CITY NAME –SHAMLI

Sewerage and Septage Management

1. Assess the Service Level Gap

The first step is to assess the existing situation and service levels gaps for Sewerage (AMRUT Guidelines; para 3 & 6). This will also include existing institutional framework for the sector. For this City has to review all policy, plans, scheme documents etc. to identify service level gaps and hold discussions with officials and citizens. 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 sewerage system of the city? Detail out the data, information, plans, reports etc related to sewerage available with city? Is zone wise information available? Have you correlated your data with census 2011 data? (100 words)

DPR of sewerage has been prepared by Jal Nigam, SHAMLI. Data of census 2011 is available with Nagar Palika Parishad SHAMLI.			
Total Population (Census, 2011)	**Location of source of Sewerage Population**	**Total Number of Households**	**Total Number of Households with toilets**
	Total Population -		
	Within the premises	**16968**	**16628**
	Near the premises	**991**	**761**
	Away	**738**	**629**
	Total	**18697**	**18018**
Departmental Data (2015)	**Population-**	**26562**	**24000**

Waste water outlet connected	**Close Drainage**	**Open Drainage**	**No Drainage**
Number of HH	**3551**	**15080**	**66**
Departmental Data	**No departmental information is available**		**0**

What are existing service levels for sewerage for coverage of sewerage network services, efficiency of collection of sewerage and efficiency in treatment. Provide information in table

Table 2.1 : Status of sewerage network and Service Levels

Sr. No.	Indicators	Existing Service Level	MOUD Benchmark	Reliability
1	Coverage of latrines (individual or community)24000/26562	90.35 %	100%	D
2	Coverage of sewerage network services.0/26562	0%	100%	D
3	Efficiency of collection of sewerage	0%	100%	D
4	Efficiency in Treatment: Adequacy of sewerage treatment capacity	0%	100%	D

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

1. **Gap in coverage of latrines (individual or community)= 9.65%**
2. **Gap in Coverage of sewerage network services= 100%**
3. **Gap in Efficiency of collection of sewerage=100%**
4. **Gap in Efficiency in Treatment: Adequacy of sewerage treatment capacity=100%**

Question: Does city has separate drainage system or sewer lines take care of storm water? (50 words)

Yes, city is planning to construct Drainage and sewerage system separate and sewerage system is not present in the city.

Coverage of latrines (individual or community), Please provide information in Table 2.2 A

Ward	Total number of HH a	Total number of HH with individual or community toilets within walking distance (b)	Coverage of latrines (%), (b/a)*100%
1	965	965	100.00
2	768	443	57.68
3	925	925	100.00
4	912	912	100.00

Ward	Total number of HH a	Total number of HH with individual or community toilets within walking distance (b)	Coverage of latrines (%), (b/a)*100%
5	750	750	100.00
6	923	923	100.00
7	1058	783	74.01
8	1278	847	66.27
9	1219	874	71.70
10	870	870	100.00
11	1178	898	76.23
12	1420	1136	80.00
13	1498	1498	100.00
14	995	995	100.00
15	994	994	100.00
16	992	992	100.00
17	1045	765	73.21
18	1299	1081	83.22
19	1148	1148	100.00
20	1098	1098	100.00
21	795	795	100.00
22	960	960	100.00
23	739	739	100.00
24	1735	1460	84.15
25	998	965	100.00

Ward	Total number of HH a	Total number of HH with individual or community toilets within walking distance (b)	Coverage of latrines (%), (b/a)*100%
total	26562	24000	90.35%

SEWERAGE NETWORK AND COLLECTION OF SEWERAGE

Question: How much of the area of the city is covered by sewerage network? What is the status of household connections in each zone? What are the areas covered under septage? Provide information in Table

Table: Zone/Ward Wise Coverage of Households

Not available

Ward	Total No. of Households(HH) a	Households with Sewerage Network b	Coverage of sewerage network services (b/a)*100%
1	965	0	0 %
2	768	0	0 %
3	925	0	0%
4	912	0	0%
5	750	0	0%
6	923	0	0%
7	1058	0	0 %
8	1278	0	0 %
9	1219	0	0 %
10	870	0	0%
11	1178	0	0 %
12	1420	0	0%
13	1498	0	0%

Ward	Total No. of Households(HH) a	Households with Sewerage Network b	Coverage of sewerage network services (b/a)*100%
14	**995**	**0**	**0%**
15	**994**	**0**	**0%**
16	**994**	**0**	**0%**
17	**1045**	**0**	**0 %**
18	**1299**	**0**	**0 %**
19	**1148**	**0**	**0%**
20	**1098**	**0**	**0%**
21	**795**	**0**	**0%**
22	**960**	**0**	**0%**
23	**739**	**0**	**0%**
24	**1735**	**0**	**0 %**
25	**998**	**0**	**0%**
total	**26562**	**0**	**0%**

Question:Are there any areas where sewer lines have been laid but still households are not connected to sewer lines? Are there any areas where toilets may be connected to sewer lines but kitchen or bathroom waste are not connected to sewerage system? (75 word)

No, there is no sewerage system at present.

