to result in 6.6 crore hours of time saved on water collection for the households, especially for women. Time so saved, can be utilised by women in taking better care of their homes and in other productive income generating activities. For girls, such time saved could be utilised in studies, resulting in better learning outcomes."

24. While the data presented pertains primarily to the Jal Jeevan Mission, the findings are broadly indicative of the public health and socio-economic benefits of improved water supply systems, which AMRUT also seeks to achieve in urban areas.

(iv) Outdated and Inadequate Water Treatment Infrastructure

25. Building on the need for water quality and public health, the Committee further sought to assess the extent to which AMRUT has contributed to strengthening urban water supply infrastructure by modernizing outdated treatment facilities and expanding overall capacity and to evaluate improvements in operational efficiency. The Committee also desired to know the State/UT-wise data on the number and capacity of old Water Treatment Plants (WTPs) upgraded, as well as new WTPs commissioned along with their combined treatment capacity. In response, the Ministry furnished the following information:

"Under AMRUT 1.0, out of 32 old WTPs targeted to be upgraded/augmented, 31 have been completed. State/ UT-wise no. and capacity of WTPs that have been upgraded/ augmented under AMRUT is as below:

#	State/ UT	No. of Old WTPs	Capacity of Old WTPs (MLD)
1	Arunachal Pradesh	2	1.5
2	Assam	10	44.40
3	Dadra and Nagar Haveli	1	11

4	Gujarat	2	25
5	Haryana	2	27
6	Karnataka	5	141.89
7	Kerala	1	10
8	Madhya Pradesh	8	47
	Grand Total	31	307.79

Under AMRUT 2.0, so far, 133 WTPs of 1652.49 MLD capacity have been approved for augmentation/rehabilitation of which, 2 WTPs with capacity 6.03 MLD have been completed so far. The State-wise details are as below-

State	Approved project (No.)	WTP Capacity to be augmented (MLD)	Completed project (No.)	Achieved WTP capacity (MLD)
Andhra Pradesh	2	12		
Assam	5	25.99		
Bihar	1	41.5		
Gujarat	11	718.4		
Haryana	3	9.5		
Himachal Pradesh	2	2.03		
Jammu & Kashmir	1	21.45		
Jharkhand	1	8.1		
Karnataka	7	27.83		
Kerala	10	64.1		
Madhya Pradesh	43	156.029		
Maharashtra	12	248.97		
Manipur	2	2.6		
Mizoram	1	2.5		
Odisha	2	6	1	3
Punjab	3	14.755		
Rajasthan	7	52.8		
Sikkim	1	6		
Tamil Nadu	5	14.1	1	3.03
Telangana	4	30.41		
Uttar Pradesh	5	30.84		
Uttarakhand	1	3.518		
West Bengal	4	153.07		
Grand Total	133	1652.492	2	6.03

26. It may be seen above that under AMRUT 1.0, out of 32 old and inefficient WTPs targeted for upgradation or augmentation, 31 have been completed, covering a cumulative capacity of 307.79 MLD across eight States/UTs with Karnataka accounting for the highest

upgraded capacity (141.89 MLD). However, under AMRUT 2.0, there remains a substantial gap between approvals and on-ground progress. While 133 WTPs with a combined capacity of 1,652.49 MLD have been sanctioned across 23 States/UTs, only 2 WTPs, one each in Odisha and Tamil Nadu, have been completed so far, contributing a mere 6.03 MLD, which is less than 0.4% of the approved capacity. Major States with significant sanctioned capacities, such as Gujarat (718.4 MLD), Maharashtra (248.97 MLD) and Madhya Pradesh (156.03 MLD) have reported zero completion to date, indicating slow execution.

27. As regards new Water Treatment Plants (WTPs) which were commissioned under AMRUT along with their combined treatment capacity (in MLD), the information furnished by the Ministry is given below:

SI NO	State/UT's	Target set for new Water Treatment Plants under AMRUT		No. of new Treatment Plants commissioned under AMRUT and their capacity (in MLDs)		Gap that persists in treatment of water (in MLDs) after AMRUT
		No.	Capacity	No.	Capacity	
1	Andhra Pradesh	15	319	11	272	47
2	Arunachal Pradesh	2	8	2	8	0
3	Assam	11	100.8	10	58.1	42.7
4	Bihar	1	34	1	34	0
5	Chandigarh	4	68	4	68	0
6	Chhattisgarh	9	352	8	317	35
7	Delhi	1	3	1	3	0
8	Gujarat	14	930.85	14	930.85	0
9	Haryana	8	95.8	8	95.8	0
10	Jharkhand	5	119	5	119	0
11	Karnataka	6	184.48	6	184.48	0
12	Kerala	5	255	4	155	100
13	Madhya Pradesh	12	287.5	12	287.5	0
14	Maharashtra	15	683.7	12	445.7	238
15	Mizoram	1	34.8	1	34.8	0
16	Odisha	5	86	5	86	0
17	Punjab	5	518.89	2	113	405.89
18	Rajasthan	2	7.8	2	7.8	0
19	Tamil Nadu	7	854.4	6	729.4	125
20	Tripura	2	16.5	2	16.5	0

21	Uttar Pradesh	5	405	4	210	195
22	West Bengal	14	450.13	14	450.13	0
	Total	149	5,814.65	134	4,626.06	1,188.59

28. Examination of the above data suggests that under AMRUT, 149 new WTPs with a combined planned capacity of 5,814.65 MLD were targeted across 23 States/UTs, of which 134 plants have been commissioned, achieving a total treatment capacity of 4,626.06 MLD. This translates to a commissioning rate of nearly 90% in terms of number of plants and around 80% in terms of treatment capacity. However, a significant capacity gap of 1,188.59 MLD still persists between the planned and achieved outcomes. While several States such as Gujarat, Madhya Pradesh, Jharkhand, Karnataka, Assam and West Bengal have fully met their commissioning targets, others show substantial shortfalls. Notably, Punjab achieved only 113 MLD of the planned 518.89 MLD, leaving a gap of 405.89 MLD, Maharashtra continues to have a deficit of 238 MLD, Tamil Nadu, Uttar Pradesh and Kerala shows a gap of 125 MLD, 195 MLD and 100 MLD respectively. These disparities highlight the uneven progress across States.

(v) Aging and Insufficient Infrastructure

29. In order to evaluate the efficiency, equity and sustainability of urban water supply services under AMRUT and to assess both service delivery outcomes and operational efficiency across AMRUT-covered areas, the Committee sought State/UT-wise data on the percentage of urban households with access to piped water supply, the number of cities/ULBs providing 24x7 continuous water supply, the level of non-revenue water as a share of total supply, overall water distribution losses and the extent of water connection metering. In response, the Ministry provided the following information:

SI. No.	**States/ UTs**	**Urban Households with access to piped water supply (%) (2021)**
a.	b.	c.
1	Andaman And Nicobar Islands	100
2	Andhra Pradesh	70.02
3	Arunachal Pradesh	37.74
4	Assam	16.28
5	Bihar	82.89
6	Chandigarh	95.06
7	Chhattisgarh	63.75

8	Dadra N.H & D & D	100
9	Delhi	81.85
10	Goa	95.17
11	Gujarat	86.86
12	Haryana	75.42
13	Himachal Pradesh	74.78
14	Jammu And Kashmir	68.87
15	Jharkhand	35.7
16	Karnataka	70.95
17	Kerala	49.89
18	Ladakh	11.46
19	Lakshadweep	-
20	Madhya Pradesh	76.98
21	Maharashtra	83.64
22	Manipur	39.94
23	Meghalaya	59.14
24	Mizoram	66.22
25	Nagaland	17.07
26	Odisha	86.29
27	Puducherry	92.86
28	Punjab	91.67
29	Rajasthan	80.36
30	Sikkim	37.92
31	Tamil Nadu	54.87
32	Telangana	92.47
33	Tripura	60.29
34	Uttar Pradesh	44.15
35	Uttarakhand	88.89
36	West Bengal	65.19

30. The reply provided by the Ministry addresses only one aspect of the Committee's query, *i.e.*, the State/UT-wise percentage of urban households with access to piped water supply as of 2021. However, no information was furnished regarding the number of cities or ULBs providing 24x7 continuous water supply, the level of non-revenue water as a share of total supply, overall distribution losses or the extent of water connection metering.

31. Moreover, the above State/UT-wise data provided by the Ministry on percentage of urban households with access to piped water supply as of 2021 reflects significant variation in the percentage of urban households with access to piped water supply across States and UTs. While some regions like Andaman & Nicobar Islands, Dadra and Nagar Haveli & Daman and Diu, Punjab, Telangana and Puducherry report over 90% coverage, several States lag considerably behind. Ladakh (11.46%), Nagaland (17.07%), Assam (16.28%),

Arunachal Pradesh (37.74%), Jharkhand (35.7%) and Uttar Pradesh (44.15%) are among those with less than 50% coverage.

32. The Committee further sought to know the Urban Household water pipeline coverage (in kms) before AMRUT intervention, after AMRUT intervention and the gap that persists post AMRUT to assess the scale of pipeline coverage and infrastructure. In reply, the Ministry has provided the data on the targeted and achieved length of water network under AMRUT which is as below:

#	Name of State / UTs	Network Length Target (in KMs)	Network Length Achieved (in KMs)
1	Andaman and Nicobar Islands	26.07	26.19
2	Andhra Pradesh	3178.54	2,765.23
3	Arunachal Pradesh	55.53	49.98
4	Assam	1574.1	442.05
5	Bihar	4361.77	4,443.69
6	Chhattisgarh	3719.003	3,664.92
7	Dadra and Nagar Haveli	62.6	62.60
8	Daman and Diu	63	63.00
9	Delhi	172.5	172.50
10	Gujarat	1679.05	1,470.88
11	Haryana	1896.73	1,777.59
12	Himachal Pradesh	48.3	50.35
13	Jammu and Kashmir	14.92	14.92
14	Jharkhand	2345	2,028.37
15	Karnataka	5539.71	5,448.16
16	Kerala	2084.12	2,042.90
17	Madhya Pradesh	6805.93	6,656.17
18	Maharashtra	6785.48	6,962.71
19	Manipur	356.00	383.40
20	Mizoram	103.27	103.27
21	Odisha	2841.59	2,841.59
22	Puducherry	78.8	78.77
23	Punjab	1615.45	1,595.66
24	Rajasthan	3227.08	2,986.23
25	Tamil Nadu	6687.4	6,637.72
26	Telangana	4336.54	4,213.17
27	Tripura	167.55	167.55
28	Uttar Pradesh	6163.82	5,994.43
29	Uttarakhand	794.64	763.21
30	West Bengal	3889.29	9,612.30
	Total	**70,673.783**	**73,519.51**

33. The data reveals that under AMRUT, against a total targeted water pipeline network length of 70,673.78 km, the Ministry reports an achievement of 73,519.51 km, indicating

an overall completion exceeding 100% of the target. Several States/UTs including Maharashtra, West Bengal, Manipur, Andaman & Nicobar Islands, Himachal Pradesh, Odisha, Dadra & Nagar Haveli and Daman & Diu have achieved or marginally surpassed their respective targets. Whereas Assam achieved only 442.05 km against a target of 1,574.10 km, reflecting a completion rate of less than 30%.

34. Further, under AMRUT 2.0, 22,147 km of distribution network is proposed to be replaced. State-wise details provided by the Ministry are as follows:

#	State/UT	Length of existing distribution network to be replaced (in km)
1	ANDHRA PRADESH	455.78
2	ASSAM	43.00
3	CHHATTISGARH	106.50
4	GOA	106.12
5	GUJARAT	2,232.42
6	HARYANA	884.07
7	HIMACHAL PRADESH	211.02
8	JAMMU AND KASHMIR	398.58
9	JHARKHAND	-
10	KARNATAKA	721.32
11	KERALA	829.13
12	MADHYA PRADESH	1,803.75
13	MAHARASHTRA	2,652.32
14	MANIPUR	10.18
15	MIZORAM	32.87
16	ODISHA	917.59
17	PUDUCHERRY	112.86
18	PUNJAB	363.74
19	RAJASTHAN	2,831.93
20	TAMIL NADU	2,503.14
21	TELANGANA	539.11
22	TRIPURA	8.00
23	UTTAR PRADESH	3,262.28
24	UTTARAKHAND	162.35
25	WEST BENGAL	959.06
	Grand Total	22,147.13

35. While the Ministry has furnished State/UT-wise details of the 22,147 km of existing distribution network proposed to be replaced under AMRUT 2.0, no information has been provided regarding the physical progress achieved so far against this target. When asked to

provide the impact on non-revenue water (NRW) levels post-rehabilitation of pipelines, city-wise within each State/UT, the Ministry replied as given:

> "Under AMRUT /AMRUT 2.0 states are empowered to plan, design and implement the projects as per their local conditions/ constraints and priority within broad contours of Mission Guidelines. AMRUT encourages cities to adopt smart metering systems—including automated meter readers (AMRs)—to improve water accounting and reduce losses."

(vi) High Non-Revenue Water (NRW) and Operational Losses

36. HPEC Report on Indian Urban Infrastructure and Services 2011 highlighted that non-revenue water (NRW) accounts for 50 per cent of water production, compared with 5 percent in Singapore. Recognizing the magnitude of this issue, the AMRUT Mission guidelines have underscored the need to reduce NRW to below 20%. To support this objective, the Mission provides technical and financial assistance to States and Urban Local Bodies (ULBs) for undertaking targeted interventions. In this context, the Committee sought data on the current levels of NRW in AMRUT cities/ULBs and inquired how many of them have successfully met the Mission's target of reducing NRW to below 20%. The Ministry's response is as follows:

> "Under AMRUT 2.0, performance-linked incentives have been provisioned to encourage States and Urban Local Bodies (ULBs) to reduce Non-Revenue Water (NRW). An amount of ₹400 crore has been earmarked for States upon achieving NRW reduction to below 20% at the ULB level. The eligibility for claiming these incentives is based on the following milestones:
>
> i. Installation of water meters at all water sources and bulk distribution points within the ULB.
>
> ii. Establishment of District Metered Areas (DMAs) covering at least 50% of the ULB population, with 100% metering within these DMAs (including household meters), and reporting of NRW in DMAs.
>
> iii. Creation of a Non-Revenue Water Cell in the ULB for conducting leakage mapping and water audits. ULBs already having DMAs covering 50% of the population are also eligible under this criterion.
>
> The States/ UTs have not yet submitted claim for reform incentive for reducing NRW to below 20% as per the AMRUT 2.0 guidelines."

