

# City Name – Mathura-Vrindavan

## Water Supply

### 1. Assess the Service Level Gap

The first step is to assess the existing situation and service levels gaps for Water Supply (AMRUT Guidelines; para 3 & 6). This will also include existing institutional framework for the sector. AMRUT is focused on improvement in service levels. The zone wise data shall be used in identifying the gaps. These zone-wise gaps will be added to arrive at city level service gaps. While assessing service level gap reply following questions not more than word indicated against each question.

Question: What kind of baseline information is available for water supply system of the city? Detail out the data, information, plans, reports etc related to sector. Is zone wise information available? (75 words)

**A general information has been obtained from records of municipal corporation and Jal Nigam. A general survey has been conducted by municipal corporation to cover the number of house hold present within the municipal limit. A DPR has been made by Jal Nigam under JNNURM Programme providing necessary data regarding the present status as well as augmentation needed for Water Supply condition in the city. In the said DPR Mathura city has been divided into 10 Zones.**

Question: Have you collected census 2011 data? Are you aware of baseline survey data of MoUD? Have you correlated data from these and other sources? (75 words).

**Yes, Census data of 2011 is available with Nagar Nigam Mathura-Vrindavan andit has been correlated. Nagar Nigam Mathura-Vrindavanis aware of MoUD survey data. The data is available and is being used as reference to develop SLIP.**

	Location of source of drinking water Population	Total number of house holds	Tap water from treated source
<b>Total population (census 2011) Nagar Palika Parishad Mathura</b>	<b>349336</b>		
	<b>Total</b>	<b>55086</b>	<b>23373</b>
	<b>Within the premises</b>	<b>42908</b>	<b>19332</b>
	<b>Near the premises</b>	<b>8084</b>	<b>2749</b>
	<b>Away</b>	<b>4094</b>	<b>1292</b>
<b>Departmental data 2015</b>	<b>372780</b>	<b>75529</b>	<b>44829</b>
<b>Departmental data 2017</b>	<b>393420</b>	<b>75529</b>	<b>45859</b>
<b>Departmental data 2011(data of Municipal Corporation Mathura-Vrindavan)</b>	<b>626808</b>	<b>86098</b>	<b>53355*</b>

\* As per ULB data and number of actual existing connection.\*The house hold information of the 51 village will be included in the above table after the survey is conducted.

What are existing services levels for water supply in the city? What is the coverage of water supply Connections? What is per capita supply of water? How much is the extent of metering? How much is non-revenue water? Provide information in table

  
**Project Manager**  
**Drainage & Sewerage Unit**  
**U. P. Jal Nigam, Mathura**

**TABLE: STATUS OF WATER SUPPLY SERVICE LEVELS**  
NAGAR PALIKA PARISHAD MATHURA

Sr. No.	Indicators	Present Status		MOUD Benchmark	Reliability	
		2015	2017		2015	2017
1	Coverage of water supply connections	59.35%	60.71%	100%	C	B
2	Per capita supply of water	126 LPCD	129 LPCD	135 LPCD	D	D
3	Extent of metering of water connections	0%	0%	100%	D	A
4	Extent of non-revenue water	35%	25%	20%	C	D
5	Quality of water supplied	90%	99%	100%	D	D
6	Cost recovery in water supply services	0%	15%	100%	-	A
7	Efficiency in collection of water supply related charges	90%	90%	90%	-	B

**QUESTION: WHAT IS THE GAP IN THESE SERVICE LEVELS WITH REGARD TO BENCHMARKS PRESCRIBED BY MOUD? (75 WORDS).**

NAGAR PALIKA PARISHAD MATHURA

GAP IN SERVICE LEVELS IS AS UNDER:		YEAR 2015	2017-EXISTING
1.	Gap in coverage of water supply as per census 2011 data is	40.65%	39.29%
2.	Gap in Per capita water availability as per present population is about LPCD.	9 LPCD	6 LPCD
3.	Gap in Metering is 100%.	100%	100%
4.	NRW is about which include leakage and free water supply to social gathering festivals along with water supply through stand posts.	15%	5%
5.	No gap in Quality of supplied water as per PHE norms.	10%	1%
6.	Gap in Cost recovery is 100% with expenditure on electricity and power.	100%	85%
7.	Gap in efficiency of water charges/tax collection is about	10%	10%