Question: Is there any systematic and organized method to collect and treat waste from septic tanks? What is the duration of cleaning of septic tanks (monthly, quarterly, semiannually or annually)? Indicate status of overflows of septic tanks, either in the nearby drains /open fields/ sewerage lines etc? (75 words)

NPP has 1 sewer suction machine through which cleaning of septic tank work is being carried out on demand of citizen. Some people connect their septic tank to direct to drains.

Question: What is the situation of O&M of the existing sewerage system? Does the city has routine maintenance system or breakdown maintenance system? What is the duration of cleaning of sewer lines (monthly, quarterly, semiannually or annually)? Indicate infrastructure available for O&M of the sewerage system i.e sewer jetting machines etc? (100 words)

NPP has sewer jetting machine On demand of citizen and during routine inspection cleaning of sewer ,septic is being carried out.Annually cleaning of sewer is done.

SEWAGE TREATMENT SYSTEM

Question: Does city has Sewage Treatment Plant (STP)? Which areas are covered under each of the STPs? Provide details in Table 2.3

Table 2.3: Status of Existing's STPSs

There is no STP in the city

Sr. No.	Location	Capacity (MLD)	Inflow in the STP (MLD)	Efficiency in %
1	--------Nil-----	---------Nil-------	----------Nil------	-------Nil----------

Question: Does decentralized waste treatment system exist or planned in the city? If yes, provide details (75 words)

In Nagar Palika Parishad, there is no decentralized waste treatment system exist.

Question: How much of sewerage is generated in the city? How much of this sewerage generated reaches the STPs? What is the Biological Oxygen Demand (BOD) of incoming and outgoing sewage of each STP? (100 words)

At present availability of water is 20.65 MLD therefore about 16.52 MLD sewer is generated.. There is no existing STP in the SHAMLI, NPP.

Question: Is treated sewage being reused or recycled? Is treated water being used for irrigation or industrial purpose? Does the option of power generation being explored? (75 words)

No sewerage system present in the city so for.Sewerage is discharged into river.

INSTITUTIONAL FRAMEWORK

Question: Define role and responsibilities in terms of O&M, policy planning, funding, service provision in table

Table: 2.4: Functions, roles, and responsibilities

Planning and Design	**Construction/ Implementation**	**O&M**
UP Jal Nigam	UP Jal Nigam	Nagar Palika Parishad, SHAMLI

Question: Please also detail that how city is planning to execute projects. Shall the implementation of project be done by Municipal Corporation or any parastatal body? (75 words)

The work related to achievement of universal coverage, O&M shall be done by Nagar Palika Shamli while activities related to making the Sewerage system more efficiently will be executed by UP Jal Nigam.

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 sewerage system under different schemes with status and when the existing projects are scheduled to be completed? Provide information in Table

Table: Nil

S.No.	**Name of Project**	**Scheme Name**	**Cost in Rs Crore**	**Month of Completion**	**Status (as on DD MM 2015)**
01	**There is no ongoing project in the city.**	-	-	-	-

Question: How much the existing system will able to address the existing gap in sewerage system? Will completion of above will improve the coverage of network and collection efficiency? If yes, how much. (100 words)

Since there is no Sewerage system in the city so for. Hence existing gap in Sewerage system remains 100%..

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

Yes, Laying of sewer network with IPS to collect the waste. In case of Septage Management there is need of Septic tank ,STP and biodigester to treat the septage and so that waste can be used as a manure and irrigation purpose.

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

NPP visualization for management of sewerage septage through IEC for preventing the open deification and construction of individual & community latrines, decentralized Septage management, STP for waste collection from septic tank periodically and treatment of waste collected.