37. Considering that AMRUT proposes to prepare a comprehensive non-revenue water reduction plan which can be achieved by installation of smart water meters with automated meter readers to reduce water losses, the Committee sought to know the percentage of

households in each AMRUT city which have been equipped with functioning smart water meters and also percentage of reduction in non-revenue water due to installation of smart meters in AMRUT cities / ULBs. The Ministry replied as under:

> "Water is a State Subject. The responsibility of planning, implementation, and monitoring of smart water metering, including Non-Revenue Water (NRW) reduction initiatives, lie with the respective States and Urban Local Bodies (ULBs). Under AMRUT & AMRUT 2.0, projects have been selected, appraised, approved and implemented by the concerned States/ Union Territories (UT)/ ULBs as per their local conditions/ constraints and priority with in broad contours of Mission Guidelines."

(vii) Intermittent and Unequal Water Supply

38. Highlighting why cities should deliver continuous water supply, High-Powered Expert Committee (HPEC) in its 2011 report state that in a continuously pressurised distribution system, contaminants surrounding the pipelines cannot penetrate even if there are breaks in the pipes and joints. Without continuous pressure, street run-off, drainage water, raw sewage from adjacent sewer lines and leaky septic tanks get sucked into the water mains. A distribution system which is operated under continuous supply conditions has longer life as it is subjected to fewer shocks (water hammer effect) and changes in pressure than one which is operated under intermittent supply conditions. There is no need for households to invest in domestic storage, booster pumps, supplementary boreholes, domestic filters, and other treatment systems when water is in continuous supply. Also, there is no need to purchase water from private suppliers. Continuous water supply reduces unregulated recourse to groundwater and is, therefore, environment friendly.

39. However, as noted in the same HPEC Report, per capita supply of water in Indian cities ranges from 37 Litre Per Capita Day (LPCD) for a limited duration and the duration of water supply in Indian cities ranges from 1 hour to 6 hours. The Ministry has informed that against the prescribed benchmark of 135 LPCD, the average supply in urban areas stands at 122 LPCD, based on data reported by cities under the City Water Balance Plan (CWBP).

40. To a committee's query on the average duration of water supply (hours per day) before and after AMRUT intervention in AMRUT cities of each State/UT, the reply of the Ministry is as follows:

> "Water is a State subject and management of water is the responsibility of the State Government. Government of India supplements the efforts of the States through schematic interventions/ advisories. It provides financial and technical support to the States through various schemes/ Missions such as Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and AMRUT 2.0. No comparative study has been conducted under AMRUT in this regard."

41. To another query on the details regarding states/cities and towns which are able to supply 24x7 safe drinking water which is one of the objectives of AMRUT Scheme, the Ministry informed that under AMRUT 2.0, a total of 382 projects aimed at enabling 24x7 water supply have been approved. These projects, worth ₹25,296.04 crore, cover at least one ward or District Metering Area (DMA) in the respective urban areas**.**

(viii) Absence of National Benchmarks for Per Capita Water Supply

42. The Committee sought the information regarding per capita water availability, demand and supply as well as gap between demand and supply to know present water scenario across various States/UTs. In reply, the Ministry stated as under:

> "Water is a State subject and management of water is the responsibility of the State Government. Government of India supplements the efforts of the States through schematic interventions/ advisories. It provides financial and technical support to the States through various schemes/ Missions such as Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and AMRUT 2.0.
>
> Above information are not being maintained under AMRUT and AMRUT 2.0."

43. ln the AMRUT Guidelines, the approach to achieve Service Level Benchmarks (SLBs) which are indicators and standards set by the Ministry, is described as a gradual or incremental process called "incrementalism". Under this approach, SLBs are to be progressively attained in alignment with national priorities. ln view of the same, the Committee asked the Ministry to provide the information showing achievements of SLB in the 'water supply' sector by the ULBs. The Ministry submitted as under:

"Water is State subject and under AMRUT/ AMRUT 2.0 states are empowered to plan design, approve and implement the projects. MoHUA only approve the projects as per broad guidelines of Missions. AMRUT & AMRUT 2.0 Schemes are in progress. The quality quantity & coverage increased in the cities post commissioning of the projects. The information related to major service level benchmarks in water supply is as below:

Sl. No.	**Indicator**	**Benchmark**	**No. of ULBS under AMRUT achieved the benchmark as on date (State/UT-wise)**
01.	**Coverage**	100%	States have achieved over all coverage of 75% w.r.t. 2021 population.
02.	**Quantity**	135 lpcd	Average in Urban area supplying 122 lpcd as per data reported by cities City Water Balance Plan (CWBP)
03.	**Quality**	100%	As per information updated by States on collaboration platform for around 20 lakh samples, 99% samples passed at WTP and 98.82% samples passed at household level on testing on key parameters of E-coli, Arsenic and fluoride.

44. The Ministry has further clarified that the Ministry along with Central Public Health and Environmental Engineering Organisation (CPHEEO) has issued manuals and advisories recommending Litres per capita per day (LPCD) norms, with State Level Technical Committee (SLTCs) responsible for ensuring compliance in DPRs.

(ix) Disparity between Wastewater Generation and Treatment Capacity

45. The Committee sought to obtain State/UT-wise data on urban wastewater management, specifically, the information on the volume of wastewater generated, installed treatment capacity, proportion of wastewater effectively treated, the treatment gap, percentage discharged untreated into the environment and the share of treated wastewater reused for both potable and non-potable applications. Citing the information provided by the Chief Secretaries of 31 States/UTs to NGT dated February 2021, the information furnished by the Ministry is as below:

No.	**State**	**Sewage Generation (in MLD)**	**Existing STP (capacity in MLD and No.)**	**Capacity Utilization (In MLD)**	**Gap in Treatment at present (in MLD)**
1	**Andhra Pradesh**	1463.20	515.85 (43 STPs)	473.77 (91%)	947.35
2	**Assam**	435.53	0	0	435.53

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present (in MLD)
3	**Bihar**	651.5	230 (6STPs)	100 (44%)	421.5
4	**Chhattisgarh**	600	73.1 (3STPs)	6 (8%)	526.9
5	**Daman, Diu & Dadra Nagar Haveli**	21.2	17.21 (2STPs)	6.1 (35%)	3.9
6	**Delhi**	3273	2715 (35STPs)	2432 (90%)	558
7	**Goa**	112.53	78.35 (9STPs)	29 (37%)	34.18
8	**Gujarat**	4003	3485 (73STPs)	2739 (78%)	518
9	**Haryana**	1267	1892 (155STPs)	1189(62%)	-
10	**Himachal Pradesh**	163.5	120.5 (65STPs)	76.8 (64%)	43
11	**Jammu & Kashmir**	523	139 (15STPs)	82.9 (60%)	383.08
12	**Jharkhand**	452	108 (14STPs)	83%	343.8
13	**Karnataka**	3356.5	2242 (125STPs)	1513.5 (67%)	1114
14	**Kerala**	317	124.15 (13 STPs)	91.12 (73%)	192
15	**Madhya Pradesh**	2183.65	618.23 (23 STPs)	472.6 (76%)	1565.4
16	**Maharashtra**	9758	7747 (142STPs)	4207 (54%)	2011
17	**Manipur**	115	27 (1STP)	9 (33%)	88
18	**Meghalaya**	75	1.85 (8STPs)	1.82 (98%)	73
19	**Mizoram**	68	10 (1STP)	0	58
20	**Nagaland**	44.3	25.4 (1STP)	0	18.9
21	**Odisha**	367	91 (5STPs)	70 (76%)	276
22	**Puducherry**	88	56 (5STPs)	35 (62%)	32
23	**Punjab**	2111	1628.5 (116 STP)	80%	482.5
24	**Rajasthan**	1551	999 (80STPs)	694.5 (69%)	552

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present (in MLD)
25	**Sikkim**	47.68	19.5 (7STPs)	60%	28
26	**Tamil Nadu**	3673.3	1616 (66STPs)	919 (56%)	1320
27	**Telangana**	2613	888 (31STPs)	735.8 (82%)	1724.45
28	**Tripura**	82.5	8 (1STP)	3 (37%)	74.5
29	**Uttarakhand**	329.3	379 (63STPs)	232.9 (61%)	-
30	**Uttar Pradesh**	5500	3370 (106STPs)	2630.6 (78%)	2130
31	**West Bengal**	2758	776.32 (47 STPs) + 910 MLD addl. treatment through EKW	289.89 (37%)	1071.68
	Total	**48,003.69**	**30,000.96 (1261 STPs)**	**55.9%**	**17,026.58**

46. The data reveals a critical gap in India's urban sewage treatment infrastructure. With total sewage generation at approximately 48,004 MLD, the country has installed treatment capacity of 30,001 MLD spread across 1,261 STPs. However, actual utilization is only about 55.9%, pointing to significant under performance or operational inefficiencies. States like Assam, Bihar, Chhattisgarh, Jharkhand and many in the Northeast exhibit stark shortfalls, either lacking any STP capacity or suffering from serious under utilization of existing facilities, reflecting institutional and infrastructural shortcomings. Even high-capacity States such as Maharashtra and Uttar Pradesh have treatment gaps exceeding 2000 MLD. While some states like Andhra Pradesh, Gujarat, Jharkhand, Meghalaya, Punjab, Telangana and Delhi show higher utilization rates (above 75%), others like Goa, Karnataka, Tamil Nadu and West Bengal perform poorly in terms of STP efficiency. Notably, Haryana and Uttarakhand report treatment capacities exceeding generation. Moreover, the cumulative treatment shortfall of over 17,000 MLD over one-third of total sewage generation is based on 2021 data.

(x) Poor Reuse of Treated Wastewater

47. Recognizing that potable water continues to be used for non-potable purposes in many cities, the Committee sought to assess the extent to which treated wastewater is being

reused and whether AMRUT towns are making meaningful progress in substituting potable water with treated water. In response, the Ministry furnished the following information:

> "Water is State subject. Specific data on the extent of indiscriminate use of potable water use for all urban needs is not maintained in MoHUA. However, AMRUT 2.0 promotes the use of treated used water for non-potable purposes, including agriculture in peri-urban areas, and encourages cities to partially meet their water demand through reuse, thereby reducing indiscriminate use of potable water. So far, 1,437 MLD of treated wastewater reuse capacity has been created under AMRUT, and an additional 1,943 MLD is planned under AMRUT 2.0. Initiatives such as "Drink from Tap", smart metering, use of IoT, are promoting efficient and judicious use of potable water, while planning efforts like City Water Balance Plans (CWBPs) are helping cities map water demand and encourage appropriate water use segmentation."

48. The Committee sought clarity on how AMRUT promotes or mandates the implementation of decentralized wastewater treatment and reuse systems to reduce dependence on freshwater sources and enhance overall water quality and whether such decentralized initiatives are being carried out at ward or neighbourhood levels. The Committee also questioned whether AMRUT incorporates a policy or institutional approach that views wastewater as a valuable resource, particularly in urban areas facing water scarcity or stress, and whether state or city-level reuse guidelines have been integrated into AMRUT-supported projects. In response, the Ministry provided the following details:

> "AMRUT 2.0 strongly promotes the reuse of treated wastewater as a key strategy for building a circular urban water economy. Reuse is an admissible project component under the Mission, and States are encouraged to integrate end-to-end reuse plans including tertiary treatment and distribution within STP/ sewerage projects.
>
> So far, 1,437 MLD of additional reuse capacity has been created under AMRUT, taking the total to 5,614 MLD, with another 1,943 MLD under implementation. States are further encouraged to scale this up to 10,000 MLD by 2030. Treated water is increasingly being used for horticulture, industrial purposes, flushing, and irrigation in peri-urban areas, with the Mission also promoting rural–urban reuse synergy and waterbody recharge.
>
> AMRUT 2.0 also includes specific reform provisions for promotion to reuse of treated water. States must notify policies on treated water reuse and ensure that all Urban Local Bodies (ULBs) pass formal resolutions to adopt recycling and reuse. So far, 11 States have notified such policies. These reforms are supported by financial incentives and performance-linked funding under the Mission.
>
> Jal Hi AMRIT" under AMRUT 2.0 reforms aims to incentivize States and Union Territories (UTs) to efficiently manage sewage treatment plants for recyclable

treated water meeting environmental standards on sustained basis. … An amount of Rs.1300 crore has been earmarked under this initiative.

The Technology Sub-Mission under AMRUT 2.0 supports this vision by promoting affordable, indigenous reuse technologies and encouraging innovation in the sector."

(xi) Inadequate Institutional and Technical Capacity at Urban Local Bodies (ULBs)

49. As per the October 2015 guidelines of the 14th Finance Commission (FC), Municipal Corporations and Municipalities were expected to prepare proper plans, in line with state rules and regulations, to utilize the 14th FC grants for delivering basic services such as water supply, sanitation, sewage and solid waste management. However, it is reportedly found that in many Centrally and State sponsored schemes related to essential services like water supply, ULBs had little to no involvement in the planning process, limiting their ability to address local needs effectively. The Committee desired to know the measures taken to empower ULBs with planning and financial authority for water supply functions, as envisaged under the 74th Constitutional Amendment. The reply furnished by the Ministry is as under:

"Under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and AMRUT 2.0, key provisions have been instituted to strengthen the role of ULBs in water supply planning and execution.