### NAGAR NIGAM MATHURA-VRINDAVAN

Sr. No.	Indicators	Present Status		MOUD Benchmark	Reliability	
		2015	2017		2015	2017
1	Coverage of water supply connections	59.35%	60.71%	100%	C	B
2	Per capita supply of water	126 LPCD	101 LPCD	135 LPCD	D	D
3	Extent of metering of water connections	0%	0%	100%	D	A
4	Extent of non-revenue water	35%	31%	20%	C	D
5	Quality of water supplied	90%	95%	100%	D	D
6	Cost recovery in water supply services	0%	15%	100%		A
7	Efficiency in collection of water supply related charges	90%	90%	90%		B

GAP IN SERVICE LEVELS IS AS UNDER:		YEAR 2015	2017- EXISTING
1. Gap in coverage of water supply as per census 2011 data is		40.65%	52.07%
2. Gap in Per capita water availability as per present population is about LPCD.		9 LPCD	34 LPCD
3. Gap in Metering is 100%.		100%	100%
4. NRW is about which include leakage and free water supply to social gathering festivals along with water supply through stand posts.		15%	11%
5. No gap in Quality of supplied water as per PHE norms.		10%	5%
6. Gap in Cost recovery is 100% with expenditure on electricity and power.		100%	85%
7. Gap in efficiency of water charges/tax collection is about 10%		10%	10%

## SOURCE OF WATER AND WATER TREATMENT SYSTEM.

Please provide information in 150 words on the above responding to (however not limited to) following questions.

Question: What is the existing source of water? Is it surface water source or underground water source? What is the capacity of these sources?

Existing source of water is underground water as well as surface water (80 MLD both, total no of tube wells is 195 = 50.50 MLD by T.W. + 13 MLD (Supply from Gokul Barrage) = 63.5MLD of existing source.

Question: Is there any treatment provided to water from these sources? How much water is required to be treated daily? What is the treatment capacity installed in the city?

Yes, a Water Treatment Plant of installed treatment capacity 80 MLD is employed for treatment of surface water. For underground water supply chlorination is being done, treatment capacity is 50.50 MLD.

Question: What per capita water supply in LPCD (liter per capita per day) comes out, if you divide total water supply by the total population.?

Source Of Water Capacity is 63.5 MLD. As Per Formula  $(63.5 \text{ MLD} / 626808 \text{ Pop}) = 101 \text{ LPCD}$

## DISTRIBUTION ZONES

Please provide information in 150 words on the above responding to (however not limited to) following questions.

Question: City is divided in how many zones for water supply?

At present Mathura-Vrindavan City is divided into 11 zones.

## TABLE: ZONE WISE COVERAGE OF HOUSEHOLDS

Question: Provide details of total no of Households (HH) in each zone, no of HH with and without water tap connections in the Table

Zone No.	Total No. of Households (a)			Households with direct Water supply connection(b)		Households without direct Water supply connection		
	2015	2015-2017 increment	Total (2017)	2015	2017	2015	2017	Remaining Gap
M-1	3666	-	1452	2620	841	1046	611	611
M-2	5342	-	4896	2404	2835	2938	2061	2061
M-3	9604	-	13403	3707	8792	5897	4611	4611
M-4	11112	-	10639	6719	6162	4393	4477	4477
M-5	7179	-	9971	4800	5775	2379	4196	4196
M-6	12907	-	11417	5200	6612	7707	4805	4805
M-7	9506	-	7665	5206	4440	4300	3225	3225
M-8	9963	-	7429	7032	4303	2931	3126	3126
M-9A	8662	-	6933	4320	4015	4342	2918	2918
M-9 B	4305	-	3597	2821	2084	1484	1513	1513
Vrindavan	-	-	8696	-	7496	-	1200	1200
<b>TOTAL</b>	<b>82246</b> HH		<b>86098</b> HH	<b>44829</b> HH	<b>53355</b> HH	<b>31990</b> HH	<b>33043</b> HH	<b>33043</b> HH

## STORAGE OF WATER

Please provide information in 150 words on the above responding to (however not limited to) following questions.

Question: What is the total water storage capacity in the city? What is capacity of elevated and ground water reservoirs?

