Name – SHAMLI (NPP)

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)

Nagar Palika Parishad Shamli is the implementing agency and the departmental data has been used as the baseline information for the preparation of the Service Level Improvement Plan. City is divided into 25 wards and ward wise information has been provided.

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. Data of census 2011 is available with Nagar Palika Parishad Shamli and the source is NIC. Nagar Palika Parishd Shamli is aware of MOUD survey data. The data available is being used as reference to develop the slip.

	Location of source of drinking water Population	Total Number of Households	Tap water from treated source
Total Population (Census, 2011)	Population-107233		
	Total	18697	11900
	Within the premises	16967	11565
	Near the premises	991	296
	Away	738	39
Departmental Data (2015)	Population-115450	26562	14774 *

*As per the existing data of ULB

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	Coverage of water supply connections (14774/26562)	56.00 %	100%	D
2	Per capita supply of water (34.5MLD/0.115)	300 LPCD	135 LPCD	D
3	Extent of metering of water connections	0%	100%	А
4	Extent of non-revenue water	27.78 %	20%	D
5	Quality of water supplied	90%	100%	D
6	Cost recovery in water supply services	30%	100%	D
7	Efficiency in collection of water supply related charges	70%	90%	D

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

- 1. Coverage of water supply connections gap is 26.33 %
- 2. Per capita supply of water gap is 0 LPCD
- 3. Extend of metering of water connections gap is 100%
- 4. Extend of non-revenue water gap is 7.78 %
- 5. Quality of water supplied gap 10 %
- 6. Cost recovery in water supply services gap is 70 %
- 7. Efficiency in collection of water supply related charges gap is 20 %

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 under ground water source? What is the capacity of these sources?

Existing source of water is underground water, total no of tub well is 46. Capacity of these sources 46 Tub well x 0.75= 34.5 MLD

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 is being done. Treatment capacity of ground water is 34.5 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 34.5 MLD and Per Capita of Water Supply is = 34.5 MLD/0.115= 300 LPCD with NRW

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 ?

There are 25 wards for water supply in Nagar Palika Parishad Shamli.

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	965	536	429
2	768	427	341
3	925	514	411
4	912	507	405
5	750	417	333
6	923	513	410
7	1058	588	470
8	1278	710	568

9	1219	678	541
10	870	483	387
11	1178	655	523
12	1420	789	631
13	1498	833	665
14	995	553	442
15	994	552	442
16	994	551	441
17	1045	581	464
18	1299	722	577
19	1148	638	510
20	1098	610	488
21	795	442	353
22	960	533	427
23	739	415	324
24	1735	965	770

25	998	562	436
Total	26562	14774	11788

As per the departmental data total number of household is 26562 and as per the census total household is 18697 in this above statement as per departmental data 11788 HH without tap connection and as per census 6797 HH without tap water connection

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?

In Nagar Palika Parishad Shamli water production is 75 MLD and 17 elevated reservoirs and the storage capacity is 26.60 ML.

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

No Nagar Palika Parishad Shamli does not require ground level reservoirs.

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

In Nagar Palika Parishad Shamli water is being supplied to consumers through direct pumping as well as elevated reservoirs.

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

Yes storage capacity is sufficient to meet the city demand. In Nagar Palika Parishad Shamli water production is 75 MLD and storage capacity is 26.60 ML. Total city storage capacity demand is 75 MLD/3 =25 ML but availability is 26.60 ML

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 line is 671.82 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 is 680 KM. Pipe lines are not laid in 8.18 KM and universal coverage of water supply is not achieved.