As per Para 6.7 of the AMRUT 2.0 Guidelines, ULBs are designated as the primary implementing agencies responsible for planning, tendering, awarding, and executing projects approved under the State Water Action Plan (SWAP). States have been advised to ensure that these functions are carried out by ULBs in alignment with their constitutional responsibilities under the 12th Schedule, which includes water supply and sanitation.

In cases where ULBs lack sufficient technical capacity, the guidelines permit implementation support from specialized parastatal agencies. To further enable effective planning and execution, States and ULBs are encouraged to engage Project Development and Management Consultants (PDMCs) to provide comprehensive technical assistance across project development and management stages."

50. The Ministry's response indicates that under AMRUT and AMRUT 2.0, ULBs are designated as the primary implementing agencies for water supply projects. However, the Committee note that in practice, ULB involvement has often been minimal, with parastatal agencies continuing to dominate the planning and execution processes undermining the

constitutional intent of empowering ULBs and limiting their ability to address local needs effectively. In this context, the Committee sought to know whether ULBs were actively involved in the preparation of Service Level Improvement Plans (SLIPs) under AMRUT and how is the autonomy of ULBs justified when parastatals continue to monopolize the planning, financing, and execution of water supply projects. The reply furnished by the Ministry is as under:

> "Under the AMRUT and AMRUT 2.0 Missions, States have been empowered to select, appraise, and implement projects within the Mission framework, following approval from the Apex Committee of MoHUA. As per Para 6.7 of the AMRUT 2.0 Guidelines, ULBs are the primary agencies responsible for planning, tendering, awarding, and implementing projects approved under the State Water Action Plan (SWAP). However, in cases where ULBs lack technical capacity, specialized parastatal agencies are assisting in implementation."

51. In this regard, the Ministry's data on municipal bond mobilization by cities is noteworthy. According to the Ministry, so far 17 cities have raised ₹5,309 crore through issue of municipal bonds. This indicates that out of 500 AMRUT cities, only 17 cities were able to tap into this financing mechanism, reflecting the limited financial capacity and preparedness of most city corporations.

(xii) Weak Community Participation and Low Public Awareness

52. To evaluate how far community participation and local governance, particularly the involvement of ULBs and local residents are embedded in the monitoring, maintenance and long-term sustainability of AMRUT projects, and to determine whether the Mission promotes people-centric, participatory governance beyond mere infrastructure development, the Committee sought clarification from the Ministry. In response, the Ministry stated that citizen engagement is being promoted through initiatives such as AMRUT Mitras, involvement of Self-Help Groups (SHGs), Information, Education and Communication (IEC) campaigns, and workshops organized with States, Cantonment Boards, and parastatal bodies to encourage shared learning and community participation. The Ministry further added:

> "Community participation and local governance play a significant role in maintaining water quality under AMRUT projects:
>
> **Community Participation:** To ensure community participation, Self-Help Groups (SHGs) are trained and mobilized for water quality testing and

infrastructure management. The "AMRUT Mitra" initiative focuses on the active involvement of SHGs and women empowerment in the water sector. These groups are trained to conduct household-level water quality testing using field testing kits. This decentralized monitoring enhances local awareness about water quality, and fosters a sense of responsibility among residents.

Local Governance (ULBs): The Mission aims to strengthen Urban Local Bodies (ULBs) through capacity building. This includes training municipal engineers, technicians, and operational staff in best practices for water treatment, distribution, leak detection, and wastewater management. Enhanced capacity at the local level directly translates to better adherence to water quality standards."

53. On the Committee's observation regarding the limited awareness among citizens about AMRUT projects, the Ministry acknowledged that a major challenge in the Mission's implementation is that communities often remain unaware of the works being undertaken in their own localities. During the sitting held on 04 November 2025, the representatives of the Ministry deposed as under:

"At times, the citizens communities do not realise what projects are happening. It is happening under AMRUT, it is happening under this. Therefore, the involvement of communities is very, very important in the cities. So, these are largely the challenges that we have enlisted, that we have faced in the mission, that we are trying our best to overcome."

(xiii) Absence of Integrated Urban Water Management

54. Ensuring safe and adequate drinking water to urban households involves multiple Ministries and agencies across various stages such as water source conservation and restoration, treatment, distribution and wastewater management. ln this context, the Committee desired to know the institutional or coordination mechanisms which have been established under AMRUT 1.0 and 2.0 to ensure effective collaboration among several central Ministries, State departments, parastatal bodies and other relevant stakeholders for integrated planning, implementation and monitoring of urban water supply systems. To which, the Ministry submitted as below:

"Under AMRUT 1.0 and 2.0, institutional mechanisms have been established to ensure effective coordination among Central Ministries, State departments, ULBs, parastatal agencies, and other stakeholders. Convergence with related

missions such as Swachh Bharat Mission (SBM), Smart Cities Mission (SCM), and National Urban Livelihoods Mission (NULM) is actively promoted, as these share common components with AMRUT, including sanitation, smart water systems, and urban employment.

Projects are selected through City Water Balance Plans (CWBP) and City Water Action Plans (CWAP), which promote holistic planning by factoring in ongoing or planned projects from multiple departments, State schemes / funded through multilateral agencies. To support this integration, States are assisted by Project Development and Management Consultants (PDMCs), who help align AMRUT interventions with other schemes in terms of coverage, funding, and outcomes.

At the institutional level, the Mission is monitored by the State High Powered Steering Committee (SHPSC), chaired by the State Chief Secretary, to ensure cross-departmental convergence. State and district-level Committees also include officials from relevant departments, further supporting coordinated planning, implementation, and monitoring of urban water supply systems."

55. To another query on what coordination mechanisms exist between ULBs and parastatals to avoid duplication, delays or underperformance in urban water supply services and how does the Ministry intend to resolve the overlapping responsibilities and authority between ULBs, Jal Nigam, Jal Sansthans and other agencies as part of its water reform agenda, the information provided by the Ministry is as under:

Under the AMRUT and AMRUT 2.0 Missions, States have been empowered to select, appraise, and implement projects within the Mission framework, following approval from the Apex Committee of MoHUA. Under the Mission a structured, multi-tiered coordination framework has been institutionalized to ensure effective collaboration between Urban Local Bodies (ULBs) and parastatal agencies, thereby minimizing duplication, delays, and underperformance in urban water supply services. At the State level, State High Powered Steering Committees (SHPSCs) chaired by the Chief Secretary are responsible for overall inter-agency policy coordination, while State Level Technical Committees (SLTCs) provide technical scrutiny of DPRs, tendering, and implementation activities. Additionally, district-level advisory mechanisms such as DISHA Committees help in monitoring and implementation of the projects. To further strengthen coordination and delineation of responsibilities, the Mission supports States in developing urban water policy frameworks and promotes the use of digital platforms like the City Water Balance Plan (CWBP) and AMRUT dashboards. These tools, along with outcome-based disbursement mechanisms and dedicated capacity-building efforts, are aimed at enabling ULBs to progressively assume full control over planning and execution, while parastatals play a supportive, capacity-driven role.

56. The Committee also sought information on the extent of convergence with other schemes such as Atal Bhujal Yojana, Jal Shakti Abhiyan or state-level water conservation programmes in supporting AMRUT's water sustainability goals. The information provided by the Ministry is as given:

> "AMRUT (Atal Mission for Rejuvenation and Urban Transformation) actively converges with other national and state-level water conservation schemes to achieve its water sustainability goals, particularly under AMRUT 2.0. A strong synergy exists with programs like Jal Shakti Abhiyan (JSA), which is a time-bound program during monsoon season for rainwater harvesting and water conservation activities across urban areas. JSA, especially its "Catch the Rain" campaign, explicitly encourages convergence with schemes like AMRUT for various water conservation and recharge structures."

III. ISSUES IN IMPLEMENTATION OF AMRUT

57. After reviewing the interventions under AMRUT in addressing key urban drinking water challenges such as access, quality, equity and efficiency, the Committee sought to focus on the structural, institutional and procedural issues affecting the on-ground execution and implementation of the AMRUT Scheme across States and Urban Local Bodies (ULBs).

(i) Inadequate Funding

58. The High-Powered Expert Committee (HPEC)' chaired by Dr. lsher Judge Ahluwalia, in its 2011 report titled 'Report on Indian urban infrastructure and Services", projected a total investment requirement of 39.2 lakh crore over a 20-year period (2012-13 to 2031-32) to bridge the deficits in urban infrastructure across the country. Of this, it estimated ₹8 lakh crore for core urban services, including water supply, sewerage, solid waste management and stormwater drainage, and ₹19.9 lakh crore for operation and Maintenance (O&M) of these assets. Further, the total capital expenditure requirement for water supply is Rs 3.2 lakh crore and O&M requirement is Rs 5.5 lakh crore. However, in contrast to this ambitious roadmap, the actual financial outlays under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) have been significantly lower. For instance, under AMRUT 1.0, the total approved outlay stood at around ₹77,640 crore (including central assistance of ₹50,000 crore), while AMRUT 2.0 aims for a total investment of ₹2,77,000 crore (with a central share of ₹76,760 crore) over a five-year period. Given the scale of infrastructure need versus the actual budgetary commitments, a

considerable funding gap persists, particularly in achieving water sufficiency and universal access in urban areas. In view of the same, the Committee desired to know the actual level of investment under AMRUT 1.0 and AMRUT 2.0 on 'water supply' as on date in comparison to these projections and percentage of the HPEC-projected requirement for urban water infrastructure which has actually been addressed through AMRUT's committed investments. The Ministry submitted as under:

> "The total approved outlay for AMRUT 1.0 was ₹77,640 crore. Approximately half of this total outlay was allocated to water supply, against which the water supply projects worth ₹43,392 crore have been grounded of which ₹38,554 crore has been expended on these projects. Under AMRUT 2.0, water supply projects worth ₹1,18,422 crore have been approved of which projects worth ₹69,341 crore have been grounded."

The Ministry further stated:

> "The High-Powered Expert Committee (HPEC) projected a total investment requirement of ₹3.20 lakh crore for urban water supply infrastructure. Combining the committed investments in AMRUT and AMRUT 2.0, against the total outlay of ₹3,77,000 crore, ₹1,61,814 crore have been sanctioned for water supply sector. Besides this, separate State schemes of water supply are also being implemented.
>
> Therefore, the percentage of the HPEC-projected requirement for core urban services addressed through AMRUT's committed investments is approximately 51%."

The Ministry added that the gap may not be estimated as various schemes at State level are also being implemented in addition to AMRUT.

59. During the Committee's sitting held on 04 November 2025, the representative of the Ministry deposed before the committee as under:

> "there is gap assessment. For example, we have a target of 2.68 crore when we started AMRUT 2.0. But we know today that if we have to saturate hundred per cent the cities, we need almost 2.50 crore more. Almost, approximately 2.50 crore connections are still a gap to be met even after AMRUT 2.0. So, we have request the 16th Finance Commission also for more funding for this sector. When we design AMRUT 3.0, we would also keep that in mind. …."

60. To a query on the estimated cost of operation and Maintenance (O&M) under the AMRUT scheme given the HPEC's estimation of ₹19.9 lakh crore for O&M in urban infrastructure, the Ministry furnished the following information:

> "As per Mission guidelines, AMRUT & AMRUT 2.0 projects will have O&M for at least five years to be funded by way of levy of user charges or other revenue streams. Project cost will exclude O&M. ULBs shall fund O&M through an appropriate cost recovery mechanism to make them self-reliant and cost effective. So far, under AMRUT 2.0, states have assessed/planned projects worth ₹21,023 cr. as O&M cost for approved projects worth ₹1,73,149 cr."

61. During the Committee's sitting held on 04 November 2025, the Ministry acknowledged that inadequate provision for Operation and Maintenance (O&M) remains one of the most serious challenges affecting the sustainability of urban water infrastructure created under AMRUT and AMRUT 2.0.

> "A very important point is inadequate O&M. Under AMRUT or AMRUT 2.0, we do tell that you build in your O&M for five years, but we do not fund operation and maintenance. In the Government of India, we cannot fund O&M. That is a very big challenge that our infrastructure is made well. But because the States struggle with O&M funds because of the financial constraints in the ULB level, it becomes very difficult for them to run the plants or the infrastructure effectively."

62. It may be seen in Ministry's clarification that although States and ULBs are required to factor in at least five years of O&M while planning projects, the Government of India does not provide financial support for O&M activities under the Mission.

(ii) Delays in Physical and Financial Progress

63. The Ministry has stated that under AMRUT 1.0, States/UTs have physically grounded 6,010 projects worth ₹83,550 crore which is in excess to total approved allocation worth ₹77,640 crore. Overall, works worth ₹79,461 crore (95%) have been executed and expenditure worth ₹72,729 crore (87%) has been incurred so far.