**Storage capacity of in the city is as follows:-**

**Total – 4500 KL**

**Elevated reservoir capacity- 19120KL**

**Groundwater Reservoir - 9700 KL**

**Total Storage Capacity - 33320 KL.**

**Proposed capacity :NONE**

Question: In case of surface water, does city need to have ground level reservoirs to store raw treated water?

**The city draws raw surface water from River Yamuna at existing Gokul Barrage hence no ground level reservoir is needed.**

Question: Is water being supplied to consumers through direct pumping or through elevated reservoirs?

**The treated water is being supplied to consumers through direct pumping as well as through elevated reservoir.**

Question: Is storage capacity sufficient to meet the cities demand ?

**No, the storage capacity is insufficient to meet the city's demand.**

## **DISTRIBUTION NETWORK**

Please provide information in 150 words on the above responding to (however not limited to) following questions.

Question: What is the total length of water supply distribution pipe line laid in the city?

**In Nagar Nigam Mathura-Vrindavan There is Water Supply Distribution Network of 589.22 KM.**

Question: What is the total road length in the city? Is the pipe lines are laid in all streets? Is the objective of universal coverage of water supply pipe line is achieved?

**Total road length in the city is 945.95 Km. Pipe lines are not laid in all streets. The objective of universal coverage of water supply pipe line is not achieved.**

Question: What are the kind of pipe materials used in distribution lines?

**PVC, A.C., D.I.&C.I. pipe material are being used in the distribution lines.**

Question: Provide zone wise details of street length with and without water distribution lines in the Table?

Table: Zone Wise length of distribution network

Zone No.	Total Street Length (KM)	Street length with water distribution pipe line			Street length without water distribution pipe line		
		2015	2017	Total	2015	2017	Remaining Gap
M-1	23.69	16.74	16.74	16.74	6.95	6.95	6.95
M- 2	55.70	18.96	18.96	18.96	36.74	36.74	36.74
M- 3	127.50	45.57	45.57	45.57	81.93	81.93	81.93
M- 4	82.95	78.41	78.41	78.41	4.54	4.54	4.54
M- 5	107.06	75.16	75.16	75.16	31.90	31.90	31.90
M-6	63.40	21.18	21.18	21.18	42.22	42.22	42.22
M-7	49.09	16.35	16.35	16.35	32.74	32.74	32.74
M-8	44.50	14.82	14.82	14.82	29.68	29.68	29.68
M -9(A)	53.96	18.04	18.04	18.04	35.92	35.92	35.92
M - 9(B)	38.10	33.99	33.99	33.99	4.11	4.11	4.11
Vrindavan	300.00	-	250.00	250.00	-	50.00	50.00
<b>TOTAL</b>	<b>945.95 KM</b>	<b>339.22 KM</b>	<b>589.22 KM</b>	<b>589.22 KM</b>	<b>306.73 KM</b>	<b>356.73 KM</b>	<b>356.73 KM</b>

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## INSTITUTIONAL FRAMEWORK

Please provide information in 150 words on the above responding to (however not limited to) following questions.

Question: Define role and responsibilities in terms of O&M, policy planning, funding, service provision in table

Table: Functions, roles, and responsibilities

Planning and Design	Construction/ Implementation	O&M
U.P. Jal Nigam	U.P. Jal Nigam and ULB	Municipal Corporation Mathura-Vrindavan

Question: How city is planning to execute projects?

The city has been working in collaboration with Jal Nigam a parastatal body or its water infrastructure projects in the city. The execution of the projects will be done as per instructions given by the state government, as well as MoUD, Gol & smaller projects like branch lines, gaps in pipe lines will be done by Nagar Nigam Mathura-Vrindavan.

Question: Shall the implementation of project be done by Municipal Corporation or any parastatal body? Please refer para 8.1 of AMRUT guidelines.

Implementation of the project shall be done by U.P. Jal Nigam & Nagar Nigam Mathura-Vrindavan.

## 2. Bridge the Gap

Once the gap between the existing Service Levels is computed, based on initiatives undertaken in different ongoing programs and projects, objectives will be developed to bridge the gaps to achieve universal coverage. (AMRUT Guidelines; para 6.2 & 6.3, Annexure-2; Table 2.1). Each of the identified objectives will be evolved from the outcome of assessment and meeting the opportunity to bridge the gap.