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

PVC,DI, CI and GI 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

Ward No.	Total Street Length	Street length with water distribution pipe line	Street length without water distribution pipe line
1	7.3	7	0.3
2	11.55	11	0.55
3	8.25	8	0.25
4	9.35	9	0.35
5	12	12	0
6	6.5	6.5	0
7	14.85	14.2	0.65
8	10.6	10	0.6
9	12.05	11.3	0.75
10	14.5	14.5	0
11	13.5	13	0.5
12	13.3	12.5	0.8

Ward No.	Total Street Length	Street length with water distribution pipe line	Street length without water distribution pipe line
13	9.05	8.5	0.55
14	12	12	0
15	8.5	8.5	0
16	7.5	7.5	0
17	12.5	12	0.5
18	14.65	14	0.65
19	12.5	12.5	0
20	7.7	7.5	0.2
21	8.8	8.5	0.3
22	14	14	0
23	8.78	8.6	0.18
24	16.7	16	0.7
25	6	6	0
Total	272.43	264.6	7.38

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		lesign	Construction/ Implementation	O&M		
UP SHAML	JAL J	NIGAM	JAL NIGAM SHAMLI	N.P.P. CONTRA	SHAMLI ACT BASE	ON

Question: How city is planning to execute projects ?

The execution of the projects will be done as per instructions given by the state government as well as MOUD & smaller projects like branch lines, gaps in pipe lines will be done by Nagar Palika Parishad Shamli and nodal agency Jal Nigam Shamli.

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 Nagar Palika Parishad Shamli as well as State Level Parastatal Agency U.P. Jal Nigam. Nagar Palika Parishad Shamli 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

S. No	Name of Project	Scheme Name	Cost	Month of Compilation	Status (as on dd mm 2015)
1	UIDSSMT	ShamliWaterSupplyReorganization Schem.Tub well- 17,OHT-11,DistributionSystem -148.25Rising main -	54.553 Cr	2013	98 % March 2016

Table: Status of Ongoing/ Sanctioned

S. No	Name of Project	Scheme Name	Cost	Month of Compilation	· ·
		14.655, ZPS-05, Staff Quarters -11			

Question: How much the existing system will 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)

Yes in this above said project address the existing gap in terms of per capita of water supply, pressure and water production.

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

Yes. City required additional work like regularization of unregistered connections, and to motivate citizens to take connection will increase coverage and reduction of NRW, Improve Quality of Water as well as metering will improve efficiency of collection and operation.

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?

Nagar Palika Parishad Shamli will make its people aware of the importance of drinking water. Nagar palika Parishad Shamli 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?

City has not conducted any assessment related to NRW Nagar Palika Parishad Shamli have approximate NRW level is 41 %

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	34.5 MLD	-	34.5 MLD	17.4 MLD	0	

Component	2015			2021		
	Present	Ongoing	Total	Demand	Gap	
Treatment capacity	34.5 MLD	-	34.5 MLD	17.4 MLD	0	
Elevated Storage capacity	26.60ML	-	26.60ML	11.5 ML	0	
Distribution network coverage	264.6 KM	-	264.6 KM	272.43KM	7.38KM	

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.

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

- IEC activities for 11788
- Universal Coverage by laying of pipe line 7.38 KM in uncovered area
- Reduction of NRW by Leakage Detection
- Improve the quality of Water through establishment of Lab and implementation of online water testing and Monitoring System
- Efficiency of charges collection-. Metering system in water supply system and online billing, tracking system & spot billing machine.

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 funding for meeting out the each objective will 50% from AMRUT and remaining 50% from state and Nagal palika Parishad Shamli.

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

There are no ongoing project under JICA/ADB but activities is converged with UIDSSMT

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

In this above ongoing project no need of money for completion of the project.

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

In Nagar Palika Parishad Shamli there is a staff shortage for running the project and focusing toward enhancement of coverage. During the implementation of water supply scheme awareness among public was most challenging activities.

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

Nagar Palika Parishad Shamli will minimize non-revenue water by regularizing unregistered water connections & make more efforts from collection staff & introducing metering system & automation of tube wells.

Question: Will metering system for billing introduced?

Yes. Nagar Palika Parishad Shamli will introduce metering system for billing under AMRUT scheme.

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

By regularizing of water connection through IEC activities, Introduce metering of water connections, improve the collection efficiency.

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

YES.

