

Service Level Improvement Plan (SLIP) Atal Mission for Rejuvenation and Urban Transformation (AMRUT)



SAMBALPUR











Sambalpur

As per the 2011 census, the population of Sambalpur Municipal Corporation is 3.36 Lakh. The decadal growth rate of the city is @ 20%. The population of the out growth area is about 0.06 Lakh. The average floating population is about 15,000. Both horizontal and vertical growth of the city is observed during the recent years. Satellite towns are developing in the outskirts of the city. Recently merged towns i.e. Burla and Hirakud are likely to develop in the future to constitute a regional hub. Sambalpur symbolizes the culture of western Odisha with the famous Sambalpuri folk dance. The city is also famous for its unique handloom (Sambalpuri Silk Saree) and the fabric. There is presence of a major multipurpose reservoir and dam (longest earthen dam of Asia) over river Mahanadi. Mahanadi Coalfields Ltd. (MCL), the major coal producer and HINDALCO are also present in Sambalpur. The city is famous for handicraft work and Sambalpuri silk



saree and dress materials trading. It is indeed the trading gateway for western Odisha. Economy of the city is based on industrial activities in the periphery, whole sale trading and support services.

Skilled manpower is available in the city in handicraft, engineering & services. Adequate land is available for horizontal growth of the city to accommodate future infrastructure needs. Proximity to Mahanadi ensures adequate water source and availability of potable water supply to match national benchmark. Sewerage and drainage system are being proposed under the state plan. Solid waste management for the city is proposed on PPP mode including landfill and treatment. Better public transport facility has been initiated with introduction of city bus service on PPP mode. Sambalpur is well connected by rail and road (NH 42) and has proximity to the proposed regional Airport. Educational facility in the city is good with presence of a major medical college cum hospital, engineering colleges, ITI centers and a varsity.

In the Service Level Improvement Plan (SLIP) for Sambalpur, sector-wise projects identified and the estimated costs are: water supply-26 nos./Rs. 374.53 Cr.; sewerage/Septage- 8 nos./ Rs. 746.04 Cr.; storm water drainage- 6 nos/ Rs. 664.93 Cr.; urban transport – 7 nos. / Rs. 23.6 Cr.; and parks – 10 nos./ Rs. 2.91 Cr. In total 57 nos of projects have been identified with a total estimated cost of Rs. 1812.01 Crore.

Water Supply

Mission Management Information System

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 frame work 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)

Ans. Zone wise information/plans, reports etc are available. But some data relating to newly included villages in the Municipal Corporation area have been collected from RWSS. Consumer and asset database is maintained and updated annually. One project is ongoing under UIDSSMT which does not include the additional area after formation of corporation.

Question: Have you collected census 2011 data? Are you aware of base line survey data of MoUD? Have you correlated data from these and other sources? (75 words)

Ans. Yes, census 2011 data have been collected. Data are also collected from Sambalpur Municipal Corporation and RWS&S Division, Sambalpur. Base line survey data of MoUD and data from different sources have been correlated.

Question: What is 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.

Ans. The existing service levels for water supply to Sambalpur are given below in the prescribed table.

Indicators	Present status	MOUD Benchmark	Reliability Level
Coverage of water supply connections	30.0%	100%	С
Per capita supply of water	185.6	135	D
Extent of metering of water connections	0.0%	100%	A
Extent of non-revenue water	67.9%	20%	D
Quality of water supplied	98.0%	100%	С
Cost recovery in water supply services	42.5%	100%	С
Efficiency in collection of water supply related charges	37.9%	90%	В

TABLE 1.1: Status of Water Supply Connections.

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

Ans. There is huge gap in service level in respect of certain indicators such as Coverage, Extent of NRW, Extent of metering, Cost recovery and Efficiency in revenue collection. Reliability levels of the data / figures in respect of indicators also need improvement. The Gaps have widened due to the increase in corporation area.

SOURCE OF WATER AND WATER TREATMENT SYSTEM.

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

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

Ans. Both surface water source and underground water source are presently utilized for water supply. Total quantity of surface water source is 57.50 MLD, where as the total quantity of underground water source is 7.82 MLD.

Question: Is there any treatment provided to water from these sources? How much water is required to be treated daily? What is the treatment capacity installed in the city?

Ans. Yes, water is being treated prior to supply to the consumers. At present 57.50 MLD of water is being treated. The installed treatment capacity in the city is 57.50 MLD.

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?

Ans. 185.60 LPCD.

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?

Ans. City is divided into 17 Zones for water supply distribution purpose.

Question: Provide details of total nos of Households (HH) in each zone, nos of HH with and without water tap connections in the Table

Ans:-Detailed information given below.

Zone No	Total No of Households	Households with direct water supply Connection	Households without direct water supply connections
1	4273	21	4252
2	4271	1124	3147
3	5579	1550	4029
4	6378	2029	4349
5	3606	0	3606
6	5579	4206	1373
7	5558	4361	1197
8	6106	4455	1651
9	4235	3778	457
10	6387	4141	2246
11	4242	3630	612
12	4928	634	4294
13	5975	4236	1739
14	3434	3383	51
15	3150	379	2771
16	2290	95	2195
17	1575	60	1515
Total	77566	38082	39484

TABLE 1.2: Zone wise coverage of household

NOTE: The data provided for house hold with direct water supply connection includes existing and ongoing

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?

Ans. Total water storage capacity including ongoing projects = 19.08 ML

ESR = 05.23 ML GSR= 13.85 ML

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

Ans. There is no requirement to store raw water since the river source are perennial. However storage capacity for treated water is required.

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

Ans. Water is being supplied to consumers through both direct pumping and through elevated reservoirs.

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

Ans. No. Storage capacity is not sufficient. Additional storage facilities need to be provided for the un-covered areas and the newly included areas as well as water-scarce areas of the corporation.

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?

Ans. Total length of the existing water supply distribution pipe line in the city is 406.00 Km and laying of another 27.62 Km of pipe line is going on under UIDSSMT scheme & MCL deposit.

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?

Ans. The total road length of the city is 1081.02 Km. Pipe lines are not laid in all streets. The objective of universal coverage of water supply pipe line has not yet been achieved.

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

Ans. Mostly C.I. & D.I. pipes are used excepting a few areas where PVC pipes are used.

Question: Provide zone wise details of street length with and without water distribution lines in the Table?

Zone No	Total Street Length (Km)	Street length with water distribution pipe line (Km)	Street length without water distribution pipe line (Km)	Remark
1	101.95	18.96	82.99	
2	53.65	37.21	16.44	
3	76.51	66.41	10.10	
4	66.52	41.01	25.51	
5	52.13	8.36	43.77	
6	67.28	18.89	48.39	
7	31.59	11.70	19.89	
8	162.88	46.03	116.85	information provided
9	26.11	13.85	12.26	ongoing to be taken up
10	49.48	24.62	24.87	under separate source of
11	27.87	14.79	13.08	Turtung
12	113.00	20.51	92.49	
13	108.30	38.31	69.99	
14	47.14	19.38	27.76	
15	47.26	29.90	17.36	
16	25.00	9.57	15.43	
17	24.35	14.12	10.23	
Total	1081.02	433.62	647.40	

TABLE 1.3: Zone wise length of distribution network

INSTITUTIONAL FRAME WORK

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 1.4a: Functions, roles, and responsibilities Planning and Design

Planning and Design	Construction/Implementation	O&M		
Planning and design Cell in EIC (PH) office headed by SE(P&D) and supported by technical cell and PDMC	Project team headed by divisional EE of PHEO along with supervision field engineers (AEE/AE/JE) and supported by PMMU anf PDMC. MoU will be signed between PHEO and ULB for execution of the project	O & M team headed by EE of PHEO and supported by operations engineers and operators. MoU will be signed between PHEO and ULB for O & M of the infrasructure. Outsourced PPP model will also be explored.		

Question: How city is planning to execute projects?

Ans. The city is planning to execute the ongoing and proposed projects through a dedicated field supervision team with hierarchical monitoring by PHEO.

Question: Shall the implementation of project be done by Municipal Corporation or any parastatal body? Please refer para 8.1 of AMRUT guidelines.

Ans. It will be implemented by PHEO, a wing of H&UD Department.

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.

SI. No.	Name of Project	Scheme Name	Cost (Cr. Rs.)	Month of Completion	Status
1	Improvement of water supply to Sambalpur Area	UIDSSMT	40.28	March 2019	Procurement process initiated
2	Improvement of water supply to Burla Area	CSR	11.30	March 2018	Execution in progress

TABLE 1.4b: Status of Ongoing/ Sanctioned projects

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)

Ans. After completion of the above projects it will improve the coverage of network and collection efficiency to achieve the benchmark levels.

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

Ans. Yes. City requires additional infrastructure to improve the services. Since the corporation is spread over large area with a major river dividing it into two parts, the requirement fo additional infrastructure is evident. New WTP, extending distribution network and rehabilitation of existing age old infrastructure are very much required to improve the services. Consumer metering is very much essential to reduce the level of NRW & per capita supply.

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?

Ans. Consumer metering is proposed to reduce the level of NRW & to improve cost recovery. Rehabilitation of existing infrastructure (mainly age old distribution network) is very much essential to improve water quality. The existing assets will be optimally utilized to ensure rejuvenation.

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

Ans.: City has conducted assessment of Non-Revenue Water through indirect methods which is approximately 67.90%. Yes, the city has plans to reduce NRW by way of introduction of HH level metering, reducing illegal connections and reducing other losses.

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.

	2015			2021		
Component	Present	Ongoing projects	Total	Demand	Gap	
Source (MLD) -Surface Source	61.75	10	71.75	72	20	
Treatment capacity (MLD)	61.75	10	71.75	72	20	
Elevated Storage capacity (ML)	3.38	1.85	5.23	24	18.77	
Distribution network coverage (m)	405928	27693	433621	1081020	647399	

TABLE 1.5: Gaps in water supply service levels

NOTE

The surface source development is proposed in the newly added areas which are across the river and transportation of water from existing WTP is not possible

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?

Ans. Each of the objectives have been evolved from the outcome assessment. Which can be listed as follows

- 1. Ensure quality to water
- 2. Universal household level access with adequate water
- 3. Reduce NRW thereby increase the coverage & cost recovery

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

Ans. Yes, each of the objectives meets the opportunity to bridge the gaps.

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)

Ans. Projects being undertaken through UIDSSMT funding and peripheral development grant from MCL shall cover many uncovered and water scarce areas where as strengthening/rehabilitation of distribution network, new additional WTPs, additional ESRs/GSRs and new distribution network of the balance uncovered areas are being proposed under AMRUT scheme to bridge the gaps in service levels.

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

Ans. The proposed activities under AMRUT have been converged with programme like UIDSSMT, CSR Deposits, as stated above.

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

Ans. Balance funding through state budgetary support.

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

Ans. Availability of land and realistic market estimate has been the major bottleneck in implementation of ongoing projects. Steps are already initiated to avoid such problems in future. These bottlenecks have been addressed while preparing SLIP for AMRUT

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

Ans. Cost recovery is being proposed by increasing the consumer base and reducing the operational cost.

Question: Will metering system for billing introduced?

Ans. Yes.

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

Ans. Yes, O & M cost will be reduced by reducing the NRW levels.

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

Ans. Yes

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

Table: Alternative Activities To Meet Objectives

Sr. No.	Objective	Activities	Financing Source
1	Quality water supply	Rehabilitation of venerable streches	AMRUT
2	Adequecy of water	Treatment facility	UIDSSMT, CSR & AMRUT
3	Universal coverage	Network expansion and house connection	UIDSSMT, CSR & AMRUT
4	NRW reduction	Consumer metering & leak reduction	UIDSSMT & AMRUT
5	Cost recovery	Coverage & NRW reduction	

TABLE 1.6: Alternative Activities to Meet Objectives

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?

Ans. Yes

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

Ans. Yes.

Question: Has alternative proposed above are crowd sourced?

Ans. Yes.

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

Ans. All stake holders agree to the proposed activities under AMRUT.

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

Ans. Yes

Question: What methodology adopted for prioritizing the alternatives?

Ans. Cost benefit analysis

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?

Ans. AMRUT

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

Ans. Yes

Question: Has projects been prioritized based on "more with less" approach?

Ans. Yes

Question: Has the universal coverage approach indicated in AMRUT guidelines followed for prioritization of activities?

Ans. Yes

5. 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.

Ans. Lands is available for the proposed infrastructures. Environmental clearances are not required for the proposed project. Water for the proposed WTPs shall be available from Hirakud Reservoir for which permission from WR Deptt. Of GoO has been taken. Power availability has been agreed upon with WESCO.

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.

Ans: The projects are environmentally sustainable and also disaster resilient.

7. Financial Plan

Total No of Projects identified is 26 nos with an estimated cost of Rs. 374.53 Cr. is required to achieve universal coverage as envisaged under AMRUT. The completion period of this project is planned by 2019-20. The water supply system is under parastatal agency i.e. Public Health Engineering Organization (Urban). The ULB own generated fund is not able to cover the

operational requirements of ULB and has been depending upon the state grant for the same. Therefore, all infrastructure development projects are required to be funded by Centre/ State grants or loan funds by state agencies. Accordingly the present investment on the projects is planned based on 50% fund as grant from Centre and 50% fund to be met by state grant and some limited funds from ULB/ soft loans from financial agency like OUIDF. At the planning stage, it is not possible to identify the breakup of funding pattern for state 50 % share of fund and it is considered that this fund shall be made available from state resources. Based on the above financial plan the specific responses to the questionnaires given in the template are as under:

How the proposed finance plan is structured for transforming and creating infrastructure projects?

The financial plan is made considering 50 % Central grant and 50% state grant. Since the ULB do not have the financial capability, no share has been considered from ULBs.

• List of individual project which is being financed by various stakeholders?

All the projects listed are planned under AMRUT on the basis of 50 % Central grant and 50% state grant. Soft loan from funding agencies will be explored which will form part of ULB contribution. However, the state share will not be less than 20%.

• Has financial plan prepared for identified projects based on financial convergence and consultation with funding partners?

Yes, the project identified here does not include the ongoing projects which are covered under other scheme. Therefore, financial convergence from other schemes has not been planned for projects listed under this scheme. Since all the identified projects are funded under AMRUT on 50: 50 basis. Consultation with other funding partners is not required. However, consultation for involving other funding partners will be explored to achieve the objective of the mission.

Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations?

Yes, the financial structure proposed is sustainable. The state govt. is committed to contribute required funds for completing the projects. However, the O&M cost for these projects will be met from internal resources including collection of user charges. The projects have been categorized based on gap analysis identified for universal coverage as required under AMRUT scheme.

• Have the financial assumptions been listed out?

Yes, the financial assumption has been listed to work out the operational sustainability.

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

Yes, the financial plan takes care of apart from infrastructure cost, the O&M requirement of project life cycle. It will be possible to be sustained throughout the life cycle.

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

Yes, the initial sharing of financial plan is based on 50 % Central grant and 50% state grant.

Does it include financial convergence with various ongoing projects?

Yes, it includes various ongoing projects under different schemes supported by both Central & State grant.

• Does it provide year-wise milestones and outcomes?

Yes, it has been provided as per detailed furnished at table 8.1.