Question: List out initiatives undertaken in different ongoing programs and projects to address these gaps. For this provide details of ongoing projects being carried out for sector under different schemes with status and when the existing projects are scheduled to be completed? Provide information in Table

## TABLE: STATUS OF ONGOING/ SANCTIONED PROJECTS

2015-16

S.No.	Name of Project	Scheme Name	Cost	Month of Completion	Status (as on dd mm 2015)/2017
1	Mathura Water House Connection (Domestic) Scheme	AMRUT	268.67 Lacs	03/2018	Work is approx. 20% completed

Question: How much the existing system will be able to address the existing gap in water supply system? Will completion of above will improve the coverage of network and collection efficiency? If yes, how much. (100 words).

**At present existing infrastructure is sufficient to cater 60.71% HH after completion of above mentioned project the total network coverage will be approx. 67%.**

Question: Does the city require additional infrastructure to improve the services? What kind of services will be required to fulfill the gap?

**Yes, city requires additional infrastructure to improve the services**

1. Increase coverage of water supply system by increasing length of pipe lines and making awareness about quality of municipal water supply among people.
2. Regularization of unauthorized water connection.
3. Reduction in NRW water by replacement of old-damaged pipelines.
4. Automation of tube wells as well as Water Treatment Plant at Gokul Barrage.
5. Provision of metering of water connection.
6. Upgradation/Augmentation of Water Treatment Plant at Gokul Barrage.
7. Construction of New O.H.T. & C.W.R.

Question: How does the city visualize taking the challenge to rejuvenate the projects by changing their orientation, away from expensive asset replacement programs, to focusing on optimum use of existing assets?

**The Municipal Corporation Mathura-Vrindavan Nagar Nigam will motivate its people to take water connections by making awareness and importance of municipal drinking water quality. Municipal Corporation Mathura-Vrindavan Nagar Nigam will make efforts by meeting and registering water connections by advertisements. U.P. Jal Nigam will also make the optimum use of existing water supply facilities while preparing new projects.**

Question: Has city conducted assessment of Non Revenue Water? if yes, what is the NRW level? Is city planning to reduce NRW?

**The Municipal Corporation Mathura-Vrindavan Nagar Nigam is planning to conduct ward wise assessment to ascertain the NRW and legalization of the connection. The NRW at present is 31%.**

Question: Based on assessment of existing infrastructure and ongoing / sanctioned projects, calculate existing gaps and estimated demand by 2021 for water supply pipe network, number of household to be provided with tap connections, and required enhancement in capacity of water source/ treatment plant (MLD). Gaps in water supply service levels be provided as per Table

Component	2015		2021			2021	
	Present	Ongoing 2017	Total		Demand 2021	Gap 2017-2021	
			2015	2017		2017	2021
Source(T.W.) + Surface Water	50.50 MLD (T.W) + 80 MLD (Gokul Barrage)	NIL	130.50 MLD	130.50 MLD	101 MLD	Surplus	Surplus
Treatment Capacity	101 MLD	NIL	101 MLD	101 MLD	101 MLD	Sufficient	Sufficient
Elevated Storage Capacity (O.H.T)	19.12 ML	NIL	19.12 ML	19.12 ML	30.11 ML	10.99 ML	10.99 ML
Surface (C.W.R)	14.20 ML	NIL	14.20 ML	14.20 ML	22.58 ML	8.38 ML	8.38 ML
Distribution Network Coverage	589.22KM	NIL	589.22 KM	589.22 KM	945.95 KM	356.73 KM	356.73 KM

## OBJECTIVES

Based on above, objectives will be developed to bridge the gaps to achieve universal coverage. While developing objectives following question shall be responded so as to arrive at appropriate objective.

Please provide List out objectives to meet the gap in not more than 100 words.

Question: Does each identified objectives will be evolved from the outcome of assessment?