Provide information in Table 2.6

Table 2.6: Demand Gap Assessment

Component	**2015**			**2021**	
	Existing	**Ongoing projects**	**Total**	**Demand**	**Gap**
Sewerage network (km)	0	Nil	0	272.43 Km	272.43 Km
No of Households covered under sewerage system	0	Nil	0	26562	26562
No. of HH covered in Septage Management	**24000**	0	**24000**	26562	2562
Sewerage Treatment Plant (MLD)	0	0	0	13.92	13.92 MLD

OBJECTIVES

Based on assessment of existing infrastructure and ongoing / sanctioned projects, calculate existing gaps and estimated demand by 2021 for sewerage network, number of household to be provided with connections, and required enhancement in capacity of STP (MLD), area to be covered under septage management. Based on the demand and gap assessment, evolve objectives to achieve bridging these gap.
Question: Does each identified objectives will be evolved from the outcome of assessment?

1. Construction of HH latrines in 2562 HH through SBM.
2. Laying of 272.43 km sewer line and providing connection to 26562 HH.
3. Treatment of sewage through 1STPs (14 MLD)
4. Construction of 2 no. IPS and 1 MPS
5. Septage Management if Sewerage system is not approved.
6. Purchasing of 3 sewer suction machine

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

Yes, the objectives will meet the Gap.

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 alternative. While identifying the possible activities, also examine the ongoing scheme and its solutions including status of completion, coverage and improvement in O&M. Please reply following questions in not more than 200 words.

Question: What are the possible activities and source of funding for meeting out the objectives?

The funding for meeting out the each objective will 50% from AMRUT and remaining 50% from state and Nagar Palika Parishad SHAMLI.

Question: How can the activities be converged with other programmes like JICA/ ADB funded projects in the city etc?

There are no ongoing projects under JICA/ADB

Question: What are the options of completing the ongoing activities?

There are no ongoing activities.

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

There is no ongoing Project.

Question: Has projects includes O&M of sewerage system?

There are no ongoing activities.

Question: What measures may be adopted to recover the O&M costs? Can the option of sale of treated wastewater be applicable to recover the O&M cost.

NPP will impose sewer tax and charges for maintaining the sewer and treated water may be use for watering the gardens maintain by the NPP, option of sale of treated water and digested manure as fertilizers will be considered while preparing DPR.

Question: What are innovative alternative solutions explored in achieving objectives?

Exploring of new technology in the field of waste water treatment. Reuse and reclyle of trated water.NPP will also focus to motivate the citizens for taking the connections and try to stop open defecation in the city.

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

Yes NPP will be explored PPP options during preparation of DPR.

Question: How the recycle and reuse of water will be done? How much quantity of treated water may be reused?

Reuse of water in Palika gardens.Use of recycled water in non portable water use such as flushing in toilet. Above factors will be considered while preparing DPR.

Question: Have you analyzed best practices and innovative solutions in sewerage sector? Is any of the practice be replicated in the city?

We have not yet studied the best practice and innovation. In future these activities will be carried out.

Question: Have you identified the areas for decentralized waste treatment system? Explore the approaches for Septage management i.e. People Public Private Partnership (PPPP) model or replacing septic tanks by bio-digesters, bioremediation etc

Yes, this PPPP option will be consider during decentralize waste treatment septage management in during DPR preparations..

The alternative activities to meet these activities be defined as per Table 2.7 Table2.7 Alternative Activities To Meet Objectives

SL No.	Objective	Activities	Financing Source
1	Construction of HH Latrine (2562HH)	Survey	SBM
2	Establishing of sewer network of 272.43 km , STPs, IPS,MPS	Construction of sewer network	AMRUT/ State Govt
3	Treatment of Septage waste	Through decentralize waste treatment	AMRUT/ State Govt.
4	Purchasing of sewer suction machines	Septic management	AMRUT/ State Govt.
5	Septage waste collection and transportation	Septic management	AMRUT/ State Govt.

4. Citizen Engagement

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 reply following questions in not more than 200 words.

Question: Has all stakeholders involved in the consultation?

Yes, all stakeholders is being involved in the consultation passes the proposals which are put up by ward members. Thus all stakeholders were involved in the consultation

3rd October,2015 ward no-13

5th October,2015 ward no-14

8th October,2015 ward no-07

9th October,2015 ward no-10

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

Yes, In Nagar Palika Parishad SHAMLI Ward Level Consultations has held under the chairmanship of ward members on 7 October 2015 ward no.4

Question: Has alternative proposed above are crowd sourced?

Option explored are not crowd sourced.

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

83% of the people are agreed to Construction of individual & community latrines, transportation and treatment of waste through sewerage system.

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

Yes, Construction of individual & community latrines ,laying of sewer line & transportation and treatment of waste by decentralize waste managment.

Question: What methodology adopted for prioritizing the alternatives?

After consultation made in nagar Palika parishad board meetings priority laid firstly on universal coverage, Construction of individual & community latrines & transportation and treatment of septage waste by decentralize waste managment.