Sr. No.	Project Name & code	Priority number	Year in which to be implemented	Year in which proposed to be completed	Estimated Cost (Cr. Rs.)
1	Improvement of WS to Sambalpur -Rehabilitation P1 (AMRUT/OD/SAMBALPUR/WS/01)	1	15-16	16-17	6.61
2	Improvement of WS to Sambalpur -Rehabilitation P2 (AMRUT/OD/SAMBALPUR/WS/02)	2	15-16	16-17	8.33
3	Improvement of WS to Sambalpur -Rehabilitation P3 (AMRUT/OD/SAMBALPUR/WS/03)	3	15-16	16-17	2.14
4	Improvement of WS to Sambalpur -Rehabilitation P4 (AMRUT/OD/SAMBALPUR/WS/04)	4	15-16	16-17	13.56
5	Improvement of WS to Sambalpur -New Z1 (AMRUT/OD/SAMBALPUR/WS/05)	7	16-17	17-18	14.21
6	Improvement of WS to Sambalpur -New Z2 (AMRUT/OD/SAMBALPUR/WS/06)	18	17-18	18-19	6.90
7	Improvement of WS to Sambalpur -New Z3 (AMRUT/OD/SAMBALPUR/WS/07)	19	17-18	18-19	2.49
8	Improvement of WS to Sambalpur -New Z4 (AMRUT/OD/SAMBALPUR/WS/08)	17	17-18	18-19	11.78
9	Improvement of WS to Sambalpur -New Z5 (AMRUT/OD/SAMBALPUR/WS/09)	22	18-19	19-20	17.83
10	Improvement of WS to Sambalpur -New Z6 (AMRUT/OD/SAMBALPUR/WS/10)	14	16-17	17-18	18.46
11	Improvement of WS to Sambalpur -New Z7 (AMRUT/OD/SAMBALPUR/WS/11)	9	16-17	17-18	11.07
12	Improvement of WS to Sambalpur -New Z8 (AMRUT/OD/SAMBALPUR/WS/12)	10	16-17	17-18	36.95
13	Improvement of WS to Sambalpur -New Z9 (AMRUT/OD/SAMBALPUR/WS/13)	11	16-17	17-18	3.30
14	Improvement of WS to Sambalpur -New Z10 (AMRUT/OD/SAMBALPUR/WS/14)	12	16-17	17-18	13.12
15	Improvement of WS to Sambalpur -New Z11(AMRUT/OD/SAMBALPUR/WS/15)	13	16-17	17-18	7.02
16	Improvement of WS to Sambalpur -New Z12 (AMRUT/OD/SAMBALPUR/WS/16)	23	18-19	19-20	32.75
17	Improvement of WS to Sambalpur -New Z13 (AMRUT/OD/SAMBALPUR/WS/17)	15	16-17	17-18	21.45
18	Improvement of WS to Sambalpur -New Z14 (AMRUT/OD/SAMBALPUR/WS/18)	16	16-17	17-18	8.23
19	Improvement of WS to Sambalpur -New Z15 (AMRUT/OD/SAMBALPUR/WS/19)	24	18-19	19-20	7.75
20	Improvement of WS to Sambalpur -New Z16 (AMRUT/OD/SAMBALPUR/WS/20)	25	18-19	19-20	7.53
21	Improvement of WS to Sambalpur -New Z17 (AMRUT/OD/SAMBALPUR/WS/21)	26	18-19	19-20	4.29
22	Improvement of WS to Sambalpur – Head works P1 (AMRUT/OD/SAMBALPUR/WS/22)	5	15-16	17-18	3.37
23	Improvement of WS to Sambalpur – Head works P2 (AMRUT/OD/SAMBALPUR/WS/23)	6	15-16	17-18	26.00
24	Improvement of WS to Sambalpur – Head works P3 (AMRUT/OD/SAMBALPUR/WS/24)	8	15-16	17-18	31.50
25	Improvement of WS to Sambalpur – Head works P4 (AMRUT/OD/SAMBALPUR/WS/25)	20	17-18	19-20	25.02
26	Improvement of WS to Sambalpur – Head works P5 (AMRUT/OD/SAMBALPUR/WS/26)	21	17-18	19-20	32.87
	TOTAL				374.53

TABLE 2.1: Master Plan of Water Supply Projects for Mission period

TABLE 2.2: Master Service Level Improvement during Mission period

			Change i	in Service L	evels	Estimated
Sr.	Project Name & code	Physical		Existing	After	Cost (Cr.
NO.		Component	Indicator	(As-Is)	(To-be)	Rs.)
1	Improvement of WS to Sambalpur -Rehabilitation P1 (AWRUT/OD/SAMBALPUR/WS/01)	Replacement pipes	Continuity	98%, C	24 hr	6.61
2	Improvement of WS to Sambalpur -Rehabilitation P2 (AVRUT/OD/SAVBALPUR/WS/02)	Replacement pipes	Quality	98%, C	100%, А	8.33
3	Improvement of WS to Sambalpur -Rehabilitation P3 (AVIRUT/OD/SAVIBALPUR/WS/03)	Replacement pipes	Quality	98%, C	100%, А	2.14
4	Improvement of WS to Sambalpur -Rehabilitation P4 (AVIRUT/OD/SAVIBALPUR/WS/04)	Metering	Metering	0%	100%, A	13.56
5	Improvement of WS to Sambalpur -New Z1 (AMRUT/OD/SAMBALPUR/WS/05)	Storage & Distribution	Coverage	0.5%	100.0%	14.21
6	Improvement of WS to Sambalpur -New Z2 (AMRUT/OD/SAMBALPUR/WS/06)	Storage & Distribution	Coverage	26.3%	100.0%	6.90
7	Improvement of WS to Sambalpur -New Z3 (AMRUT/OD/SAMBALPUR/WS/07)	Storage & Distribution	Coverage	27.8%	100.0%	2.49
8	Improvement of WS to Sambalpur -New Z4 (AMRUT/OD/SAMBALPUR/WS/08)	Storage & Distribution	Coverage	31.8%	100.0%	11.78
9	Improvement of WS to Sambalpur -New Z5 (AMRUT/OD/SAMBALPUR/WS/09)	Storage & Distribution	Coverage	0.0%	100.0%	17.83
10	Improvement of WS to Sambalpur -New Z6 (AMRUT/OD/SAMBALPUR/WS/10)	Storage & Distribution	Coverage	75.4%	100.0%	18.46
11	Improvement of WS to Sambalpur -New Z7 (AMRUT/OD/SAMBALPUR/WS/11)	Storage & Distribution	Coverage	78.5%	100.0%	11.07
12	Improvement of WS to Sambalpur -New Z8 (AMRUT/OD/SAMBALPUR/WS/12)	Storage & Distribution	Coverage	73.0%	100.0%	36.95
13	Improvement of WS to Sambalpur -New Z9 (AMRUT/OD/SAMBALPUR/WS/13)	Storage & Distribution	Coverage	89.2%	100.0%	3.30
14	Improvement of WS to Sambalpur -New Z10 (AMRUT/OD/SAMBALPUR/WS/14)	Storage & Distribution	Coverage	64.8%	100.0%	13.12
15	Improvement of WS to Sambalpur -New Z11(AMRUT/OD/SAMBALPUR/WS/15)	Storage & Distribution	Coverage	85.6%	100.0%	7.02
16	Improvement of WS to Sambalpur -New Z12 (AMRUT/OD/SAMBALPUR/WS/16)	Storage & Distribution	Coverage	12.9%	100.0%	32.75
17	Improvement of WS to Sambalpur -New Z13 (AMRUT/OD/SAMBALPUR/WS/17)	Storage & Distribution	Coverage	70.9%	100.0%	21.45
18	Improvement of WS to Sambalpur -New Z14 (AMRUT/OD/SAMBALPUR/WS/18)	Storage & Distribution	Coverage	98.5%	100.0%	8.23
19	Improvement of WS to Sambalpur -New Z15 (AMRUT/OD/SAMBALPUR/WS/19)	Storage & Distribution	Coverage	12.0%	100.0%	7.75
20	Improvement of WS to Sambalpur -New Z16 (AMRUT/OD/SAMBALPUR/WS/20)	Storage & Distribution	Coverage	4.1%	100.0%	7.53
21	Improvement of WS to Sambalpur -New Z17 (AMRUT/OD/SAMBALPUR/WS/21)	Storage & Distribution	Coverage	3.8%	100.0%	4.29
22	Improvement of WS to Sambalpur - Headworks P1 (AMRUT/OD/SAMBALPUR/WS/22)	Surface Source Improvement	Adequaecy	0.0%	135	3.37

23	Improvement of WS to Sambalpur - Headworks P2 (AMRUT/OD/SAMBALPUR/WS/23)	Surface Source Improvement	Adequaecy	0.0%	135	26.00
24	Improvement of WS to Sambalpur - Headworks P3 (AMRUT/OD/SAMBALPUR/WS/24)	Surface Source Improvement	Adequaecy	0.0%	135	31.50
25	Improvement of WS to Sambalpur - Headworks P4 (AMRUT/OD/SAMBALPUR/WS/25)	Surface Source Improvement	Adequaecy	0.0%	135	25.02
26	Improvement of WS to Sambalpur - Headworks P5 (AMRUT/OD/SAMBALPUR/WS/26)	Surface Source Improvement	Adequaecy	0.0%	135	32.87

TABLE 2.3.1a: Total Fund Sharing Pattern for water supply projects during mission period

Sr.	Name of Project & code	Total Project Cost (Cr.	Share (Amount in Cr. Rs.)				
INO.		Rs.)	GOI	State	ULB	Others	Total
1	Improvement of WS to Sambalpur -Rehabilitation P1 (AMRUT/OD/SAMBALPUR/WS/01)	6.61	3.31	3.31			6.61
2	Improvement of WS to Sambalpur -Rehabilitation P2 (AVRUT/OD/SAMBALPUR/WS/02)	8.33	4.17	4.17			8.33
3	Improvement of WS to Sambalpur -Rehabilitation P3 (AVRUT/OD/SAMBALPUR/WS/03)	2.14	1.07	1.07			2.14
4	Improvement of WS to Sambalpur -Rehabilitation P4 (AVRUT/OD/SAMBALPUR/WS/04)	13.56	6.78	6.78			13.56
5	Improvement of WS to Sambalpur -New Z1 (AMRUT/OD/SAMBALPUR/WS/05)	14.21	7.10	7.10			14.21
6	Improvement of WS to Sambalpur -New Z2 (AMRUT/OD/SAMBALPUR/WS/06)	6.90	3.45	3.45			6.90
7	Improvement of WS to Sambalpur -New Z3 (AMRUT/OD/SAMBALPUR/WS/07)	2.49	1.25	1.25			2.49
8	Improvement of WS to Sambalpur -New Z4 (AMRUT/OD/SAMBALPUR/WS/08)	11.78	5.89	5.89			11.78
9	Improvement of WS to Sambalpur -New Z5 (AMRUT/OD/SAMBALPUR/WS/09)	17.83	8.92	8.92			17.83
10	Improvement of WS to Sambalpur -New Z6 (AMRUT/OD/SAMBALPUR/WS/10)	18.46	9.23	9.23			18.46
11	Improvement of WS to Sambalpur -New Z7 (AMRUT/OD/SAMBALPUR/WS/11)	11.07	5.53	5.53			11.07
12	Improvement of WS to Sambalpur -New Z8 (AMRUT/OD/SAMBALPUR/WS/12)	36.95	18.47	18.47			36.95
13	Improvement of WS to Sambalpur -New Z9 (AMRUT/OD/SAMBALPUR/WS/13)	3.30	1.65	1.65			3.30
14	Improvement of WS to Sambalpur -New Z10 (AMRUT/OD/SAMBALPUR/WS/14)	13.12	6.56	6.56			13.12
15	Improvement of WS to Sambalpur -New Z11(AMRUT/OD/SAMBALPUR/WS/15)	7.02	3.51	3.51			7.02
16	Improvement of WS to Sambalpur -New Z12 (AMRUT/OD/SAMBALPUR/WS/16)	32.75	16.37	16.37			32.75
17	Improvement of WS to Sambalpur -New Z13 (AMRUT/OD/SAMBALPUR/WS/17)	21.45	10.73	10.73			21.45
18	Improvement of WS to Sambalpur -New Z14 (AMRUT/OD/SAMBALPUR/WS/18)	8.23	4.12	4.12			8.23
19	Improvement of WS to Sambalpur -New Z15 (AMRUT/OD/SAMBALPUR/WS/19)	7.75	3.87	3.87			7.75
20	Improvement of WS to Sambalpur -New Z16 (AMRUT/OD/SAMBALPUR/WS/20)	7.53	3.77	3.77			7.53

21	Improvement of WS to Sambalpur -New Z17	1 20	2 15	2 15			1 29
22	Improvement of WS to Sambalpur - Headworks P1 (AMRUT/OD/SAMBALPUR/WS/22)	3.37	1.68	1.68			3.37
23	Improvement of WS to Sambalpur - Headworks P2 (AMRUT/OD/SAMBALPUR/WS/23)	26.00	13.00	13.00			26.00
24	Improvement of WS to Sambalpur - Headworks P3 (AMRUT/OD/SAMBALPUR/WS/24)	31.50	15.75	15.75			31.50
25	Improvement of WS to Sambalpur - Headworks P4 (AMRUT/OD/SAMBALPUR/WS/25)	25.02	12.51	12.51			25.02
26	Improvement of WS to Sambalpur - Headworks P5 (AMRUT/OD/SAMBALPUR/WS/26)	32.87	16.43	16.43			32.87
	Total	374.53	187.27	187.27	-	-	374.53

TABLE 2.3.1b: Annual Fund Sharing Pattern for water supply projects

Sr.	Name of Project & code	Total Project	Share (Amount in Cr. Rs.)				
NO.		CUSI (CI. NS.)	GOI	State	ULB	Others	Total
1	Improvement of WS to Sambalpur -Rehabilitation P1 (AMRUT/OD/SAMBALPUR/WS/01)	6.61	2.48	2.48			4.96
2	Improvement of WS to Sambalpur -Rehabilitation P2 (AMRUT/OD/SAMBALPUR/WS/02)	8.33	3.12	3.12			6.25
3	Improvement of WS to Sambalpur -Rehabilitation P3 (AMRUT/OD/SAMBALPURWS/03)	2.14	0.80	0.80			1.60
4	Improvement of WS to Sambalpur -Rehabilitation P4 (AMRUT/OD/SAMBALPUR/WS/04)	13.56	3.39	3.39			6.78
5	Improvement of WS to Sambalpur -New Z1 (AMRUT/OD/SAMBALPURWS/05)	14.21	-	-			-
6	Improvement of WS to Sambalpur -New Z2 (AMRUT/OD/SAMBALPUR/WS/06)	6.90	-	-			-
7	Improvement of WS to Sambalpur -New Z3 (AMRUT/OD/SAMBALPUR/WS/07)	2.49	-	-			-
8	Improvement of WS to Sambalpur -New Z4 (AMRUT/OD/SAMBALPUR/WS/08)	11.78	-	-			-
9	Improvement of WS to Sambalpur -New Z5 (AMRUT/OD/SAMBALPUR/WS/09)	17.83	-	-			-
10	Improvement of WS to Sambalpur -New Z6 (AMRUT/OD/SAMBALPUR/WS/10)	18.46	-	-			-
11	Improvement of WS to Sambalpur -New Z7 (AMRUT/OD/SAMBALPUR/WS/11)	11.07	-	-			-
12	Improvement of WS to Sambalpur -New Z8 (AMRUT/OD/SAMBALPUR/WS/12)	36.95	-	-			-
13	Improvement of WS to Sambalpur -New Z9 (AMRUT/OD/SAMBALPUR/WS/13)	3.30	-	-			-
14	Improvement of WS to Sambalpur -New Z10 (AMRUT/OD/SAMBALPUR/WS/14)	13.12	I	-			-
15	Improvement of WS to Sambalpur -New Z11(AMRUT/OD/SAMBALPUR/WS/15)	7.02	-	-			-
16	Improvement of WS to Sambalpur -New Z12 (AMRUT/OD/SAMBALPUR/WS/16)	32.75	-	-			-
17	Improvement of WS to Sambalpur -New Z13 (AMRUT/OD/SAMBALPUR/WS/17)	21.45	-	-			-
18	Improvement of WS to Sambalpur -New Z14 (AMRUT/OD/SAMBALPUR/WS/18)	8.23	-	-			-
19	Improvement of WS to Sambalpur -New Z15 (AMRUT/OD/SAMBALPUR/WS/19)	7.75	-	-			-