**Yes. The objective is to increase the coverage to unserved areas and to reduce NRW and enhance storage capacity of raw water.**

1. Universal coverage of water connections by laying of water supply pipe lines in shortfall areas and legalization of unauthorized water connections.
2. To improve the quality of water establishment of water testing lab.
3. To make the system energy efficient solar energy for continuous electricity supply replacement of inefficient pumps and motors.
4. To enhance Efficiency of water charges collection metering system in water supply system and online billing, tracking system and spot billing machine will be introduced.
5. To reduce NRW provision of replacement of old pipe lines, leakage detection machine and automation of tube wells will be made.

Question: Does each objective meet the opportunity to bridge the gap?

**Yes, each objective meets the opportunity to bridge the gap**

## 3. Examine Alternatives and Estimate Cost

The objective will lead to explore and examine viable alternatives options available to address these gaps.. These will include out of box approaches. (AMRUT Guidelines; Para 6.4 & 6.8 & 6.9). This will also include review of smart solutions. The cost estimate with broad source of funding will be explored for each. While identifying the possible activities, also examine the ongoing scheme and its solutions including status of

completion, coverage and improvement in O&M. Please provide information on the above responding to (however not limited to) following questions.

Question: What are the possible activities and source of funding for meeting out the objectives? (75 words)

**The source of funding of activities shall be:**

- 1. AMRUT,**
- 2. 14th Finance Commission**
- 3. State Government Funds**
- 4. The Central Government Funds**

**The funding for meeting out the each objective will 50% from GOI, and remaining 30% from state government and 20% ULB.**

Question: How can the activities be converged with other programme like JICA/ ADB funded projects in the city etc? (100 words)

**No on going project like JICA/ ADB**

Question: What are the options of completing the ongoing activities? (75 words)

**The ongoing Mathura Water House Connection (Domestic) Scheme is approximately 20% completed and is expected by March, 2018.**

Question: How to address the bottlenecks in the existing project and lessons learnt during implementation of these projects? (75 words)

**The bottlenecks would be addressed are how to maximum utilize the present infrastructure to achieve better delivery of service this would be addressed through capacity building programme.**

Question: What measures may be adopted to recover the O&M costs? (100 words)

**The O&M cost shall be recovered by:**

- 1. Increasing the coverage of water supply to unserved areas,**
- 2. Regularization of unauthorized water connections.**
- 3. By increasing user charges**
- 4. By reducing NRW**

Question: Will metering system for billing introduced?

**Yes, Metering System will be introduced.**

Question: Whether reduction in O&M cost by addressing NRW levels be applied? (75 words)

**Yes, Municipal Corporation Mathura-Vrindavan Nagar Nigam will minimize NRW level to enhance O&M Cost optimization by regularizing of unauthorized connections and replacement of old pipe lines with new. To enhance Efficiency of water charges collection metering system in water supply system and online billing, tracking system and spot billing machine will be introduced.**

Question: Does each objective meet the opportunity to bridge the gap?

**Yes, objectives have been identified to bridge the current service level gaps**

## THE ALTERNATIVE ACTIVITIES TO MEET THESE ACTIVITIES BE DEFINED AS PER TABLE

Table: Alternative Activities To Meet Objectives

Sr. No.	Objective	Activities	Cost (Cr)	Financing Source
1.	To achieve the universal coverage	HH Connections near the premises = 5335@5185 Rs./HH	2.68 Cr	AMRUT/State and ULB
2.	To achieve Universal distribution network	Universal distribution network by laying New pipe 356KM @ 0.3 Cr/KM including 28738@5185 Rs./HH	121.70 Cr	AMRUT/State and ULB
3.	Per capita LPCD Storage capacity	To meet proposed demand of storage by construction of 8.38 ML C.W.R @1.35 Cr. for surface supply & 10.99 ML O.H.T. @ 1.8 Cr.	31.09 Cr	AMRUT/State and ULB
4.	Upgradation of W.T.P.	Rehabilitation and Upgradation of existing W.T.P. and construction of new 60 MLD W.T.P.	200.00 Cr	AMRUT/State and ULB
5.	To make the system efficient by reduction of NRW water	By providing replacement of old pipe line 220 km @.3 cr /km, zoning and leakage detection and automation of tube well.	66.00 Cr	AMRUT/State and ULB
6.	To improve the quality of water	Establishment/rehab of water testing lab and implementation of online water testing & monitoring systems and water testing.	0.80 Cr	AMRUT/State and ULB
7.	Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine 86098 @ 3000	25.83 Cr	AMRUT/State and ULB
8.	To make the system energy efficient	Solar energy for continuous electricity supply replacement of inefficient pumps and rebore tube well in ward	1.74 Cr	AMRUT/State and ULB
9.	To achieve universal coverage and universal distribution system for Newly added 51 villages	Universal distribution network by laying New pipe 765KM @.3 CR/KM with C.W.R. and O.H.T.	300.00 Cr	AMRUT/State and ULB
<b>TOTAL</b>			<b>749.84 Cr</b>	

