NAME OF ULB - JAUNPUR

SECTOR WISE SLIP TEMPLATE: 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.

- 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)

Master Plan is available withJaunpur Regulated Authority,DPR of water supply is available with Jal Nigam and Nagar Palika ParishadJaunpur. Departmental data of House tax has also been usedby Nagar Palika Parishad.
Yes Zone wise information is available with Nagar Palika Parishad jaunpur

- 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 collected and co-related the information from census 2011 data. The details of which are as under:

Area Name	Source Of Information	Location of source of drinking water	Total Number of Households	Tapwater from treated source
Jaunpur	**As per census 2011 available**	Total Population = 1,80,362		
		Total Households	**34,616**	**18,485**
		Within the premises	**30,616**	**18,485**
		Near the premises	**2,000**	**-**
		Away	**2,000**	
	Departmental Data		34616	18485

- 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 1.1

Table 1.1 Status of Water Supply service levels

Sr. No.	Indicators	Present status	MOUD Benchmark	
1	Coverage of water supply connections 18485/34616	60 %	100%	D
2	Per capita supply of water with NRW 20.22 MLD/0.180	112 Lpcd	135 LPCD	D
3	Extent of metering of water connections	0 %	100%	A
4	Extent of non-revenue water	30 %	20%	D
5	Quality of water supplied	50 %	100%	D
6	Cost recovery in water supply services	40 %	100%	D
7	Efficiency in collection of water supply related charges	65 %	90%	D

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

The service level gaps are as under:

1. Gap in coverage of water supply is 40%
2. Gap in Per capita water availability is about 23 LPCD.
3. Gap in Metering is 100%.
4. Gap in NRW is about 10% which include leakage and free water supply to social gathering festivals along with water supply through stand posts.
5. 50% gap in Quality of supplied water as per PHE norms.
6. Gap in Cost recovery is 60% with expenditure on electricity and power.
7. Gap in efficiency of water charges/tax collection is about 25% .

Source of Water and Water Treatment System

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

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

• **Ground Water -25 Tube wells-Avg. Discharge- 1348LPM-Total -----20.22 MLD**
• **Surface Water -4 MLD At Present but currently we are drawing only 1.8 MLD water due to Shortage of Electricity Supply**

- 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?

Chlorination is provided 100% hence the treatment capacity comes to-20.22MLD

- 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 watersupply= 126 LPCD.

Distribution Zones

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

- City is divided in how many zones for water supply ?

Yes Divided in 10 Zones.

- Provide details of total no of Households (HH) in each zone, no of HH with and without water tap connections in the Table 1.2.

Table 1.2: Zone Wise Coverage of Households

Zone/ Ward/ Mohalla No	Total No of Households in each Zone/ Ward/ Mohalla	Households with water tap Connection in each Zone/ Ward/ Mohalla	Household without water tap connection in each Zone/ Ward/ Mohalla
1A	9151 HH	5406 HH	3645 HH
1B	4260 HH	2424 HH	1936 HH
1C	1489 HH	1331 HH	158 HH
1D	4842 HH	2995 HH	1847 HH
Zone 1	2434 HH	970 HH	1464 HH
2	2895 HH	1134 HH	1761 HH
3	3740 HH	1260 HH	2480 HH
4	1505 HH	155 HH	1350 HH
5	1310 HH	1135 HH	175 HH

Zone/ Ward/ Mohalla No	Total No of Households in each Zone/ Ward/ Mohalla	Households with water tap Connection in each Zone/ Ward/ Mohalla	Household without water tap connection in each Zone/ Ward/ Mohalla
6	2990 HH	1675 HH	1315 HH
Total	**34616**HH	**18485**HH	**16131**HH

Storage of Water

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

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

Total Water Storage Capacity- 6.970 MLD
Elevated Water Reservoirs-----7 Nos-------Total capacity------4.970 MLD
Ground Water Reservoir----------2 Nos------capacity ---2 MLD

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

No ground level reservoirs to store raw treated water is not required.

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

Water is supplied to consumers through direct pumping and elevated reservoir both.

- Is storage capacity sufficient to meet the cities demand ?

No, capacity is to be Improved.

