

NAME OF ULB - FATEHPUR

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)

Baseline information of existing water supply system is available in detail project report prepared by U.P. Jal Nigam in year 2006-07. In which the supply of water in the city is divided in three zones i.e. A, B, C. The project report consists of reorganization of existing water supply system with reference to water supply, production, treatment and distribution of water.

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, we have Census data.

	Location of source of drinking water Population	Total Number of Households	Tap Water from treated source
Total Population (Census, 2011)	Population-193801		
	Total	33605	18933
	Within the premises	24939	16675
	Near the premises	6667	1919
	Away	1999	339
Departmental Data (2015)	210490	20251	14562

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 (14562/33605)	43%	100%	D
2	Per capita supply of water 30 MLD/0.210	143LPCD	135 LPCD	D
3	Extent of metering of water connections	0%	100%	A
4	Extent of non-revenue water	50%	20%	D
5	Quality of water supplied	90%	100%	D
6	Cost recovery in water supply services	60%	100%	D
7	Efficiency in collection of water supply related charges	50%	90%	D

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

As per above table it is clear that gap in service levels are as under:

1. Gap in coverage of water supply is 57%
2. No gaps in Per capita supply of water.
3. Gap in Metering is 100%.
4. NRW is about 50% which include leakage, theft and free water supply to social gathering festivals along with water supply through stand posts.
5. 10% gap in Quality of supplied water as per MoUD norms.
6. Gap in Cost recovery is 40% with expenditure on electricity and power.
7. Gap in efficiency of water charges/tax collection is about 40% .

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. There are 47 tube wells in the city. The capacity of these tube wells = $47 \times 0.65 = 30$ 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?

Yes, we provide Chlorination in each tube well via dozer.30 MLD treated water is required daily. Yes treatment capacity is sufficient in the city.

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?

143 LPCD water supplied through Ground water source. $30/0.210=142.85$ 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?

City is divided in three 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	Households with Water tap Connection	Households without Water tap Connection
A	8100 HH	5825 HH	2275 HH
B	7088 HH	5096 HH	1992 HH
C	5063 HH	3641 HH	1422 HH
TOTAL	20251 HH	14562 HH	5689 HH

Whereas as per the census data the total household is 33605. Hence 13354 households are un assessed.

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 Water Storage Capacity is 16.4 ML. All water storage capacity is in form of elevated reservoir.

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

NA

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

The water is being supplied to consumers through direct pumping and elevated reservoirs.

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

Yes, storage capacity is sufficient to meet the cities demand. Total storage capacity is 16.4 ML and demand is $30/3=10$ 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?

Total length of water supply pipe lines is 114.57 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 is 122.01 km. The objective of universal coverage is not achieved due to pipe line is not covered in all streets.

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

The pipe materials used in distribution system are CI, DI, PVC.

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	Street length with water distribution pipe line	Street length without water distribution pipe line
A	25.21 Km	23.67 Km	1.54 Km
B	54.04 Km	50.75 Km	3.29 Km
C	42.76 Km	40.15 Km	2.61 Km
TOTAL	122.01 Km	114.57 Km	7.44 Km

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 PalikaParishad

Question: How city is planning to execute projects?

The schemes of water supply are designed planned and constructed by UPJN. After completion of project, the schemes are handed over to ULB Fatehpur.

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. Nagar Palika Parishad Fatehpur 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)
1	Nil	Nil	Nil	Nil	Nil

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)

NA

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. Like laying of pipelines to unserved areas, replacement of old pipelines and Automation of Tube wells to increase service efficiency .

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 focus under AMRUT shall be to increase the coverage, thus focus will be on optimum utilization of existing assets and improve the services.

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

No city has not conducted any assessment related to NRW but City is planning to reduce NRW.

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	30MLD	0	30MLD	30 MLD	No Gap
Treatment capacity	30MLD	0	30MLD	30MLD	No Gap
Elevated Storage capacity*	16.4ML	0	16.4 ML	10 ML	No Gap
Distribution network coverage	114.57KM	0	114.57KM	122.01Km	7.44KM

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, we cover the following objective

1. **Universal coverage,**
2. **Reduction of non revenue water and**
3. **Efficiency in charges collection.**
4. **Increase in service efficiency**

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

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

NA

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

NA

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

No ongoing project

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

1. Increasing the coverage of water supply by legalizing the unauthorized connections, and motivating the citizens for taking new connections and providing new connections to unserved areas,

- 2. By increasing user charges
- 3. By reducing NRW
- 4. By Automation of Tube Wells

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, NRW levels will be reduced to enhance O&M Cost.