## 4. CITIZEN ENGAGEMENT

ULBs will organize and conduct city level citizen consultation and receive feedback on the suggested alternatives and innovations. Each alternative will be discussed with citizens and activities to be taken up will be prioritized to meet the service level gaps. ULB will prioritize these activities and their scaling up based on the available resources. (AMRUT Guidelines; Para 6.6, 6.7 & 7.2). Please explain following questions in not more than 200 words detailing out the needs, aspirations and wishes of the local people.

Question: Has all stakeholders involved in the consultation?

**Yes, all stakeholders is being involved in the consultation. The proposals are put before ward members of Municipal Corporation Mathura-Vrindavan Nagar Nigam.**

Question: Has ward/ zone level consultations held in the city?

**Yes, all the elected representative have been in touch with the citizens of their respective wards and have been consulting over the role of Municipal Corporation M.V.N.N. to give better services to the citizens their respective wards.**

Question: Has alternative proposed above are crowd sourced?

**No the alternatives proposed are not crowd sourced.**

Question: What is feedback on the suggested alternatives and innovations?

**Feedbacks are regularly taken each month in monthly meeting and at ward level meetings. Feedbacks on the suggested alternatives and innovations are being considered.**

Question: Has alternative taken up for discussions are prioritized on the basis of consultations?

**Yes, alternatives taken up for discussions are prioritized on the basis of consultations, firstly regularization of unauthorized water connection and metering of water.**

Question: What methodology adopted for prioritizing the alternatives?

**On the basis of consultation made in Municipal Corporation Mathura-Vrindavan Nagar Nigam, the projects are prioritized as per consultation/opinion of general public, elected members and engineering staff of U.P. Jal Nigama & Municipal Corporation Mathura-Vrindavan Nagar Nigam.**

## 5. Prioritize Projects

Based on the citizen engagement, ULB will prioritize these activities and their scaling up based on the available resources to meet the respective objectives. While prioritizing projects, please reply following questions in not more than 200 words.

Question: What are sources of funds?

**The source of funding of activities shall be:**

- 1. AMRUT,**
- 2. 14th Finance Commission**
- 3. State Government Funds**
- 4. ULB**
- 5. Central Government**

Question: Has projects been converged with other program and schemes?

**Yes, it might be converged but as of now it is not falling under any other programme or scheme.**

Question: Has projects been prioritized based on "more with less" approach?

**Yes the projects are being prioritized based on "more with less" approach.**

Question: Has the universal coverage approach indicated in AMRUT guidelines followed for prioritization of activities?

**Yes, universal coverage approach indicated in AMRUT guidelines has been followed for prioritization of activities**

## 6. Conditionalities

Describe in not more than 300 words the Conditionalities of each project in terms of availability of land, environmental obligation and clearances, required NOC, financial commitment, approval and permission needed to implement the project.

**The only conditionality to be followed is availability of land for the infrastructure development that need to be done.**

## 7. Resilience

Required approvals will be sought from ULBs and competent authority and resilience factor would be built in to ensure environmentally sustainable water supply scheme. Describe in not more than 300 words regarding resilience built in the proposals.

**Yes, resilience factor would be built in to ensure environmentally sustainable water supply scheme. All the norms are being followed in the development of structures.**

## 8. Financial Plan

Once the activities are finalized and prioritized after consultations, investments both in terms of capital cost and O&M cost has to be estimated. (AMRUT Guidelines; para 6.5) Based on the investment requirements, different sources of finance have to be identified. Financial Plan for the complete life cycle of the prioritized development will be prepared. (AMRUT Guidelines; para 4, 6.6, 6.12, 6.13 & 6.14). The financial plan will include percentage share of different stakeholders (Centre, State and City) including financial convergence with various ongoing projects. While preparing finance plan please reply following questions in not more than 250 words

Question: How the proposed finance plan is structured for transforming and creating infrastructure projects?