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.4 SBM

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

Yes, IEC &construction of individual and community latrines converge with Swach Bharat Mission(SBM).

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 indicated in AMRUT guidelines followed for prioritization of activities?

Yes, universal coverage approach indicated in AMRUT guidelines followed for prioritization of activities.

6. Conditionalities

Describe 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. Please reply following questions in not more than 100 words.

Arrangement of land for decentralize waste management can be made available by NPP free of cost. Land will not be available free of cost for STP and has to be purchased for the construction of STP, Environment clearance and other NOC will be obtained, efforts will be made for the availability of land for the construction with district authorities. For the laying of sewer line Efforts will be made for obtain NOC. Sewerage system can only be implemented if land is available for STP.

7. Resilience

Required approvals will be sought from competent authority and organizations. The resilience factor would be built in to ensure environmentally sustainable sewerage scheme. Please reply following questions in not more than 100 words.

YES,Disaster and environmental related factor will be considered while preparation of DPRs

8. Financial Plan

Once the activities are finalized and prioritized after consultations, investments both in terms of capital cost and O&M cost has to be estimated. (AMRUT Guidelines; para 6.5) Based on the investment requirements, different sources of finance have to be identified. Financial Plan for the complete life cycle of the prioritized development will be prepared. (AMRUT Guidelines; para 4, 6.6, 6.12, 6.13 & 6.14). The financial plan will include percentage share of different stakeholders (Centre, State and City) including financial convergence with various ongoing projects. While preparing finance plan please reply following questions in not more than 200 words

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

As per the guidelines of the AMRUT, the structured plan of the project will be developed. In which 50% from GOI and remaining will be shared between state and ULB .

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

Yes it will be converged under SBM.

Question: Does it include financial convergence with various ongoing projects

.

Yes, financial plan prepared for identified projects are based on financial convergence and consultation with funding partners.GOI, STATE& ULB.

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

Yes

DETAILS IN FINANCIAL PLAN SHALL BE PROVIDED AS PER TABLE 8.1, 8.2, 8.3, 8.4 AND 8.5. THESE TABLES ARE BASED ON AMRUT GUIDELINES TABLES 2.1, 2.2, 2.3.1, 2.3.2, AND 2.5.

Table 8.1 Master Plan of Sewerage 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	**Installation of Sewer network of 272.43km@ 60 Lac/km**	**1**	**2017**	**2020**	**163.458 Cr**
2	**Construction of 2 IPS @ 1.5 Cr/Unit**	**1**	**2017**	**2020**	**3 Cr**
3	**Construction of 1 MPS@4 cr/Unit**	**1**	**2017**	**2020**	**4cr**
4	**Construction of 1 STPs 14 MLD in 1.5 Cr/MLD**	**1**	**2017**	**2020**	**21 Cr**
Total					**191.458 Cr**
1	**Decentralize Waste Management for 26562 X 6000 Rs**	**2**	**2017**	**2020**	**15.94 Cr**
2	**Purchasing of sewer suction and jetting machine 3 Lac X 0.15**	**2**	**2017**	**2020**	**0.45 Cr**
Total					**16.39 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-ls)	After (To-be)	
1	**Efficiency in treatment: Adequacy of Sewerage Treatment.**	**Decentralize Waste Management for 26562 HH X 6000 Rs**	100%		100%	**15.94 Cr**
2	**Efficiency of Collection of Sewerage**	**Purchasing of sewer suction and jetting machine 3 Lac X 0.15**	100%		100%	**0.45 Cr**
Total						**16.39 Cr**
1	**Coverage of sewerage network services**	**Installation of Sewer network of 272.43 km@ 60 Lac/km**	100%	0%	100%	**163.458 Cr**
2	**Efficiency of Collection of Sewerage**	**Construction of IPS 2**	100%	0%	100%	**3.00 Cr**
3	**Efficiency of Collection of Sewerage**	**Construction of 1 MPS@4 cr/Unit**	**100%**		**100%**	**4.00cr**
5	**Efficiency in treatment: Adequacy of Sewerage Treatment.**	**Construction of 1 STPs 14 MLD in 1.5 Cr/MLD**	100%	0%	100%	**21.00 Cr**
Total						**191.458Cr**