20	Improvement of WS to Sambalpur -New Z16 (AMRUT/OD/SAMBALPUR/WS/20)	7.53	-	-			-
21	Improvement of WS to Sambalpur -New Z17 (AMRUT/OD/SAMBALPUR/WS/21)	4.29	-	-			-
22	Improvement of WS to Sambalpur - Headworks P1 (AMRUT/OD/SAMBALPUR/WS/22)	3.37	-	-			-
23	Improvement of WS to Sambalpur - Headworks P2 (AMRUT/OD/SAMBALPUR/WS/23)	26.00	-	-			-
24	Improvement of WS to Sambalpur - Headworks P3 (AMRUT/OD/SAMBALPUR/WS/24)	31.50	-	-			-
25	Improvement of WS to Sambalpur - Headworks P4 (AMRUT/OD/SAMBALPUR/WS/25)	25.02	-	-			-
26	Improvement of WS to Sambalpur - Headworks P5 (AMRUT/OD/SAMBALPUR/WS/26)	32.87	-	-			-
	Total	374.53	9.79	9.79	-	-	19.59

TABLE 2.3.2: Annual Fund Sharing break up for water

supply project

			State			ULB					
Sr. No.	Project Name & code	Gol	14 th	Othe	Tot	14 ‡ h	Othe	Tot	Converge nce	Othe	Tota I
			FC	rs	al	FC	rs	al		15	
	Improvement of WS to Sambalpur -										
1	Rehabilitation P1 (AMRI IT/OD/SAMBAL PLIRAMS/01)	2.48		2.48	2.4 8						4.96
	Improvement of WS to Sambalpur -				Ū						
2	Rehabilitation P2 (AMRUT/OD/SAMBALPUR/WS/02)	3.12		3.12	3.1 2						6.25
	Improvement of WS to Sambalpur -										
3		0.80		0.80	0.8						1.60
	(AVIROT/OD/SAVIBALFORVV3/03)				0						
4	Rehabilitation P4	2.20		2.20	3.3						0.70
	(AMRUT/OD/SAMBALPUR/WS/04)	3.39		3.39	9						0.78
	Improvement of WS to Sambalpur -										
5		-		-	-						-
	Improvement of WS to Sambalour -										
6	New Z2										
	(AMRUT/OD/SAMBALPUR/WS/06)	-		-	-						-
	Improvement of WS to Sambalpur -										
1		-		-	-						-
	Improvement of WS to Sambalour -										
8	New Z4										
	(AMRUT/OD/SAMBALPUR/WS/08)	-		-	-						-
~	Improvement of WS to Sambalpur -										
9		-		-	-						-
	(AVIROT/OD/SAVIBALFORVV3/09)										
10	New Z6										
	(AMRUT/OD/SAMBALPUR/WS/10)	-		-	-						-
	Improvement of WS to Sambalpur -										
11		-		-	-						-
	(AVIINUT/UL/SAVIBALPUK/VVS/11)						<u> </u>				
12	New Z8										
	(AMRUT/OD/SAMBALPUR/WS/12)	-		-	-						-

All Amount in Crores of Rs.

	Total	9.79	-	9.79	9.7 9	-	-	-	-	-	19.5 9
26	Headworks P5 (AMRUT/OD/SAMBALPUR/WS/26)	-		-	-						-
25	Headworks P4 (AMRUT/OD/SAMBALPUR/WS/25)	-		-	-						-
24	Intervement of WS to Sambalpur - Headworks P3 (AMRUT/OD/SAMBALPUR/WS/24)	-		-	-						-
23	Improvement of WS to Sambalpur - Headworks P2 (AMRUT/OD/SAMBALPUR/WS/23)	-		-	-						-
22	Improvement of WS to Sambalpur - Headworks P1 (AMRUT/OD/SAMBALPUR/WS/22)	-		-	-						-
21	Improvement of WS to Sambalpur - New Z17 (AMRUT/OD/SAMBALPUR/WS/21)	-		-	-						-
20	Improvement of WS to Sambalpur - New Z16 (AMRUT/OD/SAMBALPUR/WS/20)	-		-	-						-
19	Improvement of WS to Sambalpur - New Z15 (AMRUT/OD/SAMBALPUR/WS/19)	-		-	-						-
18	Improvement of WS to Sambalpur - New Z14 (AMRUT/OD/SAMBALPUR/WS/18)	-		-	-						-
17	Improvement of WS to Sambalpur - New Z13(AMRUT/OD/SAMBALPUR/WS /17)	-		-	-						-
16	Improvement of WS to Sambalpur - New Z12 (AMRUT/OD/SAMBALPUR/WS/16)	-		-	-						-
15	Improvement of WS to Sambalpur - New Z11 (AMRUT/OD/SAMBALPUR/WS/15)	-		-	-						-
14	Improvement of WS to Sambalpur - New Z10 (AMRUT/OD/SAMBALPUR/WS/14)	-		-	-						-
13	Improvement of WS to Sambalpur - New Z9 (AMRUT/OD/SAMBALPUR/WS/13)	-		-	-						-

TABLE 2.5: Year wise Plan for Service Level Improvement

	Project Cost in Cr. Rs.	Indicator	Baseline	Annual Targets						
Proposed				(Increment from the Baseline Value)						
Project				FY 2016		FY	FY	FY	FY	
				H1	H2	2017	2018	2019	2020	
Ongoing under UIDSSMT & CSR	51.57									
Proposed under AMRUT	374.53									

	Coverage of water supply connections	30.0%	32%	35%	45%	70%	90%	100%
	Per capita supply of water	185.6	185	170	160	150	135	135
	Extent of metering of water connections	0.0%	0%	3%	20%	50%	100%	100%
	Extent of non-revenue water	67.9%	67%	65%	45%	35%	20%	20%
	Quality of water supplied	98.0%	100%	100%	100%	100%	100%	100%
	Cost recovery in water supply services	42.5%	45%	50%	60%	80%	100%	100%
	Efficiency in collection of water supply related charges	37.9%	40%	60%	70%	80%	100%	100%

Storm Water Drainage

Mission Management Information System

I. Assess the Service Level Gap

The first step is to assess the existing situation and service levels gaps for Storm Water Drainage (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.

1.1. What kind of baseline information is available for storm water drainage system of the city? Detail out the data, information, plans, reports etc related to sector. Is zone wise information available? (75 words)

The base line information of urban population (ward wise) is available in Census-2011, rainfall data with significance of catchment area is received from metrological department, information about length of roads & drains (ward wise), maps (GIS for slum area), City Development Plan 2011, City Sanitation Plan 2006 and the draft Comprehensive Development Plan for Sambalpur City-2030.

Yes, zone wise information for Storm Water Drainage (SWD) is available.

1.2. Have you collected data from census other sources? Are you aware of baseline survey data of MoUD? Have you correlated data from these and other sources? (75 words)

Yes, the data are collected from population Census 2011, District Statistics Office, slum population from Urban Poverty Alleviation programs like, RAY.

Yes, the above information relating to baseline survey data of MoUD are ascertained from CrDP for Sambalpur City-2030.

Yes, all the data above are correlated as per availability of different sources.

1.3 What is existing service levels for storm water drainage in the city? What is the coverage of drains? What are the no of incidence of sewerage mixing in the drains? How many times water logging incidence happens in the city? Provide comparative information of service levels (in tabulated form) with respect to the service level bench marks prescribed by MoUD and sustainable standards for service levels under the National Mission on Sustainable Habitat (NMSH) in table 1.1

Sr. No.	Indicators	Sustainable standards	Black (Caution for improvement)	Red (Immediate action for improvement)	Present Status
1	Coverage of Storm water drainage network	100%	<75%	<50%	24.2%
2	Incidence of sewerage mixing in the drains ¹	0%	<25%	<50%	5%
3	Incidence of water logging ² (in nos. per year)	0	<25	⊲50	1

Table 1.1 : Status of Storm Water Level service levels

1.4: What is the gap in these service levels with regard to benchmarks prescribed by MoUD and sustainable standards for service levels under the National Mission on Sustainable Habitat (NMSH)?(75 words)

The Service Level Benchmarks as prescribed by the MoUD are being maintained w.r.t. promotion of facilities to the urban citizens within the limited resources as per guidelines under National Mission on Sustainable Habitat (NMSH). The coverage area of drain is achieved only 24% w.r.t. road length. There are 31 nos. of water logging spots are identified within the city. The water logging happens once a year.

1.5 What are major challenge facing the city in regard to achieving these service level benchmarks?

The challenges faced by the city to achieve SLB are as follows

- 1. Lack of proper drainage network
- 2. Encroachment & obstacles
- 3. Due to maximum opening of the Hirakud Dam during rainy seasons
- 4. Choking of drains by solid waste
- 5. Silting of drains
- 6. Uncovered Drainages

¹Incidence of sewerage mixing in the drains are ratio of no of households discharging wastewater directly into the drains to the total no of households.

² No of times water logging is reported in a year, at flood prone points in the city

1.6: Identify gaps in capacity in managing the services efficiently and also provide an innovative solution for efficiently managing these services.

The challenges faced by the city to achieve SLB are as follows

- 1. Existing drain should be covered
- 2. Kutcha drains need to be converted to RCC/pukka.
- 3. Raising & widening of existing culverts at 20 points
- 4. Renovation of old stone masonary drains
- 5. Due to encroachment there is lack of maintenance facility.

1.7: Brief the ongoing drainage projects in the city. The components included in these projects, how and up to what extent it will support to the drainage system of the city. Weather it address all the issues related to drainage?

YES there is an existing drainage project. Which involves construction 1.5 km of RCC drains. Also there is a project which is for construction of high power pumping station at three points which is under progress. It would increase the coverage of the drains in uncovered area.

No, it doesn't addresses the complete issues pertaining to the drainage of the city.

2.0 Coverage of drains **

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

2.1: Describe how at present, the storm water of City is drained off? How many natural and manmade drains are exists and their coverage with respect to road network?

There exist a network of kutch of total length 274.62 km and pucca 261.683 km drains finally leading to natural drain of 11.94 km which finally leads to Mahanadi River.

There are three major natural drains namely Tangana Nala, Dhobijo & Harada Jore. This compared to 1081.008 kms of road network provides an coverage 24% on storm water drainage sector with consideration of only manmade drains.

2.2 What is the capacity and condition of these drains? Is sufficient to carry the peak flow of the catchment/water shed?

Presently the existing Pucca drains are in captive condition as it is approximately 20 years old. These SWD are repaired and maintained on regular basis. None of them have a cover slab which is very much required.

No, the existing SWD network is not sufficient to carry the peak flow of the catchment/water shed which leads to flooding at 31 places.

2.3 Does city have separate storm water drainage network? If no, provide the information regarding locations of gray water mixes with the existing drains in table 1.2. In case of mixed drainage how it works in peak rainy days?

There is no separate SWD network prevailing in the city. All households in the city dispose their gray water to the existing SW drains.

S. No.	Sewer Zone/ Ward No	Location	Merging with which sewer					
All households/all zone/ward in the town outlet their gray water to the existing drains.								

Table 1.2: Detail of Locations where storm water get mixed with sewer

2.4 In case of mixed drainage how it works in peak rainy days?

During the peak rainy days the waste water that is storm water and the sewer water floods up the roads, household and the intersection. This flooding happens one in a year and creating nuisance for minimum of 7-8 hours.

3.0 Water Logging

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

3.1 Presently how the problem of water logging is handled? Is it provides the satisfactory outcome?

At, the present during water logging pumps area used to pump out the water in the water logging area. Somehow it solves the present problems during peak rainy season.

3.2 Provide details of flood points/areas prone to frequent water logging with special focus on Key road intersections, along roads (50 mt length or more) and Locality (affecting 50 HH or more) in the Table 1.2.

The reason for water logging and flooding are generally observed during peak rainy season in low laying areas of the City with adjacent to the locality of the river bed side. Especially during flood situations. As a result of which a very few households on the slum pockets are being affected.

S.No.	Area	No of points	No of times water logging reported in a year (stagnant water for more than four hours of a depth more than 6")
	Key road	Charabati, Sbi Main Branch, Mayabagicha, Hirkud	
1	intersection	Colony, Gujarati Colony, Sakhipada, Tawnlapada, Housing Board Colony, Dalipali & Chandan Nagar	1
2	Along roads (.50	Charabati, Kulutkani, Binakandi, Commissioner	
	mt length or more)	Colony, Sahoo Conlony, Housing Board Colony,	1
		Cherua Pada, Chandan Nagar, Danipali, Deheripali & Teolographi	
		Makupali Charabati SBI Main Branch Mayabaqidha Hirkud	
		Colony Guiarati Colony Sakhinada Tawalanada	
		Housing Board Colony, Dalipali Chandan Nagar,	
	Locality (offecting	Kulutkani, Govindtola, Sunapali, Commisner Colony,	
3	50 HH or more)	Binakhandi, Saliabagicha, A N Guhalane, Dalaipada,	1
	301110111016	Sahu Colony, Samaleshwari Colony, Deulbandha,	
		Chheruapara, Ghunghutipada, Badbazar,	
		Bagalipada, Kadammal, Dehripali Thakurpara,	
		Pradhanpada, Gujapal, Chakrabatipada & Nimpalli,	

Table 1.2: Flood prone points in the city

4.0 Chocking of drains

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

4.1 Provide details of flood points/areas prone to frequent water logging with special focus on Key road intersections, along roads (50 mt length or more) and Locality (affecting 50 HH or more) in the Table 1.2.

S.No.	Sewer Zone/Ward No	Location	Stretch Length Affected
1		Big bazar	60 mts
2		Tawnla pada	50 mts
3		Sahoo colony	50 mts

Table 1.2: Detail of Locations prone to chocking of drains due to solid waste

4.2 How presently the problem is addressed?

This ULB is taking all appropriate measures for Desilting of drains by municipality sweepers and engaging extra sweepers from other neighbor districts.

5.0 Institutional Framework

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

5.1 Define role and responsibilities in terms of O&M, policy planning, funding, service provision in table 1.3. Is it in accordance with the AMRUT guidelines (Clause 8.1)?

This ULB is confined with promoting basic amenities to its City's people in terms of O&M creating awareness amongst the people and their role of social responsibility through the community participation. The Planning & Policies are being prepared and monitored by technical experts and stakeholders.

Planning and Design	Construction/Implementation	M&O		
ULB	ULB	ULB		

Table 1.3: Functions, roles, and responsibilities

5.2 How city is planning to execute projects?

The council of the ULBs at the beginning of the FY prepares the projects to be undertaken under this head with availability of state government funds and own resource. With execution of projects in time bound manner.

5.3 Shall the implementation of project be done by Municipal Corporation? If no, weather resolution has been passed by the Municipal Corporation and accordingly, a tripartite Memorandum of Understanding (MoU) between State Government, Municipal Corporation and Parastatal has been signed? Please refer para 8.1 of AMRUT guidelines.

YES. The projects shall be implemented by the ULB concerned with due weightage to MoU and AMRUT guidelines with the help of technical experts, designers and stakeholders. But presently the SWD system is being maintained by the ULB in traditional process.

II. 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.

1.1 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

S. No.	Name of Project	Scheme Name	Cost	Month of Completion	Status (as on ddmm 2015)
1.	Construction of SWD at SRIT colony	Special urban package	20 lakhs	September end	Under progress

Table 1.4: Status of Ongoing/ Sanctioned

1.2 How much the existing system will able to address the existing gap in storm water drainage system? Will completion of above improve the coverage of network; eliminate the chocking of drains and water stagnation problem? If yes, how much. (100 words)

The existing system is able to cover only 29% of the road length the completion of the above project would increases the coverage by 0.1%.

