

# NAME OF ULB - MAINPURI

## 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)

**JalkalVibhagMainpuri maintains water supply of the Mainpuri city. Data pertaining to existing system e.g - no. of tube well , over head tanks, clear water reservoir, zonal pumping station etc are available. U.P.Jal Nigam is the state level body entrusted work of planning, implementation of water supply schemes**

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)

<b>Yes we have Census data and the current format is being filled after procuring data</b>			
	Location of source of drinking water Population	Total Number of Households	Tap Water from treated source
<b>Total Population (Census, 2011)</b>	117327		
	Total	23741	9827
	Within the premises	18153	8188
	Near the premises	4183	1307
	Away	1405	332
<b>Departmental Data (2015)</b>	126713	29800	9600

What are existing service 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

Table: Status of Water Supply service levels

Sr. No.	Indicators	Present Status	MOUD Benchmark	Reliability
1	<u>Coverage of water supply connections</u> 9600/29800	32.21%	100%	D
2	<u>Per capita supply of water</u> 15.53 MLD/0.126	123 LPCD	135 LPCD	D
3	<u>Extent of metering of water connections</u>	0%	100%	A
4	<u>Extent of non-revenue water</u>	45 %	20%	D
5	<u>Quality of water supplied</u>	75%	100%	D
6	<u>Cost recovery in water supply services</u>	40%	100%	D
7	<u>Efficiency in collection of water supply related charges</u>	40%	90%	D

Question: What is the gap in these service levels with regard to benchmarks prescribed by MoUD? (75 words)

**GAP in water supply connections = 67.79%**  
**Gap in Per capita supply of water =12LPCD**  
**Gap in Extent of metering of water connections = 100%**  
**Gap in Extent of non-revenue water = 25%**  
**Gap in Quality of water supplied = 25%**  
**Gap in Cost recovery in water supply services = 60%**  
**Gap in Efficiency in collection of water supply related charges = 50%**

## 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?

NPP Mainpuri have underground water source the total no of tube well is 23 (21 working +2 not working)

S.N.	Discharge of Tubewell LPM	MLD of Tubewell
<b>Total</b>	<b>18500 LPM with 14 hours working time</b>	<b>15.53 MLD</b>

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?

**Underground Water Chlorination Isbeing Done. Treatment Capacity of Water Is 15.53MLD**

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?

**Per capita of water supply is 123.25 LPCD [15.53 / 0.126713]**

## 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?

**No Zone wise divided, NPP divided in 25 Wards**

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

Ward No.	Total No. of Households	Households with Water tap Connection	Households without Water tap Connection
1	1885 HH	1250 HH	635 HH
2	1645HH	305 HH	1340 HH
3	2126 HH	1600 HH	1526 HH
4	745 HH	480 HH	265 HH

<b>Ward No.</b>	<b>Total No. of Households</b>	<b>Households with Water tap Connection</b>	<b>Households without Water tap Connection</b>
5	1474 HH	294 HH	1177 HH
6	1641 HH	189 HH	1452 HH
7	1271 HH	283 HH	988 HH
8	697 HH	275 HH	422 HH
9	767 HH	335 HH	432 HH
10	704 HH	286 HH	418 HH
11	693 HH	309 HH	384 HH
12	993 HH	202 HH	791 HH
13	981 HH	286 HH	695 HH
14	1238 HH	294 HH	944 HH
15	1009 HH	152 HH	857 HH
16	1645 HH	380 HH	1265 HH
17	791 HH	269 HH	522 HH
18	1026 HH	405 HH	621 HH

Ward No.	Total No. of Households	Households with Water tap Connection	Households without Water tap Connection
19	783 HH	388 HH	395 HH
20	1244 HH	181 HH	1063 HH
21	661 HH	269 HH	392 HH
22	1460 HH	188 HH	1272 HH
23	2353 HH	378 HH	1975 HH
24	956 HH	308 HH	648 HH
25	1015 HH	294 HH	721 HH
<b>Total</b>	<b>29800 HH</b>	<b>9600 HH</b>	<b>20200 HH</b>

## 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?

**Total storage capacity is 10075 KL with (11 working + 1 Non working OHT)**

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

**No Surface water in Mainpuri City.**

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

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

**Yes, NPP Mainpuri have 15.53 MLD water capacity & storage capacity is 10 MLD.**

## 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?

**The total length of water supply distribution pipe laid in the city is 130 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?

