

NAME OF ULB – RAMPUR

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 of existing water supply system is available in Detailed Project Report prepared by U.P. Jal Nigam in the year 2012-2013. The DPR consists reorganization of the existing water supply system with reference to water supply production, treatment and distribution of water supply lines. The DPR consists Master Plan of the water supply system and it has been divided into 12 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)

S.No	Source	Particulars	Numbers	Tap Water Connection
01	Census 2011	Total Population	325313	
		Household	57944	22411
		Within the premises	55678	22065
		Near the premises	2059	306
		Away	207	40
02	Departmental Data 2015	Total Population	349711	
		Household	58285	10200 *

*As per the ULBs data and number of actual existing connection.

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 (Tap water connections/No. of house holds)x 100	17.5 %	100%	D
2	Per capita supply of water (Total discharge/Total Population)	134.78 LPCD	135 LPCD	D
3	Extent of metering of water connections (Total meter connections/Total connections)x100	0%	100%	A
4	Extent of non-revenue water (Wastage of water/ Total water produced)x100	62.5 %	20%	D
5	Quality of water supplied	100 %	100%	D
6	Cost recovery in water supply services (total collection of water taxes and charges/Total Expenses O & M) x 100	6.1 %	100 %	D
7	Efficiency in collection of water supply related charges (Collection of total water charges and water taxes/ Total bill raised) x 100	28 %	90%	D

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

1. Gap in Coverage of water supply connections 82.5 %.
2. Per capita water supply gap is 0.22 LPCD.
3. Extent of metering of water supply connections gap is 100 %.
4. Extent of non-revenue water gap is 42.5 %.
5. There is no gap in water quality.
6. Gap in cost recovery is 93.9 %
7. Gap in efficiency of collection of water charges is 62 %.

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? 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? 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.?

Under ground water is the existing source. Water supply is being performed using elevated storage water tanks. Currently Total 25 nos. of tube well are working with total discharge capacity of 56000 lpm. Rampur ground water needs only chlorination for treatment and chlorination of water is being performed using the electronic and mechanical dossers. The daily treated water is 47.04 MLD. Per Capita water supply is 135 LPCD.

Total discharge taken from 25 no. of tube well for 14 hrs.= 56000 X 60 X 14

TOTAL WATER CAPACITY = 47.04 MLD

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 into 12 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
01	4238 HH	736 HH	3502 HH
02	4680 HH	813 HH	3867 HH
03	3678 HH	638 HH	3040 HH
04	5328 HH	924 HH	4404 HH
05	6340 HH	1100 HH	5240 HH

Zone No.	Total No. of Households	Households with Water tap Connection	Households without Water tap Connection
06	4727 HH	820 HH	3907 HH
07	7216 HH	1253 HH	5963 HH
08	5615 HH	975 HH	4640 HH
09	4908 HH	852 HH	4056 HH
10	3504 HH	609 HH	2895 HH
11	3250 HH	561 HH	2689 HH
12	4801 HH	919 HH	3882 HH
Total	58285 HH	10200 HH	48085 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?

The total water storage capacity in city is 14.6 ML . The whole of the capacity pertains to elevated water tank, no ground water reservoir exists.

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

N.A.

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

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

The current storage capacity is not sufficient and additional capacity is needed to fulfill the demand upto the year 2044.

47.04 MLD/03 = 15.68 KL but existing capacity is only 14.6 ML. For that DPR is already sanctioned by state government and projects are under execution.

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 pipeline is approx. 249.631 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 the city is 430 Km. The pipe line are not laid in all streets, but it will be achieved after completion of ongoing project.