**As per the guidelines of the AMRUT, the structured plan of the project has been developed in which 50% from GOI and 30% state govt and remaining 20% ULB.**

Question: list of individual projects which is being financed by various stakeholders?

**Yes, projects which is being financed by various stakeholders**

1. GOI
2. State Government
3. ULB

Question: Has financial plan prepared for identified projects based on financial convergence and consultation with funding partners?

**Yes, financial plan prepared for identified projects are based on financial convergence and consultation with funding partners, GOT, state government and ULB.**

Question: Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations ?

**Yes, the proposed financial structure is sustainable and project has been categorized based on financial considerations**

Question: Have the financial assumptions been listed out ?

**Yes, financial assumptions have been listed out.**

Question: Does financial plan for the complete life cycle of the prioritized development?

**Yes, financial plan has been done for the complete life cycle of the prioritized development**

Question: does financial plan include percentage share of different stakeholders (Centre, State, ULBs)

**Yes, financial plan include percentage share of different stakeholders (Centre, State and ULB)**

Question: Does it include financial convergence with various ongoing projects.

**Yes, it includes financial convergence with various ongoing projects.**

Question: Does it provide year-wise milestones and outcomes ?

**No, year-wise milestones and outcomes have not been provided.**

**DETAILS IN FINANCIAL PLAN SHALL BE PROVIDED AS PER TABLE 8.1, 8.2, 8.3, 8.4 AND 8.5. THESE TABLES ARE BASED ON AMRUT GUIDELINES TABLES 2.1, 2.2, 2.3.1, 2.3.2, AND 2.5.**

Table 8.1 Master Plan of Water Supply Projects for Mission period  
(As per Table 2.1 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost
1.	To achieve the universal coverage	1	2017 ongoing project	2018	2.68 Cr
2.	To achieve Universal distribution network	2	2018	2021	121.70 Cr
3.	Per capita LPCD Storage capacity	3	2018	2021	31.09 Cr
4.	Upgradation of W.T.P.	4	2018	2020	200.00 Cr
5.	To make the system efficient by reduction of NRW water	5	2018	2021	66.00 Cr
6.	To improve the quality of water	6	2018	2020	0.80 Cr
7.	Efficiency of charges collection	7	2018	2019	25.83 Cr
8.	To make the system energy efficient	8	2018	2021	1.74 Cr
9.	To achieve universal coverage and universal distribution system for Newly added 51 villages	9	2019	2021	300.00 Cr
				<b>TOTAL</b>	<b>749.84 Cr</b>

# MASTER SERVICE LEVELS IMPROVEMENTS DURING MISSION PERIOD

Sr. No.	Project Name	Physical Components	Indicator	Change in Service Levels year wise			Estimated Cost Cr
				2015	2017	2020	
1	To achieve the universal coverage	HH Connections near the premises = 5335@5185 Rs./HH	Household coverage	59.35 %	60.71 %	100%	2.68 Cr
2	To achieve Universal distribution network	Universal distribution network by laying New pipe 356KM @ 0.3 Cr/KM including 28738 @5185 Rs./HH	Coverage of water supply network	59.35 %	60.71 %	100%	121.70 Cr
3	To make the system efficient by reduction of NRW water	By providing replacement of old pipe line 220 km @.3 cr /km, zoning and leakage detection and automation of tube well.	N.R.W	35%	31%	100%	66.00 Cr
4	To improve the quality of water	Establishment/rehab of water testing lab and implementation of online water testing & monitoring systems and water testing.	Quality	90%	95%	100%	0.80 Cr
5	Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine 86098 @ 3000					25.83 Cr
2017- 2020							
6	To make the system energy efficient	Solar energy for continuous electricity supply replacement of inefficient pumps and rebore tube well in ward					1.74 Cr
7	Upgradation of W.T.P.	Rehabilitation and Upgradation of existing W.T.P.and construction of new 60 MLD W.T.P.					200.00 Cr
8	To achieve universal coverage and universal distribution system for Newly added 51 villages	Universal distribution network by laying New pipe 765KM @.3 CR/KM with C.W.R. and O.H.T.					300.00 Cr