64. The Ministry has further informed that as on 24.03.2025, of the total grounded projects of ₹ 83,549.70, work worth ₹ 79476.54 crore (95.12%) have been physically completed and work worth ₹ 4073.15 crore (4.88%) is in progress. As regards progress of AMRUT projects subsumed in AMRUT 2.0, the Ministry added that as on 01.10.2021, 2,020 ongoing projects worth ₹38,995.80 crore under AMRUT were subsumed under AMRUT 2.0. Of these works, worth ₹ 34,922.27 crore have been completed and work worth ₹ 4073.13 are in progress and at advance stage of completion**.** It is notable that the amount still under execution *i.e.* ₹4,073.13 crore under the subsumed AMRUT projects in AMRUT 2.0 has remained almost unchanged over time. The State-wise central assistance

committed, released and utilisation certificates submitted under AMRUT by the States/ UTs are as below:

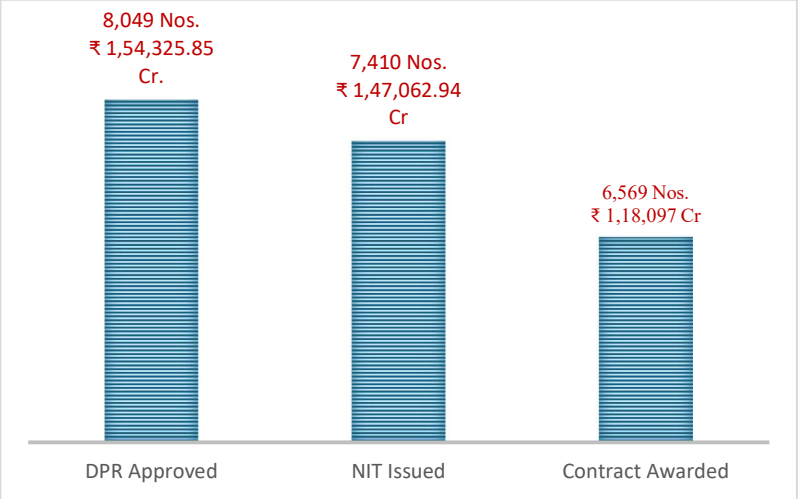
Sl No.	State/ UT	Total Cost of Approved SAAPs @	Total Committed Central Assistance	Central Assistance released	Total Fund Utilisation	
					UCs received against CA released	% of utilization vis-à-vis total fund received
1	Andaman and Nicobar Islands	10.82	10.82	10.81	6.49	60.04%
2	Andhra Pradesh	2,890.17	1,056.62	1,049.89	942.76	89.80%
3	Arunachal Pradesh	140.25	126.22	116.69	99.32	85.12%
4	Assam	657.14	591.42	511.71	457.67	89.44%
5	Bihar	2,469.77	1,164.80	1,146.15	1,055.87	92.12%
6	Chandigarh	95.07	54.09	53.26	52.40	98.38%
7	Chhattisgarh	2,192.76	1,009.74	969.12	955.65	98.61%
8	Dadra and Nagar Haveli	10.82	10.82	10.59	10.59	100.00%
	Daman and Diu	18.03	18.03	18.03	12.92	71.66%
9	Delhi	802.31	802.31	673.74	517.35	76.79%
10	Goa	209.18	104.58	62.75	62.75	100.00%
11	Gujarat	4,884.42	2,069.96	1,966.96	1,966.96	100.00%
12	Haryana	2,565.74	764.51	746.39	736.97	98.74%
13	Himachal Pradesh	304.52	274.07	269.06	255.73	95.05%
14	Jammu and Kashmir	513.13	500.62	477.74	358.39	75.02%
15	Ladakh	79.92	79.19	39.20	33.21	84.72%
16	Jharkhand	1,245.74	566.17	551.69	422.28	76.54%
17	Karnataka	4,952.87	2,318.79	2,258.85	2,238.78	99.11%
18	Kerala	2,359.38	1,161.20	1,153.08	965.55	83.74%
19	Lakshadweep	3.61	3.61	2.25	2.11	94.00%
20	Madhya Pradesh	6,200.67	2,592.86	2,497.05	2,497.05	100.00%
21	Maharashtra	7,759.32	3,534.08	3,356.19	3,065.01	91.32%
22	Manipur	180.31	162.28	162.28	161.91	99.77%
23	Meghalaya	80.14	72.12	71.02	31.60	44.49%
24	Mizoram	140.25	126.22	125.37	119.72	95.49%
25	Nagaland	120.22	108.19	107.87	77.18	71.56%
26	Odisha	1,598.96	796.97	785.23	785.23	100.00%
27	Puducherry	64.91	64.91	63.75	53.38	83.73%
28	Punjab	2,766.62	1,204.47	1,190.77	1,190.77	100.00%
29	Rajasthan	3,223.94	1,541.95	1,511.23	1,456.95	96.41%
30	Sikkim	40.06	36.06	34.03	31.06	91.27%
31	Tamil Nadu	11,194.78	4,756.58	4,626.24	4,397.29	95.05%
32	Telangana	1,666.26	832.60	831.53	806.21	96.96%
33	Tripura	148.25	133.43	132.47	132.47	100.00%
34	Uttar Pradesh	11,421.67	4,922.46	4,880.70	4,421.75	90.60%

Sl No.	State/ UT	Total Cost of Approved SAAPs @	Total Committed Central Assistance	Central Assistance released	Total Fund Utilisation	
					UCs received against CA released	% of utilization vis-à-vis total fund received
35	Uttarakhand	593.02	533.72	531.92	461.07	86.68%
36	West Bengal	4,035.00	1,929.32	1,905.39	1,606.49	84.31%
Total		77,640.02	36,035.79	34,900.97	32,448.90	92.97%

65. For AMRUT 2.0, total indicative outlay is ₹2,77,000 crore including central share of ₹76,760 crore (₹ 66,750 cr for projects) for five years from FY 2021-22 to FY 2025-26. It is informed that 8,791 projects costing around ₹1,93,576 crore are approved by the Ministry and DPRs have been approved worth ₹1.54,325 crore (8,049 projects), of which NITs have been issued worth ₹1,47,062 crore (7,410 projects) of which contracts have been awarded worth ₹1,18,097 crore (6,569 projects). So far, total works worth ₹48,050 crore have been physically completed and ₹35,520 crore have been expended.

66. Further, as regards Central share of ₹66,750 for projects, the Ministry has informed that ₹12,724 crore has been released so far. Overall, ₹14,443 crore have been released under various components of AMRUT 2.0 such as projects and A&OE.

67. Thus, out of ₹2.77 lakh crore total outlay, projects worth ₹1.90 lakh crore have been approved, which is nearly 70% of total outlay. However, the data reflects a clear drop in progress as projects transition from approval to execution. While DPRs have been prepared for projects worth ₹1.54 lakh crore, NITs have been issued for ₹1.47 lakh crore and contracts amounting to ₹1.18 lakh crore have been awarded. In contrast, the value of works physically completed stands at only about ₹48,050 crore, with an expenditure of ₹35,520 crore. Though the five-year timeline of AMRUT 2.0 is set to conclude in the financial year 2025-26, there continues to be wide variation in the timelines across critical stages including project approval, preparation of DPRs, tendering, award and execution.



(iii) Constrained and Uneven Outcome

68. To a query on the extent to which augmentation of water supply capacity been achieved in each State/UT (in terms of additional MLD capacity created *vs* target) under AMRUT and the gap that will remain to achieve 'universal water capacity' in all the ULBs post AMRUT, the information provided by the Ministry is as under:

#	State/ UT	Augmentation of urban water supply system in ULBs (in MLD)		
		Water Supply Capacity target set under AMRUT 1.0	Water supply capacity achieved at the end of AMRUT 1.0	Target set under AMRUT 2.0
1	Andhra Pradesh	319	272	447.16
2	Arunachal Pradesh	9.5	9.5	17.65
3	Assam	145.2	102.50	102.39
4	Bihar	34	34	419.03
5	Chandigarh	68	68	
6	Chhattisgarh	352	317	141.1
7	Dadra & Nagar Haveli and Daman & Diu	11	11	
8	Delhi	3	3	
9	Gujarat	955.85	955.85	2525.11
10	Haryana	122.8	122.80	186.5
11	Himachal Pradesh			18.202
12	Jammu And Kashmir			52.4004
13	Jharkhand	119	119	259.07
14	Karnataka	326.37	326.37	433.67
15	Kerala	265	165	140.35
16	Ladakh			28
17	Madhya Pradesh	334.5	334.5	1144.019
18	Maharashtra	683.7	445.7	1829.02

#	State/ UT	Augmentation of urban water supply system in ULBs (in MLD)		
		Water Supply Capacity target set under AMRUT 1.0	Water supply capacity achieved at the end of AMRUT 1.0	Target set under AMRUT 2.0
19	Manipur			6.3
20	Meghalaya			15
21	Mizoram	34.8	34.8	5.987
22	Nagaland			28.21
23	Odisha	86	86	602.5
24	Puducherry			5
25	Punjab	518.89	113	608.896
26	Rajasthan	25.8	7.8	249.147
27	Sikkim			8
28	Tamil Nadu	854.4	729.4	109.824
29	Telangana			109.91
30	Tripura	16.5	16.5	13.94
31	Uttar Pradesh	405	210	756.8458
32	Uttarakhand			70.898
33	West Bengal	450.13	450.13	818.64
	Grand Total	**6140.44**	**4933.79**	**11,152.77**

69. The Ministry's data indicates that under AMRUT 1.0, a total water supply augmentation capacity of 6,140.44 MLD was targeted across States and UTs, of which 4,933.79 MLD was achieved, reflecting an overall attainment of roughly 80% of the planned capacity. While several States such as Gujarat, Jharkhand, Andhra Pradesh, Chhattisgarh, Delhi, Bihar, Odisha, Mizoram and West Bengal fully met their augmentation targets, others recorded significant shortfalls. Punjab achieved only 113 MLD against its target of 518.89 MLD, Kerala added 165 MLD against the targeted 265 MLD and Uttar Pradesh achieved 210 MLD of its planned 405 MLD. Further, several States/UTs including Himachal Pradesh, Jammu & Kashmir, Ladakh, Nagaland, Meghalaya, Puducherry, Manipur, Sikkim and Telangana show no reported augmentation under AMRUT 1.0, underscoring the uneven progress across regions. Further, the Ministry has not furnished any information on the residual gap that will persist in achieving universal water supply capacity across all ULBs post-AMRUT.

(iv) Limited Engagement of Private Sector and PPP Models

70. In reply to a query of the Committee regarding the extent to which States and ULBs contributing to the overall investment targets and are there any innovative financing mechanisms such as PPPs and municipal bonds being explored to close the gap, the Ministry informed:

> "So far, under AMRUT projects worth ₹83,482 cr have been grounded of which central assistance allocated is ₹36,063 cr. The remaining balance is borne by the States/ UTs and their ULBs from their own funds. Similarly, under AMRUT 2.0 projects worth ₹1,73,150 cr (Capex) have been approved, of which central assistance allocated is ₹66,025 cr. The remaining balance is borne by the States/ UTs and their ULBs from their own funds/ innovative financing.
>
> **Innovative Financing Mechanisms:**
>
> **Public-Private Partnerships (PPPs):** Under AMRUT 2.0, projects representing 10% of the allocation in million-plus cities are mandated for implementation in PPP mode. So far, 43 projects worth ₹7,384 crore have been approved in 43 cities including 19 projects worth ₹6,472 crore in million plus cities.
>
> **Municipal Bonds:** So far 17 cities have raised ₹5,309 crore through issue of municipal bonds."

(v) Suboptimal Water Balance and Action Plans

71. City Water Balance Plans (CWBPs), City Water Action Plans (CWAPs) and State Water Action Plans (SWAPs) are at the core of AMRUT 2.0. As per AMRUT 2.0 guidelines, ULBs will submit detailed CWBPs and CWAPs through online portal covering proposed projects in the thrust areas. ln view of the same, the Committee sought to know the number cities/ULBs which have so far prepared and submitted CWBP and CWAP in various States/UTs. In response, the details provided by the Ministry are as under:

State/UT	Number of Cities that have filled CWBP	Number of Cities that have submitted CWAP
Andaman & Nicobar Islands	1	1
Andhra Pradesh	123	117
Arunachal Pradesh	47	13
Assam	96	42
Bihar	259	24
Chandigarh	1	1
Chhattisgarh	169	53

State/UT	Number of Cities that have filled CWBP	Number of Cities that have submitted CWAP
Dadra & Nagar Haveli and Daman & Diu	2	1
Delhi	3	2
Goa	14	6
Gujarat	165	161
Haryana	90	56
Himachal Pradesh	68	32
Jammu And Kashmir	80	78
Jharkhand	51	46
Karnataka	315	257
Kerala	93	93
Ladakh	2	2
Lakshadweep	1	0
Madhya Pradesh	418	418
Maharashtra	414	137
Manipur	27	16
Meghalaya	9	1
Mizoram	23	23
Nagaland	39	39
Odisha	114	83
Puducherry	7	6
Punjab	168	158
Rajasthan	231	201
Sikkim	7	5
Tamil Nadu	664	606
Telangana	143	140
Tripura	20	12
Uttar Pradesh	778	380
Uttarakhand	110	26
West Bengal	131	131
Grand Total	**4,883**	**3,367**

72. The Ministry's data shows that while 4,883 cities have filled the City Water Balance Plans (CWBPs), only 3,367 have submitted their City Water Action Plans (CWAPs), indicating a notable gap between planning and execution. States like Madhya Pradesh, Kerala, Nagaland and West Bengal show full or near-full submission, reflecting good compliance. However, large States such as Bihar, Maharashtra, Uttar Pradesh, and Uttarakhand have significant shortfalls.

73. On being asked to state the extent to which the CWBPs and CWAPs prepared by cities and ULBs been developed with sufficient scientific rigor, methodological

consistency and data reliability to serve as a credible foundation for the formulation of State and National-level Water Action Plans, the Ministry responded as under:

> "Water is a State subject, and under AMRUT and AMRUT 2.0, States are empowered to plan, design, and approve projects based on their priorities and contextual needs. The Ministry of Housing and Urban Affairs (MoHUA) approves only the State Water Action Plans (SWAPs) submitted by States, in alignment with the broad contours and reform objectives outlined in the Mission Guidelines.
>
> Under AMRUT 2.0, the preparation of City Water Balance Plans (CWBPs) and City Water Action Plans (CWAPs) has been made mandatory for all towns and cities. These plans serve as foundational documents to assess a city's water demand, supply, losses, and potential for reuse, and to guide targeted interventions for water security and sustainability.
>
> While the introduction of CWBPs and CWAPs has brought significant structure and consistency to city-level water planning across States, certain challenges persist. These include data gaps, variable quality of consultant support, and limited integration of climate resilience in some plans. Despite these limitations, the exercise has substantially improved the baseline understanding of urban water flows, informed State-level planning, and laid the groundwork for more data-driven and resilient water infrastructure development.
>
> The responsibility for ensuring scientific rigour, data reliability, and methodological consistency rests with the respective State Level Technical Committee (SLTC) and State High Powered Steering Committee (SHPSC). These bodies are expected to review and validate the quality and integrity of data and planning assumptions in the CWBP/CWAPs submitted by ULBs."