Distribution Network

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

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

Total Length of distribution line is 120.4 KM (which includes rising main and feeder main)

- 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-----194.8KM.
No the objective of universal coverage is not achieved. 74.4 KM streets are not having pipelines in the city, which is required to be laid.

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

P.V.C., C.I., A.C. Pipe materials are being used.

- Provide zone wise details of street length with and without water distribution lines in the Table 1.3.

Table 1.3: 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
1A	**16.2 KM**	**12.4 KM**	**3.8 KM**
1B	**18.1 KM**	**12.1 KM**	**6.0 KM**
1C	**14.1 KM**	**7.5 KM**	**6.6 KM**
1D	**10.3 KM**	**8.7 KM**	**1.5 KM**
Zone-1	**25.6 KM**	**16.3 KM**	**9.3 KM**
2	**16.4 KM**	**8.7 KM**	**7.7 KM**
3	**16.7 KM**	**18.3 KM**	**8.4 KM**
4	**22.5 KM**	**15.5 KM**	**7.0 KM**
5	**26.6 KM**	**15.0 KM**	**11.6 KM**
6	**28.3 KM**	**15.8 KM**	**12.5 KM**
Total	**194.8 KM**	**120.4 KM**	**74.4 KM**
Say	**195 KM**	**120 KM**	**74 KM**

Institutional Framework

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

- Define role and responsibilities in terms of O&M, policy planning, funding, service provision in table 1.4.

Table 1.4: Functions, roles, and responsibilities

Planning and Design	Construction/ Implementation	O&M
UP Jal Nigam & ULB	**UP Jal Nigam & ULB**	**ULB**

- How city is planning to execute projects ?

The work related to achievement of universal coverage for which branch lines have to be laid and IEC to regularize illegal connections to increase will be done by Nagar Palika parishad Jaunpur. Other activities like construction of OHTs, Installation of Tube wells, reboring and rising main will be executed by UP Jal Nigam.

- 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 jointly by Nagar Palika parishad as well as State Level Parastatal Agency U.P. Para 8.1 of the AMRUT Guidelines will be followed 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.

- 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 1.4

Table 1.4: Status of Ongoing/ Sanctioned NA

S. No.	Name of Project	Scheme Name	Cost	Month of Completion	Status (as on dd mm 2015)
1	Jaunpur Peyjal Punargathan Yojna	Jaunpur Peyjal Punargathan Yojna	862 Cr.	3.2.2016	35%

- 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)

NA

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

Yes , City require extension of pipe line for universal coverage and replacement of old pipe line and Construction of OHTs& Renovation of Surface Water Treatment Plant.

- 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?

Earlier programme there was no focus on increasing the coverage. Bychanging the orientation our focus is to enhance the connection through regularizing unauthorized connection, motivation to citizens to take connection for optimizing the existing asset.

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

No,NRW Level is 30%. Yes city is planning to reduce NRW under AMRUT.

- 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 1.5.

Table 1.5 . Demand Gap Assessment for Water Supply Sector

Component	2015			2021	
	Present	Ongoing projects	Total	Demand	Gap
Source (MLD) Ground + Surface Water	22.74 MLD	2.2 MLD	22.74 MLD	28 MLD	5.26 MLD
Treatment capacity	22.74 MLD	2.2 MLD	22.74 MLD	28 MLD	5.26 MLD
Elevated Storage	4.97 ML	6.0 ML	10.97	10 ML	-

capacity (MLD)			ML		
Distribution network coverage (KM)	120.4 km	20 km	140.40 km	194.4 km	54.4 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.

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

Objects are identified from the gap and these objectives will be evolved from the outcome of the assessment. Details are given in below table

- Does each objective meet the opportunity to bridge the gap?

yes

Objectives	Activities to be performed to bridge the gap
To achieve universal coverage	**Gap in existing water supply network with household connections**
	Expansion of water supply distribution network 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 .

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

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. (AMRUTGuidelines; 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.

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

Above information provided in the below table

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

At present, there is Jaunpur Payjal Punargathan Yojna ongoing project in the city by up Jal Nigam Jaunpur.

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

The ongoing project has been completed 30%, efforts are being made to get it completed by Feb. 2016.