**The total road length in city is approximate 200 km. no,the pipelines are not laid in all streets. no, the objective of universal coverage of water supply is not achieved.**

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

**PVC,AC and CI of pipe materials used in 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

<b>Ward No.</b>	<b>Total Street Length</b>	<b>Street length with water distribution pipe line</b>	<b>Street length without water distribution pipe line</b>
1	11 KM	8 KM	3 KM
2	9 KM	9 KM	0 KM
3	12 KM	8 KM	4 KM
4	4 KM	4 KM	0 KM
5	14 KM	8 KM	6 KM
6	7 KM	5 KM	2 KM

<b>Ward No.</b>	<b>Total Street Length</b>	<b>Street length with water distribution pipe line</b>	<b>Street length without water distribution pipe line</b>
7	14 KM	7 KM	7 KM
8	7 KM	3 KM	4 KM
9	4 KM	4 KM	0 KM
10	8 KM	4 KM	4 KM
11	4 KM	4 KM	0 KM
12	10 KM	5 KM	5 KM
13	8 KM	4 KM	4 KM
14	9 KM	6 KM	3 KM
15	9 KM	8 KM	1 KM
16	8 KM	6 KM	2 KM
17	3 KM	3 KM	0 KM
18	14 KM	6 KM	8 KM
19	3 KM	3 KM	0 KM
20	11 KM	4 KM	7 KM

Ward No.	Total Street Length	Street length with water distribution pipe line	Street length without water distribution pipe line
21	3 KM	3 KM	0 KM
22	6 KM	4 KM	2 KM
23	4 KM	4 KM	0 KM
24	4 KM	4 KM	0 KM
25	14 KM	6 KM	8 KM
<b>Total</b>	<b>200 Km</b>	<b>130 Km</b>	<b>70 Km</b>

## 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
UP JAL NIGAM	UP JAL NIGAM	Nagar Palika Parishad Mainpuri

Question: How city is planning to execute projects ?

**The schemes of water supply are formulated by UPJN and also executed by UPJN. after execution such schemes are handover to Jalka Vibhag Mainpuri.**

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 State Level Parastatal Agency U.P. Jal Nigam. Mainpuri will follow the para 8.1 of the AMRUT Guidelines while execution of the project.**

## 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

S.No.	Name of Project	Scheme Name	Cost	Month of Compilation	Status (as on dd mm 2015)
-	-	-	-	-	-

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)

**No ongoing Project.**

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, laying of 70 Km new pipe line.**

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

**NagalpalikaparishadMainpuri will make its people aware of the importance of drinking water and will make efforts by meetings & registering water connections by advertisements.**

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

**No assessment of NRW has been done till date butin future NPP is planning to conduct the assessment.**

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	
	Present	Ongoing	Total	Demand	Gap
Source	15.53 MLD	-	15.53 MLD	19 MLD	3.47 MLD
Treatment capacity	15.53 MLD	-	15.53 MLD	19 MLD	3.47 MLD
Elevated Storage capacity	10 MLD	-	10 MLD	7 MLD	Surplus
Distribution network coverage	130 Km	-	130 Km	200 Km	70 Km

## OBJECTIVES

PBased 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.

