**TEMPLATE FOR Service level improvement plan (Sewerage)**

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.

* What kind of baseline information is available for seweragesystem 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)

**At present the baseline information available for sewerage system is:**

**City Development Plan/ Master Plan/ CSP (PLEASE MENTION THE NAME OF THE REPORT)**

**IS ZONE WISE INFORMATION AVAILABLE)**

**Ans – City sanitation Plan Report , Zone wise Information is not available.**

**At present in Rajnandgaon city open drainage system is available. Most of the existing drains are used for houses waste water and as well for storm water. Sever waste of Toilets of houses are disposed to septic tanks. From septic over flow waste water are disposed through open drain. There is no under ground sewer system in city. About 75% Residential and Commercial area is covered with open drainage system.**

* 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 2.1

Table 2.1: Status of sewerage network and Service Levels(PLEASE MENTION SOURCE OF THE INFROMATION)Service Level Benchmark survey by PAS Ahmdabad Organized by State Govt.

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Indicators (as per SLB framework) | Existing Service Level | MOUD Benchmarks |
| 1 | Coverage of latrines (individual or community) | 93.7% | 100% |
| 2 | Coverage of sewerage network services | 0% | 100% |
| 3 | Efficiency of collection of sewerage | 0% | 100% |
| 4 | Efficiency in Treatment: Adequacy of sewerage treatment capacity | 0% | 100% |

Ans - In Rajnandgaon Municipal Corporation there is no Sewerage System.

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

**Coverage of latrines (individual or community) Gap with regard to benchmark Prescribed is 6.3%.**

**Currently there is no sewerage system in the city.**

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

**No, there is no separate system. Currently the city has only storm water drainage system. However, these drains are also used for discharge of overflow from septic tanks and sewage directly at some areas.**

**Sewerage network And Collection of Sewerage**

* 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 2.2.

Table 2.2: Zone Wise Coverage of Households

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Zone No** | **Total No of Households** | **Households with Sewerage Network** | **Households with Septic Tank** | **Households without any outlets for toilets** |
| - | 37136 | NA | 18230 | 18906 |

* 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 words)

**The city does not have an underground sewerage system.**

* 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)

**The septic tanks are cleaned by the Municipal Corporation as per the request of the individual household. Overflow from the septic tans is discharged in the nearby drains.**

* 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 ofsewer lines (monthly, quarterly, semiannually or annually)? Indicate infrastructure available for O&M of the sewerage system i.e sewer jetting machines etc? (100 words)

**Currently there is no sewerage system in the ULB.**

**Sewage Treatment System**

* 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 STPs

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

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

**There is no decentralized waste treatment system exist or planned in the city.**

* 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)

**There is no sewerage system and no STPs.**PLEASE MENTION HOW MUCH SEWAGE IS GENERATED IN THE CITY?

**Ans –** 18 MLD Sewerage is generated in the City by the Drainage System.

* 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)

**There is no STPs, So treated sewage is not reused or recycle**

**Institutional Framework**

* Define role and responsibilities in terms of O&M, policy planning, funding, service provision in table 2.4.

Table 2.4: Functions, roles, and responsibilities

|  |  |  |
| --- | --- | --- |
| Planning and Design | Construction/ Implementation | O&M |
| Prepare by Municipal Corporation Rajnandgaon for Construction of STPs at near Sivnath River , Mohara to prevent sewage water contamination in Shivnath River First Stage Project has been prepared | ULB (Municipal Corporation Rajnandgaon) | ULB(Municipal Corporation Rajnandgaon) |

* 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)

**After sanctioning of the project, work will be execute by the Municipal Corporation Rajnandgaon.**

PLEASE PROVIDE DETAILS OF THE PROJECT FOR SEWERAGE SYSTEM.

Ans - DPR of Rs 500 Lacs for the construction of STP at near Shivnath river has been prepare and send it to C.G. Paryavaran Sanrakshan Mandal for sanction .