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

Yes, the city would require additional asset creation and renovation of the existing one to achieve the 100 % universal coverage necessary to improve the SWD system.

The city needs 100% SWD coverage with covered drains and which would need proper maintenance of the existing infrastructure and new system.

1.4 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?

There is a good network of kuccha nad pucca drains which could be retrofitted and rejuvenated to bring down the cost of the total new asset creation.

1.5 Has city conducted assessment of O&M cost of drains and potable pumps? if yes, what is it? Is city planning to reduce it?

There is no assessment done in maintenance of the drains and the pumps. However there are maintenance as in when required.

- 1.6 Based on assessment of existing infrastructure and ongoing / sanctioned projects, calculate existing gaps and estimated demand by 2021 for Rejuvenation of existing drains, construction of new primary and secondary drains, construction of pump house with pumping machinery, covering of drains. Gaps in Storm water drainage service levels are provided as per Table 1.5.
- 1.7 Provide details of flood points/areas prone to frequent water logging with special focus on Key road intersections, along roads (50 mt length or more) and Locality (affecting 50 HH or more) in the Table 1.5.

		2015	2021		
Component	Present	Ongoing projects	Total	Demand	Gap
Major Drains (new construction)		nil		11.94	11.94
Network requirement to provide proper drainage to all identified water stagnant point/ flooding points up to the end discharge point (in Km)	261.68	nil	261.68	1081.01	819.32
Network length where households discharging wastewater directly into the drains	157	nil	157		
Rejuvenation of existing primary drains and primary drains including covering and installation of filter	0	nil	0	35.49	35.49

1.8 Whether these gaps presented in measurable/ executionable ways considering all the ongoing projects? (75 words)

As there are no existing projects available.

2.0 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.

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

Yes, the objective has been evolved from the SLB assessment which tries to fill the gap in order to achieve the 100% universal coverage.

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

Yes, all the objectives has been derived keeping in mind the existing opportunities which would probably try to bridge the existing gap in order to achieve the 100% universal coverage.

2.3 Does objectives clearly address all these gaps /solution to all the problems related to storm water drainage of the city?

Yes, each of the objective has been formulated in order to bridge the existing gap and find solution to all the problems related to storm water drainage of the city.

Please provide List out objectives to meet the gap in not more than 150 words.

III. 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.

1.1 Does all these gaps clearly identified and addressed? (75 words)

Yes, The detail estimate with source of funding have been identified in respect of Sambalpur City with respect to SWD which can some extent improvise the present scenario with an expectation of greater utility.

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

The construction kuccha drains, retrofitting, renovation of the necessary pucca drains and lining of the left out natural drains could be constructed under the state and ULB funding. (Annual cleaning of Drainage is also from state / ULB fund)

The possible activities are as follows:

- 1) Construction of RCC kuccha drains with cover slabs
- 2) Covering of existing puccaa drains
- 3) Desilting / retrofitting, renovation of exsting puccaa drains
- 4) Lining of the left out natural drains
- 5) Frequent Cleaning of SWD channel.

The major funding of the above sector has been three folded that is central, state and ULB.

1.3 How can the activities be converged with other programme like JICA/ ADB funded/SBM/Smart city mission projects in the city etc.? (i.e. convergence with other schemes)(100 words)

The convergence of the activity can't be done for the city as the city is not covered in any of the major mission like JICA/ ADB funded/SBM/Smart city. However, the SBM is taken up by the municipality. So we could propose the action necessary to avoid choking of the drainage through the SBM. Which indirectly helps in improving the SWD of the city.

1.4 What are the options (financial alternatives) of completing the ongoing activities specially on going JnNURM projects? (75 words)

As Sambalpur city is not covered under the JNNURM/UDISSMT etc. So there are no other mission which would cater as a financial alternative. Further there is no major ongoing activity on the sector for the city.

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

There has been an issue related to execution of the similar project. There exists local and site specific issues. Further there are also encroachment & eviction of the property adjacent to the SWD.

Also there are various service lines like cable line/ service lines/ phone line laid with the SWD which creates an unnecessary delay in O&M and also renovation of the SWD. Also, there has been shortage of staff, lack of skilled personnel, training. The ULB also need proper capacity building for the staffs and the service providers who can improvise the day to day activities.

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

Certain of cities of Kerala is seen to be the best practice and many of the issues related to the flooding and storm water network could be resolved by looking at those city.

However there are no similarity in geographical features of the Cuttack and Sambalpur.

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

Presently there is only holding tax being imposed in the City so by imposing property tax the sector could achieve the required financial help at least for the maintenance. Then inclusion of SWD into the Property tax.

1.8 Whether reduction in O&M cost by energy efficient pumps etc be applied? (75 words)

Yes, as the ULB uses pumps in the city to take off the flooding water so it is necessary to considered energy efficient pumps.

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

Sr. No.	Objective	Activities	Financing Source	
	To Have Complete network Coverage and	Augmentation Of The SWD Network		
	covering of The Storm Water Network	Creation of the new network	-	
		Covering of the SWD		
t	To reduce the flooding points and its flooding time.	Improving the SVM under Swatch Bharat Abhiyan	State / Central/ ULB	
		Creating the energy efficient pumping facility		
	To reduce the backflow of the flooding water	Creating the energy efficient pumping facility		
		Creating the Swliss gate facility		

There are no PPP mode used in any of the plan or project in Sambalpur city.

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

IV. 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.

a. Has all stakeholders involved in the consultation?

All the major stakeholder has been included in the consultancy workshop. This includes majorly council members and media persons etc.

b. Has ward/ zone level consultations held in the city?

Yes, but not separately the ward's prominent person have been called up in the consultations.

c. Has alternative proposed above are crowd sourced?

No the alternative hasn't been proposed above the crowd source.

d. What is feedback on the suggested alternatives and innovations?

Yes, only the major and the relevant feedbacks and alternatives/innovations has been taken up.

e. Is any new potential alternative is received? If so, how it is addressed?

No there are no potential alternative is received.

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

As no alternatives have been received so it hasn't been taken up for discussion.

g. What methodology adopted for prioritizing the alternatives?

Our approach has been taken up with the consideration of prioritizing the more problematic area with less problematic area as the city is flood affected.

V. 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.

a. What are sources of funds?

The major sources of State fund / ULB fund/ finance commission fund (central)

b. Has projects been converged with other program and schemes?

Yes. But partly and indirectly with the SWM, for choking of the drains

1.3Has projects been prioritized based on "more with less" approach?

Our approach has been taken up with the consideration of prioritizing the more problematic area with less problematic area as the city is flood affected.

1.4 Has the universal coverage approach indicated in AMRUT guidelines followed for prioritization of activities?

Yes, we have taken up approach to completely solve (Universal coverage that is 100% coverage) the problem of SWD.

VI. Conditionalties

Describe in not more than 300 words the Conditionalties 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. ** (*Plz : attach pages*)

As the project is for Storm Water Drainage so no major land is required. However, it is necessary for the pump house. There is requirement of environmental clearance and the NOC for the outfall points.

The financial commitment, approval and permission is needed to be implement for the project from the necessary department.

VII. Resilience

Required approvals will be sought from ULBs and competent authority and resilience factor would be built in to ensure environmentally sustainable storm water drainage scheme. Describe in not more than 300 words regarding resilience built in the proposals. ** (Plz : attach pages)

The BOD and the COD of the storm should be lower down to the necessary level such that it doesn't affect the nearby environment.

Further the possibility of the necessary ground water recharge for the area should be considered.

VIII. 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?

The financial plan is made considering 50 % Central grant and 50% state grant. Since the ULB do not have the financial capability, no share has been considered from ULBs.

• List of individual projects which are being financed by various stakeholders?

All the projects listed are planned under AMRUT on the basis of 50 % Central grant and 50% state grant.

• Has financial plan prepared for identified projects based on financial convergence and consultation with funding partners?

Yes, as all the identified projects are funded under AMRUT on 50: 50 basis, consultation with other funding partners is not required. However, consultation for involving other funding partners will be explored to achieve the objective of the mission.

• Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations?

Yes, the financial structure proposed is sustainable. The state govt. is committed to contribute required funds for completing the projects. However, the O&M cost for these projects will be met from internal resources including collection of user charges. The projects have been categorized based on gap analysis identified for universal coverage as required under AMRUT scheme.

• Have the financial assumptions been listed out?

Yes, the financial assumption has been listed to work out the operational sustainability.

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

Yes, the financial plan takes care of apart from infrastructure cost, the O&M requirement of project life cycle. It will be possible to be sustained throughout the life cycle.

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

Yes, the initial sharing of financial plan is based on 50 % Central grant and 50% state grant.

• Does it include financial convergence with various ongoing projects?

Yes, it includes various ongoing projects under different schemes supported by both Central & State grant.

• Does it provide year-wise milestones and outcomes?

Yes, it has been provided as per detailed furnished at table 1.7

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 Master Plan of Storm Water Drainage Projects for Mission period (As per Table 2.1of AMRUT guidelines)

Sr. No	Project Name	Priority number	Year in which to be implemented	Year in which proposed to be completed	Estimated Cost	
1	Improvement of SWD inSAMBALPUR City in zone 3 AMRUT/OD/SAMBALPUR/SWD/03	1	2015-16	2016-17	148.40	
2	Improvement of SWD in SAMBALPUR City in zone 4 AMRUT/OD/SAMBALPUR/SWD/04	2	2016-17	2017-18	216.38	
3	Improvement of SWD in SAMBALPUR City in zone 2 AMRUT/OD/SAMBALPUR/SWD/02	3	2016-17	2017-18	67.40	
4	Improvement of SWD in SAMBALPUR City in zone 1 AMRUT/OD/SAMBALPUR/SWD/01	4	2017-18	2018-19	76.39	
5	Improvement of SWD in SAMBALPUR City in zone 6 AMRUT/OD/SAMBALPUR/SWD/06	5	2018-19	2018-19	81.82	
6	Improvement of SWD in SAMBALPUR City in zone 5 AMRUT/OD/SAMBALPUR/SWD/05	6	2019-20	2019-20	74.54	
Grant Total						

Master Plan of Storm Water Drainage Projects for Mission period

Table 1.8 Master Service Levels Improvements during Mission Period	b
(As per Table 2.2 of AMRUT guidelines)	

Sr. Drojact Nama		Dhy picel Component	Change ir	Estimated			
No	Project Name	Physical Component	Indicator	Existing As-Is	After to Be	Cost	
	Improvement of SWD	1. Construction of covered storm water drainage network.	Coverage Drainage Network	33.47%	100%		
1	AMRUT/OD/SAMBALPUR/S WD/03	 Renovation of Existing Drain. Construction and erection of Sluice arrangment. 	Incidence of Water Logging	1	1	148.40	
2	Improvement of SWD in SAMBALPUR City in zone 4	1. Construction of covered storm water drainage network.	Coverage Drainage Network	28.35%	100%	216 38	
~	AMRUT/OD/SAMBALPUR/S WD/04	 Renovation of Natural Drains. Renovation of Existing Drain. 	Incidence of Water Logging	1	1	210.00	
3	Improvement of SWD in SAMBALPUR City in zone 2	rovement of SWD in1. Construction of covered storm/BALPUR City in zone 2water drainage network.		9.43%	100%	67.40	
Ŭ	AMRUT/OD/SAMBALPUR/S WD/02	 Renovation of Natural Drains. Renovation of Existing Drain. 	Incidence of Water Logging	1	1	01.10	
	Improvement of SWD in SAMRAL PLIP City in 2000 1 Unctor drainage paturals		Coverage Drainage Network	28.34%	100%		
4	AMRUT/OD/SAMBALPUR/S WD/01	 Renovation of Natural Drains. Renovation of Existing Drain. 	Incidence of Water Logging	1	1	76.39	
	Improvement of SWD in SAMBALPUR City in zone 6	1. Construction of covered storm	Coverage Drainage Network	14.88%	100%		
5	AMRUT/OD/SAMBALPUR/S WD/06	 Renovation of Natural Drains. Renovation of Existing Drain. 	Incidence of Water Logging	1	0	81.82	
6	Improvement of SWD in SAMBALPUR City in zone 5	of SWD in 1. Construction of covered storm Dity in zone 5 water drainage network.		4.41%	100%	74.54	
O	AVIKUT/OD/SAMBALPUR/S WD/05	 Renovation of Natural Drains. Renovation of Existing Drain. 	Incidence of Water Logging	1	0	17.07	

Table1.9 Annual Fund Sharing Pattern for Storm Water Projects

Cr. No.	Nome of Project	Total Project		Total			
SI. NO	Name of Project	Cost	Gol	State	ULB	Others	TOLAI
1	Improvement of SWD in SAVBALPUR City in zone 3 AMRUT/OD/SAVBALPUR/SWD/03	148.40	74.20	74.20			148.40
2	Improvement of SWD in SAMBALPUR City in zone 4 AMRUT/OD/SAMBALPUR/SWD/04	216.38					
3	Improvement of SWD in SAMBALPUR City in zone 2 AMRUT/OD/SAVBALPUR/SWD/02	67.40					
4	Improvement of SWD in SAMBALPUR City in zone 1 AMRUT/OD/SAMBALPUR/SWD/01	76.39					
5	Improvement of SWD in SAMBALPUR City in zone 6 AMRUT/OD/SAMBALPUR/SWD/06	81.82					
6	Improvement of SWD in SAVBALPUR City in zone 5 AVRUT/OD/SAVBALPUR/SWD/05	74.54					
	Total	664.93	74.20	74.20	-	-	148.40

C				State			ULB		0		Total
No.	No. Project Gol	Gol	14 th FC	Others	Total	14 th FC	Others	Total	ce	Others	
1											
2											
3											
4											
5											
	Total										

Table 1.10 Annual Fund	I Sharing Break-up for Storm	Water Drainage Projects
------------------------	------------------------------	-------------------------

Year wise Plan for Service Levels Improvements											
	Proposed		Base Line	Present Status		FY2016		FY	FV	FY	FV
SI.No	Project Cost in cr	Indicator			Gap	н	H2	2017	2018	2019	2020
1	664.93	Coverage of Storm Water Drainage Network	100%	24%	76%	0%	39.97%	72.57%	81.19%	90.99%	100%
2	2	Incidence of Water Logging	0	1	1	1	1	1	1	0	0

Sewerage

Mission Management Information System

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)

Ans. Census 2011 & Draft CDP are available and have been correlated with census 2011 data.

Question: 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

Sr. No.	Indicators	Existing Service level	MOUD Benchmark
1	coverage of latrines (individual or community)	66%	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%

Table 2.1 : Status of sewerage network and Service Levels

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

Ans: There is no sewerage network & hence no collection & no treatment. The septage disposal is irregular and mostly to open drains. Hence the gap in these service level with regard to benchmarks prescribed by MoUD is 100%.

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

Ans: Yes, the city is having partly separate drainage system.
Coverage of latrines (individual or community), Please provide information in

Zone No	Total number of HH (a)	Total number of HH without individual or community toilets within walking distance (b)	Coverage of latrines (%), (a-b)/a*100%
1	48158	16374	66%
2	9850	3349	66%
3	8301	2822	66%
4	11257	7880	30%
Total	77566	30425	61%

Table 2.2 A

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

Zone No	Total No. of Households(HH) a	Households with Sewerage Network b	Coverage of sewerage network services (b/a)*100%
1	48158	0	0
2	9850	0	0
3	8301	0	0
4	11257	0	0
Total	77566		

Table 2.2b : Sewerage network and collection of sewage

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 words)

Ans: Such condition does not arise.