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

PVC pipes, A.C Pipe and C.I. and D.I. pipe are 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

Zone No.	Total Street Length (Km.)	Street length with water distribution pipe line (Km.)	Street length without water distribution pipe line (Km.)
01	31 KM	18.00 KM	13.00 KM
02	34.5 KM	20.00 KM	14.50 KM
03	27 KM	15.70 KM	11.30 KM
04	39.5 KM	22.96 KM	16.54 KM
05	46.8 KM	27.20 KM	19.60 KM

Zone No.	Total Street Length (Km.)	Street length with water distribution pipe line (Km.)	Street length without water distribution pipe line (Km.)
06	34.87 KM	20.30 KM	14.57 KM
07	53 KM	30.80 KM	22.20 KM
08	41.5 KM	24.12 KM	17.38 KM
09	36 KM	21.00 KM	15.00 KM
10	25.85 KM	15.00 KM	10.85 KM
11	24.00 KM	13.90 KM	10.10 KM
12	35.98 KM	20.651 KM	14.96 KM
Total	430.00 KM	249.631 KM	180.00 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
U. P. Jal Nigam Rampur	U. P. Jal Nigam Rampur	Nagar Palika Parishad Rampur

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 JalkalVibhag Nagar PalikaParishadRampur.The Execution of the projects will done as per instructions given by the State Govt.

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 Rampur 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)
01	State Sector zone 01 to 10 Tubewell-16 O.H.T- 07 Distribution Line -168 KM	Rampur Water Supply Reorganizations Scheme	4995.78 Lacs	March 2016	60 % as on 15.09.2015

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)

After completion of the above said projects there will still be some gap in water supply in the city for achieving universal coverage, reduction in NRW, reducing illegal connections, metering and increase in service efficiency.

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

City requires increase in universal coverage, reduction in NRW, reducing illegal connections, metering and increase in service efficiency. These gaps will be fulfilled under AMRUT.

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?

NA

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

No, the city has not conduct assessment of Non Revenue Water till date. But metering is proposed to be taken under AMRUT which will reduce the NRW in the city.

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	47.04 MLD	40.32 MLD	87.36 MLD	51.82 MLD	Surplus
Treatment capacity	47.04 MLD	40.32 MLD	87.36 MLD	51.82 MLD	Surplus
Elevated Storage capacity	14.60 ML	13.70 ML	28.30 ML	18.95 ML	Surplus
Distribution network coverage	249.63 KM	168 KM.	417.63 KM.	430 KM	12.37 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 will be evolved from the outcome of assessment.

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

Objectives	Activities to be performed to bridge the gap
ONGOINGPROJECTS	After completion of ongoing projects city will be self dependent in storage of water and availability of water to some extent in distribution system
TO ACHIEVE UNIVERSAL COVERAGE	Public awareness to increase house hold connections -IEC ,capacity building, assessment study for authorised /illegal connections and uptapped/submersible house hold etc- AMRUT A&OE
	Expansion of water supply distribution network with household connection in uncovered pockets
TO MAKE SYSTEM EFFICIENT BY NRW REDUCTION	Leakage detection and its removal Replacement of old lines (damaged,leaked, defunged, chocked, sluice valve etc) with house hold connection Water supply zoning of service area . 100% implementation of metering . Automisation of tube well throughSCADA
EFFICIENCY IN CHARGES COLLECTION	Online billing , tracking system & spot billing machine Rehabilitation and expansion of payment collection center

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)

- **Public awareness to increase house hold connections -IEC ,capacity building, assessment study for authorised /illegal connections and uptapped/submersible house hold etc.**
- **Expansion of water supply distribution network with household connection in uncovered pockets**
- **Online billing , tracking system & spot billing machine**
- **Rehabilitation and expansion of payment collection center**
- **Leakage detection and its removal**
- **Replacement of old lines with house hold connection**

- **Water supply zoning of service area.**
- **100% implementation of metering.**
- **Automisation of tube well through SCADA**

The source of funding for all the above activities will be AMRUT

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

Rampur Nagar Palika Parishad is not yet associated with JICA/ADB.

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

Projects are sanctioned and funds are available with UP Jal Nigam for completing the ongoing activities by state grants.

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

In some dense populated areas due to congestion and crowded streets difficulties are faced in laying of distribution lines and sometimes also in unavailability of lands for water tanks and pump houses.

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

Water Taxes and other related water charges are levied on the consumers to recover the O & M.

Question: Will metering system for billing introduced?

Yes,It is required. It is to be covered through Amrut Scheme

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

For reduction in O & M cost addressing the NRW levels is applied. If NRW levels is reduced it will reduce the working of the pump hours and also reduce the electric consumption.