(vi) Absence of an Independent Regulatory Framework for Quality Assurance and Service Standards

74. To a query of the Committee whether the data sets compiled by Cities/ULBs subjected to field-level validation in the process of preparing CWBPs and CWAPs to ensure their accuracy and reliability, the Ministry replied:

> "There is a structured mechanism under AMRUT 2.0 Mission for approval of projects. Under AMRUT 2.0, States have been empowered to select, appraise, prioritise and implement projects. State Level Technical Committee (SLTC) headed by the Secretary, Urban Development & Housing Department provides technical support to the State High Powered Steering Committee (SHPSC) headed by the Chief Secretary of the State, to approve, monitor and supervise

the implementation of the scheme at the State/ UT level. On recommendation of the SHPSC, Apex Committee of Ministry of Housing & Urban Affairs (MoHUA) approves projects within the broad framework of Mission.

The responsibility to review, authenticate and approve CWBP and CWAP rests with the respective State Level Technical Committee (SLTC) and State High Powered Steering Committee (SHPSC). During the approval of the projects submitted under SWAP by Apex committee, the projects are reviewed by MoHUA in a holistic manner based on the broad contours of Mission guidelines only."

(vii) Irregular and Infrequent Auditing of Projects

75. The Committee inquired what mechanisms are in place for regular auditing of the work carried out by the private contractors considering that lapses in quality lead to not only the erosion of public trust and financial losses but also the inefficient use of water which is becoming a critical and increasingly scarce resource. Reply of the Ministry is as under:

"Under the AMRUT and AMRUT 2.0 Missions, States have been empowered to prioritise and implement projects within the Mission framework, following approval from the Apex Committee of MoHUA. To ensure quality and transparency in project implementation AMRUT/AMRUT 2.0 has adopted a robust multi-layered monitoring and auditing framework.

At the State level, a State High Powered Steering Committee (SHPSC) headed by the Chief Secretary, and a State Level Technical Committee (SLTC) led by the Principal Secretary/Secretary, Urban Development, are responsible for continuous oversight and technical supervision. Additionally, District-level advisory mechanisms such as DISHA committees, along with State-level technical reviews and potential audits by CAG, further strengthen quality control and accountability.

Key provisions include:

- Third-Party Audits by IRMAs: Independent Review and Monitoring Agencies verify physical/financial progress and quality. Their certification is mandatory for fund release beyond the first installment.
- Digital Monitoring via AMRUT Portal: All projects are geo-tagged and digitally tracked with real-time updates, enabling transparency and third-party verification.

- Outcome-Based Funding: Final disbursements are linked to verified service outcomes—such as new tap/sewer connections or rejuvenated water bodies—ensuring performance-driven payments.
- Community & SHG Involvement: AMRUT 2.0 encourages engagement of Self-Help Groups (SHGs) and community members using a gig economy model for water quality monitoring and infrastructure upkeep, enabling social vigilance."

76. To another query on whether the Ministry has got any audit conducted on the 'functional' status of the water taps provided, the Ministry informed as under:

"Under AMRUT 2.0, specific provisions have been made for the verification of outcomes reported by States/UTs on the AMRUT portal. This includes:

- Randomised third-party (Independent Review and Monitoring Agencies (IRMAs)) verification of a defined percentage of connections and infrastructure reported as completed. Funds are released to the States/ UTs upon satisfactory compliance of IRMA reports.
- Collection of user feedback through recorded video interviews, testimonials, and photographic evidence, to validate service delivery and user satisfaction at the beneficiary level."

(viii) Gaps in Monitoring, Data Deficiency and Real-Time Tracking of Fund Flow and Project Outcomes under AMRUT and AMRUT 2.0

77. The Committee asked the Ministry to state whether they had evaluated the State/UT-wise total requirement of household water tap connections, household sewer connections, sewer networks and Sewage Treatment Plants (STPs) in urban areas across the country, along with the estimated cost and whether the projects sanctioned under the Mission were sufficient to meet these assessed requirements. In response, the Ministry stated as under:

"Sanitation, water supply and urban development are State subjects. The Central Government, through various program interventions including AMRUT, supplements the efforts of State/ Union Territories (UTs) in improving these facilities."

78. Further, to evaluate the progress in urban drinking water supply in AMRUT cities across three key milestones—2015 (pre-AMRUT), 2021 (end of AMRUT) and 2025 (target under AMRUT 2.0), the Committee requested data on improvements in essential parameters related to urban water security. These included access such as piped water coverage and 24x7 supply, adequacy *i.e.* per capita demand and supply, efficiency *i.e.* non-

revenue water, metering and distribution losses as well as wastewater treatment and reuse. In response, the Ministry provided the following data in a tabulated format.

Parameter	2015	2021	2025 (estimated/provisional)
No. of ULBs facing Water Stress	-	-	-
ULBs without Piped Water Supply	-	183	-
Cities with 24x7 Continuous Supply	-	-	-
Urban Households with Piped Supply (%)	49%	70%	75%
Per Capita Availability (LPCD)	-		-
Per Capita Demand (LPCD)	-	*	-
Per Capita Supply (LPCD)	-	122	-
Demand-Supply Gap	-	-	-
NRW as % of Supply	-	-	-
Water Distribution Losses (%)	-	-	-
Extent of Metering (%)	-	-	-
Wastewater Generation (MLD)	-	48,000 MLD#	-
Wastewater Treatment Capacity (MLD) (Installed Capacity)	-	30,000 MLD#	-
Treated Wastewater (%)	-	-	-
Untreated Wastewater (%)	-	-	-
Potable Water Used for Non-Drinking (%)	-	-	-
Treated Water Reused for Potable Use (%)	-	-	-
Treated Water Reused for Non-Potable Use (%)	-	-	5614 MLD
Circular Water Economy Adoption	-	-	-

79. As evident from the above, the Ministry's response contains only limited data, with major gaps in several key indicators and across the three reference years. Although there is an improvement noted in household piped water coverage from 49% in 2015 to a projected 75% in 2025, critical information on water-stressed ULBs, 24x7 supply, demand-supply gaps, non-revenue water, metering and distribution losses is missing.

80. Furthermore, in reply to another query regarding the extent of funding contributions by States and ULBs, the Ministry stated that the details of fund released & their utilization from sources other than central assistance is not being maintained at MoHUA.

81. During the Committee's sitting held on 04 November 2025, the Committee further examined the issue of fund flow under AMRUT and AMRUT 2.0, particularly the release of State share. It was pointed out that several projects had not progressed due to delays in the State Governments' matching contribution and emphasised that the Ministry must possess clear, real-time data on the extent of State releases and the projects affected by such delays. The Ministry responded that earlier gaps in information have been addressed through the Single Nodal Agency (SNA)–SPARSH platform, which now enables real-time tracking of Central and State releases. The Ministry deposed before the Committee:

> "In the Single Nodal Agency (SNA) SPARSH system, out of Rs.8,000 crore, we have sanctioned around Rs.6,000 crore as "Mother Sanctions". The corresponding State sanctions are commensurate with this. Now, regarding the real-time release on SNA SPARSH - for example, if a bill comes to us from X State of Uttar Pradesh. Now, यूपी से दस करोड़ रुपये काबिल आया, तो जब तक राज्य अपना शेयर नहीं मिलाएगा, वह आगे पैसा नहीं ले सकता है। it is processed in real time."

82. Elaborating further on the issue, the Ministry, in a written reply, further clarified as under:

> "Under AMRUT and AMRUT 2.0, the funding pattern is a shared responsibility of the Central Government, State Governments and Urban Local Bodies (ULBs) as per the scheme guidelines. The Ministry releases Central Assistance based on the achievement of milestones, while the State and ULB shares are mobilized at the State level.
>
> Project progress is monitored through several mechanisms. The AMRUT portal captures both physical and financial progress at the project level. Although MoHUA does not keep separate records of State or ULB contributions, the overall financial and physical progress, along with reasons for delays, is tracked through these digital platforms and periodic review meetings held at both the Ministry and State levels. The Integrated Review and Monitoring Agency (IRMA) assists the Ministry in independent assessment and validation of implementation progress across States.
>
> If any delay is caused due to non-release of the matching share by States or ULBs, the issue is taken up during State review missions and national-level monitoring meetings.
>
> Under AMRUT 2.0, fund release is being done through the Single Nodal Agency (SNA) SPARSH system. MoHUA issues only the mother sanction, and the Central share is transferred directly to the project account along with the corresponding State share. This system ensures transparency and efficiency in fund flow and utilization."

(ix) Short-Term Orientation and Inadequate Long-Term Planning

83. With over half of India's population expected to reside in urban areas by 2050, the Committee sought to know if any comprehensive assessment has been undertaken to estimate the urban drinking water demand for the long-term horizon of 2047 (Viksit Bharat) or 2050, the information furnished by the Ministry is as under:

> "The Government of India has taken cognizance of the urban demographic transition and its implications for water security as part of the Viksit Bharat 2047 vision. While a unified national projection report is not available, various institutional mechanisms—including Census projections, NITI Aayog and multilateral agencies such as the World Bank and ADB—have provided inputs and support that inform long-term urban infrastructure planning, including water. Under AMRUT 2.0 States have been asked to identify city-wise saturation gaps in water supply post AMRUT 2.0 and State interventions
>
> To address future demand in a decentralised manner, AMRUT 2.0 has encouraged States and ULBs to prepare City Water Balance Plans (CWBP) and City Water Action Plans (CWAP). These tools enable States and ULBs to assess current demand-supply gaps and project future requirements based on population growth and urbanisation trends up to 2025. Further, Detailed Project Reports (DPRs) under AMRUT 2.0 are based on a 15–30 year design horizon as recommended in manuals, factoring in peak demand and projected urban growth. Cities are encouraged to develop infrastructure not just for current needs but for future-readiness, including treatment capacity, distribution networks, and storage."

84. When asked by the Committee on how has the AMRUT Mission across both its phases-been designed or recalibrated to factor in the anticipated growth in urban population and corresponding rise in drinking water demand in view of these long-term projections and what strategic interventions are being made under AMRUT to ensure water security for future urban lndia, the reply of the Ministry is as under:

> "The AMRUT Mission adopts a systems-thinking approach to move from infrastructure creation to service delivery and sustainability in 500 cities. Expanding coverage to all statutory towns, Urban water security is a central objective of AMRUT 2.0, with the vision of making cities "self-reliant and water secure." The Mission takes a multi-dimensional and reform-driven approach, integrating infrastructure investment, policy change, capacity building, and

digital transformation. These strategic interventions are designed to future-proof urban water systems and ensure water security for the next generation of Indian cities or Viksit Bharat."

(x) Lack of Trained Contractor Workforce and Need for Standardised Capacity-Building

85. On the issue regarding the absence of uniform construction standards and the inconsistent quality of execution by contractors engaged in AMRUT works, the Committee sought clarity from the Ministry on whether any agency has been mandated to frame, enforce and monitor project-level standards so as to ensure uniformity and quality in execution across States and ULBs. In response, the Ministry during the Committee's sitting on 04 November 2025 deposed as under:"

"there is lack of trained contractor's staff. It is very important that officers are also trained. But it is equally important that the persons who are implementing, the contractors are also skilled. So, under AMRUT, we made an effort to even train the contractors under the mission. In the portal, we do capture that who is the contractor of this. जहाँ जहाँ नंबर है we capture the numbers also of the site engineer, contractor both. So, training of contractors is also very important because they are the ones actually implementing it on ground."

PART-II

OBSERVATIONS AND RECOMMENDATIONS

Recommendation No. 1

Need for adequate Funding for Urban Water Infrastructure under AMRUT 2.0

The Committee evaluated the adequacy of financial investments under AMRUT 1.0 and AMRUT 2.0 in comparison with the projections made by the High-Powered Expert Committee (HPEC), 2011 set up for estimating the investment requirements for Urban Infrastructure Services, which estimated ₹3.2 lakh crore for urban water supply infrastructure and ₹5.5 lakh crore for Operations and Maintenance (O&M) over a 20-year period (2012-2031).

The Ministry informed that under AMRUT 1.0, ₹43,392 crore worth of water supply projects have been grounded with ₹38,554 crore already spent. Under AMRUT 2.0, water supply projects worth ₹1,18,422 crore have been approved, with grounding completed for ₹69,341 crore. Combined, ₹1,61,814 crore has been sanctioned for water supply across both Missions, addressing about 51% of the HPEC-projected investment of ₹3.2 lakh crore. The Committee observe that while AMRUT has led to a notable scaling-up of investments in urban water supply infrastructure, the total sanctioned amount still meets only about half of the requirement projected by HPEC for the 20-year period 2012–2031, which is set to conclude in the next five to six years.

On the O&M front, the Committee note that projects worth ₹21,023 crore have been planned under AMRUT 2.0 against the total sanctioned project cost of ₹1,73,149 crore. The Ministry informed that O&M expenses are to be met by ULBs through user charges or other cost-recovery measures. The Committee observe that although States and ULBs are required to incorporate five years of O&M in project planning, the Government of India does not provide financial support for these expenses under either AMRUT or AMRUT 2.0. This has led to significant operational difficulties at the ULB level, where limited financial resources often impede the proper operation and maintenance of water treatment plants, sewerage networks and other assets created under the Mission. The Committee note that inadequate O&M financing not only limits the effectiveness of capital investments but also affects the long-term sustainability of the infrastructure. Furthermore, as O&M responsibilities rest with ULBs, the limited financial and institutional capacity of many urban local bodies further constrains their ability to ensure reliable and sustained service delivery.