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)

Ans: At present there is no systematic and organized method to collect and treat waste from septic tanks. Only 2 (Two) nos. of Cess Pool emptier are available which is not sufficient for systematic and organized cleaning. As there is no organized method of collection in many of the cases, the septic tanks overflow either into nearby drains/open fields etc.

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)

Ans: Does not arise, since there is no sewerage system .

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

Sr. No	Location zone	Capacity (MLD)	Inflow in the STP (MLD)	Efficiency in %
1		NIL		
2		NIL		
3		NIL		
4		NIL		
5		NIL		

Table 2.3: Status of Existing STPs :

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

Ans: There is no decentralized waste treatment system in the city

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)

Ans: NIL. Since there is no sewer collection & treatment system, no sewage reaches the STP.

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)

Ans: No.

INSTITUTIONAL FRAMEWORK

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

Table: 2.4: Functions, roles, an	d responsibilities
----------------------------------	--------------------

Planning and Design	Construction/Implementation	O&M
Planning and design Cell in MS of OWSSB	Project team headed by divisional PE OWSSB supported by PMU and PDMC . There will be MoU between Municipal Corporation and State Govt/ OWSSB for implementation.	O & M team headed by Municipal Engineer of Sambalpur Muncipal Corporation .

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)

Ans: Implementation of project will done by Orissa Water Supply & Sewerage Board

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: 2.5	Status of	Ongoing/	Sanctioned
------------	-----------	----------	------------

Sr. No	Name of Project	Scheme name	Cost in Rs Cr	Month of completion	Status (as on dd mm 2015
	NIL		0		

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)

Ans: The existing system will be able to address the existing gap by 0%. Since no on going scheme, ongoing/ sanctioned system will be able to improve 0% network and collection efficiency.

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

Ans: Yes, the city require additional infrastructure to improve the services. It needs sewerage system and treatment.

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?

Table 2.6: Demand Gap Assessment.

		2015	2021		
Component	Existing	Ongoing projects	Total	Demand	Gap
Sewerage net work km	0	0	0	471	471
No of Households covered under sewerage system (2021 demand)	0	0	0	87859	87859
Sewerage treatment plant MLD (2030 demand)	0	0	0	56	56

Note: The demand gap will be fulfilled as per requirement of CPHEEO Mannual.

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 this gap.

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

Ans: Yes

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

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

Ans: Yes, each objective meets the opportunity to bridge 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?

Ans: The activities are sewer net work, treatment and house connection to meet the objective for universal coverage of sewerage system.

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

Ans: Does not arise.

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

Ans: here does not arise. But done Through State Govt and other funding.

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

Ans: The bottlenecks that is disposal arrangements, reuse of treated waste water etc learnt have been addressed and shall be taken care during implementation of these projects under AMRUT.

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

Ans: Yes.

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.

Ans: Collection of of new connection fees and monthly sewerage fees.

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

Ans: Options for STP methodology and innovation that is reuse of treated waste water explored in achieving objectives.

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

Ans: Yes, Design-build-Operate-Transfer (DBOT) will be considered.

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

Ans: Does not arise.

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

Ans: Yes.

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.

Ans: Decentralized waste treatment system provided.

The alternative activities to meet these activities be defined as per Table 2.7

Table2.7 Alternative Activities To Meet Objectives

SI. No	Objective	Activities	Financing Source
1	Universal coverage with sewerage system	Sewerage system and construction of STP, re use of treated waste water.	AMRUT

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?

Ans: Yes

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

Ans: Yes

Question: Has alternative proposed above are crowd sourced?

Ans: Yes through website.

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

Ans: Proposed proposal is well appreciated.

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

Ans: Yes.

Question: What methodology adopted for prioritizing the alternatives?

Ans: Keeping in mind how the house holds can be well covered under sewerage facilities opted for achieving early coverage of the gap assessed under AMRUT.

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?

Ans: State Govt. fund/ Govt. of India fund

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

Ans: Yes

Question: Has projects been prioritized based on "more with less" approach?

Ans: Yes.

Question: Has the universal coverage approach indicated in AMRUT guidelines followed for prioritization of activities?

Ans: Yes.

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.

Ans: Govt land has been identified and available. Environmental clearance applied and other clearances / NOC are under process.

7. 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.

Ans: The proposed project under AMRUT and ongoing/ sanctioned would be built-in to ensure environmentally sustainable sewerage scheme. Also Odisha State Pollution Board requirements shall be adhered to.

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

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

Yes, projects proposed include O&M for 5 years. O&M shall be integral part of the execution contract so that the agency/contractor who develops the assets shall be responsible for post asset creation O&M for 5 years. The O&M cost for Water Supply shall be borne by the OWSSB (Odisha Water Supply and Sewerage Board).

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

Yes, the financial plan is based on 50 % Central grant and 50% state grant.

• Does it include financial convergence with various ongoing projects?

Yes, it includes convergence with various ongoing projects under different schemes supported by both Central & State grant.

• Does it provide year-wise milestones and outcomes?

Yes, it has been provided as per detailed furnished at table 8.1

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

		Infrastructure Improvement				
Or Nie	Project Name and Code ⁶ (list all projects to achieve		Change in Service Levels			
Sr. No.	universal coverage in the City separately for water supply and sewerage	Priority number	Year in which to be implemented	Year in which proposed to be completed	(Amount in Rs. Cr.)	
1	Sewerage System for SAMBALPUR , Zone 1 – Sewer network AMRUT/OD/SAMBALPUR /SG/01	3	2016-17	2019-20	333.87	
2	Sewerage System for SAMBALPUR, Zone 1 – STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/02	4	2016-17	2019-20	94.81	
3	Sewerage System for SAMBALPUR, Zone 2 – Sewer network AMRUT/OD/SAMBALPUR/SG/03	5	2016-17	2019-20	145.26	
4	Sewerage System for SAMBALPUR, Zone 2– STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/04	6	2016-17	2019-20	28.2	
5	Sewerage System for SAMBALPUR, Zone 3 – Sewer network AMRUT/OD/SAMBALPUR/SG/05	7	2016-17	2018-19	99.59	
6	Sewerage System for SAMBALPUR, Zone 3– STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/06	8	2016-17	2018-19	16.94	
7	Septage Management for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/07	2	2015-16	2015-16	5.37	
8	ID Works and treatment for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/08	1	2015-16	2015-16	22	
Grand Total				Total AMRUT	746.04	
				on going	0	

Table 8.2: Master Service Levels Improvements during Mission Period

(As per Table 2.2 of AMRUT guidelines)

		Infrastructure Improvement					
q			Change in Service Levels			Estimated Cost	
No.	Project Name and code7	Physical components	Indicator	Existing	After	(Amount in Rs. Cr)	
				(As-is)	(To-be)		
1	Sewerage System for SAMBALPUR , Zone 1 – Sewer network AMRUT/OD/SAMBALPUR /SG/01	Sewer network & house connection	a .Coverage b.Collection efficiency	0%	100%	333.87	
2	Sewerage System for SAMBALPUR, Zone 1 – STP & Pumping Stations. AMRUT/OD/SAMBALPUR /SG/02	STP, Pumping main and Pumping Stations	Sewage treatment & disposal	0%	100%	94.81	
3	Sewerage System for SAMBALPUR, Zone 2 – Sewer networkAMRUT/OD/SAMBALPUR /SG/03	Sewer network & house connection	a .Coverage b.Collection efficiency	0%	100%	145.26	
4	Sewerage System for SAMBALPUR, Zone 2– STP & Pumping Stations. AVRUT/OD/SAMBALPUR /SG/04	STP, Pumping main and Pumping Stations	Sewage treatment & disposal	0%	100%	28.2	
5	Sewerage System for SAMBALPUR, Zone 3 – Sewer networkAMRUT/OD/SAMBALPUR /SG/05	Sewer network & house connection	a .Coverage b.Collection efficiency	0%	100%	99.59	
6	Sewerage System for SAMBALPUR, Zone 3– STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/06	STP, Pumping main and Pumping Stations	Sewage treatment & disposal	0%	100%	16.94	
7	Septage Management for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/07	FSM & Treatment	Collection & Treatment	0%	100%	5.37	
8	ID Works and treatment for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/08	ID work & Treatment	Treatment	0%	100%	22	
	Total					746.04	

	Total			Share			
Sector	Project cost	Gol	State	ULB	Others (OUIDF)	Total in Cr	
Sewerage and Septage management							
Proposed Projects							
Sewerage System for SAMBALPUR , Zone 1 – Sewer network AMRUT/OD/SAMBALPUR/SG/01	333.87	0	0			0	
Sewerage System for SAMBALPUR, Zone 1 – STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/02	94.81	0	0			0	
Sewerage System for SAMBALPUR, Zone 2 – Sewer network AMRUT/OD/SAMBALPUR /SG/03	145.26	0	0			0	
Sewerage System for SAMBALPUR, Zone 2– STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/04	28.2	0	0			0	
Sewerage System for SAMBALPUR, Zone 3 – Sewer network AMRUT/OD/SAMBALPUR /SG/05	99.59	0	0			0	
Sewerage System for SAMBALPUR, Zone 3– STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/06	16.94	0	0			0	
Septage Management for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/07	5.37	2.685	2.685			5.37	
ID Works and treatment for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/08	22	2.2	2.2			4.4	
Total						9.77	

Sr.				State			ULE	3	ance	0	
No.	Project	Gol	14 th FC	Others	Total	14thFC	Others	Total	Converge	Others	Total in Cr
1	Sewerage System for SAMBALPUR , Zone 1 – Sewer network AMRUT/OD/SAMBALPUR/SG/01	0.00		0.00	0.00						0.0
2	Sewerage System for SAMBALPUR, Zone 1 – STP & Pumping Stations. AMRUT/OD/SAMBALPUR/SG/02	0.00		0.00	0.00						0.00
3	Sewerage System for SAMBALPUR, Zone 2 – Sewer network AMRUT/OD/SAMBALPUR/SG/03	0.00		0.00	0.00						0.00
4	Sewerage System for SAMBALPUR, Zone 2– STP & Pumping Stations. AMRUT/OD/SAMBALPUR /SG/04	0.00		0.00	0.00						0.00
5	Sewerage System for SAMBALPUR, Zone 3 – Sewer network AMRUT/OD/SAMBALPUR /SG/05	0.00		0.00	0.00						0.00
6	Sewerage System for SAMBALPUR, Zone 3– STP & Pumping Stations. AMRUT/OD/SAMBALPUR /SG/06	0.00		0.00	0.00						0.00
7	Septage Management for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/07	2.685		2.685	2.685						5.370
8	ID Works and treatment for SAMBALPUR AMRUT/OD/SAMBALPUR/SG/08	2.200		2.200	2.200						4.40
	Total										9.77

Table 8.5: Year wise Plan for Service Levels Improvements

(As per Table 2.5of AMRUT guidelines)

	Total	otal		Annual Targets (Increment from the Baseline Value)					
Proposed Projects	Project Cost in Cr	Indicator	Baseline	FY 2016/ 2015-16		FY	FY	FY	FY
				H1	H2	2017	2018	2019	2020
Ongoing Sewerage Project	0								
Sewerage and Septage Management									
		1. Coverage of latrines (individual or community)	66%	71%	76%	84%	92%	100%	100%
		2. Coverage of sewerage network services	0%	0%	0%	0%	0%	50%	100%
		3. Efficiency of Collection of Sewerage	0%	0%	0%	0%	0%	50%	100%
		4. Efficiency in treatment	0%	0%	10%	30%	30%	60%	100%

Urban Transport

SAMBALPUR

SECTORWISESLIPTEMPLATE: URBANTRANSPORT

Under AMRUT Mission, Urban Transport components which are admissible are; Side- walks, Foot-over bridges, Non-motorized transport (NMT), Buses, BRTS, Multi-level parking, Waterways Ferry vessels Ferries and Waterways. (AMRUT Guidelines; para3).

1.Service Level Gaps Assessment

1.SERVICE LEVEL STATUS

Assess the existing transportation situation and service levels gaps for indicators urban to achieve service level benchmarks. (AMRUT Guidelines Table.1.4 & Table2.5). Service Level gaps will be analyzed as per indicators prescribed in Service Level Benchmarks (SLBs) for urban transport of MoUD, Gol. Please provide information in200 words responding to the following questions;

Q1) Question: What is the baseline information available for improvement city transportation? Whether City has prepared City Mobility Plan? If yes then, Does CMP includes NMT, Ferries, waterways?

Answer:

A City Development Plan (CDP) has been prepared and is in the finalization process. The present rolling stock structure for the City has been identified through the DPR. There is no other respective document that studies the city transportation situation. There is no City Mobility Plan (CMP) and the study of NMT but not the study of Waterways or ferries..

There are four Levels of Services (LOS) which will be calculated considering various indicators as LOS1, LOS2, LOS3 and LOS4 correspond to adequacy and quality of city's available transportation services. The summary of the service level gap and performance should be presented as per illustrative Table

SI. No	Indicators	Levels of Serv Mo	Present Service Level	
		Level of Service	Range	
	Service Coverage of	1	>=1	
1	the city	2	0.7-1	4
		3	0.3-0.7	
		4	<0.3	
	Availability of urban	Level of Service	Range	
2	transport per 1000 population	1	>=0.6	4
		2	0.4-0.6	
		3	02-0.4	
		4	<=0.2	

Table: Service level Benchmark

Q2) Question: Have level of services (LOS) been calculated based on the indicators prescribed in the SLB for urban transport by Ministry of Urban Development? As per MoUD SLB for urban transport, there are four Levels of Services (LOS) which will be calculated considering various indicators as LOS1, LOS2, LOS3 and LOS4 correspond to adequacy and quality of city's available transportation services.

Answer: Yes

Q3) Question: While assessing the above indicators, also analyze following aspects as an outcome of the broad components of urban transport under AMRUT;

a) Non-Motorised Transport Facilities

- 1. % of network covered
- 2. Encroachment on NMT roads by vehicle parking (%)
- 3. NMT parking facilities at interchanges (%)

Answer:

No NMT Parking facilities available in Sambalpur

b) Parking: Availability of parking spaces

Answer:

Unauthorized municipal parking spaces

Parking spaces were available atGol bazaar, Near Samaleshwari Mandir, court area, Aithapally Chowk, Dhanupalli Chowk, Remed Chowk, Dhanu Palli Chowk, Auto/Taxi Stand, Khetrajpur Railway Station, Phatak Railway station, Petrol Pump Chowk, Stadium Biju Patnaik, Power Channel Embarkment, Burla and Hospital Chowk

Q4) Question: Have specific issues for the city been identified and addressed including issues with the existing traffic, NMT, parking / transport environment?

Answer: **Encroachments on roads**: Encroachment by street vendors, hawkers, shop keepers and parking lots are responsible factors for reduction in the effective width of the roads. Most of the major arteries of the city are congested not only in the peak hours but throughout thy day due to encroachments. Mainly at Rama Talkies.

Main Roads with high traffic of HOVs is observed but the road width is considerably less which became a burden to regular traffic.

Sidewalks, Foot-over bridges and NMT

Q5) Question: Do you think city roads are safe for pedestrians? If no then, which section of roads needs immediate attention?

Answer: No. the city roads are rather narrow and there are insufficient footpaths available for pedestrians to walk. There are few proposals that are identified to improve pedestrianisation in Sambalpur City:

Requirement of Pedestrian Walkways:-At Aithapally Road, Lakshmi talkies Road, Railway station road and Ring Road

Question: What type of Non-Motortised Vehicle (NMV) infrastructure available in the city?

- 1. Lanes reserved for NMV
- 2. Footpath allocated for both pedestrian and NMV
- 3. Area allocated to NMV parking

Answer:

No lanes or infrastructure available for NMT

Q6) Question: Has budget provision for NMT included in the transportation projects in the city?