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

Yes, each objectives are meet the opportunity to bridge the gap.

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

Table: Alternative Activities To Meet Objectives

Objectives	Activities to be performed to bridge the gap	Financing Source
ONGOING PROJECT	Extension of distribution network, construction of tube well and OHT	State
TO ACHIEVE UNIVERSAL COVERAGE	capacity building, assessment study for authorised /illegal connections and uptapped/submersible house hold etc- AMRUTA&OE Funds	AMRUT IEC
	Expansion of water supply distribution network with household connection in uncovered pockets	AMRUT/State/ULB
TO MAKE SYSTEM EFFICIENT BY NRW REDUCTION	Leakage detection and its removal Replacement of old lines (damaged,leaked, defunged, choked,sluice valve etc) with house hold connection Water supply zoning of service area . 100% implementation of metering . Automisation of tube well thoroughscada	AMRUT/State/ULB
TO MAKE THE SYSTEM ENERGY EFFICIENT EFFICIENCY IN CHARGES COLLECTION	Online billing , tracking system & spot billing machine Rehabilitation and expansion of payment collection center	AMRUT/State/ULB

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, Stakeholders are involved in the Board Members of Nagar Palika Parishad on 05-09-2015

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

Yes, ward/ zone level consultations is being held in the city on-04-08-2015,07-10-2015 at Ambedkar Park Rampur

Question: Has alternative proposed above are crowd sourced?

No

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

90 % of the crowd was convinced the view of regularization of connections and automation/Metering.

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 The fund is being requested from the central Govt Scheme AMRUT

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

The convergence factor has been considered while designing and funding of project and it will be depending on state govt. instructions.

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.

1 Land is a major issue. In developed area normally land for construction of O.H.T and tube wells is not available. 2 Environment obligations is not a major issue in this area. 3 Clearance of projects is not a major issue.

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. The projects under execution are environmental sustainable.

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. The existing plan needs no change. It is sufficient to transform and create infrastructure projects.

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.

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)

S.No.	Objective	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost
1	TO ACHIEVE UNIVERSAL COVERAGE	Expansion of distribution network and achieve universal coverage	1	2016	2019	1.72Cr
2	TO MAKE SYSTEM EFFICIENT BY NRW REDUCTION	Metering Program	3	2016	2017	11.65 Cr.
		Automation of Tube Wells	4	2016	2017	0.98 Cr
3	EFFICIENCY IN CHARGES COLLECTION	On line billing, tracking system and spot billing machine	5	2017	2018	0.15Cr.
	Total					14.5Cr

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 Service Levels			Estimated Cost
				Indicator	Existing (As-Is)	After (To-be)	
1	TO ACHIEVE UNIVERSAL COVERAGE	Expansion of distribution network	Expansion of distribution network and achieve universal coverage	100%	17.5%	100 %	1.72Cr
2	TO MAKE SYSTEM EFFICIENT BY NRW REDUCTION	Metering Program	58285 H.H X 2000 Rs	Reduction in NRW	0	100	11.65 Cr.
		Automation of Tube Wells	SCADA Lab 41 Tube well X 2.4 lacs	Reduction in NRW	0	100	0.98 Cr.
3	EFFICIENCY IN CHARGES COLLECTION	On line billing, tracking system and spot billing machine	Billing and Tracking System	Increase in water charges collection	28 %	90%	0.15 Cr.
Total							14.5Cr

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
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Sr. No.	Project	GOI	State			ULB			Convergence	others	Total
			14th FC	Others	Total	14th FC	Others	Total			
2	Metering of HHs & Automation of Tube Wells	50%	-	50%	-	-	-	-	-	-	100%
3	On line billing, tracking system and spot billing machine	50%	-	50%	-	-	-	-	-	-	100%

YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per Table 2.5 of 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 distribution network and achieve universal coverage	1.72cr.	Increase in no. of house hold connections & coverage area 100%	17.5%		45%	60%	90%	100%	
Metering of HHs & Automation of Tube Wells	12.63 Cr	Reduction in NRW 20%	82.5%		50%	20%		-	-
On line billing,	0.15Cr.	Increase in water charges collection 90	28%	-	-	50%	90%	-	-