1. **Bridging 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 sewerage system under different schemes with status and when the existing projects are scheduled to be completed? Provide information in Table 2.4

Table 2.4: Status of Ongoing/ Sanctioned

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No.** | **Name of Project** | **Scheme Name** | **Cost in Rs Crore** | **Month of Completion** | **Status**  **(as on dd Month 2015)** |
| 1. | NA | NA | NA | NA | NA |

* 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)
* **10% gap is able to address in sewerage system**(HOW IS 10% GAP ADDRESSED**(The said gap has been addressed by using of Vacume emptier Machineries with capacity 3000 ltr.)**? PLEASE EXPLAIN)**, after completion of above**(WHICH PROJECT KINDLY MENTION – **Under AMRUT Scheme**) **50% improve the coverage of network and collection efficiency.**

**Ans – Underground sewerage system project is necessary in city to improve the System.**

* Does the city require additional infrastructure to improve the services? What kind of services will be required to fulfill the gap?
* .**Yes, Construction of underground sewerage system and STPs is required to fulfill the gap.**
* How does the city visualise 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?
* **There is no sewerage system in the city.**

Provide information in Table 3.5.

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.

1. **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.

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

**State Govt & Central Govt.**

* How can the activities be converged with other programme like JICA/ ADB funded projects in the city etc?
* **As per requirement activities be converged with other programme like JICA/ ADB funded/SBM/Smart city mission projects in the city.**PLEASE MENTION THE METHODOLOGY TO CONVERGE THE ACTIVITIES WITH OTHER PROGRAMMES.There are no convergence has been identified and awaiting for the AMRUT Scheme.
* State government allots fund to ULB different scheme Example 14th Finance Commission, SBM Funds, Smart City Mission and other Infrastructural development work So in this fund activities be converged.
* What are the options of completing the ongoing activities?
* **By the help of state Govt. or Central govt. Fund allotment.**
* Has projects includes O&M of sewerage system?
* **Yes**
* 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.
* **Integrated tax given by the households.**NOT CLEAR KINDLY PROVIDE AN EXPLANATION

**Ans –** integrated tax is taken by the municipal corporation by every households at present 200 Rs per Year is taking by the corporation for sanitation work by households.

* Are different options of PPP such as Design-build-Operate-Transfer (DBOT), Design Built Finance Operate and Transfer (DBFOT) are considered?
* **Yes**
* How the recycle and reuse of water will be done? How much quantity of treated water may be reused?
* **Establishment STPs for recycle and reuse of water 5 MLD quantity of treated water maybe used.**PLEASE MENTION WATER WILL BE REUSED FOR WHICH ACTIVITIES FOR e.g. IRRIGATION

**Ans - After establishment STPs 5MLD quantity of Treated water be reused , which will used for irrigation work in agriculture land.**

* Have you analyzed best practices and innovative solutions in sewerage sector? Is any of the practice be replicated in the city?
* **Yes. THE BEST PRACTICES AND INNOVATIVE SOLUTIONS ANALYZED ARE:**

PLEASE MENTION THE BEST PRACTICES AND INNOVATIVE SOLUTIONS STUDIED AND ANALYZED. ALSO MENTION AMONGST THE BEST PRACTICES STUDIED WHICH ONE IS BEST TO PE REPLICATED IN THE CITY.

**Ans - As an example of implementation in Surat City sewerage system.**

* 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.**PLEASE MENTION THE AREAS IN THE CITY WHICH WILL BE BROUGHT UNDER DECENTRALIZED WASTE TREATMENT.

**Ans –** In ward no 50 Singdai, which is near to Shivnath river.

* ALSO PLEASE MENTION WHAT MEASURES WILL BE TAKEN BY THE ULB FOR SEPTAGE MANAGEMENT.NA

For each identified activity and alternative indicate the cost estimate with broad source of funding will be explored for each alternative in Table 3.6

1. **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.

* Has all stakeholders involved in the consultation?