Answer: No

Buses and BRTS

Q7) Question: Have city initiated feasibility of BRTS?

Answer: No

Q8) Question: What kind of public transport is available in the city? Please mentionNumber of public transport vehicles operating in the city.

Answer: City Bus Services has been initialized and 32 city buses have been procured

Q9) Question: What is the total length of public transport corridor in the city limits?

Answer: 60 kms

Multi-level parking

Q10) Question: Whether city has designated parking spaces? If yes, provide list of

Answer: No

Q11) Question: What is the total available on street paid parking spaces on Arterial, sub arterial roads?

Answer: No

Q12) Question: Whether parking supply inventory is available for the city including; Types of onroad and off road parking restrictions (time of day, duration, private etc)

Answer: No

Q13) Question: Whether parking facilities available for bicycles, auto rickshaw, goods delivery.

Answer: Near Railway station and the other two have been proposed at New Bustand and Ainthapalli

Q14) Question: Is private sector involved in parking?

Answer: No

Q15) Question: Whether adopted parking bans/restrictions on major roads .

Answer: No bans for private Vehicles, restrictions for trucks from 9 AM to 1 PM, 4 PM to 6 PM

Waterways and Ferry vessels

If city has waterways system then provide following questions;

Q16) Question: Whether city has inland waterways system?

Answer: no

Q17) Question: Who is managing and operating the ferry system? if any

Answer: no

Q18) Question: Provide number of ferry vessels

Answer: no

Institutional Set Up

Describe the institutional framework including role and responsibilities in terms; administration and Policy making, planning, Vehicle Registration, public transportation operators including Private operators and overall traffic management.

Role and Responsibilities of all the agencies shall be provided in the illustrative tableNo. 2

Table: Role and responsibility of agencies involved in management of City transport

SI. NO	Agencies	Responsibilities
1	SDA	Planning
2	WOUTSI	City Bus
۷	WOOTSE	Services
3	PTO	Vehicle
5	RIO	Registration
		Administration
4	SP (Police)	and Policy
		making

Please provide information in 200 words responding to the following questions;

Q19) Question: Who is responsible for management of urban transport in the city?

Answer: Municipality and Development Authority, City Buses by WOUTSL

Q20) Question: Is there enough provisions for enforcement of traffic rules for pedestrian safety on roads?

Answer: SP Police, District Administration and ULB

Q21) Question: How are you planning for execution of transport related projects for AMRUT, whether, present role and responsibilities lying with these organizations is capable to implement projects under AMRUT?

Answer: urban transport projects that need to be implemented under AMRUT are prioritized on the basis of land availability for creating new street parking and new ML Parking spaces and road space for creating NMT and city bus services. In case of Sambalpur, there is no enough spaces that can be allotted to create parking areas but the roads are rather narrow to ply more buses and with respect to the organisations too, there is NO proper and enough capacity to implement projects.

1.2 Status of On-going Projects

Critically examine the existing and ongoing projects for improvement of urban transport as to be filled in illustrative Table No.3

Notice: Undefined index: table12_proposed_projects in

/var/www/html/amrut/urbantransport-result.php on line 312

Project/Sector	Approved Cost (Rs. Lakhs)	Status of projects (till May 13)	Expenditure(Rs. Lakhs)	Scheme
Road Improvement	1500	Ongoing		State
Road Widening	-			
Railway Over Bridges	proposed			State
Widening of existing river Bridges	Proposed			State
Railway Under Pass	Proposed			State
Pedestrian Walkways	Proposed			State
Medians and other Infra etc				
Street Parking	proposed			
Multi Level Parking	proposed			
Over Bridges	proposed			
SBP Outer ring road	proposed			Centre/State
Laxmi talkies	Proposed			State

Flyover		
Others		

Question: which are the incentives taken for the implementation of NMT facilities in the city? Please list out initiatives undertaken in different ongoing programs and projects to address these gaps

Answer: None

Q22) Question: Whether convergence with other ongoing Central and State and Local Government Programs/Schemes can be done at this stage.

Answer: no convergence with the ongoing projects can be made at present.

Q23) Question: Whether ongoing scheme and projects has been critically reviewed? Please explain what is the extent of convergence to bridge the gaps?

Answer: No

2. Bridging the Gap

Demand Gap Assessment

Despite the fact, non-motorized modes and public transit account for a significant proportion of travel activity of a city. The city needs to pursue different strategies and programs for bridging the gap on transportation facilities where the city is and where it wishes to go in future.

Please provide information in 200 words responding to the following questions

Q24) Question: What steps can be taken to bridge these gaps? Please explain in 200 words,

Answer: Provision of designated parking spaces, widening of roads to allocate enough space for plying of city buses and providing NMT facilities

Whether present level gaps as identified through SLB indicators will be achievable by 2021 as compare with the present level of gap and demand?. (Table)

Table: Bridging the gap- Demand Assessment

SI. No	Benchmark	Levels of Service as per SLB, MoUD		Levels of Service as per SLB, MoUD		Present Service Level	Current Gap	Demand/ Target by 2021
	Convine Coverage of	Level of Service	Range					
1	urban transport in the city	1	>=1	4				
•		2	0.7-1	•				
		3	0.3-0.7					
		4	<0.3					
	Availability of urban	Level of Service	Range					
2	transport per 1000	1	>=0.6	4				
_	population	2	0.4-0.6	-				
		3	02-0.4					
		4	<=0.2					
	Other indicators							
3	Percentage of City Covered by footpaths wider than 1.2m	-						
4	Non Motorised Transport Facilities including;							
a)	% of network covered		-					
b)	Encroachment on NMT roads by vehicle parking (%)		-					
c)	NMT parking facilities at interchanges (%)	-						
	Availability of On-	Level of Service	Range					
5	street paid public	1	>=75	4				
	parking spaces (%)	2	50-75					
		3	25-50					
	Motor wove and	4	<25					
6	Ferries		-					

3.Objectives

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).

Please provide information in 200 words responding to the following questions;

Q25) Question: How will you define your overall goal to improve city transport?

Answer: The vision of the City Public Transport is "To provide safe, efficient and cost effective public transportation system accessible to all the citizens with maximum walkability of citizens in the city."

Q26) Question: What possible strategies envisaged to achieve various LoS to improve the transportation components under AMRUT?

Answer: provision of NMT facilities wherever necessary and also to provide city bus services with maximum frequency and accessibility coverage.

Q27) Question: How well does goals and objective for developing efficient urban transportation facilities can articulate the use of NMT options and parking facilities to improve the quality oflife of local citizens?

Answer: Unless there is enough space for roads in the city limits, implementation of nonmotorised vehicles is not plausible. As estimated, unless the roads in the city while having the ROW with sufficient lane width supposed for NMT can be implemented. As there are ongoing road improvement projects, it is high time to improve road conditions and storm water scenario inside the city to make way for safe movement of pedestrians which paves way for better mobility of citizens.

Q28) Question: How identified each objective can evolve considering bridging the gap with present level of services as to achieve SLB indicators.

Answer: each identified objective needs to be assessed carefully and proposed with respect to citizen and stakeholder consultation. The present level of service of every transport component is inadequate and to enhance the same requires lot of funding and land availability. As there is enough land for implementing off street parking and depots/terminals for City Bus Services, land need to identified to widen the most important roads so to ply the buses and increase efficiency and accessibility to citizens.

Q29) Question: How objectives can be framed ensuring sustainable mobility solutions and creating city-wide NMT facilities for pedestrians and cyclists.

Answer: The objectives need to be framed in such a manner so to provide safe and secure way to promote walkability and mobility to citizens. Improving main road structure and enforcing the most congested and crowded zones of the city such as markets, mandis, old city areas, railway station etc to convert them to NMT zones.

Q30) Question: Howe objectives for improvement of NMT facilities integrate with other modes of transport.

Answer: Presently, there is a provision of 32 buses under City Bus Services connecting several important areas. But still the demand would not be met for the overall citizens in the city. As we know there is no existing NMT facility for the city, pedestrian tracks should proposed in future which would be integrated to the existing CBS so to achieve the first and last mile connectivity.

4. Alternate Activities to Meet Objectives

Evolve overall objective is to ensure that mobility solutions for the city that are sustainable and create city-wide NMT facilities for pedestrians and cyclists and integrate them with other modes of transport. Suggest possible strategies and options to achieve each objective with estimate cost of alternate solutions as per table 1 & Table 2

SI. No	Objectives	Possible Activities	Financing Source
1	NMT	Pedestrian walkways, footpaths, cycle tracks, parks and open spaces	Municipality
2	Parking	Multi level parking	Municipality
3	City Bus Services	Augmentation and Network increasing	Centre/Municipality
4	City Mobility Plan	DPR	Municipality

Table2:Estimated Cost for various possible activities

SI. No	Projects	Unit	Quantity	Total Cost (in Crores)
1	Augmentation of CBS	Buses	100	12.00
2	DPR on City Mobility Plan	No	1	0.50
3	Fly Over at Laxmi Talkies	No	1	61.00
4	Street Parking	No	3	0.60
5	Multi Level Parking	No	1	1.00
6	Railway Under Pass	No	1	5.00
7	Railway Over Bridges	No	2	55.00
8	NMT	kms	2	0.50
9	Construction of Foot Over Bridges	No	5	3.00
10	Construction of Non Motorised Transport facilities (Footpaths & Cycle Tracks & Cycle Parking)	Kms	3	6.00
	Total			143.3

While addressing alternate solution to achieve these objects, please provide information in 500 words responding to the following questions:

Question: How realistic and feasible urban transport strategies are to be evolved to address key challenges, priorities as an outcome of the citizen consultation

Answer: With respect to the citizen and stakeholder consultation, there are several actions that need to be addressed to improve the city wide transportation scenario. Mostly improving/widening/upgradation of roads, improved network of CBS, installation of NMT facilities at congested areas, development of truck terminal, parking areas and rickshaw areas etc

Question: What alternative innovative solution can be adopted for improving the service delivery by creating

a: Citizen friendly provision of barrier free pedestrian facilities including, footpaths, road marking and signages

Answer: Vehicle tracking System, automatic pedestrian crossing facility,

b: pathways

Answer: Urban planning with built-in street design,

c: Parking

Answer: Multilevel parking spaces, Zoning near the congested areas to promote NMT

d: traffic management using ITS

Answer: Vehicle tracking System, Surveillance System, GIS based traffic analysis

Question: What strategic intervention is required in the implementation of above projects?

Answer: Special Purpose Vehicles (SPVs), Traffic Management Committees or agencies etc appointed to overlook and undertake the specific tasks related to the transport criteria

Question: Whether alternative modes of transport such as cycling can be provided in major roads

Answer: Yes.

Question: Whether non-Motorised Transport (NMT) facilities corridor suggested with dedicated NMV, Cycle track and Signalized Intersection count.

Answer: No

Question: How innovative solutions for alternative modes of transport including NMT such as cycling, pedestrian and public transportation system will address the overall transportation issue of the city?

Answer: this would shape the future city transportation in such a way to improve mobility of the city with barrier free pedestrian movement and enhanced levels of safety and security.

Question: What will be the source of funding for identified project?

Answer: Central, State, ULB and community Participation and funding from other development agencies through pooling of resources.

Question: Whether convergence with other scheme has been made. Please explain each identified projects and their source of funding such as AMRUT, 14th FC and also converge with other schemes.

Answer: No

5. Citizen Engagement

Each alternative will be discussed with citizens and activities to be taken up will be prioritized to meet the service level gaps. The section will summarize the Citizens priorities for adoption of alternate solution of urban mobility, drawing on SLIP preparation.

Please provide information in 200 words responding to the following questions:

Question: Have all stakeholders including residents (RWAs), Transporters, RTOs, Traffic Police attended the citizen consultation?

Answer: Yes.

Question: Has alternate proposed crowd sourced?

Answer: Yes. Crowd and stakeholder sourced.

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

Answer: The most important criteria for citizens is enhancing the public transport which can cater to almost all the areas of the city. Secondly, to designate various parking spaces so to decongest the main roads.

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

Answer: Yes

Question: What methodology adopted for prioritizing the alternatives?

Answer: Studying the entire area and identifying the loopholes in the service provision.

Question: How citizen has been exposed best practices and smart solutions in order to generate citizen-driven solutions for urban mobility?

Answer: Through presentations and seminars.

Question: Please examine whether identified solutions are addressing citizens requirement

Answer:Yes

Question: Whether ULB have adequate resources to implement prioritized alternate solutions?

Answer:No.

Question: How innovative alternate options of NMT facilities examined and shared with citizens?

Answer: Yes. Through presentations and study material.

6. Prioritization of projects

Based on the citizen engagement, ULB will prioritize these activities and their scaling up based on the available resources to meet the respective objective. (AMRUT Guidelines; para 6.6, 6.7 & 7.2). Please provide information in 200 words responding to the following questions:

Question: Are innovative solution prioritized based on the available resources and demand of citizens?

Answer: Yes.

Question: Has source of funding considered while prioritizing the project?

Answer: Yes

Question: Whether project has been prioritized considering last mile connectivity?

Answer: No

Priority No	Project	Cost (in Cr.)	Financing Source
1	Construction of Street Parking (AMRUT/OD/SAMBALPUR/UT/01)	0.60	AMRUT/State
2	Construction of Non Motorised Transport facilities (AMRUT/OD/SAMBALPUR/UT/02)	0.50	AMRUT/State
3	Preparation of DPR on City Mobility Plan (CMP) (AMRUT/OD/SAMBALPUR/UT/03)	0.50	AMRUT/State
4	Construction of Multi-level parking (AMRUT/OD/SAMBALPUR/UT/04)	1.00	AMRUT/State
5	Augmentation of City Bus fleet (AMRUT/OD/SAMBALPUR/UT/05)	12.00	AMRUT/State
6	Construction of Foot Over Bridges (AMRUT/OD/SAMBALPUR/UT/06)	3.00	AMRUT/State
7	Construction of Non Motorised Transport facilities (Footpaths & Cycle Tracks & Cycle Parking) (AMRUT/OD/SAMBALPUR/UT/07)	6.00	AMRUT/State
8		23.60	

Table1: Possible Strategies to meet objectives

7.Out of Box Solution Used

Please provide information in 200 words responding to the following questions:

Question: What are the out of box thinking on alternative and new innovative solutions for the following;

a: Citizen friendly provision of barrier free pedestrian facilities including, footpaths, road marking and signages,

Answer: Escalators and underpasses for pedestrian movement, solar lighting and panels for signages and road marking.

b: pathways

Answer: Escalators and travelators, automated Subway Systems for pedestrian movement

c: parking

Answer: Automated Valet System, Mobile integrated citizen info systems, parking line alarms,

d: traffic management using ITS

Answer: Real Time Vehicle tacking using Satellite imagery

Question: Whether solution provided to improve the safety of vulnerable groups such as old age/handicapped/children

Answer: Yes

8. Conditionalities Fulfilled and Resilience Built-in

First and foremost condition is to identify the availability of land for projects such as parking, widening of roads for pedestrian, cycle tracks and hawkers zone. Further, agencies need to be brought on board for any new initiatives as part of convergence process and necessary approval and permissions.

Please provide information in 200 words responding to the following questions:

Question: Whether described the conditionalities of each project in terms of availability of land parking, widening of roads for pedestrian, cycle tracks and hawkers zone?

Answer: Yes. Government lands are available.

Question: How these projects will be funded? Are projects being implemented through own sources or borrowing then which is the commitment in this regard.

Answer: Both sources are considered. This can be done through Central, State, ULB and community Participation and funding from other development agencies through pooling of resources.