The Committee, therefore, recommend that the MoHUA take immediate steps to bridge the financing gap in urban water infrastructure. This should include: -

(i) conducting a comprehensive assessment of State-level water sector investments to gauge cumulative progress towards the HPEC-estimated requirement;

(ii) pursuing enhanced central and multilateral funding support to close the remaining deficit, especially in underserved regions;

(iii) establishing a dedicated financial mechanism or incentive-based support framework for O&M funding to supplement ULB efforts, particularly in smaller municipalities with limited revenue-generating capacity; and

(iv) assessing the additional financial requirements and investment needs of the urban water sector with a long-term perspective up to the year 2047.

Recommendation No. 2

<u>Strengthening the Quality and Coverage of City Water Planning under AMRUT 2.0</u>

City Water Balance Plans (CWBPs), City Water Action Plans (CWAPs) and State Water Action Plans (SWAPs) are at the core of AMRUT 2.0 and has introduced structure and consistency in urban water planning. As per AMRUT 2.0 guidelines, Urban Local Bodies (ULBs) will submit detailed CWBPs and CWAPs through online portal covering proposed projects in the thrust areas. The responsibility of ensuring scientific accuracy, reliable data and methodological consistency in these plans lies with the respective State Level Technical Committee (SLTC) and State High Powered Steering Committee (SHPSC). The Committee were informed that the preparation of CWBPs and CWAPs has been made mandatory for all towns and cities. However, out of 4,883 cities that filled CWBPs, only 3,367 submitted CWAPs. States like Madhya Pradesh, Kerala, Nagaland and West Bengal have shown near-full compliance, while others such as Bihar, Maharashtra, Uttar Pradesh and Uttarakhand lag significantly. The Ministry has, thus acknowledged that though CWBPs and CWAPs has brought significant structure and consistency to city-level water planning across States, certain challenges such as data gaps, inconsistent consultant support and limited climate resilience integration in some plans persist.

The Committee observe that while the introduction of CWBPs and CWAPs is a step forward in structured urban water planning, a large gap remains between the number of cities that have filled CWBPs and those that have submitted CWAPs. The shortfall in States like Bihar, Maharashtra, Uttar Pradesh and Uttarakhand is concerning, indicating possible delays, limited technical support or capacity gaps. Moreover, the variability in the scientific rigour and data reliability of the plans poses a risk to the effectiveness of implementation. The Committee feel that these issues may undermine the achievement of AMRUT 2.0's goals related to water security and sustainability.

The Committee, therefore, recommend that the Ministry, in coordination with State Governments, take time-bound steps to ensure 100% submission of City Water Action Plans (CWAPs) by all ULBs, with a focus on lagging States. A standardised quality assurance framework for CWAPs/CWBPs should be developed, incorporating uniform data standards, methodologies and climate resilience parameters. The capacity and accountability of State Level Technical Committees (SLTCs) and State High Powered Steering Committees (SHPSCs) must be strengthened for robust data validation. Further,

targeted technical handholding and centralised consultant support should be provided to low-capacity ULBs to improve the quality and timeliness of these planning documents.

Recommendation No. 3

<u>Strengthening Institutional Convergence for Integrated Urban Water Management</u>

Ensuring safe and adequate drinking water to urban households involves multiple Ministries and agencies across various stages namely, source conservation and restoration, treatment, distribution and wastewater management. In this context, the Ministry had briefed the Committee that convergence has been built into AMRUT's design through holistic planning tools like City Water Balance Plans (CWBP) and City Water Action Plans (CWAP), and institutional oversight mechanisms such as the State High Powered Steering Committee (SHPSC) chaired by State Chief Secretaries and State Level Technical Committees (SLTCs). States are also supported by Project Development and Management Consultants (PDMCs) to align AMRUT projects with other schemes. In addition, the Mission promotes convergence with related initiatives like Smart Cities Mission (SCM), Swachh Bharat Mission (SBM), and Jal Shakti Abhiyan (JSA) including its "Catch the Rain" campaign.

While structural mechanisms and planning frameworks under AMRUT attempt to promote inter-agency coordination, the Committee observe that actual implementation remains fragmented. No dedicated institutional mechanism or binding inter-agency coordination protocol exists to operationalize the much-required convergence effectively. There is minimal, if any, interaction between the agencies responsible for planning, financing, execution, and operations & maintenance. Urban water governance continues to function in silos, with overlapping mandates and insufficient integration among stakeholders at various levels. Despite convergence being encouraged through SHPSCs and planning tools, the absence of a centralized command structure and binding protocols for cross-sector collaboration has significantly impeded progress toward truly integrated urban water management.

In light of the above, the Committee recommend that the Ministry, in coordination with the Ministry of Jal Shakti and concerned State departments, take time-bound action to institutionalize integrated urban water management. This should include setting up a formal inter-ministerial coordination platform with clearly defined roles for key ministries and planning bodies; enforcing convergence across central schemes like AMRUT, SBM, Atal Bhujal Yojana, and Jal Shakti Abhiyan; establishing Integrated Urban Water Management Cells under State High Powered Steering Committees (SHPSCs) as nodal coordination units; integrating real-time data systems across departments; and mandating the inclusion of sustainability components such as wastewater reuse, aquifer recharge, and catchment protection in all AMRUT planning and execution processes.

Recommendation No. 4

Establishing adequate Data Systems for Monitoring Outcomes and Financial Transparency

The Committee had sought to know whether the Ministry had evaluated the State/UT-wise total requirement of household water tap connections, household sewer connections, sewer networks and sewage treatment plants (STPs) in urban areas, including the estimated cost and whether sanctioned projects under the Mission were adequate to meet those requirements. The Committee had further requested data on key progress indicators in urban water supply and sanitation across the years 2015 (pre-AMRUT), 2021 (end of AMRUT), and 2025 (target under AMRUT 2.0), including parameters such as piped water coverage, 24x7 supply, per capita supply and demand, non-revenue water (NRW), metering, distribution losses, wastewater treatment and reuse along with the extent of funding contributions made by States and ULBs.

However, in response to data requests, the Ministry could provide only limited information. Apart from a marginal increase in household piped water coverage (from 49% in 2015 to a projected 75% in 2025), several critical parameters across the three reference years remained unreported. Furthermore, the Ministry confirmed that it does not maintain records of financial contributions or utilization from sources other than central assistance.

The Committee are of the view that the Ministry's inability to furnish comprehensive outcome and impact metrics undermines effective monitoring and evaluation of AMRUT and AMRUT 2.0. Key indicators essential to assessing urban water security and service delivery such as water-stressed ULBs, 24x7 coverage, demand-supply gap, NRW, metering and wastewater treatment—remain absent or patchy, reflecting a lack of robust data systems. The Ministry's dependence solely on State-reported figures, without a centralized mechanism to track cumulative financial inputs and tangible outcomes, poses serious concerns regarding accountability and policy coherence. The lack of data not only affects mid-course corrections but also hinders the formulation of evidence-based policy interventions.

The Committee, therefore, recommend that the Ministry should immediately institute a centralized and standardised outcome monitoring framework for AMRUT 2.0, encompassing physical, financial and impact-related indicators across States/UTs. A digital dashboard with time-series data on essential parameters such as 24x7 water supply, per capita supply and demand, NRW, metering, wastewater generation and reuse must be made publicly accessible. In addition, the Ministry should put in place a robust mechanism to track financial contributions and expenditures by States as well as Urban Local Bodies (ULBs) to enable more informed, transparent and accountable implementation of Mission objectives.

Recommendation No.5

Need for accelerated implementation of water source sustainability measures under AMRUT 2.0

The Committee, taking note of the alarming depletion of groundwater reserves and the growing threat to water security, sought detailed information from the Ministry on the interventions under AMRUT and AMRUT 2.0 aimed at ensuring water source sustainability, specifically, the measures taken for reducing groundwater dependence, rejuvenating water bodies, improving aquifer recharge, along with their measurable outcomes and effectiveness. In response, the Ministry stated that a multi-pronged approach has been adopted under both phases of AMRUT to tackle groundwater depletion. Key measures *inter-alia* included the implementation of Shallow Aquifer Management (SAM) pilots in 9 cities, now being scaled up to 75 cities under SAM 2.0, construction of aquifer recharge structures, restoration of defunct wells and comprehensive groundwater mapping and planning in partnership with National Remote Sensing Centre (NRSC) and National Institute of Urban Affairs (NIUA). Further, 28,761 urban water bodies covering an area of 7.13 lakh hectares have been mapped.

While acknowledging the Ministry's efforts in designing a broad framework for groundwater recharge and water body rejuvenation, the Committee remain concerned about the slow implementation. It is noted that only 678 out of 3,032 sanctioned water body rejuvenation projects have been completed, amounting to just around 22%, reflecting significant delays. Moreover, despite the extensive mapping of water bodies, rejuvenation plans have so far been prepared for only about 10.5% of them under AMRUT 2.0, highlighting a disconnect between data collection and follow-through action. The Committee further observe that SAM initiative although conceptually strong, so far remains limited in reach and investment with only ₹4.5 crore invested across 9 cities. The Committee have further been briefed that the exact volumes of drinking water contributions made through these interventions are not quantified and State/UT wise data is not monitored under AMRUT 2.0.

In view of the above submissions made by the Ministry, the Committee recommend the following:

(i) in light of the fact that the Mission is scheduled to end on 31stMarch, 2026, the Ministry must take urgent steps to accelerate the completion of all sanctioned water body rejuvenation projects under AMRUT 2.0 and establish annual progress targets with public disclosure;

(ii) expedite the sanctioning and approval of projects for rejuvenation of urban water bodies that have been mapped through Urban Water body Information System (UWAIS) by the National Remote Sensing Centre (NRSC);

(iii) simultaneously also upscale Shallow Aquifer Management (SAM) 2.0 by enhancing funding, expanding its coverage beyond the initial 75 cities and integrating it into city-level planning frameworks; and

(iv) formulate a National Urban Aquifer Recharge Strategy with defined benchmarks, monitoring mechanisms and a GIS-enabled tracking system so as to quantify the outcomes and sustainability of the various initiates.

Recommendation No. 6

<u>Need for Accelerated Completion, Capacity Realisation and Performance Monitoring of Water Supply Infrastructure under AMRUT</u>

The Committee, while reviewing the status of urban water supply infrastructure under AMRUT and AMRUT 2.0, examined State/UT-wise data relating to upgradation and augmentation of old Water Treatment Plants (WTPs), commissioning of new WTPs, household access to piped water supply and expansion and replacement of water distribution networks. The Committee observe that although certain components of AMRUT 1.0 have registered notable progress, substantial gaps persist across States/UTs in both infrastructure creation and service delivery outcomes.

Under AMRUT 1.0, out of 32 old WTPs targeted, 31 have been upgraded/augmented, covering a combined capacity of 307.79 MLD across eight States/UTs, with Karnataka alone accounting for nearly 142 MLD of upgraded capacity. However, under AMRUT 2.0, the Committee note that out of 133 sanctioned WTP augmentation/rehabilitation projects with a total approved capacity of 1,652.49 MLD, only 2 projects (6.03 MLD) have been completed to date, representing less than 0.4% of the approved capacity. Major States such as Gujarat, Maharashtra and Madhya Pradesh, despite having some of the highest sanctioned capacities, have reported no completed projects so far.

As regards new WTPs under AMRUT, out of 149 planned plants, 134 have been commissioned, achieving 4,626.06 MLD against a planned capacity of 5,814.65 MLD, leaving a capacity gap of 1,188.59 MLD. Several States including Punjab (gap of 405.89 MLD), Maharashtra (238 MLD), Tamil Nadu (125 MLD) and Kerala (100 MLD) continue to exhibit substantial shortfalls.

On the aspect of household access to piped water supply, the data furnished reflects disparities across States/UTs as of 2021. While States/UTs, such as Andaman & Nicobar Islands, Punjab, Telangana and Puducherry report over 90% coverage, several States/UTs, such as Ladakh (11.46%), Nagaland (17.07%), Assam (16.28%), Arunachal Pradesh (37.74%), Jharkhand (35.7%) and Uttar Pradesh (44.15%) remain significantly below the 50% mark.

The Committee further note that under AMRUT 1.0, against a target of 70,673.78 km of water pipeline network, 73,519.51 km has reportedly been achieved overall. However, this aggregate conceals substantial under-performance in States such as Assam, Andhra Pradesh, Gujarat, Jharkhand, Kerala, Rajasthan, Telangana and Uttar Pradesh. Under

AMRUT 2.0, although 22,147 km of distribution network has been identified for replacement, the Ministry has not furnished any data on progress achieved so far.

In light of these observations and especially noting the slow pace of WTP upgradation under AMRUT 2.0, persistent treatment capacity gaps and wide disparities in household coverage, the Committee recommend that the Ministry of Housing and Urban Affairs undertake the following measures:

(i) Establish strict, State-wise quarterly targets for the completion of ongoing WTP upgradation, augmentation and rehabilitation projects under AMRUT 1.0 and AMRUT 2.0, as well as pipeline network works in lagging States. These targets should be monitored on a real-time basis to prevent further slippage.

(ii) Bridge Capacity Gaps: Prioritise States with significant treatment capacity deficits such as Punjab, Maharashtra, Tamil Nadu and Kerala and those with less than 50% household coverage, such as Ladakh, Nagaland, Assam, Arunachal Pradesh, Jharkhand, and Uttar Pradesh by providing targeted funding, technical support and capacity-building measures.

(iii) Improve Data Transparency: Mandate comprehensive annual performance reporting for all AMRUT cities/ULBs, including household coverage, treatment capacity utilisation and progress on network projects to ensure informed policy and operational decisions.

(iv) Link Funding to Outcomes: Introduce conditional funding mechanisms under AMRUT 2.0, linking future fund releases not only to demonstrated progress in infrastructure creation but also to operational performance indicators such as treatment capacity utilisation, proportion of population receiving 24x7 water supply and household coverage with piped connections etc. so as to enhance accountability and ensure timely achievement of Mission objectives.