- 1. To universal coverage by regularizing –2876 HH,**
- 3. To make the system efficient by reduction of NRW water by providing replacement of old pipe line, zoning and leakage detection and automation of tube well.**
- 4. To improve the quality of water establishment/rehab of water testing lab and implementation of online water testing & monitoring systems and water testing van**
- 5. To make the system energy efficient solar energy for continuous electricity supply replacement of inefficient pumps and rebore2tube well**
- 6. Efficiency of charges collection Metering system in water supply system, and online billing, tracking system & spot billing machine.**

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

Yes,

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

Yes,

### 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, The funding for meeting out the each objective will 50% from Goland remaining 50% from state and ULB.**

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

**No ongoing project like JICA/ ADB**

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

**No ongoing project.**

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

**NA**

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. By increasing user charges 3. By reducing NRW**

Question: Will metering system for billing introduced?

**Yes, Metering System will introduced.**

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

**Yes, NRW levels will be reduced by automation of tubewell&zoning of after supply system.**

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	To achieve universal coverage by regularizing of illegal connection- 2876 HH (@5146 Rs/ HH) , coverage of water +70 Km New pipe line	1.48 Cr+ 17.5 Cr = 18.98Cr	AMRUT/State and ULB
2	To make the system efficient by reduction of NRW water	By providing replacement of old pipe line 10 Km (@0.25 Cr/Km), zoning and leakage detection and automation of tube well	2.5 + 2	AMRUT/State and ULB
3	To improve the quality of water	Establishment of water testing lab and implementation of online water testing & monitoring systems and water testing van 2 Nos.	0.80 + 0.40	AMRUT/State and ULB
4	To make the system energy efficient	Solar energy for continuous electricity supply replacement of inefficient pumps and rebore 2 tube well (@0.30 Cr/ Tubewell).	1.5 + 0.6 Cr	AMRUT/State and ULB
5	Efficiency of charges collection	Metering system in water supply system,and online	5.9 Cr	AMRUT/State and ULB

Sr. No.	Objective	Activities	Cost (Cr.)	Financing Source
		billing, tracking system & spot billing machine		
	<b>Total</b>		<b>32.68Cr</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, NPP Mainuri conducted meeting with ward member on 7 Sept, 2015, also a consultation on were done citizen on 22 Sept, 2015 in NPP Hall Mianpuri and on 10 Oct, 2015 in NPP Mainpuriheadoffice**

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

**Yes,**

Question: Has alternative proposed above are crowd sourced?

**No**

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

**Feedback on the suggested alternatives and innovations are being considered.**

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

**The people agree to take the connection and regularization of water supply.**

Question: What methodology adopted for prioritizing the alternatives?

**Alternatives have been prioritized based on demand raised through consultation with citizens & officials.**

## 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?

**Regularisation of water supply connections, metering of water connection & automation of tubewells project of Nagar Palika Parishad Mainpuri are in AMRUT.**

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

**No**

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,**

## 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.

**Yes. No land is required in regularisation and metering of water supply. Automation of tubewell needs no land & clearance, no further NOC's required.**

## 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. Disaster and environmental related factor will be considered while preparation of DPRs.**

## 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 will be developed. In which 50% from GOI and remaining by STATE and ULB.**

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

**There is no such individual project.**

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, GOI, STATE & 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,**

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

**Yes, 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.

**No,**

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

**Yes,**

**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 2.1of AMRUT guidelines)

(Amount in Rs. Cr)

S.No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost
1	To achieve universal coverage by regularizing of illegal connection- 2876 HH (@5146 Rs/ HH) , coverage of water +70 Km New pipe line	1	2016	2018	18.98Cr
2	By providing replacement of old pipe line 10 Km (@0.25 Cr/Km), zoning and leakage detection and automation of tube well	2	2016	2018	2.5 + 2 Cr = 4.5 Cr
3	Establishment of water testing lab and implementation of online water testing & monitoring systems and water testing van 2 Nos.	3	2016	2018	0.80 + 0.40 =1.20 Cr
4	Solar energy for continuous electricity supply replacement of inefficient pumps and rebore 2 tube well (@0.30 Cr/ Tubewell).	4	2016	2018	1.5 + 0.6 2.1 Cr

S.No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost
5	Metering system in water supply system, and online billing, tracking system & spot billing machine	5	2017	2018	5.9
<b>Total</b>					<b>32.68Cr</b>