- What are the lessons learnt during implementation of similar projects? (100 words)

Not Applicable

- Have you analysed best practices and innovative solutions in sector? Is any of the practice be replicated in the city? (75 words)

Nagar Palika Parishad plans to take up automation in the near future.

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

Regularize of illegal connection, enhancement of coverage area, increase house hold connections, reducingNRW and use of ICT in collection of tax/charges

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

yes, leakage detection and its repairing, replacement of old lines (damaged, leaked, defunged, chocked,sluice valve etc) with house hold connection, water supply zoning of service area , atomisation of tube well through SCADA

- Are different options of PPP such as Design-build-Operate-Transfer (DBOT), Design Built Finance Operate and Transfer (DBFOT) are considered? (100 words)

PPP option willbe explored while framing the DPR in future.

The alternative activities to meet these activities be defined as per Table 1.6

Table1.6 Alternative Activities to Meet Objectives

Objectives	Activities to be performed to bridge the gap	Financing Source	Project Cost
To achieve universal coverage	**Gap in existing water supply network with household connections and expansion of water supply distribution network with household connection in uncovered pockets**	AMRUT IEC	12.00 Cr
To make system efficient by nrw reduction	**Leakage detection and its repair, replacement of old pipe lines (damaged,leaked, defunged, chocked,sluice valve etc) with house hold connection and water supply zoning of service area .**	AMRUT/State/ULB	8.00 Cr
Quality of water supply	**Renovation of water treatment plant.**		**1.00 Cr**
	Total		**21.00 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.

- Has all stakeholders involved in the consultation?

Yes, all stakeholders is being involved in the consultation
Discussion were held with citizen groups, with members and Hon'ble Chairman of Nagar Palika Board.

- Has ward/ zone level consultations held in the city?

Yes, ward/ zone level consultations is being held in the city. A Meeting of the Board was held on 15/05/2015. During the meetings various options and projects to be initiated under AMRUT were discussed .

- Has alternative proposed above are crowd sourced?

No alternatives proposed above are not crowd sourced.But Nagar Palika Parishad has planned for inviting the suggestionsfrom citizens through newspaper, website of Nagar Palika Parishad.

- What is feedback on the suggested alternatives and innovations?

Yes, Feedback are regularly taken and the feedback received areregarded in Register.

- 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 consultation with the citizen groups and elected representatives.

- What methodology adopted for prioritizing the alternatives?

Through departmental and public consultation.

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.

- What are sources of funds?

AMRUT/State/ULB Funds

- Has projects been converged with other program and schemes?

Yes

- Has projects been prioritized based on “more with less” approach?

Yes

- 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.

A) For increasing universal coverage the ULB does not require any NOC/land/ environmental clearance.
B) Also for leakage detection and its repairing -replacement of old Pipe lines (damaged,leaked, defunged, chocked,sluice valve etc) with house hold connection , water supply zoning of service areathere is no need of land/environmental clearance and NOC.

6. 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 Resilience related factor will be considered implementation of the project.

7. 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

- 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.

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

These projects will be financed by GOI,State and ULB

- 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.

- 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.

- Have the financial assumptions been listed out ?

Yes, as per guidelines of AMRUT 50% funding has been proposed through GOI and remaining funds will be provided by State and ULB.

- 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

- Does financial plan include percentage share of different stakeholders (Centre, State, ULBs and)

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

- Does it include financial convergence with various ongoing projects.

The financial convergence has not been considered as yet.

- 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 1.7,1.8,1.9,1.10 and 1.11. These tables are based on AMRUT guidelines tables 2.1, 2.2, 2.3.1, 2.3.2, and 2.5.

Table 1.7 MasterPlan of Water Supply Projects for Mission period

(As per Table 2.1of AMRUT guidelines)

(Amountin Rs. Cr)

Sr. No.	Project Name	Priorityn umber	Year inwhichto beimplemente	Year in which proposed to be completed	Estimated Cost
1	household connections and expansion of water supply distribution network with household connection in uncovered pockets	1	2016	2018	12.00 Cr
2	Leakage detection and its removal, replacement of old lines (damaged,leaked, defunged, chocked,sluice valve etc) with house hold and water supply zoning of service area connection and	2	2016	2017	08.00 Cr
3.	Renovation of water treatment plant.	3	2016	2018	01.00
			Total		21.00 Cr