Question: Has environmental obligation such as clearances and NOC required? Please suggest action and initiatives need to be taken in this regards

Answer: No

9. Financial Plan

Prepare Financial Plan for the complete life cycle of the prioritized development. The financial plan will include percentage share of different stakeholders (Centre, State, ULBs and) including financial convergence with various ongoing projects. Describe briefly the institutional arrangement), leveraging potential partnerships, convergence with other Government Schemes, monitoring and evaluation and also provide year-wise milestones and outcomes.

• How the proposed finance plan is structured for transforming and creating infrastructure projects? Explain in 200 words how these institutional arrangements are leveraging partnership and converge with government scheme and provide list of individual projects which is being financed by various stakeholders.

The financial plan is made considering 50 % Central grant and 50% state grant. Since the ULB do not have the financial capability, no share has been considered from ULBs.

• Has financial plan prepared for identified projects based on financial convergence and consultation with funding partners?

Yes, the project identified here does not include the ongoing projects which are covered under other scheme. Therefore, financial convergence from other schemes has not been planned for projects listed under this scheme. Since all the identified projects are funded under AMRUT on 50: 50 basis. Consultation with other funding partners is not required. However, consultation for involving other funding partners will be explored to achieve the objective of the mission.

• What are the different sources of funding being tapped for this project.(75 words)

Own Source, PPP mode and CSR source of funding will be tapped

• Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations (100 words)

Yes, the financial structure proposed is sustainable. The state govt. is committed to contribute required funds for completing the projects. However, the O&M cost for these projects will be met from internal resources including collection of user charges. The

projects have been categorized based on gap analysis identified for universal coverage as required under AMRUT scheme.

• Have the financial assumptions been listed out? Please provide the list. (100 words)

Yes, the financial assumption has been listed to work out the operational sustainability.

10. Finalization of Master Service Level Improvement Plan

Q31) Question: Discuss Draft Master Service Level Improvement Plan with citizen. Based on the final citizen consultations, prepare final Master Service Level Improvement Plan. Annual Plan will be prepared as an application for monitoring the improvement in achieving the service level indicators as targeted in the Service level improvement plan. (AMRUT Guideline; Table 2.1, 2.2, 2.3, 2.4 and 2.5) and Annual Plan (AMRUT Guidelines; Annexure-2, 3, 4, 5& 6)

Answer:

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.

MASTER SERVICE LEVELS IMPROVEMENTS DURING MISSION PERIOD

(As per Table 2.2 of AMRUT guidelines) (Amount in Rs. Cr)

Notice: Undefined index: table6_sno in

/var/www/html/amrut/urbantransportresult.phpOn line 869

SI.	Braiast Nama	Physical	Chang	Estimated		
No	Project Name	Components	Indicator	Existing	Proposed	Cost
1	Construction of Street Parking (AMRUT/OD/SAMBALPUR/UT/01)					0.60
2	Construction of of Non Motorised Transport facilities (AMRUT/OD/SAMBALPUR/UT/02)					0.50
3	Preparation of DPR on City Mobility Plan (CMP) (AMRUT/OD/SAMBALPUR/UT/03)					0.50
4	Construction of Multi-level parking (AMRUT/OD/SAMBALPUR/UT/04)					1.00
5	Augmentation of City Bus fleet (AMRUT/OD/SAMBALPUR/UT/05)					12.00
6	Construction of Foot Over Bridges (AMRUT/OD/SAMBALPUR/UT/06)					3.00
7	Construction of Non Motorised Transport facilities (Footpaths & Cycle Tracks & Cycle Parking) (AMRUT/OD/SAMBALPUR/UT/07)					6.00
						23.60

ANNUALFUNDSHARINGPATTERNFORSEWERAGE PROJECTS

(As per Table 2.3.1 of AMRUT guidelines) (Amount in Rs. Cr) Notice: Undefined index: table7_sno in

/var/www/html/amrut/urbantransportresult.phpOn line 917

SI.	Name of Project	Total Project	Share						
No	Name of Project	Cost	Gol	State	ULB	Others	Total		
1	Construction of Street Parking (AMRUT/OD/SAMBALPUR/UT/01)	0.60	0.30	0.30			0.60		
2	Construction of of Non Motorised Transport facilities (AMRUT/OD/SAMBALPUR/UT/02)	0.50	0.25	0.25			0.50		
3	Preparation of DPR on City Mobility Plan (CMP) (AMRUT/OD/SAMBALPUR/UT/03)	0.50	0.25	0.25			0.50		
4	Construction of Multi-level parking (AMRUT/OD/SAMBALPUR/UT/04)	1.00	0.50	0.50			1.00		
5	Augmentation of City Bus fleet (AMRUT/OD/SAMBALPUR/UT/05)	12.00	6.00	6.00			12.00		
6	Construction of Foot Over Bridges (AMRUT/OD/SAMBALPUR/UT/06)	3.00	1.50	1.50			3.00		
7	Construction of Non Motorised Transport facilities (Footpaths & Cycle Tracks & Cycle Parking) (AMRUT/OD/SAMBALPUR/UT/07)	6.00	3.00	3.00			6.00		
		23.60	11.80	11.80			23.60		

ANNUAL FUND SHARING BREAK-UP FOR SEWERAGE PROJECTS

(As per Table 2.3.2 of AMRUT guidelines)

Notice: Undefined index: table8_sno in /var/www/html/amrut/urbantransportresult.php Online973

SI.	Project	Gol	State		ULB			Convergence	Othoro	Total	
No			14th FC	Others	Total	14th FC	Others	Total	Convergence	Others	TOLAI
1	Construction of Street Parking (AMRUT/OD/SAMBALPUR/UT/01)	0.30			0.30						0.60
2	Construction of Non Motorised Transport facilities (AMRUT/OD/SAMBALPUR/UT/02)	0.25			0.25						0.50
3	Preparation of DPR on City Mobility Plan (CMP) (AMRUT/OD/SAMBALPUR/UT/03)	0.25			0.25						0.50
4	Construction of Multi-level parking (AMRUT/OD/SAMBALPUR/UT/04)	0.50			0.50						1.00
5	Augmentation of City Bus fleet (AMRUT/OD/SAMBALPUR/UT/05)	6.00			6.00						12.00
6	Construction of Foot Over Bridges (AMRUT/OD/SAMBALPUR/UT/06)	1.50			1.50						3.00
7	Construction of Non Motorised Transport facilities (Footpaths & Cycle Tracks & Cycle Parking) (AMRUT/OD/SAMBALPUR/UT/07)	3.00			3.00						6.00
8		11.80			11.80						23.60

YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per Table 2.5of AMRUT guidelines)

Notice: Undefined index: table9_proposed_projects in/var/www/html/amrut/urbantransport-result.php on line 1033

SI. No	Proposed Projects	Project Cost	Indicator	Baseline	Annual Targets (Increment from the Baseline Value)						
					FY 2016		FY	FY	FY	FY	
					H1	H2	2017	2018	2019	2020	
1	Construction of Street Parking (AMRUT/OD/SAMBALPUR/UT/01)	0.60									
2	Construction of Non Motorised Transport facilities (AMRUT/OD/SAMBALPUR/UT/02)	0.50									
3	Preparation of DPR on City Mobility Plan (CMP) (AMRUT/OD/SAMBALPUR/UT/03)	0.50									
4	Construction of Multi-level parking (AMRUT/OD/SAMBALPUR/UT/04)	1.00									
5	Augmentation of City Bus fleet (AMRUT/OD/SAMBALPUR/UT/05)	12.00									
6	Construction of Foot Over Bridges (AMRUT/OD/SAMBALPUR/UT/06)	3.00									
7	Construction of Non Motorised Transport facilities (Footpaths & Cycle Tracks & Cycle Parking) (AMRUT/OD/SAMBALPUR/UT/07)	6.00									
8		23.60									
9											
10											
11										1	

Urban Transport

Mission Management Information System

PARKS AND PLAY GROUNDS

The objective of this template is to assist ULBs in preparation of SLIP for Green Space and Parks component for rejuvenation of at least one park in each of the 500 Urban Local Bodies (ULBs) involving creation and upgradation of basic elements, especially for the youth, children and the elderly. Rejuvenation also includes involving local citizens and groups in the maintenance and upkeep of the park in order to make the development sustainable. Cost of this component will be met from the 2.5 per cent annual allocation for development of parks under the Mission and used in accordance with its Guidelines. (Refer AMRUT Guidelines: Section 5.1 Sr.No.6, 6.7 & Annexure-1 Sr.No.4) SLIP would involve write up on following sections:

1. Assess the Service Level Gap

First and foremost aspect of SLIP is to assess the existing situation and service levels gaps for organised Green Space and Parks based on standards prescribed in URDPFI Guidelines (Refer AMRUT Guidelines; Para 3.1.6 & 6.2). This shall also include describing existing institutional framework vis-à-vis development and maintenance of organised green space/ parks. In order to assess the service level gap the City shall have to review all policies, plans; scheme documents etc., hold discussions with concerned officials and citizens, as per the requirement and conduct physical assessment of city parks to understand the current status (Refer Indicative Parks Assessment Tool as given in Annex-1 of this document). The city should undertake overall assessment of Parks and Open/ Green Space in terms of a) Physical Activities Resources, b) Family Facilities including child friendly play equipment's, c) Available General Services and Facilities, and, d) Aesthetics and other While discussing about the existing status of the organised green space in your city make a sincere effort to analyze the proportion of area under the categorization of parks as per URDPFI Guidelines eq: Housing Area Park (HAP), Neighbourhood Park (NP) Community Park (CP), District Park (DP), and Sub-City Park (SCP). Also focus on qualitative aspects of existing parks like geographical distribution across the city, encroachments, child and elderly friendly features; staffing, maintenance & equipment issues; and maintenance by RWAs/ Corporates under their CSR Activities etc.

Please respond to the questions given below (Word Limit: 800 words).

Question: What are the available data sources/ plans/ reports/ schemes that exist as regards development and maintenance of parks?

Sambalpur municipality has done elementary tabulation of the existing parks such as name of the park, area, O&M costs and brief description about the parks apart from this there are no special plans or reports prepared for this sector. But the existing parks are developed with the help of state government and maintenance of the parks is covered in the municipal expenditure

Question: Review the recommendation on open/ green space as per Master Plan/ Development Plan and map existing green cover against the same. Identify the areas where there is deficiency of open/green space

There is a referring documents CDP which provide the landuse0.7% and stating that green spaces have to be developed in the city but there is no document where the deficiency of open/green spaces identified to fill the gap but there is a map showing the existing green space locations for the city.

Question: Does the ULB follow URDPFI Guidelines to categorize its organized greens/ parks/ open space or follow its own categorization? If ULB follow its own categorization, what is the rationale and how well they are interlinked to development of parks?

Sambalpur municipality does not categorize the parks and open spaces as per the hierarchy of organized green spaces based on population and area criteria as prescribed by URDPFI guidelines it only categorizes parks in developed and undeveloped category.

Question: What is the per person open space availability in the city in general and within builtup areas?

19.4 acres is the cumulative area of developed parks in the Sambalpur town apart from this there are many open spaces and playgrounds spread over the city for children's to play and elders to take a fresh walk in the morning but these play grounds and not equipped with any amenities.

Service Level Status

Sr.	Indicators	Present	Benchmark	Source	Reliability
.No		Status			Factors
1	Per person open space in plain	0.29	10 -12 Sq.	Municipality	С
	areas as per URDPFI guidelines	Sq.m	m		

Source: URDPFI-2014&AnalysisofULBLevelData

Question: Have the ULB/ City prepared park wise inventory of facilities and amenities? (ULB should identify some of the quick-win parks, which could be developed with minimal intervention that can attract good number of citizens)

Sambalpur municipality has done elementary tabulation of the existing parks such as name of the park, area, O&M costs and brief description about the parks apart from this they identified few parks for renovation which can attract a lot of people to use the parks and enhancing children friendly features identified by the municipality will make tem quick-win parks.

Question: How is the physical condition of parks in the city? Do they have boundary wall, fenced area, facilities of public conveniences, tube well, dustbins etc. (Mention in proportions, if possible)

Parks in Sambalpur municipality are in good physical condition overall and every park lacks in toilet facility and park furniture is not in a good shape .

Question: Whether parks have well planned play area encouraging physical activity? Are they equipped with child friendly play equipments, snack/ ice cream parlours/ kiosks etc. (Mention in proportions, if possible)

Except Surendra Sai Park, Sen Park and Christian Park. No park is equipped with Play equipments with kiosks

Question: How well aesthetics component have been built in parks of your city? Are they well illuminated, landscaped – manicured with waterbodies/ fountains etc. wherever possible? (Mention proportions, if possible)

Parks in Sambalpur municipality are in decentaesthetic condition overall, every park of Sambalpur has shortage of land scape and park furniture is not in a good shape

Question: Are there some running schemes/ projects – Central/ State/ Donor funded in the city as regard development of parks/ open spaces? Or else ULB is funding park development of parks/ green space out of its own budget?

Development of open spaces, green spaces and parks in Sambalpur are done with the help of state government and maintenance of the parks is covered by the municipal fund

Question: Explain the process how a park/ open space is normally shortlisted for development? Does the city have rationale for park selection for development or it is done on ad-hoc basis.

Sambalpur municipality shortlists the parks/open spaces in a unique process as follows

- 1. Identification of government lands in the city
- 2. Gap analysis based on the existing parks coverage
- 3. Initial prioritization based on the size and coverage of the park
- 4. Stakeholder consultation by the municipal engineers
- 5. Citizen consultation and enlightening them with the facts
- 6. Finally considering all the above aspects the chairperson and counsellors shortlists parks for development

Question: List the organizations/ authorities/ private sector firms etc. and describe their roles and responsibilities in development of city parks/ open space along with green area under their jurisdiction.

No such private sector firms /organizations are involved in the development or maintenance of any park in the city, all the parks are under the municipal authority and they operate and maintain.

Question: Where can new parks be developed in the future; how much space may be available.

Sambalpur municipality has identified few government lands in the municipal jurisdiction where there is a need for parks but the land is under the state body which has to be transferred to the municipality so that they can plan and execute the projects

Question: How much is allocated under Parks/ Open/ Recreational space as per the DP or Master Plan for new areas?

DP provide the landuse0.7% and stating that green spaces have to be developed in the city but there is no allocated under Parks/ Open/ Recreational space as per the DP or Master Plan for new areas.

Question: Who manages the parks in the city? How much delegation of responsibility has been given to RWAs and/or NGOs?

Parks are undertaken by the municipality, no NGO's delegation of responsibility has been given.

Question: Which parks have uneasy accessibility issues or get flooded/water logged etc.?

All the existing parks are easy to access and there is no such problem of flooding/water logging etc transpired in the parks.

Question: Does the ULB have any guidelines for providing safe and secure access to parks for children and elders?
Private architects are hired for designing the parks and then the plans are reviewed by the internal technical experts with regard to safety, security and universal accessibility measures taken in the design and then finalize the plan for execution which makes parks in Sambalpur safe and secure for all age groups.

Question: Is there a system for preventing the entry of animals into parks?

All the existing parks in the SAMBALPUR municipality are with the boundary wall so there is not even a single event occurred in the past few years that the animals entering the parks.

Question: Does the city have any guidelines for horticulture; types of trees and plants, etc?

City has not specifically followed any guidelines for horticulture or selecting type of trees or plants .the plan given by the landscape architect is followed and implemented on field because of shortage if capacity in that sector.