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

Sr. No.	Objective	Activities	Cost (Cr)	Financing Source
1	To achieve the universal coverage	IEC activities for 11788 HH @X 5000Rs	5.89 Cr	AMRUT/State and ULBs
	coverage	Laying of Pipe line in uncovered areas 7.38 KM X 0.25Cr	1.85Cr	AMRUT/State and ULBs

Table: Alternative Activities To Meet Objectives

2	To make the system efficient by reduction of NRW water	Household Level Metering 26562 HH X2500 Rs	6.65 Cr	AMRUT/State and ULBs
3	To improve the quality of water	Establishment/rehab of water testing lab and implementation of online water testing & monitoring systems and water testing van	0.50 Cr	AMRUT/State and ULBs
4	Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine	0.90 Cr	AMRUT/State and ULBs
	Total		15.79 Cr	

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?

Nagar Palika Parishad Shamli passes the proposals which are put up by ward members. Thus all stakeholders involve in the consultations on 25 June 2015

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

In Nagar Palika Parishad Shamli ward/zone level consultations has held under the chairmanship of ward members on

3rd October,2015 ward no-13

5th October,2015 ward no-16

8th October,2015 ward no-04

9th October,2015 ward no-10

10th October,2015 ward no-17

15th October,2015 ward no-14

Question: Has alternative proposed above are crowd sourced?

Yes. Suggestions and views of the crowd are taken into consideration on website www.nppshamli.nic.in

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

90% of the people are agreed to regularization of connection and improvement of quality of water supply & metering of water connections.

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

Yes.

Question: What methodology adopted for prioritizing the alternatives?

After the consultation made in Nagar Palika Parishad Shamli board meetings as the discussion regularization of water connections ,laying of pipe lines, metering of water connections, establishment of Lab.

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

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

There is no other scheme running in the city.

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

Yes the projects are being prioritized based on "more with less" approach universal coverage through IEC activities.

Question: Has the universal coverage approach indiated 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.

Public awareness to increase the coverage of water supply, Augmentation of water supply system No need of Land, environment clearance and NOC for meet the GAP for universal coverage and quality of water

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.

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. The share of State and ULB will be decided in High power committee.

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 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 ?

Yes, year-wise milestones and outcomes have 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 2.1of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No 1	Objective To achieve the universal	Activities	Priorit y numbe r	Year in which to be implemente d 2016	Year in which to be complete d 2018	Cost (Cr) 5.89 Cr	Financing Source AMRUT/Stat e and ULBs
	coverage	@X 5000Rs Laying of Pipe line in uncovered areas 7.38 KM X 0.25Cr	2	2016	2018	1.85C r	AMRUT/Stat e and ULBs
2	To make the system efficient by reduction of NRW water	Household Level Metering 26562 HH X2500 Rs	3	2016	2018	6.65 Cr	AMRUT/Stat e and ULBs
3	To improve the quality of water	Establishment/re hab of water testing lab and implementation of online water testing & monitoring systems and water testing van	4	2016	2018	0.50 Cr	AMRUT/Stat e and ULBs
4	Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine	5	2016	2018	0.90 Cr	AMRUT/Stat e and ULBs
	Total					15.79 Cr	

MASTER SERVICE LEVELS IMPROVEMENTS DURING MISSION PERIOD

(As per Table 2.2 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Objective	Project Name	Physical Components	Change in S	Service Lev	rels	Estimated Cost
				Indicator	Existing (As-ls)	After (To- be)	
1	To achieve the universal coverage	IEC activities for 11788 HH @X 5000Rs	Survey	coverage	73.67	100	5.89 Cr
		Laying of Pipe line in uncovered areas 7.38 KM X 0.25Cr	New pipeline	coverage	73.67	100	1.85Cr
2	To make the system efficient by reduction of NRW water	Household Level Metering 26562 HH X2500 Rs	Metering	Reduce NRW	60	20	6.65 Cr
3	To improve the quality of water	Establishment/rehab of water testing lab and implementation of online water testing & monitoring systems and water testing van	Lab establishment	Quality of water	90	100	0.50 Cr