Table 1.8 Master Service Levels Improvements during Mission Period

(As per Table 2.2 of AMRUT guidelines) (Amountin Rs. Cr 20.00)

Sr. No.	Project Name	Physical Components	Change in Service Levels			Estimated Cost (Cr)
			Indicator	Existing (As-Is)	After (To-be)	
1	**household connections and expansion of water supply distribution network with household connection in uncovered pockets**	**Survey,74.4 Km Pipe line and consumer connection**	**Coverage of water supply connections**	**60**	**90**	**12.00**
2	**Leakage detection and its removal, replacement of old lines (damaged,leaked, and water supply zoning of service area defunged, chocked,sluice valve etc) with house hold connection**	**Repair of water line**	**Extent of non-revenue water**	**30**	**20**	**08.00**
3	**Renovation of existing water treatment plant**	**Renovation of existing water treatment plant (4 MLD)**	**Improvement in Quality of Water**			**01.00**
Total						**21.00 Cr.**

Table1.9 Annual Fund Sharing Pattern for Water Supply Projects

(As per Table 2.3.1of AMRUT guidelines)

(Amountin Rs. Cr 20.00)

Sr. No.	Name of Project	Total Project Cost	Share				
			GOI	State	ULB	Others	Total
1	**Household connections and expansion of water supply distribution network with household connection in uncovered pockets**	**12.00**	**50%**	**50%**		**--**	**12.00**
2	**Leakage detection and its removal, replacement of old lines (damaged,leaked, and water supply zoning of service area defunged, chocked,sluice valve etc) with house hold connection**	**08.00**	**50%**	**50%**		**--**	**08.00**
3	**Renovation of existing water treatment plant**	**01.00**	**50%**	**50%**			**01.00**
	Total	**21.00**					**21.00 cr.**

Table 1.10 Annual Fund Sharing Break-up for Water Supply Projects

(As per Table 2.3.2 of AMRUT Guidelines)

(Amountin Rs.Cr20.00)

Sr. No.	Project	GoI	State			ULB			Convergence	Others	Total
			14th FC	Others	Total	14th FC	Others	Total			
1	**HOUSEHOLD CONNECTIONS and EXPANSION OF WATER SUPPLY DISTRIBUTION NETWORK WITH HOUSEHOLD CONNECTION IN UNCOVERED POCKETS**	**6.00**		**6.00**		**--**	**--**	**--**	**--**	**--**	**12.00**
2	**LEAKAGE DETECTION AND ITS REMOVAL, REPLACEMENT OF OLD LINES (DAMAGED,LEAKED, and WATER SUPPLY ZONING OF SERVICE AREA DEFUNGED, CHOCKED,SLUICE VALVE ETC) WITH HOUSE HOLD CONNECTION**	**4.00**		**4.00**		**--**	**--**	**--**	**--**	**--**	**08.00**
3	**RENOVATION OF EXISTING WATER TREATMENT PLANT**	**0.50**		**0.50**							**01.00**

Table 1.11Year wise Plan for Service Levels Improvements
(As per Table 2.5 of AMRUT guidelines)

Proposed Projects	Project Cost	Indicator	Baseline	AnnualTargets (Incrementfrom theBaselineValue)					
				FY2016		FY 2017	FY 2018	FY 2019	FY 2020
				H1	H2				
WaterSupply									
ASSESSMENT HOUSEHOLD CONNECTIONS and EXPANSION OF WATER SUPPLY DISTRIBUTION NETWORK WITH HOUSEHOLD CONNECTION IN UNCOVERED POCKETS	12.00	Coverage of water supply connections	60%	--	70%	90%	100%	-	-
LEAKAGE DETECTION AND ITS REMOVAL, REPLACEMENT OF OLD LINES (DAMAGED,LEAKED, and WATER SUPPLY ZONING OF SERVICE AREA DEFUNGED, CHOCKED,SLUICE VALVE ETC) WITH HOUSE HOLD CONNECTION	8.00	Extent of non-revenue water	30%	--	30 %	20%			
RENOVATION OF EXISTING WATER TREATMENT PLANT	01.00	Improvement in Quality of Water	50%		60 %	80%	100%		