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	Financing Source
1	To achieve universal coverage	Increasing the coverage of water supply by legalizing the unauthorized connections, and motivating the citizens for taking new connections and providing new connections to unserved areas	AMRUT
2	To make system efficient by NRW reduction	Leakage detection and its removal and replacement of old pipe lines	AMRUT
3	Increase in Service Efficiency	Automation of Tube Wells	AMRUT
4	Efficiency in charges collection	Online billing	AMRUT

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 were involved in the consultation. The board meeting held on 31/07/2015

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

Yes, ward/ zone level consultations with Corporator, NGOs and citizens of the ward was held in the city on 29/09/2015 and 06/10/2015.

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?

Yes, alternatives taken up for discussions are prioritized on the basis of consultations

Question: What methodology adopted for prioritizing the alternatives?

Alternatives have been prioritized based on demand raised through consultation with citizens, officials and parastatal agencies.

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?

The convergence factor has been considered while designing and funding of project.

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.

For objective to achieve universal coverage, making system efficient by NRW reduction, efficiency in charges collection. There is no need of land environmental clearance and NOC

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.

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.

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

No

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.

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.

No ongoing project

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)

S.No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost
1	EXPANSION OF WATER SUPPLY DISTRIBUTION NETWORK WITH HOUSEHOLD CONNECTION IN UNCOVERED POCKETS and regularisation of illegal connection 7.5 Km X 0.13Cr	1	2017	2018	1 Cr
2	LEAKAGE DETECTION AND ITS REMOVAL 2000 X 1140	2	2017	2019	0.20 Cr
3	REPLACEMENT OF OLD LINES 15 km X 0.12 Cr				1.80 Cr
4	IMPLEMENTATION OF ONLINE BILLING, WATER TESTING, MONITORING SYSTEMS& AUTOMATION OF TUBEWELLS	3	2017	2019	2Cr

S.No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost
TOTAL					5 Cr

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	EXPANSION OF WATER SUPPLY DISTRIBUTION NETWORK WITH HOUSEHOLD CONNECTION IN UNCOVERED POCKETS and regularisation of illegal connection 7.5 Km X 0.13Cr	7.5KmWATERLINE 7.5 Km X 0.13 Cr and regularization of 180 HH	Coverage of water supply connections	43	100	0.1 Cr
2	LEAKAGE DETECTION AND ITS REMOVAL	REPAIROFWATERLINE 1140 X 2000 Rs	Extent of non-revenue water	50	35	0.2 Cr
3	REPLACEMENT OF OLD LINES	15KmWATERLINE 15 Km x 0.12Cr	Extent of non-revenue water	50	20	1.8 Cr
4	IMPLEMENTATION OF ONLINE BILLING, WATER TESTING & MONITORING SYSTEMS& AUTOMATION OF TUBEWELLS	---	Quality of water supplied	90	100	2 Cr
TOTAL					5 Cr	

Sr. No.	Project	GOI	State			ULB			Convergence	others	Total
			14th FC	Others	Total	14th FC	Others	Total			
	CONNECTION IN UNCOVERED POCKETS and regularisation of illegal connection 7.5 Km X 0.13Cr										
2	LEAKAGE DETECTION AND ITS REMOVAL	50%		50%							100%
3	REPLACEMENT OF OLD LINES	50%		50%							100%
4	IMPLEMENTATION OF ONLINE BILLING, WATER TESTING, MONITORING SYSTEMS& AUTOMATION OF TUBEWELLS	50%		50%							100%

YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per Table 2.5of AMRUT guidelines)

Proposed Projects	Project Cost	Indicator	Baseline	Annual Targets (Increment from the Baseline Value)					
				FY 2016		FY 2017	FY 2018	FY 2019	FY 2020
				H1	H2				
EXPANSION OF WATER SUPPLY DISTRIBUTION NETWORK WITH HOUSEHOLD CONNECTION IN UNCOVERED POCKETS and regularisation of illegal connection 7.5 Km X 0.13Cr	1 Cr	Coverage of water supply connections	43%			60%	78%	100%	
LEAKAGE DETECTION AND ITS REMOVAL	0.2 Cr	Extent of non-revenue water	50%			40%	30%	20%	
REPLACEMENT OF OLD LINES	1.8 Cr								
IMPLEMENTATION OF ONLINE BILLING,	2 Cr	Increase in service efficiency	90%			95%	100%		