4	Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine	Efficiency of cost recovery	70	90	0.90 Cr
	Total					15.79 Cr

ANNUAL FUND SHARING PATTERN FOR WATER SUPPLY PROJECTS

(As per Table 2.3.1 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Objective	NAME OF PROJECT	Total Project Cost	Share				
				GOI	State	U L B	Ot her s	Total
1	To achieve the universal coverage	IEC activities for 11788 HH @X 5000Rs	5.89 Cr	5.89	-	-	-	5.89 Cr
		Laying of Pipe line in uncovered areas 7.38 KM X 0.25Cr	1.85Cr	0.925	0.925	-	-	1.85Cr

2	To make the system efficient by reduction of NRW water	Household Level Metering 26562 HH X2500 Rs	6.65 Cr	3.325	3.325	-	-	6.65 Cr
3	To improve the quality of water	Establishment/rehab of water testing lab and implementation of online water testing & monitoring systems and water testing van	0.50 Cr	0.25	0.25	-	-	0.50 Cr
4	Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine	0.90 Cr	0.45	0.45	-	-	0.90 Cr
	Total		15.79 Cr					15.79 Cr

ANNUAL FUND SHARING BREAK-UP FOR WATER SUPPLY PROJECTS

(As per Table 2.3.2 of AMRUT guidelines)

Sr. No.	Objective	Project	GOI	State			ULB			Co nv er ge nc e	ot he rs	Total
				14th FC	Othe rs	To tal	14th FC	Oth ers	To tal			
1	To achieve the universal coverage	IEC activities for 11788 HH @X 5000Rs	100%	-	-	-	-	-	-	-	-	100%
		Laying of Pipe line in uncovered areas 7.38 KM X 0.25Cr	50%	-	-	50 %	-	-	-	-	-	100%
2	To make the system efficient by reduction of NRW water	Household Level Metering 26562 HH X2500 Rs	50%	-	-	50 %	-	-	-	-	-	100%
3	To improve the quality of water	Establishment/reha b of water testing lab and implementation of online water testing & monitoring systems and water testing van	50%	-	-	50 %	-	-	-	-	-	100%

Sr. No.	Objective	Project	GOI	State			ULB			Co nv er ge nc e	ot he rs	Total
				14th FC	Othe rs	To tal	14th FC	Oth ers	To tal			
4	Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine	50%	-	-	50 %	-	-	-	-	-	100%
	Total											15.79 Cr

YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per Table 2.5of AMRUT guidelines)

Objective	Proposed Projects	Proje ct Cost	Indic ator	Baseline	Annu (Incre		om the]	Baselin		argets le)
		Cost			FY 2016		FY 201 7	FY 201 8	FY 201 9	FY 202 0
					H1	H2		_		
To achieve the universal coverage	IEC activities for 11788 HH @X 5000Rs	5.89 Cr	cover age	73.67	-	75	90	100	100	100
	Laying of Pipe line in uncovered areas 7.38 KM X 0.25Cr	1.85 Cr	cover age	73.67	-	75	90	100	100	100
To make the system efficient by reduction of NRW water	Household Level Metering 26562 HH X2500 Rs	6.65 Cr	Redu ce NRW	60	-	60	50	40	30	20
To improve the quality of water	Establishment/rehab of water testing lab and implementation of online water testing & monitoring systems and water testing van	0.50 Cr	Quali ty of water	90	-	92	95	100	100	100
Efficiency of charges collection	Metering system in water supply system, and online billing, tracking system & spot billing machine	0.90 Cr	Effici ency of cost recov ery	70	-	75	85	100	100	100

Objective	Proposed Projects	Proje ct	Indic ator	Baseline		Annual (Incremet from the Base			Targets line Value)		
		Cost			FY 2016		FY 201 7	FY 201 8	FY 201 9	FY 202 0	
					H1	H2					
Total		15.79 Cr									