**Yes, stockholder involved in the consultation (**PLEASE MENTION HOW MANY CONSULTATIONS HAVE BEEN CONDUCTED SO FAR AND MENTIN THE DATE OF EACH CONSULTATION. HOW MANY PARTICIPANTS ATTENDED THE CONSULTATION? WHO WERE THE STAKEHOLDERS? WHAT ISSUES WERE DISCUSSED IN THE CONSULTATION)



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 26 | 14.07.2015 |  | 15 | 07 |  |
| 27 | 14.07.2015 | 24 | 03 |
| 28 | 14.07.2015 | 25 | 16 |
| 29 | 14.07.2015 | 26 | 03 |
| 30 | 14.07.2015 | 37 | 01 |
| 31 | 14.07.2015 | 27 | 04 |
| 32 | 14.07.2015 | 28 | 02 |
| 33 | 14.07.2015 | 36 | 22 |
| 34 | 14.07.2015 | 38 | 11 |
| 35 | 14.07.2015 | 39 | 09 |
| 36 | 14.07.2015 | 48 | 06 |
| 37 | 14.07.2015 | 29 | 06 |
| 38 | 14.07.2015 | 30 | 09 |
| 39 | 14.07.2015 | 31 | 03 |
| 40 | 14.07.2015 | 32 | 05 |
| 41 | 14.07.2015 | 33 | 13 |
| 42 | 14.07.2015 | 34 | 17 |
| 43 | 14.07.2015 | 35 | 05 |
| 44 | 14.07.2015 | 40 | 01 |
| 45 | 14.07.2015 | 41 | 02 |
| 46 | 14.07.2015 | 42 | 17 |
| 47 | 14.07.2015 | 43 | 16 |
| 48 | 14.07.2015 | 46 | 21 |
| 49 | 14.07.2015 |  | 47 | 05 |  |
| 50 | 14.07.2015 | 49 | 02 |
| 51 | 14.07.2015 | 50 | 07 |
| 52 | 14.07.2015 | 51 | 05 |
|  |  | Total |  | 544 |

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

**Yes, ward and zone level consultation held in city.**(HAVE ALL THE WARDS/ ZONES BEEN COVERED IN THE CONSULTATION?)

**Ans – Yes**

* Has alternativesexplored are crowd sourced?
* **Yes, Alternatives explored are crowed sourced.**
* What is feedback on the suggested alternatives and innovations?

**Feedback for improvement of water supply , sewerage system, drainage system has got by Citizen.**HERE PLEASE MENTION WHAT IDEAS WERE GIVEN BY THE ULB FOR IMPROVEMENT IN SEWERAGE SYSTEM AND WHAT FEEDBACK WAS GIVEN BY THE CITIZENS ON THE ALTERNATIVES GIVEN BY THE ULB.

Ans – drainage system in Rajnandgaon is open public want covered drain and there is no sewerage treatment plan so waste water mixed with Shivnath River , So construction of STP is must in City.

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

**Municipal Corporation Rajnandgaon has taken priorities on the basis of consultations.**

* What methodology adopted for prioritizing the alternatives?

**the methodology for prioritizing depends on survey, requirement and public demand.**

1. **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?
* **Central Govt. and State Govt. are the sources of funds.**
* Has projects been converged with other program and schemes?.
* **Yes, the projects has been converged with other program and schemes.**WHICH PROGRAM AND SCHEMES? PLEASE MENTINON.

**Ans -** 14th Finance Mission, SBM, and others Fund by State Govt.

* Has projects been prioritized based on “more with less” approach?
* **Yes, the project has been prioritized based on “more with less” approach.**
* Has the universal coverage approach indiated in AMRUT guidelines followed for prioritization of activities?
* **Yes, the universal coverage approach as indicated in AMRUT guidelines has been followed.**

1. **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.

**Land will be acquire by Revenue Department of State Government. Environmental and clearance certificate will be taken from pollution control board. Financial commitment approval and permission will be taken by the competent authority**

1. **Resilience**

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

**If required resilience factor would be admirable by the Institution.**NOT CLEAR PLEASE EXPLAIN

**Ans** – if their wiould be any problem to find Environmental Clearence or Land acquisition then for water supply Project we will request to competent authority for resilience.