Sr. No	Jurisdiction	No. of Parks	Area of Parks (in hec)	Proportion (in Percentage)
1	ULB	11	2.6 hec	100
2	Development Authority	0	0	0
3	Private Ownership Corporate/NGO's	0	0	0
	Total	11	2.6	100

Table2: Jurisdiction wise-Allocation of Green Space and Parks

Table3: Hierarchy of Organised Greens in the City (As per URDPFI-2014)

	, ,	2 (1	/	
Sr. No	Category	No. of Parks	Area under the category (in hec)	% Area under parks and open spaces
1	Housing Area Park (HAP) (Less than 5000 Sq.m.)	9	1.08	0.25
2	Neighbourhood Park (NP)(5000 -10000 sq.m.)	2	1.52	0.35
3	Community Park (CP) (10000 - 50000 sq.m	0	0	0
4	District Park (DP) (50000 – 250000 Sq.m.)	0	0	0
5	Sub-City Park (SCP) (2,50,000sq.m. & above)	0	0	0

2. Bridge the Gap

Once the gap between the existing Service Levels is computed, list out initiatives undertaken in different ongoing programs/ projects/ master – development plans to address these gaps. While bridging the gaps convergence with other ongoing Central, State and Local Government Programs/ Schemes will also be looked into. Based on above, objectives will be developed to bridge the gaps (AMRUT Guidelines; Para 6.3, Annexure-2; Table 2.1). Each of the identified objectives will be evolved from the outcome of physical assessment of parks using "Assessment Tools for Parks" (Refer Annex-1 of this document) and meeting the opportunity to bridge the gap.

As per para 5.1 (Sr.No.6) of AMRUT guidelines all projects involving development of green spaces & parks shall have to make special provision for child friendly components and establish a system of maintenance with local residents participation. At least one park from each of the 500 ULBs under AMRUT would be taken up for developing facilities for Children, Youth and Elderly.

Assessment of the current status of City parks/ open spaces would clearly bring out the gap/ dearth of open spaces in terms of area allocation, having inadequate citizen friendly features and issues pertaining to its maintenance. And these will lead to formulation of three broad objectives.

Please respond to the following questions in not more than 500 words

Question: Have the city took physical assessment of city parks? (ULB's may refer Annex-1 indicative procurement of this document)

Question: Estimate the demand gap of open/green space in the city

The city has a demand of around 3500 acres to fill the gap under open/green spaces in the city.

Question: Explain how the city plans to fill the gap in green cover and progressively enhance green cover within City to 15% over next 5 years. ?

Sambalpur municipality has done elementary tabulation of the existing parks and decided to construct a park every year and renovate the existing facilities so that they can fill the gap in green cover and within next decade green cover in te city will be close to 15 %.

Question: Assess and describe, if requisite provisions as per Master Plan and otherState legislation have already been made?

No requisite provisions as per Master Plan and other State legislation have already been made

Question: Explain the city's action plans to make special provisions for installing child friendly components in the city parks as per AMRUT Guidelines. ?

Except Surendra Sai Park, Sen Park and Christian Park every other park lacks in child friendly components s the municipality is planning to renovate the park apart from that all the new proposed parks are with child friendly components.

Question: Provide details of the initiatives undertaken in different ongoing programs and projects to address the gaps in enhancing the green cover and rejuvenation/ development of parks. Provide information in Table 4.

There are no ongoing projects in this sector as the city is concerned

Sr No	Name of the Project	Scheme Name	Cost in Rs. Lakhs	Month	of	Status (as on dd mm 2015)
1	Iti Hostel, Gandi Nagar		10	Compiction		Running
2	Near JaganathMandir At Silipathar		9			Running
3	Gss Park		70			Running
4	Bod Bazar Park		4			Running
5	Infront Of Rto Office		30.79			Running
6	Children Park At GobindTola		23.55			Running
7	Park At Bajamunda		40			Running
8	Park At Maneshwar		40			Running
9	Sri Ram Vihar Park		40			Running
10	Development Of Small Path Infront Of Samaleswari Temple At Central Store Chowk		10			Running
11	Development, Maintenance And Beautification Of Children Park Near VssChowk		6			Running
12	Narsingmandir Park		2.5			Running

Tabel4:Status of Ongoing/Sanctioned/Committed Projects

OBJECTIVES

Based on above, objectives will be developed to bridge the gaps. While developing objectives following question shall be responded so as to arrive at appropriate objective.

Question: Please provide a set of 2-3 objectives to meet the gap in not more than 100 words.

- 1. Installation of child friendly equipment
- 2. Image of wild life to be conserved
- 3. Urban greenery in prioritization through plantation on both sides of all pivot routes
- 4. Identification of huge vacant lands in the city to build parks

3. Examine Alternatives and Estimate Cost

Suggest alternatives/ options to complete the ongoing projects pertaining to developing parks and green spaces. Identify quick-win parks and open space which can also have play area and associated facilities for Children, Youth & Elderly. Also identify & describe the prevailing models of parks development & maintenance in your city? Any new model your city wishes to adopt? (Word Limit: 200 Words)

City is trying to incorporate the industries surrounded by to take reasonability and develop parks as part of corporate social responsibility to compensate the pollution created by tm in the city .these are in the stages of discussion but under implementation

Tabel 4: Cost Estimates for Park Development

Sr. No.	Component	Rate	Amount in Rs.
	Grand Total		

As per AMRUT guidelines half of Rs. Cr. may be sought from Government of India under the scheme and balance could be explored and converged from other sources like 14th Finance Commission, State Government (Park Development Fund) and CSR Activities of Corporate Groups active in the City.

4. Citizen Engagement

ULBs will organize and conduct city level citizen consultation and receive feedback on the suggested alternatives and innovations. Each alternative pertaining to development and maintenance models for parks 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. (Refer AMRUT Guidelines; Para 6.6, 6.7 & 7.2). Please explain following questions detailing out the needs, aspirations and wishes of the local people. (Word Limit: 250 Words)

Question: Has all relevant stakeholders groups been involved in the consultation?

Private architects are hired for designing the parks and then the plans are reviewed by the internal technical experts and then the discussions are carried out to the all relevant stakeholders groups

Question: Explore option for O&M Contracts including PPPP with (RWAs/ Citizens Groups/ Corporate Groups – CSR, Selling advertisement rights etc.).

City is trying to incorporate the industries surrounded by to take reasonability and develop parks as part of corporate social responsibility to compensate the pollution created by tm in the city .these are in the stages of discussion but under implementation

Question: Explain how the city plans to establish a system of maintenance with active citizen's engagement as per AMRUT Guidelines.

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

Ward level consultations are done after the stakeholder consultation and they are used for prioritization of the projects

Question: Has alternatives explored are crowd sourced?

No

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

3 times consultation programs were held under the chairmanship of collector Sambalpur for development of Sambalpur town all the feedbacks and suggestions are considered in planning the parks

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

No it is not done based on consultation initially, all the technical aspects are considered by engineers & the chair person

Question: What methodology adopted for prioritizing the alternatives?

Sambalpur municipality prioritizes the parks/open spaces in an exclusive process as follows

- 1. Gap analysis based on the existing parks coverage
- 2. Initial prioritization based on the size and coverage of the park
- 3. Citizen consultation and enlightening them with the facts and ask their priorities
- 4. Finally considering all the above aspects the chairperson and counsellors prioritizes parks for development

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 (Word Limit: 100 Words)

Question: What are the sources of funds?

The funds are divided into three parts

- 1. Construction of parks 50% from AMRUT(GOI)
- 2. Construction of parks 50% from STATE GOVERNMENT
- 3. O&M cost by ULB 100%

Question: Has projects been converged with other program and scheme No

Question: Has projects been prioritized based on "more with less" approach?

YES the projects undertaken are prioritized based on "more with less" approach in such a way that we spend less money and coverage is more

6. Conditionalities

1.1 Describe the Conditionality's of each project in terms of availability of land, environmental & social obligation and clearances, required NOC, financial commitment, approval and permission needed to implement the project. Required approvals will be sought from competent authority and organizations. (Word Limit: 100 words)

Sambalpur municipality has identified few government lands in the municipal jurisdiction where there is a need for parks but the land is under the state body which has to be transferred to the municipality so that they can plan and execute the projects if provided funds on time by the state & central government, and approval of DPR by the apex committee

7. Resilience

The resilience factor would be built in to ensure environmentally sustainable, safe and secured park development schemes. Ensure use of rust free sturdy steel structures for child and elderly friendly features. (Word Limit: 100 words)

Plans are reviewed by the internal technical experts with regard to safety, security and universal accessibility measures taken in the design and then finalize the plan for execution which makes parks in Sambalpur safe and secure for all age groups. And the materials used considering there sustainability in mind

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 (Word Limit: 100 words)

• How the proposed finance plan is structured for transforming and creating infrastructure projects?

The financial plan is made considering 50 % Central grant and 50% state grant.

• List of individual project which is being financed by various stakeholders?

All the projects listed are planned under AMRUT on the basis of 50 % Central grant and 50% state grant.

• Has financial plan prepared for identified projects based on financial convergence and consultation with funding partners?

Yes, the project identified here does not include the ongoing projects which are covered under other scheme. Therefore, financial convergence from other schemes has not been planned for projects listed under this scheme. Since all the identified projects are funded under AMRUT on 50: 50 basis. Consultation with other funding partners is not required. However, consultation for involving other funding partners will be explored to achieve the objective of the mission.

• Is the proposed financial structure is sustainable? If so then whether project has been categorized based on financial considerations?

Yes, the financial structure proposed is sustainable. The state govt. is committed to contribute required funds for completing the projects. However, the O&M cost for these projects will be met from internal resources including collection of user charges. The projects have been categorized based on gap analysis identified for universal coverage as required under AMRUT scheme.

• Have the financial assumptions been listed out?

Yes, the financial assumption has been listed to work out the operational sustainability.

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

Yes, the financial plan takes care of both CAPEX and OPEX costs to ensure sustenance throughout the life cycle of all projects identified in SLIP.

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

Yes, the financial plan is based on 50 % Central grant and 50% state grant.

Does it include financial convergence with various ongoing projects?

Yes, it includes financial and physical convergence with various ongoing projects under different schemes supported by both Central & State grant.

• Does it provide year-wise milestones and outcomes?

Yes, it has been provided

Details in financial plan shall be provided as per Table 2.7, 2.8, 2.9, 2.10 and 2.11. These tables are based on AMRUT guidelines tables 2.1, 2.2, 2.3.1, 2.3.2, and 2.5.

MASTERSERVICELEVELSIMPROVEMENTSDURINGMISSION PERIOD

Sr. No.	Project Name	Physical Components	Indicator	Existing (As-Is)	After (To-be)	Estimated Cost (Cr)
1	Construction of Ram Sagar Park in					1.05
2	Construction of Park Siran Vihar Park in					1.30
2	Sambalpur - AMRUT/OD/Sambalpur/PR/02					0.17
3	Construction of Park bhimabhur Park in					
3	Sambalpur - AMRUT/OD/Sambalpur/PR/03					0.38
1	Development of Sen Park in Sambalpur -					
4	AMRUT/OD/Sambalpur/PR/04					0.38
Б	Children park near Govind Tola in					
5	Sambalpur - AMRUT/OD/Sambalpur/PR/05					0.06
6	Construction of Park Park infront of RTO					
0	office - AVIRUT/OD/Sambalpur/PR/06					0.11
7	Bard Bazar Park in Sambalpur -					
1	AMRUT/OD/Sambalpur/PR/07					0.08
Q	Construction of Children Park at Hirakud in					
0	Sambalpur - AMRUT/OD/Sambalpur/PR/08					0.10
0	Development of Jagannath Madhir Park in					
9	Sambalpur - AMRUT/OD/Sambalpur/PR/09					0.12
10	Development of G.S Park in Sambalpur -					
10	AMRUT/OD/Sambalpur/PR/10					0.16

ANNUAL FUND SHARING PATTERN FOR PARKS AND GREEN SPACE PROJECTS

(As per Table 2.3.1 of AMRUT guidelines) (Amount in Rs. Cr)

Sr		Total					
No.	Name of the Project	Project Cost (Cr)	GOI	State	ULB	Others	Total (in Cr)
1	Construction of Ram Sagar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/01	1.35	0.68	0.68			1.35
2	Construction of Park Siran Vihar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/02	0.17	0.08	0.08			0.17
3	Construction of Park bhimabhur Park in Sambalpur - AMRUT/OD/Sambalpur/PR/03	0.38	0.19	0.19			0.38
4	Development of Sen Park in Sambalpur - AMRUT/OD/Sambalpur/PR/04	0.38	0.19	0.19			0.38
5	Children park near Govind Tola in Sambalpur - AMRUT/OD/Sambalpur/PR/05	0.06	0.03	0.03			0.06
6	Construction of Park Park infront of RTO office - AMRUT/OD/Sambalpur/PR/06	0.11	0.06	0.06			0.11
7	Bard Bazar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/07	0.08	0.04	0.04			0.08
8	Construction of Children Park at Hirakud in Sambalpur - AMRUT/OD/Sambalpur/PR/08	0.10	0.05	0.05			0.10
9	Development of Jagannath Madhir Park in Sambalpur - AMRUT/OD/Sambalpur/PR/09	0.12	0.06	0.06			0.12
10	Development of G.S Park in Sambalpur - AMRUT/OD/Sambalpur/PR/10	0.16	0.08	0.08			0.16

ANNUAL FUND SHARING BREAK_UP FOR PARKS and PLAY GROUND PROJECTS

(As per Table 2.3.2 of AMRUT guidelines)

Qr			State			ULB			Conv		
No	Project	GOI	14th Fc	Other s	Total	14th Fc	Others	Total	erge nce	others	Total
1	Construction of Ram Sagar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/01	0.68			0.68						1.35
2	Construction of Park Siran Vihar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/02	0.08			0.08						0.17
3	Construction of Park bhimabhur Park in Sambalpur - AMRUT/OD/Sambalpur/PR/03	0.19			0.19						0.38
4	Development of Sen Park in Sambalpur - AMRUT/OD/Sambalpur/PR/04	0.19			0.19						0.38
5	Children park near Govind Tola in Sambalpur - AMRUT/OD/Sambalpur/PR/05	0.03			0.03						0.06
6	Construction of Park Park	0.06			0.06						0.11

	infront of RTO office - AMRUT/OD/Sambalpur/PR/06				
7	Bard Bazar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/07	0.04	0.04		0.08
8	Construction of Children Park at Hirakud in Sambalpur - AMRUT/OD/Sambalpur/PR/08	0.05	0.05		0.10
9	Development of Jagannath Madhir Park in Sambalpur - AMRUT/OD/Sambalpur/PR/09	0.06	0.06		0.12
10	Development of G.S Park in Sambalpur - AMRUT/OD/Sambalpur/PR/10	0.08	0.08		0.16

YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per Table 2.5of AMRUT guidelines)

		Indicator	Baselin	Annual targets (Increments form the baseline value)							
Proposed Project	Project			FY2	2016	FY	5(0040	FY 2019	F V 2020		
	COSI		C	H1	H2	2017	FY 2018		FY 2020		
Construction of Ram Sagar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/01	1.35										
Construction of Park Siran Vihar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/02	0.17										
Construction of Park bhimabhur Park in Sambalpur - AMRUT/OD/Sambalpur/PR/03	0.38										
Development of Sen Park in Sambalpur - AMRUT/OD/Sambalpur/PR/04	0.38										
Children park near Govind Tola in Sambalpur - AMRUT/OD/Sambalpur/PR/05	0.06										
Construction of Park Park infront of RTO office - AMRUT/OD/Sambalpur/PR/06	0.11										
Bard Bazar Park in Sambalpur - AMRUT/OD/Sambalpur/PR/07	0.08										
Construction of Children Park at Hirakud in Sambalpur - AMRUT/OD/Sambalpur/PR/08	0.10										
Development of Jagannath Madhir Park in Sambalpur - AMRUT/OD/Sambalpur/PR/09	0.12										
Development of G.S Park in Sambalpur - AMRUT/OD/Sambalpur/PR/10	0.16										

Annex-1: Indicative Assessment Tools for Parks (Indicative – ULBs can have its own assessment tool as per the requirement or customize this tool to suit its need)