ANNUAL FUND SHARING PATTERN FOR SEWERAGE PROJECTS

Sr. No.	Name of Project	Physical Components	Total Project Cost	Share				
				GOI	State	ULB	Others	Total
1	**Efficiency in treatment: Adequacy of Sewerage Treatment.**	**Decentralize Waste Management for 26562 HH X 6000 Rs**	**15.94 Cr**	**7.97 Cr**	**7.97 Cr**	-	-	**15.94 Cr**
2	**Efficiency of Collection of Sewerage**	**Purchasing of sewer suction and jetting machine 3 Lac X 0.15**	**0.45 Cr**	**0.225 Cr**	**0.225 Cr**	-	-	**0.45 Cr**
Total								**16.39Cr**
2	**Coverage of sewerage network services**	**Installation of Sewer network of 292 km@ 60 Lac/km**	**163.458 Cr**	**81.729 Cr**	**81.729 Cr**	-	-	**163.458 Cr**
3	**Efficiency of Collection of Sewerage**	**Construction of IPS 2**	**3 Cr**	**1.5 Cr**	**1.5 Cr**	-	-	**3 Cr**
4	**Efficiency of Collection of Sewerage**	**Construction Of MPS**	**4 Cr**	**2 Cr**	**2 Cr**			**4.0 cr**

5	**Efficiency in treatment: Adequacy of Sewerage Treatment.**	**Construction of 1 STPs 14 MLD in 1.5 Cr/MLD**	**21 Cr**	**10.5 Cr**	**10.5 Cr**	-	-	**21 Cr**
Total								**191.458 Cr**

(As per Table 2.3.1 of AMRUT guidelines)

(Amount in Rs. Cr)

ANNUAL FUND SHARING BREAK-UP FOR SEWERAGE PROJECTS

(As per Table 2.3.2 of AMRUT guidelines)

Sr. No.	Name of Project	Physical Components	GOI	State			ULB			Convergence	Others	Total
				14th FC	Other	Total	14th FC	Other	Total			
1	**Efficiency in treatment: Adequacy of Sewerage Treatment.**	**Decentralize Waste Management for 26562 HH X 6000 Rs**	**50%**	-	50%	**50 %**	-	-	-	-	-	**100 %**

Sr. No.	Name of Project	Physical Components	GOI	State			ULB			Convergence	Others	Total
				14th FC	Other	Total	14th FC	Other	Total			
2	**Efficiency of Collection of Sewerage**	**Purchasing of sewer suction and jetting machine 3 Lac X 0.15**	**50%**	-	50%	**50 %**	-	-	-	-	-	**100 %**
												100 %
1	**Coverage of sewerage network services**	**Installation of Sewer network of 272.43 km@ 60 Lac/km**	**50%**	-	50%	**50 %**	-	-	-	-	-	**100 %**
2	**Efficiency of Collection of Sewerage**	**Construction of IPS 2**	**50%**	-	50%	**50 %**	-	-	-	-	-	**100 %**
3	**Efficiency of Collection of Sewerage**	**Construction of 1 MPS@4 cr/Unit**	**50%**	-	50%	**50 %**	-	-	-	-	-	**100 %**
4	**Efficiency in treatment: Adequacy of Sewerage**	**Construction of 1 STPs 14 MLD in 1.5 Cr/MLD**	**50%**	-	50%	**50 %**	-	-	-	-	-	**100 %**

Sr. No.	Name of Project	Physical Components	GOI	State			ULB			Convergence	Others	Total
				14th FC	Other	Total	14th FC	Other	Total			
	Treatment.											

YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per Table 2.5of AMRUT guidelines)

Objective	Proposed project	Project Cost	Indicator	Baseline	Annual Target(Increment from baseline value)					
					FY 2016		**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
					H1	H2				
Efficiency in treatment: Adequacy of Sewerage Treatment.	**Decentralize Waste Management for 26562 HH X 6000 Rs**	**15.94 Cr**	100%	0%	-	-	20%	50%	75%	100 %

Efficiency of Collection of Sewerage	**Purchasing of sewer suction and jetting machine 3 Lac X 0.15**	**0.45 Cr**								
Total		**16.39 Cr**								
Coverage of sewerage network services	**Installation of Sewer network of 272.43 km@ 60 Lac/km**	**163.458 Cr**	100%	%	-	-	20%	40%	80%	100 %
Efficiency of Collection of Sewerage	**Construction of 2 IPS**	**3 Cr**	100%	0%	-	-	20%	40%	80%	100 %
Efficiency of Collection of Sewerage	**Construction Of 1 MPS**	**4 Cr**	100%				20%	40%	80%	100 %
Efficiency in treatment: Adequacy of Sewerage Treatment.	**Construction of 1 STPs 14 MLD in 1.5 Cr/MLD**	**21 Cr**	100%				20%	40%	80%	100 %
Total		**191.458**								