# ANNUAL FUND SHARING PATTERN FOR WATER SUPPLY PROJECTS

(As per Table 2.3.1 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Name of Project	Total Project Cost	Share				
			GOI	State	ULB	Others	Total Cr
1	HH Connections near the premises = 5335@5185 RS /HH	2.68 Cr Approved by SHPSC	1.34	0.80	0.54		2.68Cr
2	To achieve Universal distribution network 356 @ 0.3CR/KM	121.70 Cr	60.85	36.51	24.34		121.70 Cr
3	Per capita LPCD Storage capacity 11.5 ml c.w.r	31.09 Cr	15.54	9.33	6.22		31.09 Cr
4	To make the system efficient by reduction of NRW water 220km @.3	66.00 Cr	33.00	19.80	13.20		66.0 Cr
5	To improve the quality of water	0.80 Cr	0.40	0.24	0.16		0.80 Cr
6	Efficiency of charges collection 86098 HH @ 2000 RS	25.83 Cr	12.91	7.75	5.17		25.83 Cr
7	Upgradation of W.T.P.	200.00 Cr	100.0	60.0	40.0		200 Cr
8	To make the system energy efficient	1.74 Cr	0.87	0.52	0.35		1.74 Cr
9	To achieve universal coverage and universal distribution system for Newly added 51 villages	300.00 Cr	150.0	90.00	60.00		300 Cr.
<b>TOTAL</b>		<b>749.84 Cr</b>	<b>374.92</b>	<b>224.95</b>	<b>149.97</b>		<b>749.84 Cr</b>

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# ANNUAL FUND SHARING BREAK-UP FOR WATER SUPPLY PROJECTS

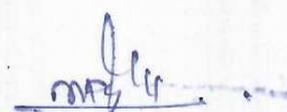
(As per Table 2.3.2 of AMRUT guidelines)

Sr. No.	Project	GOI	State			ULB			Convergence	Others	Total
			14th FC	Others	Total	14th FC	Others	Total			
1	HH Connections near the premises = 5335@5185 RS /HH	50%	-	30%	-	20%	-	-	-	-	100%
2	To achieve Universal distribution network	50%	-	30%	-	20%					100%
3	Per capita LPCD Storage capacity	50%	-	30%	-	20%					100%
4	To make the system efficient by reduction of NRWwater	50%	-	30%	-	20%					100%
5	To improve the quality of water	50%	-	30%	-	20%					100%
6	Efficiency of charges collection	50%	-	30%	-	20%					100%
7	Upgradation of W.T.P.	50%	-	30%	-	20%					100%
8	To make the system energy efficient	50%	-	30%	-	20%					100%
9	To achieve universal coverage and universal distribution system for Newly added 51 villages	50%	-	30%	-	20%					100%

## YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per Table 2.5 of AMRUT guidelines)

Proposed Projects	Project Cost	Indicator	2015	Annual Targets (Increment from the Baseline Value)					
				FY 2016		FY 2017	FY 2018	FY 2019	FY 2020
				H1	H2				
		Coverage of water supply connection	59.35%	-	50%	100%			
HH Connections near the premises = 5335@5185 RS /HH	2.68 Cr	COVERAGE	59.35%	-	60%	75%	100%		
To achieve Universal distribution network	121.70Cr	COVERAGE	59.35%	-	60%	75	100%		
Per capita LPCD Storage capacity	31.09Cr	LPCD	-	-	-	135 lpcd	135		
To make the system efficient by reduction of NRW water	66.0Cr	N.R.W	-	-	35%	30 %	25%	20%	
To improve the quality of water	0.8Cr	QUALITY	-	-	90%	100%	100%		
Efficiency of charges collection	25.83Cr	CHARGES	-	-			90%	100%	
Upgradation of W.T.P.	200 Cr	QUALITY	-	-			50%	100%	
To make the system energy efficient			-	-					
To achieve universal coverage and universal distribution system for Newly added 51 villages	300 Cr	COVERAGE	-	-				50%	100%
<b>TOTAL</b>	<b>749.84Cr</b>								

  
**Project Manager**  
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## Submitter Info

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