1. **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

* does financial plan for the complete life cycle of the prioritized development?

**Yes, the financial plan is for the complete life cycle of the prioritizeddevelopment.**

* does financial plan include percentage share of different stakeholders (Centre, State, ULBs and)

**Yes, the financial plan include percentage share of different stakeholders**

* does it include financial convergence with various ongoing projects.

**Yes, it include financial convergence with various ongoing projects**.

* Does it provide year-wise milestones and outcomes ?

**Yes, it provide year-wise milestones and outcomes.**

**Work and Service Levels**

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Indicators | Existing Service Level | MOUD Benchmarks |
| 1 | Coverage of latrines (individual or community) | 93.7% | 100% |
| 2 | Coverage of sewerage network services | 0% | 100% |
| 3 | Efficiency of collection of sewerage | 52.8% | 100% |
| 4 | Efficiency in Treatment: Adequacy of sewerage treatment capacity | 0% | 100% |

Table 3.2 Zone Wise Coverage of Households

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Zone No** | **Total No of Households** | **Households with Sewerage Network** | **Households with Septic Tank** | **Households without any outlets for toilets** |
| 1. | 37136 | NA | 18230 | 18906 |

Table 3.3: Status of Existing STPs

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

Table 3.4: Status of Ongoing/ Sanctioned

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Name of Project** | **Scheme Name** | **Cost in Rs Crore** | **Status**  **(as on dd Month 2015)** |
| 1. | NA | NA | NA | NA |

Table 3.5: Demand Gap Assessment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Component | Existing | Ongoing projects | Existing + Ongoing | 2021  (Short term) | |
| **Demand** | **Gap** |
| Sewerage network (km) | NA | NA | NA | 350 Km | 350 Km |
| No of Households covered under sewerage system | NA | Na | NA | 22487 | 22487 |
| Sewerage Treatment Plant (MLD) | NA | NA | NA | 30MLD | 30 MLD |

Table 3.6: Cost Estimate for each Objective:

|  |  |  |  |
| --- | --- | --- | --- |
| S.No | Activity | Basis | Amount in Rs.Cr |
| 1 | Septage Management |  | 12.00 |
|  | TOTAL |  | 12.00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name of City:Rajnandgaon (Chhattisgarh) Current Mission Period (2015-20)** | | | | | |
| **Table 2.1: SLIP - Master Plan of all projects to achieve universal coverage of sewerage during current Mission period (FY 2015-16 to 2019-20)** | | | | | |
|
| **Sr. No.** | **Project Name and Code (List all project to achieve universal coverage in the city seprately for water supply and sewerage)** | **Infrastucture improvement** | | | |
| **Change in service Levels** | | | **Estimated Cost (Amount in Rs. in Cr.)** |
| **Priority number** | **Year in Which to be improvement** | **Year in which proposed to be completed** |
| 4 | AMRUT/CG/Rajnandgaon/SEPT/01 | 1 | 2015 | 2016 | 12.00 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of City:Rajnandgaon (Chhattisgarh) FY: 2016-2020** | | | | | | | | |  |
| **Table 2.5 : SLIP -Plan for Achieveing Service Level Benchmarks** | | | | | | | | | |
|
| **Proposed Projects** | **Total Project Cost (Cr)** | **Indicator** | **Baseline** | **Annual Targets (Increment from the baseline Value)** | | | | | |
| **FY 2016** | | **FY 2017** | **FY 2018** | **FY 2019** | **FY 2020** |
| **H1** | **H2** |
| **Sewerage and Septage Management** | | | | | | | | | |
|  | 12.00 | coverage of latrines (individual or community) (%) | 93.70% |  | - | 100 | - | - | 100 |
| Coverage of sewerage network services (%) | 0 |  | - | 100 | - | - | 100 |
| Efficiency of Collection of Sewerage (%) | 0 |  | - | 100 | - | - | 100 |
| Efficiency in treatement (%) | 0 |  | - | 100 | - | - | 100 |