Recommendation No. 7

<u>Need to reduce Non-Revenue Water (NRW) and accelerate Smart Metering across cities under AMRUT 2.0</u>

According to the High-Powered Expert Committee (HPEC) report titled "Indian Urban Infrastructure and Services", 2011, the non-revenue water (NRW) accounts for 50 percent of water production. Further, Sustainable Development Goal 6.4 aims to substantially increase water-use efficiency across all sectors. Consequently, the AMRUT 2.0 guidelines proposes reduction of non-revenue water (NRW) to below 20% in an ULB as a part of the incentive-based reforms on water conservation. In this regard, ₹400 crore has been earmarked as incentive for States/ULBs that achieve NRW reduction below 20%, subject to fulfilling specific milestones such as installation of water meters at all water sources and bulk distribution points, creation of District Metered Areas (DMAs) covering at least 50% of ULB population with 100% household metering within these DMAs and establishment of dedicated NRW Cells for leakage mapping and water audits.

However, as per the information furnished by the Ministry, no State or ULB has submitted claims for reform incentives under this provision as yet. On the issue of smart water metering and corresponding NRW reduction, the Ministry stated that water is a State subject and planning and implementation are the responsibility of respective States/ULBs. It did not furnish any city-wise data on smart meter coverage or NRW reduction impact.

The Committee observe that despite NRW reduction being a central reform target under AMRUT 2.0 and clear financial incentives having been provisioned, progress on this front has been negligible. The fact that no State or ULB has claimed the incentive reflects a significant gap between policy design and implementation. Moreover, the lack of consolidated data on smart meter deployment and resultant NRW reduction hampers transparency, monitoring and accountability. The Committee are of the view that unless NRW is brought under control, the sustainability and efficiency of urban water supply systems will remain compromised.

Despite the fact that water is State subject, the Committee are of the firm opinion that the objective of the AMRUT 2.0 of making the cities 'water secure' cannot be achieved without increasing water-use efficiency. Therefore, the Committee recommend that the Ministry urgently engage with States/ULBs to operationalise the incentive mechanism for NRW reduction and institute a structured monitoring and reporting framework, including the publication of city-wise NRW levels and smart metering status.

Recommendation No. 8

<u>Urgent need to augment Wastewater Treatment capacity and to strengthen Wastewater Reuse through Policy, Regulation and Incentives</u>

The AMRUT 2.0 guidelines states that State High Powered Steering Committee (SHPSC), while approving the State Water Action Plan will also ensure that used water (wastewater) is treated and put to reuse to meet 20% of cities water demand and 40% of Industry water demand in aggregate at the state level. In this context, the state-wise data on sewage generation and treatment as furnished by the Ministry, based on the information provided by the Chief Secretaries of 31 States/UTs to National Green Tribunal (NGT) dated February, 2021 reveals that total sewage generation in urban India stands at approximately 48,004 MLD and the installed treatment capacity is about 30,001 MLD spread across 1,261 Sewage Treatment Plants (STPs). However, the actual utilization of the existing treatment capacity is only 55.9%, that is, 16,770 MLD. Certain States either have no treatment capacity or underutilized infrastructure. Thus, against the 2021 data on national sewage generation, as on date 31,234 MLD sewage goes untreated across states.

On reuse, the Ministry stated that AMRUT 2.0 promotes the reuse of treated wastewater for building a circular urban water economy. The Committee have been apprised that so far 1,437 MLD of additional reuse capacity has been created under AMRUT, taking the total to 5,614 MLD, with another 1,943 MLD under implementation. States are further encouraged to scale this up to 10,000 MLD by 2030. The Ministry highlighted that 11 States have notified reuse policies under AMRUT 2.0 and reforms such as *Jal Hi AMRIT* incentivise performance-based recycling. AMRUT also mandates ULBs to pass resolutions

on wastewater reuse, supported by financial and technical assistance under the Technology Sub-Mission.

The Committee take note of the significant gap of over 31,234 MLD between wastewater generation and treatment, indicating serious capacity and operational shortcomings. Although AMRUT 2.0 emphasises wastewater reuse, its adoption remains limited and inconsistent, with only 11 States having formal reuse policies. These policies appear to focus primarily on augmenting water supply, with insufficient emphasis on wastewater recycling and reclamation. The lack of centralised data on potable water uses for non-potable needs and weak enforcement mechanisms further hinder progress. While initiatives like Jal Hi AMRIT are commendable, the Committee are of the view that voluntary efforts without strong regulatory backing are unlikely to drive large-scale change at the national level.

In light of the above, the Committee recommend that:

(i) the Ministry must take all necessary measures for optimal utilisation of the sewage treatment capacity of the existing Sewage Treatment Plants (STPs) and promote installation of sufficient STPs across States/UTs as to achieve 100% wastewater treatment;

(ii) the Ministry should collect and upload the latest data from all the States on total sewage generation in urban India and the installed treatment capacity, and accordingly plan further strategies and reforms;

(iii) All the States should be urged to adopt and notify specific reform provisions and policies on reuse of treated water; and

(iv) the Ministry in coordination with States, formulate a National Urban Wastewater Reuse Policy with enforceable benchmarks on priority basis, mandating time-bound adoption of State-level reuse policies and establish robust systems for tracking actual reuse and resultant reduction in potable water diversion;

Recommendation No. 9

<u>Need for strengthening institutional and financial capacity of ULBs in water supply management</u>

Under the AMRUT guidelines, Urban Local Bodies (ULBs) have to submit detailed City Water Balance Plans (CWBPs) and City Water Action Plans (CWAPs). However, it is reportedly found that in several States/UTs the planning, financing and implementation of water supply projects is executed through parastatal agencies such as State Jal Boards rather than ULBs, contradicting the 74th Constitutional Amendment and the 12th Schedule wherein water is assigned to ULBs. In this regard, the Ministry stated that under AMRUT and AMRUT 2.0, ULBs are designated as the primary implementing agencies for planning, tendering, awarding and executing projects approved under the State Water Action Plan (SWAP). However, in cases where ULBs lack technical capacity, support is provided by specialized parastatal agencies and Project Development and Management Consultants (PDMCs). On municipal bonds, the Ministry informed the Committee that ₹5,309 crore has been mobilized by 17 cities through bond issuance so far, and incentives have been provided accordingly.

The Committee note that although the framework places ULBs at the centre of implementation, the actual practice remains skewed towards parastatal dominance due to inadequate technical and institutional capacity at the ULB level. Elected ULB members do not have much control over state-level institutions. There is also no clarity on the degree of ULB involvement in Service Level Improvement Plans (SLIPs) preparation. The Committee also took note of the fact that only 17 out of 500 AMRUT cities have successfully accessed municipal bonds, highlighting the limited financial autonomy and preparedness of the majority of ULBs.

The Committee, therefore, recommend that the Ministry of Housing and Urban Affairs, in coordination with State Governments, should take concrete, time-bound steps to empower ULBs as per the spirit of the 74th Constitutional Amendment. This includes mandating and closely monitoring their participation in planning exercises such as SLIPs, formulating a national roadmap for building their institutional and technical capacity and progressively reducing reliance on parastatal agencies. Targeted financial and technical support should be extended to enable ULBs to independently plan and implement water supply projects.

Recommendation No. 10

<u>Institutionalising community participation under AMRUT</u>

AMRUT 2.0 aims to make cities 'water secure' through circular economy of water by involving community at large. Regarding the initiatives taken under the Mission to foster a people-centric, participatory governance model beyond the scope of infrastructure creation, the Ministry informed the Committee that citizen engagement is promoted through various initiatives such as AMRUT Mitras, engagement of Self-Help Groups (SHGs), Information, Education and Communication (IEC) campaigns and workshops with States, Cantonment Boards and parastatal bodies. It elaborated that SHGs are being trained for household-level water quality testing using field kits under the AMRUT Mitra initiative, which aims to empower communities, especially women, in decentralized water quality monitoring.

While acknowledging the Ministry's initiatives to involve SHGs and promote citizen engagement, the Committee note that these efforts lack structured institutionalized platforms for regular community involvement, particularly at ground level.

The Committee, therefore, recommend that the Ministry institutionalize community participation in AMRUT projects through mechanisms such as ward-level water user committees, formal citizen feedback and grievance redressal digital platforms and inclusion of civil society organisations in monitoring activities.

Recommendation No. 11

Ensuring Timely Execution of projects under AMRUT and AMRUT 2.0

While examining the physical and financial progress of urban drinking water projects under AMRUT and AMRUT 2.0, the Committee sought detailed information on the physical and financial progress of projects under AMRUT and AMRUT 2.0, including the number and value of grounded, ongoing and completed projects; release and utilisation of Central Assistance; and the contribution and utilisation of funds from State Governments and other sources. The Committee also inquired about the status of projects subsumed under AMRUT 2.0 and whether delays in execution or fund flow are impeding the timely completion of the scheme.

The Ministry informed that under AMRUT 1.0, 6,010 projects worth ₹83,550 crore have been grounded, exceeding the approved SAAP allocation of ₹77,640 crore with 95% of physical works executed and 87% of funds utilised. However, works worth ₹4,073 crore remain under execution, a figure that has remained almost unchanged even after their subsumption into AMRUT 2.0, indicating persistent delays in closing legacy projects.

Under AMRUT 2.0, although 8,791 projects worth about ₹1.90 lakh crore have been approved, the Committee note that there continues to be significant variation as projects move from approval to actual execution. DPRs have been prepared for ₹1.54 lakh crore, NITs issued for ₹1.47 lakh crore and contracts awarded for ₹1.18 lakh crore, but physical completion stands at only about ₹48,050 crore, with expenditure at merely ₹35,520 crore. This wide variation demonstrates procedural bottlenecks and slowing momentum on the ground. Further, only ₹12,724 crore, roughly 19% of the central share for projects, has been released so far, which constrains fund flow and may discourage timely matching contributions from States and ULBs. The Committee also note that the Ministry does not maintain consolidated records of financial contributions by States and ULBs, undermining holistic monitoring of the Mission's financing. State-wise utilisation of central assistance shows significant disparities, with several States utilising their allocations fully while others lag considerably.

The Committee therefore observe that in addition to pending projects under AMRUT 1.0, the large approvals given under AMRUT 2.0 are not translating into commensurate progress on the ground. With the Mission set to conclude in FY 2025–26 and much of the work still in nascent stages, the Committee flag a risk of time overruns unless immediate and coordinated remedial steps are undertaken.

To address delays under AMRUT and AMRUT 2.0, the Committee recommend that the Ministry ensure timely completion of remaining AMRUT 1.0 projects with strict accountability. It should streamline and standardise the project workflow, from approval to execution and enhance technical assistance to States. The Committee also stress the need to accelerate the release of central funds. Taking note of the Ministry's inability to track fund release and utilisation beyond central assistance, the Committee urge the establishment of a mechanism at national level to monitor multi-source funding including State share, ULB contribution and other financing streams to improve transparency and

fiscal oversight. In addition, the Committee recommend that targeted support and performance-linked incentives should be extended to low-performing States/UTs and a comprehensive mid-term review of AMRUT 2.0 should be undertaken in FY 2025-26 to recalibrate targets and timelines for effective and timely completion of the Mission.

Recommendation No. 12

Promotion of Innovative and Alternative Financing Mechanisms

AMRUT 2.0. guidelines stipulate that Public Private Partnership (PPP) projects are mandatory in million plus cities and at least a minimum of 10% of total fund allocation at the city level shall be committed to PPP projects. In pursuance to the stated stipulation, the Committee were apprised that under AMRUT 2.0, 43 PPP projects worth ₹7,384 crore (including 19 projects worth ₹6,472 crore in million-plus cities) have been approved and 17 cities have raised ₹5,309 crore via municipal bonds.

The Committee appreciate Ministry's efforts to promote alternative financing mechanisms, particularly PPPs and municipal bonds. However, considering the total capital expenditure under the Mission, the Committee observe that the share of PPP investments and municipal bond mobilisation remains limited and concentrated in a few cities.

The Committee, therefore, recommend that the Ministry intensify efforts to scale up innovative financing mechanisms under AMRUT 2.0 and extend technical support in areas such as credit rating, accounting reforms and regulatory compliance.

Recommendation No. 13

Need for a National-Level Long-Term Urban Water Demand Projection Framework

The Committee sought to know whether any comprehensive assessment has been undertaken to estimate the urban drinking water demand for the long-term horizon of 2047 (Viksit Bharat), given the anticipated demographic transition with over half of India's population projected to reside in urban areas by 2050. The Committee also inquired how the AMRUT Mission across both phases has been designed or recalibrated to account for the projected growth in urban population and corresponding water demand, and what strategic interventions are being undertaken to ensure water security for future urban India.

The Ministry stated that while no unified national-level projection report has been prepared, inputs from institutional mechanisms such as Census projections, NITI Aayog, World Bank, and ADB are used to inform long-term planning. Under AMRUT 2.0, States and ULBs have been encouraged to prepare City Water Balance Plans (CWBP) and City Water Action Plans (CWAP) to assess current and future water demand. Detailed Project Reports are being developed on a 15–30 year horizon. Other interventions under AMRUT 2.0 include universal water supply coverage, reduction of Non-Revenue Water (NRW), treated wastewater reuse, water body rejuvenation, digital governance tools, capacity building, and reform-linked incentives.

The Committee note that although the Ministry has taken various steps through AMRUT 2.0 to guide long-term urban water infrastructure planning in a decentralised manner, there is no single consolidated or nationally coordinated projection of urban water demand for 2047 or 2050. The absence of such a long-term strategic assessment weakens the alignment of city-level interventions with the overarching goals of Viksit Bharat 2047 and limits the ability to comprehensively address the implications of rapid urbanisation on water security. Fragmented approaches, varying in quality and coverage across States and ULBs, further exacerbate this gap.

The Committee, therefore, recommend that the Ministry, in coordination with various stakeholders, should urgently commission a unified national-level assessment and projection of urban drinking water demand for next 25 to 30 years. This exercise should account for projected population growth, migration trends, climate resilience, resource sustainability and technological interventions. The findings should form the basis for a National Urban Water Security Strategy, which would guide reforms, infrastructure investments and institutional capacity building across all levels of governance to ensure future-ready and water-secure cities.

Recommendation No. 14

<u>Need for Uniform Standards and Formal Contractor Training Mechanisms</u>

In light of the observation regarding absence of uniform construction standards and the inconsistent quality of execution by contractors engaged in AMRUT works on account of the lack of structured training for contractors, inadequate technical oversight and the absence of any dedicated agency responsible for ensuring adherence to standardised protocols across projects, the Committee, sought clarification from the Ministry on whether any centralised authority has been mandated to frame, enforce and monitor project-level standards to ensure uniformity and quality in execution across all States and ULBs. In response, the Ministry acknowledged that a major challenge lies in the lack of trained contractor staff, emphasising that while officers and engineers are being trained, the contractors who are ultimately responsible for on-ground implementation also require systematic skilling.

The Committee observe that despite the measures initiated, contractor training remains fragmented and non-mandatory, and no single agency has been entrusted with enforcing uniform construction standards. In the absence of a structured and compulsory capacity-building framework, the quality of execution continues to depend heavily on individual contractors' practices, resulting in inconsistent outcomes and frequent infrastructure failures. The Committee are of the view that without a formal institutional mechanism to ensure compliance with Central Public Health and Environmental Engineering Organisation (CPHEEO) norms and technical benchmarks, the assets created under AMRUT will continue to face challenges relating to quality, durability and long-term sustainability.

In light of the above, the Committee recommend the Ministry

(i) to put in place an institutional mechanism to ensure compliance with uniform project-level construction protocols across all States and ULBs;

(ii) to formulate a mandatory contractor training and certification programme, with standard curriculum and construction protocols aligned with CPHEEO standards, as a prerequisite for undertaking AMRUT works;

(iii) to engage State-level accredited training centres for the training and periodic recertification of contractors and field supervisors.

(iv) to create and maintain a national database of certified contractors, integrated with the AMRUT portal, enabling ULBs to verify credentials before awarding works; and

(v) to introduce independent third-party quality audits for all major water supply and sewerage projects, with audit findings linked to contractors' future eligibility to undertake Mission-related works.

Recommendation No. 15

Ensuring Uniform Water Quality Monitoring and Compliance under AMRUT 2.0

The Committee, taking note of the centrality of water quality to safe and reliable urban drinking water supply, examined the mechanisms adopted under AMRUT and AMRUT 2.0 to ensure compliance with prescribed drinking-water standards. The Committee express concern over the wide variation in water-quality data placed before them, where samples were shown to meet 99% compliance at the WTP level and 98.82% at the household level in one instance, while another dataset reflected only 66% household-level compliance with BIS norms.

In response, the Ministry stated that AMRUT does not issue separate water-quality guidelines and that States/ULBs are to follow IS 10500:2012 and CPCB standards. It further referred to initiatives such as SCADA and IoT-based monitoring, setting up laboratories at WTPs and STPs and community engagement through women SHGs under AMRUT Mitra. The Committee, while acknowledging these efforts, noted the absence of a uniform, centrally governed water-quality surveillance framework. The Committee also observe that community participation and SHG involvement, though valuable for awareness generation and citizen engagement, cannot substitute formal quality-control mechanisms, which must rely on accredited laboratories and trained professionals.

In view of the above, the Committee recommend that the Ministry should establish a unified, transparent National Urban Water Quality Monitoring Framework for all AMRUT cities, prescribing standardised sampling protocols, testing parameters and reporting formats aligned with IS 10500:2012 and ensure mandatory and scientifically robust testing at both WTP and household levels at accredited water quality laboratories by qualified technical professionals, with real-time results published through a publicly accessible dashboard linked to SCADA/IoT systems.

Magunta Sreenivasulu Reddy
Chairperson
Standing Committee on Housing and Urban Affairs

New Delhi;
10 December, 2025
19 Agrahayana, 1947 (Saka)

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Appendix-I

STANDING COMMITTEE ON HOUSING AND URBAN AFFAIRS

Minutes of the Eleventh Sitting of the Standing Committee on Housing and Urban Affairs (2024-25) held on Thursday, 03 April, 2025

The Committee sat from 1515 hours to 1630 hours in Committee Room 2, Parliament House Annexe Extension, Block 'A', New Delhi.

PRESENT

Shri Magunta Sreenivasulu Reddy - Chairperson

Members

Lok Sabha

2. Smt Lovely Anand
3. Shri Manickam Tagore B.
4. Shri Satpal Brahamchari
5. Shri Selvam G.
6. Ms. Sayani Ghosh
7. Shri Shankar Lalwani
8. Smt. Mahima Kumari Mewar
9. Shri Naresh Ganpat Mhaske
10. Shri Rambhual Nishad
11. Shri Sanjay Dina Patil
12. Shri Chamala Kiran Kumar Reddy
13. Smt. Mala Rajya Laxmi Shah
14. Shri Kanwar Singh Tanwar
15. Shri Ram Shiromani Verma
16. Shri Ravindra Dattaram Waikar

Rajya Sabha

17. Shri Ayodhya Rami Reddy Alla
18. Shri Raghav Chadha
19. Shri Mission Ranjan Das
20. Dr. Medha Vishram Kulkarni
21. Smt. Maya Naroliya
22. Shri Debashish Samantaray

Secretariat

1.	Shri Y.M. Kandpal	Additional Secretary
2.	Smt. Archna Pathania	Director

Ministry of Housing and Urban Affairs

1.	Sh Srinivas Katikithala	Secretary, MoHUA
2.	Ms. D. Thara	Additional Secretary (A&CV)
3.	Ms. Isha Kalia	Joint Secretary

2**.** At the outset, Hon'ble Chairperson welcomed the Members of the Standing Committee on Housing and Urban Affairs to the sitting of the Committee.

3. The Committee then took up for consideration the Draft Report on 'Regional Rapid Transit System and Role of NCRTC' and adopted the same without any modifications.

(*Thereafter the witnesses were called in*.)

4. The Hon'ble Chairperson welcomed the representatives from MoHUA to brief the Committee on the AMRUT scheme. He noted that while AMRUT and AMRUT 2.0 had achieved considerable progress, issues related to slow implementation, financial constraints of ULBs, and gaps in coverage warranted detailed review.

5. Thereafter, the representatives from MoHUA made a detailed presentation before the Committee highlighting the progress of AMRUT 1.0, initiatives taken under AMRUT 2.0 and future Goals.

6. The Members then raised several queries, issues and also made few suggestions which have been summarized as under:

i. relating to the slow pace of project implementation in several States despite fund availability;
ii. inadequate release of funds from the total sanctioned Central share under AMRUT 2.0;
iii. frequent delays in the transfer of funds from State treasuries to implementing agencies;
iv. challenges in coordination between State Governments and Urban Local Bodies (ULBs);
v. insufficient action in backward and hilly areas, especially for water provisioning and infrastructure;
vi. no visible improvement in urban water quality in many regions despite treatment initiatives;
vii. low progress in STP commissioning and coverage in major cities;
viii. continued dumping of untreated sewage into water bodies and seas;
ix. limited adoption of advanced water purification methods for ensuring potable water;
x. limited efforts to bridge the gap between water supply infrastructure and household-level connections;
xi. Poor maintenance of public parks and green spaces developed;
xii. Overreliance on legacy water infrastructure without sufficient upgrading;
xiii. Absence of robust monitoring systems to verify quality and efficiency of ongoing projects;
xiv. No clear action plan for ensuring universal 24x7 water supply, especially in expanding urban zones;
xv. Challenges faced by ULBs in managing Operation & Maintenance (O&M) of created infrastructure;
xvi. Lack of awareness and participation at the household level leading to contamination and inefficiencies;
xvii. Concerns on capacity gaps, infrastructure sustainability and urban flooding measures;

xviii. Need to revise the funding pattern to increase the Central share to help financially weak States;

xix. Need to encourage PPP models and HAM (Hybrid Annuity Model) for infrastructure development;

xx. Need to ensure that all AMRUT cities adopt door-to-door waste segregation and establish Material Recovery Facilities (MRFs);

xxi. Deploy Internet of Things (IoT) enabled sensors in smart drainage systems to enable real-time water logging alerts;

xxii. Set green space benchmarks for AMRUT cities and promote micro-forestation with community engagement;

xxiii. Introduce a national policy on reuse of treated wastewater for agriculture and industrial use;

xxiv. Need to mandate city-level aquifer management and recharge plans to ensure water source sustainability.

7. The Chairperson then thanked the witnesses for sharing valuable information with the Committee and directed them that any pending information not readily available during the Sitting be submitted to the Committee Secretariat, in writing, at the earliest.

The Committee then adjourned.

(Verbatim proceeding of this Sitting of the Committee has been kept for record.)

Appendix-II

STANDING COMMITTEE ON HOUSING AND URBAN AFFAIRS (2025-26)

Minutes of the Fourth Sitting of the Standing Committee on Housing and Urban Affairs held on Tuesday, 04 November, 2025

The Committee sat from 1100 hours to 1250 hours in Committee Room B, Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Magunta Sreenivasulu Reddy - Chairperson

Members

Lok Sabha

2. Shri Satpal Brahamchari
3. Shri Shankar Lalwani
4. Shri Rambhual Nishad
5. Shri Sanjay Dina Patil
6. Shri Kanwar Singh Tanwar
7. Shri Ram Shiromani Verma
8. Shri Ravindra Dattaram Waikar

Rajya Sabha

9. Smt. Jaya Amitabh Bachchan
10. Shri R. Girirajan
11. Shri Ram Chander Jangra
12. Shri Sandeep Kumar Pathak
13. Shri A. A. Rahim

Secretariat

1.	Shri Lalkithang	Joint Secretary
2.	Smt. Archna Pathania	Director
3.	Ms. Swati Parwal	Deputy Secretary

Ministry of Housing and Urban Affairs

1.	Shri Srinivas Katikithala	Secretary, MoHUA
2.	Smt. Isha Kalia	Joint Secretary
3.	Shri Dinesh Kapila	Economic Advisor

2. At the outset, the Chairperson welcomed the Members and the representatives of the Ministry of Housing and Urban Affairs to the Sitting of the Committee convened to have a briefing on the subject 'Review of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with special emphasis on Urban Drinking Water'. He underlined the need for assessing the Mission's effectiveness in achieving universal and equitable water supply, adequacy of funding, capacity building of ULBs and use of technology. He also stressed the importance of promoting a circular water economy through conservation, reuse, recycling and wastewater management, while drawing lessons from AMRUT 1.0 to ensure measurable and sustainable improvements under AMRUT 2.0.

3. Thereafter, the representatives of the Ministry made a power point presentation before the Committee on the subject. The power point presentation broadly covered the objectives and components of AMRUT and AMRUT 2.0, progress achieved in ensuring universal tap connections and used water management, key features such as circular water economy, capacity building and real-time monitoring mechanisms, as well as outcomes in water coverage, quality and conservation. The presentation also highlighted innovative initiatives like *Drink from Tap*, *Jal Hi Amrit* and water body rejuvenation projects along with the persisting challenges in project execution, operation and maintenance as well as source sustainability, and concluded with the way forward towards building a resilient and sustainable urban water ecosystem.

4. The Members then raised several issues and concerns such as slow pace of progress of the Scheme, lack of monitoring and proper utilisation of money, mechanism for training of contractors, poor quality and quantity of water supply, lack of fund for operation and maintenance, need to rationalize the State's share of funding under AMRUT, need to improve the quality and pace of execution of projects, preparation of standard SoP for execution of projects across the country, fixing accountability for poor execution and maintenance of projects under AMRUT *etc*. The representatives of the

Ministry replied to some of the queries and assured to submit the pending information to the Committee at the earliest.

5. The Chairperson then thanked the witnesses for sharing valuable information with the Committee and for responding to the concerns raised by the Members. He further directed that any pending information not readily available during the sitting be submitted to the Committee Secretariat, in writing, at the earliest.

The Committee then adjourned

(Verbatim Proceedings of this Sitting of the Committee has been kept on record.)

Appendix-III

STANDING COMMITTEE ON HOUSING AND URBAN AFFAIRS

Minutes of the Sixth Sitting of the Standing Committee on Housing and Urban Affairs (2025-26) held on Wednesday, 10 December, 2025

The Committee sat from 1500 hours to 1530 hours in Committee Room 'C', Parliament House Annexe, New Delhi.

PRESENT

Shri Magunta Sreenivasulu Reddy - Chairperson

Members

Lok Sabha

2. Smt. Lovely Anand
3. Shri Selvam G.
4. Smt. Mahima Kumari Mewar
5. Shri Naresh Ganpat Mhaske
6. Shri Rambhual Nishad
7. Shri Sanjay Dina Patil
8. Dr. Gumma Thanuja Rani
9. Shri Chamala Kiran Kumar Reddy
10. Smt. Mala Rajya Laxmi Shah
11. Shri Alok Sharma
12. Shri Kanwar Singh Tanwar
13. Shri Ravindra Dattaram Waikar

Rajya Sabha

14. Smt. Kiran Choudhry
15. Dr. Medha Vishram Kulkarni
16. Smt. Maya Naroliya
17. Shri R. Girirajan
18. Shri A. A. Rahim

Secretariat

1.	Shri Lalkithang	Joint Secretary
2.	Smt. Archna Pathania	Director
3.	Ms. Swati Parwal	Deputy Secretary

2. At the outset, Hon'ble Chairperson welcomed the Members of the Standing Committee on Housing and Urban Affairs to the sitting of the Committee.

3. The Committee then took up for consideration the Draft Report on 'Review of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with special emphasis on Urban Drinking Water' and adopted the same without any modifications/with modification.

The Committee then adjourned.

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