## MASTER SERVICE LEVELS IMPROVEMENTS DURING MISSION PERIOD

(As per Table 2.2 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Project Name	Physical Components	Change in Service Levels			Estimated Cost
			Indicator	Existing (As-Is)	After (To-be)	
1	To achieve universal coverage by regularizing of illegal connection- 2876 HH (@5146 Rs/ HH) , coverage of water +70 Km New pipe line	Survey	Coverage	32.21%	100	18.98 Cr
2	By providing replacement of old pipe line 10 Km (@0.25 Cr/Km), zoning and leakage detection and automation of tube well	Replacement of old pipeline, Automation of tube well	Coverage	32.21%	100	4.5 Cr
3	Establishment of water testing lab and implementation of online water testing & monitoring systems and water testing	Water testing lab	Quality of water supply	75	100	1.20 Cr

Sr. No.	Project Name	Physical Components	Change in Service Levels			Estimated Cost
			Indicator	Existing (As-Is)	After (To-be)	
	van 2 Nos.					
4	Solar energy for continuous electricity supply replacement of inefficient pumps and rebore 2 tube well (@0.30 Cr/ Tubewell).	New Energy & rebore of tube well	Cost recovery of water supply services	40	100	2.1 Cr
5	Metering system in water supply system, and online billing, tracking system & spot billing machine	Metering & SBM	Extent of metering of water connections	0	100	5.9 Cr
<b>Total</b>						<b>32.68Cr</b>

## 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	UL B	Others	Total
1	To achieve universal coverage by regularizing of illegal connection- 2876 HH (@5146	18.98Cr	9.49 Cr	9.49 Cr	-	-	18.98Cr

Sr. No.	name of Project	Total Project Cost	Share				
			GOI	State	UL B	Others	Total
	Rs/ HH) , coverage of water +70 Km New pipe line						
2	By providing replacement of old pipe line 10 Km (@0.25 Cr/Km), zoning and leakage detection and automation of tube well	4.5 Cr	2.25 Cr	2.25 Cr	-	-	4.5 Cr
3	Establishment of water testing lab and implementation of online water testing & monitoring systems and water testing van 2 Nos.	1.20 Cr	0.6 cr	0.6 cr	-	-	1.20 Cr
4	Solar energy for continuous electricity supply replacement of inefficient pumps and rebore 2 tube well (@0.30 Cr/ Tubewell).	2.1 Cr	1.05 Cr	1.05 Cr	-	-	2.1 Cr
5	Metering system in water supply system, and online billing, tracking system & spot billing machine	5.9 Cr	2.95 Cr	2.95 Cr	-	-	5.9 Cr
	<b>Total</b>	<b>32.68Cr</b>	16.34 Cr	16.34 Cr			<b>32.68Cr</b>

## ANNUAL FUND SHARING BREAK-UP FOR WATER SUPPLY PROJECTS

(As per Table 2.3.2 of AMRUT guidelines)

Sr. No.	Project	GOI	State			ULB			Co nve rge nce	ot he rs	Total
			14 th FC	Oth ers	Total	14th FC	Othe rs	Tota l			
1	To achieve universal coverage by regularizing of illegal connection- 2876 HH (@5146 Rs/ HH) , coverage of water +70 Km New pipe line	50%	-	50%	50%	-	-	-	-	-	100%
2	By providing replacement of old pipe line 10 Km (@0.25 Cr/Km), zoning and leakage detection and automation of tube well	50%	-	50%	50%	-	-	-	-	-	100%
3	Establishment of water testing lab and implementation of online water testing & monitoring systems and water testing van 2 Nos.	50%	-	50%	50%	-	-	-	-	-	100%
4	Solar energy for continuous electricity supply replacement of inefficient pumps and rebore 2 tube well (@0.30 Cr/ Tubewell).	50%	-	50%	50%	-	-	-	-	-	100%
5	Metering system in water supply system,and online billing, tracking system & spot billing machine	50%	-	50%	50%	-	-	-	-	-	100%

## YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS



