

UNDER



*Atal Mission for Rejuvenation
and Urban Transformation*

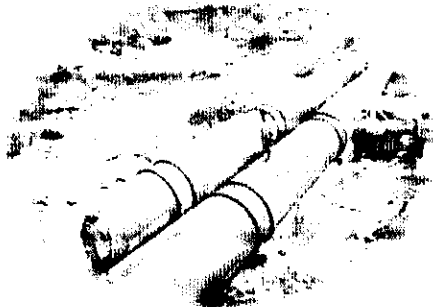
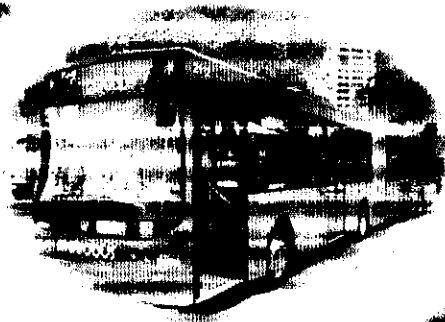


TABLE OF CONTENTS

Checklist – Consolidated State Annual Action Plan of all ULBs to be sent for Assessment by MoUD (as per table 6.4.)	1
Minutes of SHPSC Meeting	3
Chapter 1: Project Background	4
Chapter 2: Town Scenario	10
Chapter 3: STATE ANNUAL ACTION PLAN (SAAP)	12
1. Principles of Prioritization	14
2. Importance of O&M	14
3. Financing of Projects	15
Chapter 4: STATE ANNUAL ACTION PLAN (SAAP) TABLES	17

Checklist – Consolidated State Annual Action Plan of all ULBs to be sent for Assessment by MoUD (as per table 6.2)

S. No.	Points of Consideration	Yes/No	Give Details
1.	Have all the Cities prepared SLIP as per the suggested approach?	Yes	In Arunachal Pradesh there is 1 city under AMRUT. As per approach prescribed in the guideline and templets the SLIPs for all five sectors have been prepared for Itanagar.
2.	Has the SAAP prioritized proposed investments across cities?	Yes	There is only one AMRUT city.
3.	Is the indicator wise summary of improvements proposed (both investments and management improvements) by State in place?	Yes	As per the tables given in the guidelines, indicator wise improvement proposal for investment and management (both) has been considered.
4.	Have all the cities under Mission identified/done baseline assessments of service coverage indicators?	Yes	There is only one AMRUT city in Arunachal Pradesh. Baseline assessment of service coverage has been done for the selected city
5.	Are SAAPs addressing an approach towards meeting Service Level Benchmarks agreed by Ministry for each Sector?	Yes	SAAP has been prepared to meet Service Level Benchmark as agreed by ministry for each sector.
6.	Is the investment proposed commensurate to the level of improvement envisaged in the indicator?	Yes	The proposed investment matches with Service Level Improvement envisaged in the indicated.
7.	Are State Share and ULB share in line with proposed Mission approach?	Yes	It is proposed and agreed by the State that all the ULB share will also be beard by the State.
8.	Is there a need for additional resources and have state considered raising additional resources (State programs, aided projects, additional devolution to cities, 14th Finance Commission, external sources)?	Yes	To achieve the MoUD benchmark and limited resources at State level and Fund allocation under AMRUT, there is a need of additional resources. Efforts are being made to mobilize additional financial resources through ADB assistance, ADB and other central sponsored schemes like NLCPR etc.

9.	Does State Annual Action Plan verify that the cities have undertaken financial projections to identify revenue requirements for O&M and repayments?	Yes	O&M charges will be reimbursed by collecting user charges. Additional fund requirement and repayment for O&M shall be worked out during DPR preparation.
10.	Has the State Annual Action Plan considered the resource mobilization capacity of each ULB to ensure that ULB share can be mobilized?	Yes	The resource mobilisation capacity of the ULBs is weak. Considering the present resource mobilization capacity of ULB, the ULB share will be borne by State.
11.	Has the process of establishment of PDMC been initiated?	Yes	The process for establishment of PDMC shall be initiated.
12.	Has a roadmap been prepared to realize the resource potential of the ULB?	Yes	The resource potential of ULBs has been considered.
13.	Is the implementation plan for projects and reforms in place (Timelines and yearly milestones)?	Yes	The timelines and milestones has been set for achieving the reforms under scheduled period.
14.	Has the prioritization of projects in ULBs been done in accordance with para 7.2 of the guidelines?	Yes	Prioritization has been given in accordance with para 7.2 of mission guideline.

(.....)

Commissioner

Urban Development

& State Mission Director- AMRUT,

Arunachal Pradesh

Minutes of SHPSC Meeting

MINUTES OF THE STATE LEVEL HIGH POWERED STEERING COMMITTEE (SLHPSC) MEETING ON AMRUT, HELD UNDER THE CHAIRMANSHIP OF CHIEF SECRETARY, ARUNACHAL PRADESH ON 8TH FEBRUARY 2016 AT 1530 HRS IN THE CONFERENCE HALL OF CHIEF SECRETARY, GOVERNMENT OF ARUNACHAL PRADESH.

A meeting of State Level High Powered Steering Committee (SLHPSC) on AMRUT was held under the Chairmanship of Chief Secretary, Arunachal Pradesh on 8th February 2016 at 1530 hrs.

The following officers were present in the meeting:-

1. Shri Kamesh Negi, Chief Secretary
2. Shri Satya Gopal, Principal Secretary (Finance)
3. Shri Mohan Kumar, Conservator of Forests
4. Shri A. Morang, Director, U & U, P&T
5. Shri Kipri Kaku, Chief Counselor, IAS
6. Shri Habung Lanpung, CMO, IMC

The Chief Secretary, Arunachal Pradesh has enquired about the SUP and SAAP of AMRUT. The meeting was held to discuss the progress of the work done by the State Level High Powered Steering Committee (SLHPSC) under newly launched schemes of Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

The meeting was held to discuss the progress of the work done by the State Level High Powered Steering Committee (SLHPSC) under newly launched schemes of Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

The meeting was held to discuss the progress of the work done by the State Level High Powered Steering Committee (SLHPSC) under newly launched schemes of Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

The meeting was held to discuss the progress of the work done by the State Level High Powered Steering Committee (SLHPSC) under newly launched schemes of Atal Mission for Rejuvenation and Urban Transformation (AMRUT).


 Director, P&T
 Government of Arunachal Pradesh

Memo No. D. C. & M. S. / 102 / 2016-16

Dated the Bangalore 11th February 2016

1. The Chief Secretary, Government of Arunachal Pradesh
2. The PS to Chief Secretary, Government of Arunachal Pradesh
3. The Chief Counselor, Government of Arunachal Pradesh
4. The Director, P&T, Government of Arunachal Pradesh

Chapter 1: Project Background

AMRUT Mission

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) has been launched by the Ministry of Urban Development, GoI on 25th June 2015 with the purposes (a) to ensure that every household has access to a tap with assured supply of water and a sewerage connection; (b) to increase the amenity value of cities by developing greenery and well maintained open spaces (e.g. parks); and (c) to reduce pollution by switching to public transport or constructing facilities for non-motorized transport (e.g. walking and cycling).

AMRUT believes that the infrastructure creation should have a direct impact on the real needs of people, and hence, focus should be on infrastructure creation which has a direct link to provision of better services to people.

Besides, a sound institutional structure is the foundation to make Missions successful. Therefore, Capacity Building and a set of Reforms have been included in the Mission to enhance the transparency in services delivery by the ULBs through improving governance. Reforms will lead to improvement in service delivery, mobilization of resources and making municipal functioning more transparent and functionaries more accountable, while Capacity Building will empower municipal functionaries through augmenting their skills as well as knowledge and lead to timely completion of projects.

AMRUT also actualizing the spirit of cooperative federalism through making States and ULBs equal partners in planning & implementation of projects, as the plans (Action Plans) have to be prepared every year and will be approved for a year, instead of project-by-project sanctions.

THRUST AREAS & COMPONENTS UNDER MISSION:

❖ Water Supply

- i. Water supply systems including augmentation of existing water supply, water treatment plants and universal metering.
- ii. Rehabilitation of old water supply systems, including treatment plants.
- iii. Rejuvenation of water bodies specifically for drinking water supply and recharging of ground water.
- iv. Special water supply arrangement for difficult areas, hill and coastal cities, including those having water quality problems (e.g. arsenic, fluoride)

❖ Sewerage

- v. Decentralized, networked underground sewerage systems, including augmentation of existing sewerage systems and sewage treatment plants.
- vi. Rehabilitation of old sewerage system and treatment plants.
- vii. Recycling of water for beneficial purposes and reuse of wastewater.

❖ **Septage**

- viii. Faecal Sludge Management- cleaning, transportation and treatment in a cost- effective manner.
- ix. Mechanical and biological cleaning of sewers and septic tanks and recovery of operational cost in full.

❖ **Storm Water Drainage**

- x. Construction and improvement of drains and storm water drains in order to reduce and eliminate flooding.

❖ **Urban Transport**

- i. Ferry vessels for inland waterways (excluding port/bay infrastructure) and buses.
- ii. Footpaths/walkways, sidewalks, foot over-bridges and facilities for non-motorized transport (e.g. bicycles).
- iii. Multi-level parking.
- iv. Bus Rapid Transit System (BRTS).

❖ **Green space and parks**

- v. Development of green space and parks with special provision for child-friendly components.

❖ **Reforms management & support**

- i. Support structures, activities and funding support for reform implementation.
- ii. Independent Reform monitoring agencies.

❖ **Capacity Building**

This has two components- individual and institutional capacity building.

COVERAGE UNDER MISSION:

- ❖ All Cities and Towns with a population of over one lakh with notified Municipalities, including Cantonment Boards (Civilian areas),
- ❖ All Capital Cities/Towns of States/UTs, not covered above,
- ❖ All Cities /Towns classified as Heritage Cities by MoUD under the
- ❖ HRIDAY Scheme.
- ❖ Thirteen Cities and Towns on the stem of the main rivers with a population above 75,000 and less than 1 lakh, and
- ❖ Ten Cities from hill states, islands and tourist destination (not more than one from each State).

(Only One City –ITANAGAR is selected under AMRUT Mission in Arunachal Pradesh)

PROGRAM MANAGEMENT STRUCTURE

National level:

❖ Apex Committee (AC):

An Apex Committee (AC), chaired by the Secretary, MoUD and comprising representatives of related Ministries and organizations will approve the projects and supervise the Mission

State Level

❖ State Level High Powered Committee (SHPSC):

As mandated by the AMRUT Guidelines, Government of Arunachal Pradesh has constituted State Level High Powered Committee (SHPSC) under the Chairmanship of Chief Secretary, Govt. of Arunachal Pradesh vide Government Order No. DUD/PLG-29/AMRUT/2015-16/6676-87 dated 13th July-2015.

❖ State Level Nodal Agency (SLNA)/PMU:

Further, Government of Arunachal Pradesh (Govt. of AP) has nominated Town Planning and Urban Local Body as State Level Nodal Agency (SLNA)/ PMU and Commissioner, Urban Development & Housing Department, Govt. of AP as the State Mission Director for AMRUT.

SAAP has been evolved by the State based on the SLIPs prepared and submitted by the ULB, for the identified projects with three times the Central Assistance (CA) allocated to the State during 2015-16. Projects for universal coverage of water supply and Sewerage facilities and Septage management are also identified.

With due diligence, SAAP is submitted to SHPSC for consideration. SHPSC, in the meeting held on 26 November, 2015, has recommended the SAAP to be submitted to the Apex Committee in MoUD for approval.

And, at the State Level, the mission will be monitored by the State Mission Director with support by AMRUT & Smart City Mission, and, the Programme Development & Management Consultants (PDMC), which is being appointed as per the Mission Guidelines.

City Level:

❖ Projects will be executed at City Level by the ULBs, parastatal agencies such Town Planning and Urban Local Body, AP, with the support of City Mission Management Units (CMMUs) & Programme Implementation Units (PIUs).

❖ Independent Review and Monitoring Agency

External/ Third Party Agency, Independent Review and Monitoring Agency (IRMA) will be appointed to review the progress of projects and implementation of reforms, periodically.

Program Implementation & Management Structure

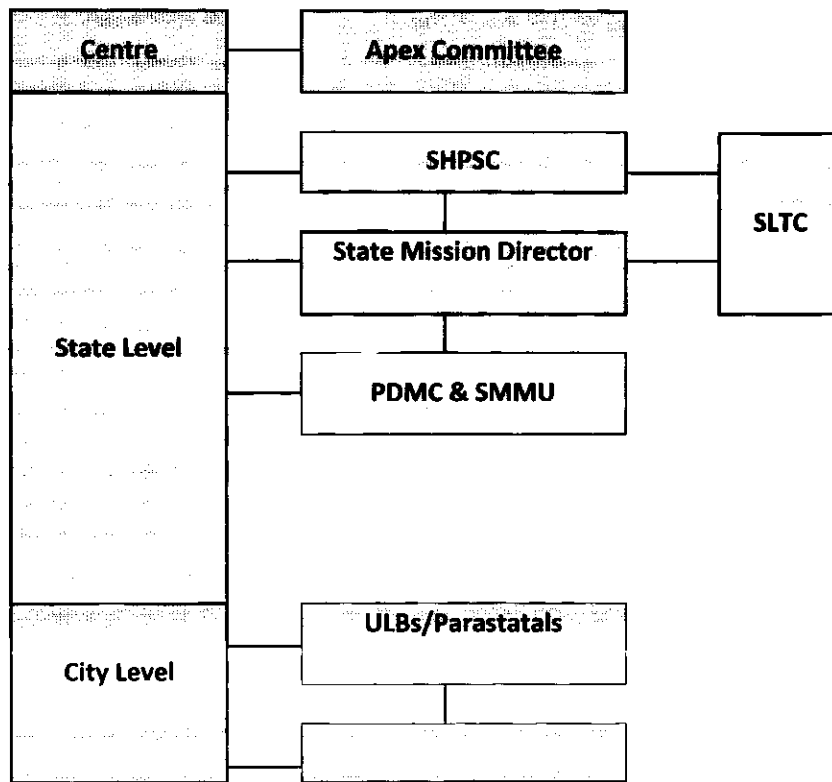


Figure.1.1. Program Implementation & management structure

DURATION OF THE PROJECT:

Five (5) years from FY 2015-16 to FY 2019-20

FINANCIAL ALLOCATION

Since the AMRUT is being operated as a Centrally Sponsored Scheme, the funds for the mission consists the following four parts:

- i. Project fund - 80% of the annual budgetary allocation.
- ii. Incentive for Reforms - 10% of the annual budgetary allocation.
- iii. State funds for Administrative & Office Expenses (A&OE) - 8% of the annual budgetary allocation
- iv. MoUD funds for Administrative & Office Expenses (A&OE) - 2% of the annual budgetary allocation

FUNDING PATTERN

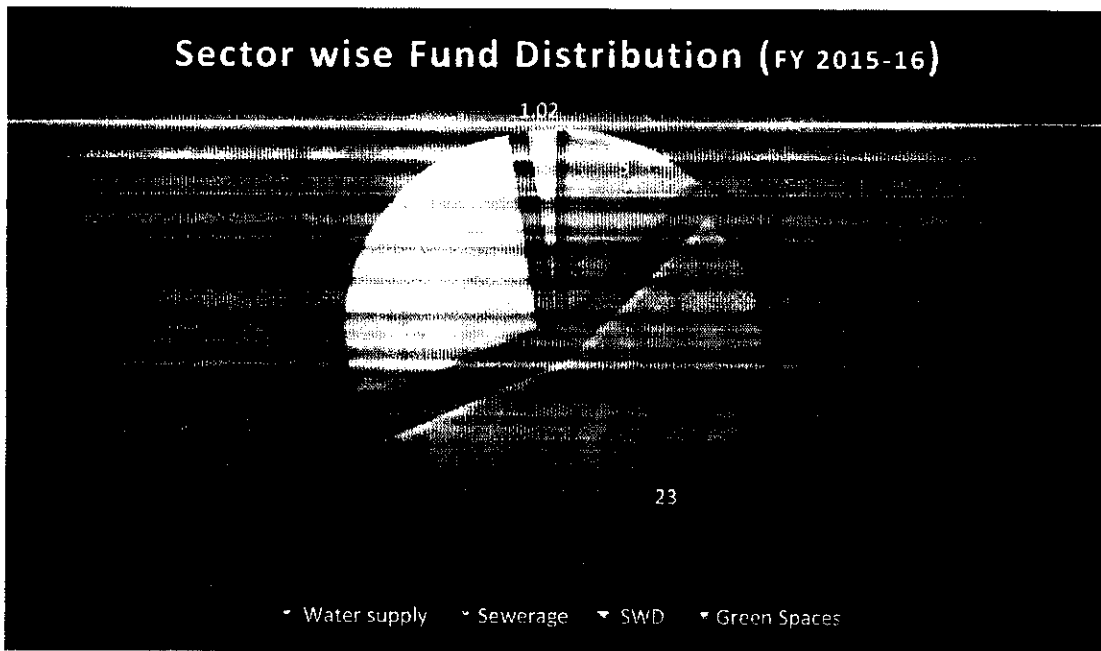
- As per the OM issued by MoUD, 90 % share is sought from MoUD for Itanagar and 10% from state Govt. and ULB.
- GoI share for Itanagar is 90% of the project cost.

- Allocation of funds will be released in the ratio of 20:40:40 (3 installments) of the approved project cost

MoUD, GoI, will allocate approximate Rs. 36.84 Crore (Rupees Thirty Seven Crore only-) to the Itanagar town, Arunachal Pradesh. Out of Rs, 40.94 Crore (SAAP size for FY 2015-16) to be allocated for the five components, Rs. 5 Crore for water supply, Rs. 23 Crore for sewerage & septage management, Rs. 11.92 drainage and RS. 1.02 Crore for parks. In addition to this, GoI will provide Rs. 1.14 Cr. for A&OE

Total Sector wise Fund Allocation

Sector	Amount (In Crores)
1. Water supply	05
2. Sewerage	23
3. SWD	11.92
4. Urban Transport	0
5. Green Spaces	1.02
Total	40.94

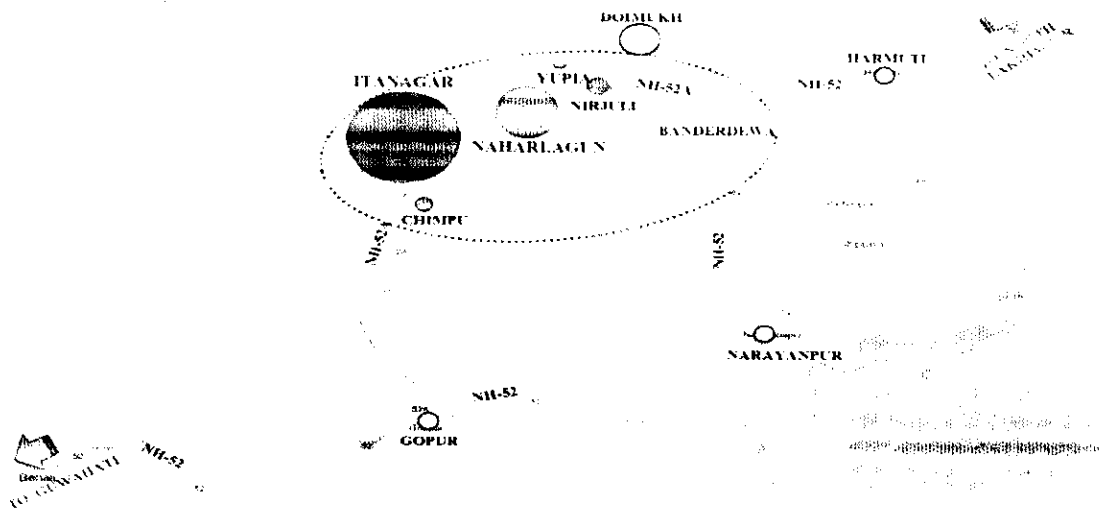


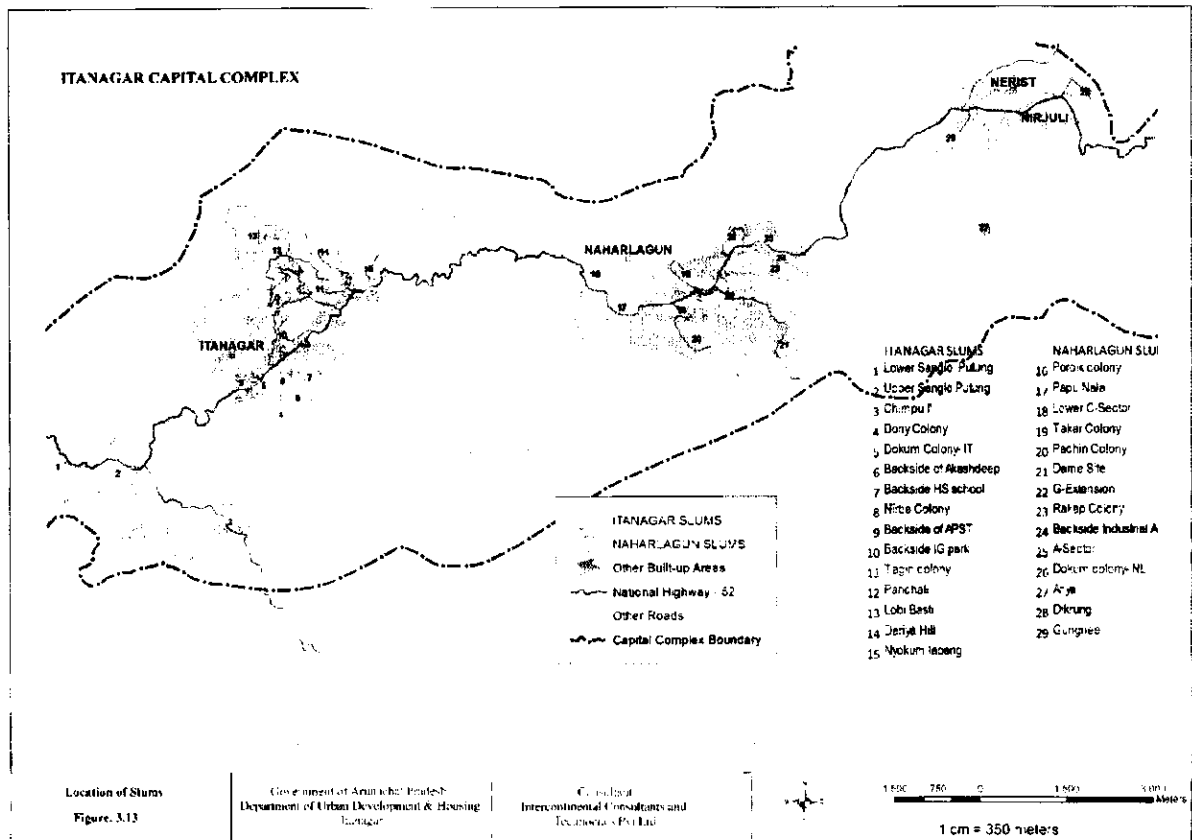
Chapter 2: Town Scenario

The Capital of Arunachal, Itanagar is situated 30 Km from the Banderdewa at latitude 27°-15' North to 28°-0'N, longitude 93°-15'E to 94°-0'E at a height of 350 m above MSL. Administratively, Itanagar lies in the Papum Pare District. The state capital is connected by National Highway No. 52A, branching off from the National Highway No. 52 at Banderdewa on Assam-Arunachal border (30km) and passes through Itanagar and reconnects the NH 52 at Gohpur (24km). The nearest railway station Harmuti (Assam) is at a distance of 32 km and Lila Bari is the nearest Airport situated at a distance of 72 km in Assam. Naharlagun (AP) is the nearest railway station to Itanagar which is 11 km away from the city of Itanagar.

The Itanagar Capital region area covers 250 sq.km including area of Dorpang reserve forest and Itanagar Wild life sanctuary in North-west and north respectively. The dereservation of almost 20% forest as well as rural area (more than 33 villages) accounted significant increase (from 152 sq.km. to 250 sq.km.) in area of capital region. However the area excluding the forest and other rural area (147 sq.km.). Doimukh is not included because of its inclusion under rural area as per census of India 2011.

The area of Itanagar Capital Region Municipal Council is having 51.44 sq. km covering 30 wards.





Demography and Area of Itanagar

As per details from Census 2011, Itanagar Municipal Council has population of 101671 souls. Itanagar town, Naharlagun, Nirjuli and Banderdewa area comes under the Itanagar Municipal Council. Details of population, area, road length are as follows:

Itanagar Municipal Council Area					
S. No.	Name of Area	Population as per Census 2011	Area in Sq. km	Wards	Road Length in KM
1	Itanagar Town	60053	51.54	30	267.70
2	Naharlagun	34509			
3	Nirjuli	3683			
4	Banderdewa	3426			
	TOTAL	101671	51.44	30	267.70

Chapter 3: STATE ANNUAL ACTION PLAN (SAAP)

AMRUT mission will provide project funds to ULBs through the States on the basis of proposals submitted in State Annual Action Plan (SAAP). SAAP is basically a State level service improvement plan indicating the year-wise improvements in water-supply and sewerage connections to households. The basic building block for the SAAP is the SLIPs prepared by the ULBs. At the State level, the SLIPs of all Mission cities will be aggregated into the SAAP. While preparing SAAP information responding to the following questions, are mentioned below:-

- **Has the State Government diagnosed service level gaps? (250 Words)**

Yes, mission city Itanagar has prepared all the SLIPs as per AMRUT guidelines and provided templates after due consultation with various stakeholders. State Government has diagnosed service level gaps for the state as per the information provided by respective ULBs in Service Level Improvement Plan (SLIP).

- **Has the State planned for and financed capital expenditure? (350 Words)**

Yes, State Government has agreed to provide matching share with Govt of India share against the Capital expenditure, in fund sharing pattern as described in the AMRUT guidelines. Considering the weaker financial condition of the Itanagar ULB State agreed to provide all the matching share including the ULB share (i.e. 10%) matching share of capital expenditure. As per the OM issued by MoUD, GoI revised the funding ratio from 50:50 to 90:10 for NE States.

- **Has the State moved towards achievement of universal coverage in water supply and sewerage/septage? (350 Words)**

Yes, the gap in universal coverage of water supply has been addressed by the state. The major gaps in water supply is covered under JnNURM funded water supply Scheme. The left out portion is proposed under the AMRUT mission. Regarding Sewerage/Septage, considering the topography and scattered habitation decentralized sewerage system is proposed in the phased manner in the AMRUT Mission. These gaps is identified by the ULBs and projects are planned to be carried out under AMRUT to fulfill the gap.

- **What is the expected level of the financial support from the Central Government and how well have State/ULB and other sources of finance been identified and accessed? (300 words)**

As per the mission guidelines GoI shall provide 50% assistance for the mission cities having population upto 10 lacs and 1/3rd assistance for mission cities having population above 10 lacs. However, considering the special condition of the state, GoI revised the funding ratio from 50:50 to 90:10 for NE States. Considering the financial condition of ULB State is decided to bear the rest Share from State Fund.

- **How fairly and equitably have the needs of the ULBs been given due consideration?**

The SLIPs submitted by the ULBs have been prepared after incorporating suggestions received from different stake holders in consultation meeting held under leadership of the elected representatives of their respective wards. Besides this projects are prioritized as per the Guidelines.

- **Have adequate consultations with all stakeholders been done, including citizens, local MPs and other public representatives? (350 words)**

Yes, consultations with all stakeholders such as: Chairperson of ULBs, ward Councilors, Citizens & representative from various departments have been made on various platforms at City & State Level. The inputs of MPs and MLAs of concerned area have also been requested. Valuable suggestions given by such stake holders have been incorporated during preparation & finalization of SLIP.

Important steps which have been considered while preparation of SAAP are mentioned below:

1. Principles of Prioritization

Has consultation with local MPs/ MLAs, Mayor and Commissioners of the concerned ULBs been carried out prior to allocation of funding? (250 words)

Yes, Local MPs/MLAs, Chief Councilor and Chief Municipal Executive officer (CMEO) of the concerned ULBs were consulted prior to allocation of funds to different sectors. The allocation of funds given in the SAAP is based on the prioritization principal mentioned in the guideline and subsequent discussions held with MPs/MLAs, Chief Councilor, Chief Municipal Executive officer (CMEO) and other stake holders. As mentioned before, lot of consultation was carried out with ULBs. Apart from discussions at State level with Mission Directorate, discussion was done with stakeholders.

- **Has financially weaker ULBs given priority for financing? (200 words)**

In Arunachal Pradesh only 1 ULB is covered under AMRUT mission city.

- **Is the ULB with a high proportion of urban poor has received higher share? (250 words)**

There is only 1 ULB covered under AMRUT mission city.

- **Has the potential Smart cities been given preference?**

Itanagar City has not been selected smart city proposal under Smart City Mission. As the selected Smart city under the State is not an AMRUT town no such weightage is given.

- **How many times projects are proposed in SAAP of the Central Assistance (CA) allocated to the State during 2015-16? (100 words)**

State has proposed projects amounting 3 times of the Central Assistance allocated for the financial year 2015-16 as per the AMRUT guidelines.

- **Has the allocation to different ULBs within State is consistent with the urban profile of the state? (260 words)**

There is only 1 ULB under AMRUT, the consistency with the urban profile has been taken care.

2. Importance of O&M

It has been observed that ULBs pay little attention to the operation and maintenance of infrastructure assets created after completion of projects. This tendency on the part of implementing agencies leads to shear loss off national assets. Information regarding importance given to O&M is mentioned below against each question:

- **Has Projects being proposed in the SAAP include O&M for at least five years? (100 words)**

Yes, O&M arrangements for all the projects proposed in the SAAP have been proposed for 5 years period after the Defects Liability Period (DLP) and shall be an integral part of the original contract resulting in reduced maintenance and repairs expenses.. State has decided to consider O&M of 5 years of every project as integral part of the original contract so that the agency/contractor who

developed the assets shall be responsible for O&M of the same for 5 years period.

- **How O&M expenditures are propose to be funded by ULBs/ parastatal? (200 words)**

O & M expenditure of assets created will be met by ULBs through recovery of user charges, increasing the revenue by reducing NRW, increasing the coverage of household's connections, strengthening the billing & collection system, rationalizing the user charges etc. and partly by state Govt. financial support. Reduction in expenditure by energy conservation will be achieved. If there will be any gap, the same shall be borne by ULB through its own resources.

- **Is it by way of levy of user charges or other revenue streams? (100 words)**

O&M will be met from, levy of user charges, expanding the connection/ service network, strengthening billing and collection systems etc. , and through expenditure reduction by way of redeployment of man power, energy conservation and efficiency improvement, reduction of NRW (Non- Revenue Water), reuse and recycling of waste water, Metering, SCADA etc. Gap if any in meeting the O&M cost, the same will be met by the ULBs through other revenue sources.

- **Has O&M cost been excluded from project cost for the purpose of funding? (100 words)**

Yes, O&M cost has been excluded from project cost for the purpose of funding and shall be borne by ULB through user charges. If there will be any gap in recovery of user charges, same shall be borne by ULB through its own resources.

- **What kind of model been proposed by States/ULBs to fund the O&M? Please discuss. (250 words)**

State has proposed to recover O&M by ULBs through imposing user charges. However user charges may not be sufficient to recover entire O&M cost, for which innovative proposals like energy saving projects, reuse of treated waste, reduction in NRW and other losses have been considered. The gap if still remains, shall be filled through ULBs fund/State support

- **Is it through an appropriate cost recovery mechanism in order to make them self-reliant and cost-effective? How? (250 words)**

Appropriate cost recovery mechanism shall be formulated during preparation of DPR and will be an integral part of all the projects proposed under the mission.

3. Financing of Projects

Financing is an important element of the SAAP. Each state has been given the maximum share which will be given by the Central Government. (Para 5 of AMRUT Guidelines). The State has planned for the remaining resource generation at the time of preparation of the SAAP. The financial share of cities will vary across ULBs. Information responding to the following questions regarding financing of the projects proposed under AMRUT, in words has been indicated below:

- **How the residual financing (over and above Central Government share) is shared between the States, ULBs? (200 words)**

As the ULBs are weak, the State shall bear the share of the ULBs.

- **Has any other sources identified by the State/ULB (e.g. PPP, market borrowing)? Please discuss. (250 words)**

No, AMRUT is the only source. However, State will explore all possible alternative funding options including PPP mode of procurement of project. Details will be worked out in due course/ at the time of preparation of DPR.

- **What is the State contribution to the SAAP? (it should not be less than 20 percent of the total project cost, Para 7.4 of AMRUT Guidelines) (150 words)**

State has decided to contribute all the remaining share including the share of ULB (i.e. 10% of the project cost). As per the OM issued by MoUD, the funding ratio has been revised from 50:50 to 90:10 for North Eastern States.

- **Whether complete project cost is linked with revenue sources in SAAP? How? (250 words)**

It has been attempted. Still, if there is any gap, the same is envisaged to be financed by the State Government through its own resources or funding/loan through financial institutions.

- **Has projects been dovetailed with other sectoral and financial programme of the Centre and State Governments? (250 words)**

Yes, all possible dovetailing/convergence of ongoing/sanctioned projects under JnNURM, Swachh Bharat Mission and Special programs for north eastern states funded have been given due consideration during preparation of the SLIPs of the ULBs.

- **Has States/UTs explored the possibility of using Public Private Partnerships (PPP), as a preferred execution model? Please discuss. (300 words)**

PPP is under consideration and shall be detailed out during DPR preparation.

- **Are PPP options included appropriate Service Level Agreements (SLAs) which may lead to the People Public Private Partnership (PPPP) model? How? (300 words)**

PPP is under consideration and shall be detailed out during DPR preparation. While preparing DPR focus will not be only asset creation but on actual service delivery. Performance based output and payment shall be attempted with the objective of achieving desired

Chapter 4: STATE ANNUAL ACTION PLAN (SAAP) TABLES

Table 1.1: Breakup of Total MoUD Allocation in AMRUT (FY 2015-2016)

(Amount in Rs Crores)

Total Central funds allocated to State	Allocation of Central funds for A&OE (@ 8% of Total given in	Allocation of funds for AMRUT (Central	Multiply col. 2 by x3) for AMRUT on col. 4 (project proposal to be three times the annual allocation - CA)	Add equal (col. 4) State/ULB	Total AMRUT annual size (cols.2+3+4+5)
1	2	3	4	5	6
13.42	1.14	12.28	36.84	4.09	42.07

Break-up of Total MoUD Allocation in 2015-15 (Amount in Cr.)

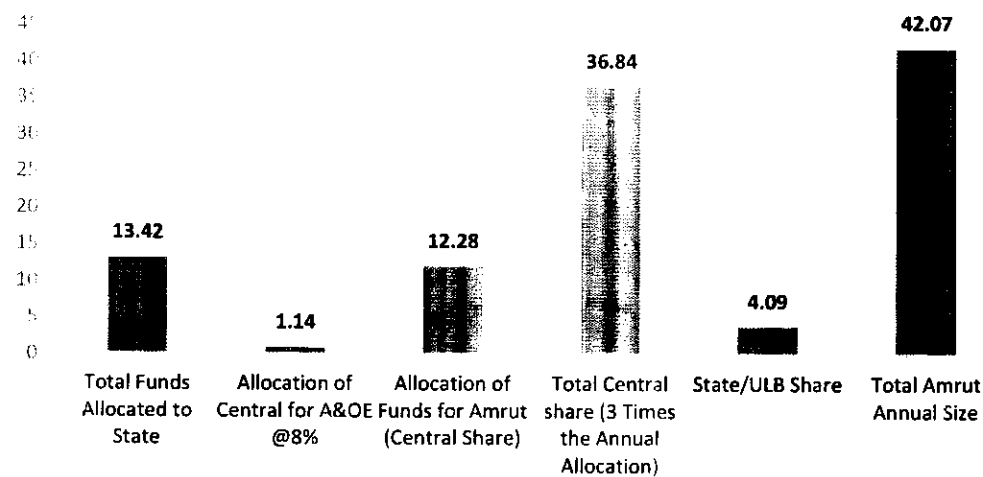


Table 1.2.1: Abstract-Sector Wise Proposed Total Project Fund and Sharing Pattern (FY 2015-2016)

(Amount in Rs. Crores)

Sl. No	Sector	No of Projects	Centre	State	ULB	Convergence	Others	Total
1	Water Supply	1	4.5	1.5	0	0	0	5
2	Sewerage and Septage Management	3	20.7	1.3	0	0	0	23
3	Drainage	1 (in Phase I)	10.73	1.19	0	0	0	11.92
4	Urban Transport	0	0		0	0	0	0
5	Parks & Open Spaces	1	0.92	1.1	0	0	0	1.02
Grand Total		6	15.85	4.09	0	0	0	40.94

Sector wise Proposed Total Project Fund and Sharing Pattern in 2015-16

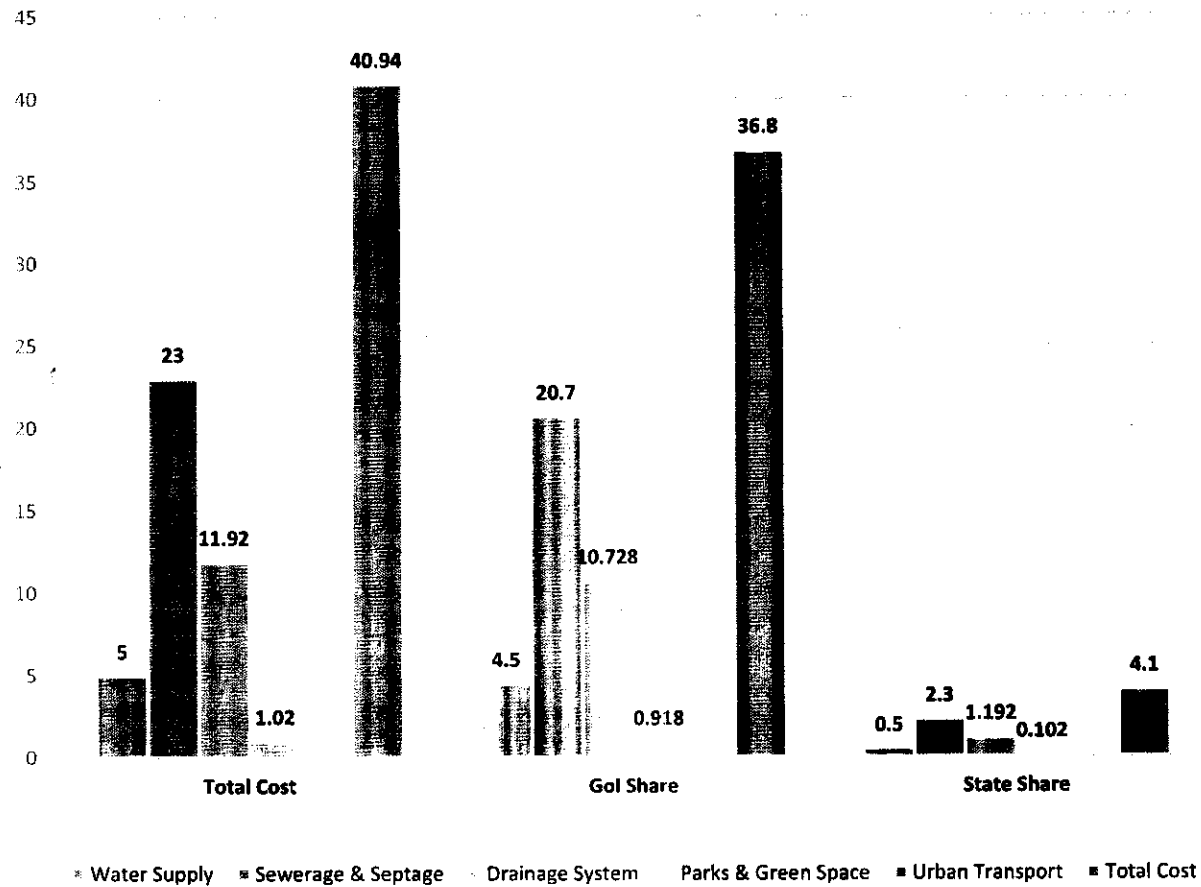


Table 1.2.2: Abstract-Break-up of Total Fund Sharing Pattern (FY 2015-2016)

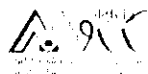
(Amount in Rs. Crores)

SR NO	SECTOR	CENTER				STATE			ULB			Conver- gence	Others	Total
		Mission	14 th finance	Others	Total	14 th Finance	Others	Total	14 th Finance	Others	Total			
1	Water Supply	4.5	0.5	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5
2	Sewerage and Septage Management	20.7	2.4	0.00	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23
3	Drainage	10.73	1.17	0.00	...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.92
4	Urban Transport	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
5	Parks & Open Spaces	0.92	0.1	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
TOTAL		36.84	4.09	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.94

Table 3.1: SAAP - Master Plan of all projects to achieve universal coverage during the current Mission period for Water Supply and Sewerage (FY 2015-16 to 2019-20)

(Amount in Crores)

Sr. No.	Name of ULB (water supply and sewerage)	Total number of projects to achieve universal coverage	Estimated Cost	Numbers of years to achieve universal coverage
1	2	3	4	5
1	Itanagar	9	139.2	5

**Table 3.2: SAAP - Sector Wise Breakup of Consolidated Investments for all ULBs in the State**

(Amount in Crores)

Name of the City	Water Supply	Sewerage and Septage Management	Drainage	Urban Transport	Green Spaces & Parks	Reforms	Total (excluding reforms)
1	2	3	4	5	6	7	8
<i>Itanagar</i>	5	23	11.92	0	1.02	2	40.94
Total Project Investment							40.94
A& OE							1.14
Grand Total							42.08

Table 3.3: SAAP - ULB Wise Source of Funds for All Sectors

Name of the City	Center	State			ULB			Convergence	Others (e.g. - Municipalities)	Total
		14 th Finance	Other	Total	14 th Finance	Other	Total			
Itanagar	36.84	4.09	0.00	4.09	0.00	0.00	0.00	0.00	40.94	
Total	36.84	4.09	0.00	4.09	0.00	0.00	0.00	0.00	40.94	
Grand Total	36.84	4.09	0.00	4.09	0.00	0.00	0.00	0.00	40.94	

Table 3.4: SAAP - Year Wise Share of Investments for All Sectors (ULB Wise)

Name of the City	Total Project Investment	Committed Expenditure (if any) from Previous year						Proposed Spending during Current Financial year						Balance Carry Forward for Next Financial Years										
		CENTER	STATE			ULB			CENTER	STATE			ULB			CENTER	STATE			ULB				
			14 th FINANCE	OTHERS	TOTAL	14 th FINANCE	OTHERS	TOTAL		14 th FINANCE	OTHERS	TOTAL	14 th FINANCE	OTHERS	TOTAL		14 th FINANCE	OTHERS	TOTAL					
Itanagar	40.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.28	1.37	0.00	1.37	0.00	0.00	0.00	24.56	2.73	0.00	2.73	0.00	0.00	0.00

Table 3.5: State level Plan for Achieving Service Level Benchmarks

Proposed Projects	Total Project Cost	Indicator	Baseline	Annual Targets based on Master Plan (Increment from the Baseline Value)						
				FY 2016		FY 2017	FY 2018	FY 2019	FY 2020	
				H	H2					
Water Supply Projects	50	1	Household level coverage of direct water supply connections	85%	85%	90%	100%	100%	100%	100%
		2	Per capita quantum of water supplied	24	245	210	175	155	150	150
		3	Quality of water supplied	70%	70%	70%	70%	100%	100%	100%
Sewerage and Septage Management	89.4	4	Coverage of latrines (individual or community)	92%	92%	96%	100%			
		5	Coverage of sewerage network services	0%	0%	0%	35%	60%	80%	100%
		6	Efficiency of collection of sewerage	0%	0%	0%	35%	60%	80%	100%
		7	Efficiency in Treatment: Adequacy of sewerage treatment capacity	0%	0%	0%	20%	60%	80%	100%
Drainage	244.52	9	Coverage of Storm water drainage network	49.7%	49.7%	52%	55%			
Urban	58.42	10	Service coverage of urban transport in the city	8%		25%	30%	35%	40%	



Transport		11	Availability of urban transport per 1000	0.41%	0.415%	0.42%				
Green Spaces and Parks	50.85	12	Enhancing Green Spaces per Person	3 %	3.0%	4.0%	4.5%	4.5%	5.0%	6.0%

Table 3.6: State Level Plan of Action for Physical and Financial Progress
SECTOR: WATER SUPPLY

Name of City	Performance Indicators	Baseline	Mission Target	For the Financial Year 2015-16			
				For Half Year 1		For Half Year 2	
				Physical Progress to be achieved	Funds to be utilized	Physical Progress to be achieved	Funds to be utilized
Itanagar	Household level coverage of direct water supply connections	85%	100%	-	-	Project will be initiated in this period	1.60
	Quality of water supplied	70%	100%	-	-		-

SECTOR: SEWERAGE & SEPTAGE MANAGEMENT

Name of City	Performance Indicators	Baseline	Mission Target	For the Financial Year 2015-16			
				For Half Year 1		For Half Year 2	
				Physical Progress to be achieved	Funds to be utilized	Physical Progress to be achieved	Funds to be utilized
Itanagar	Coverage of latrines (individual or community)	92%	100%	-	-	Project will be initiated in this period	0.00
	Coverage of sewerage network services	0 %	100%	-	-		1.70
	Efficiency of collection of sewerage	0 %	100%	-	-		0.70
	Efficiency in Treatment: Adequacy of sewerage treatment capacity	0 %	100%	-	-		5.00

SECTOR: STORM WATER DRAINAGE

Name of City	Performance Indicators	Baseline	Mission Target	For the Financial Year 2015-16			
				For Half Year 1		For Half Year 2	
				Physical Progress to be achieved	Funds to be utilized	Physical Progress to be achieved	Funds to be utilized
Itanagar	Coverage of Storm water drainage network	49.7%	100%	-	-	Project will be initiated in this period	2.0

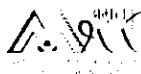
SECTOR: GREEN SPACES AND PARKS

Name of City	Performance Indicators	Baseline	Mission Target	For the Financial Year 2015-16			
				For Half Year 1		For Half Year 2	
				Physical Progress to be achieved	Funds to be utilized	Physical Progress to be achieved	Funds to be utilized
Itanagar	Enhancing green spaces per person	3 %	15% enhancement	-	-	Project will be initiated in this period	0.84

2.8. PLAN OF ACTION FOR ADMINISTRATIVE AND OTHER EXPENSES (A&OE)
Table 4: Broad Proposed Allocations for Administrative and Other Expenses

(Amount in Crores)

Sr. No	Items proposed for A&OE	Total Allocation	Committed Expenditure from previous year (if any)	Proposed spending for Current Financial year	Balance to Carry Forward			
					FY2017	FY2018	FY2019	FY2020
1	Preparation of SLIP and SAAP		0.00	0.25				
2	PDMC		0.00	0.25				
	Procuring Third Party Independent Review and Monitoring Agency		0.00	0.00				
	Publications (e-Newsletter, guidelines, brochures etc.)		0.00	0.05				
5	Capacity Building and Training - CCBP, if applicable - Others		0.00	0.20				
6	Reform implementation		0.00	0.26				
7	Others		0.00	0.13				
Total				1.14				



2.9. PLAN OF ACTION FOR REFORM IMPLEMENTATION

Table 5.1: SAAP - Reforms Type, Steps and Target for AMRUT Cities FY-2015-2016

Sr N	Type	Steps	Implementation Timeline	Target to be set by State in SAAP	
				April to Sept-2015	Oct-2015 to March- 2016
1	E-Governance	Digital ULBs			
		1 Creation of ULB website.	6 months	Yes	
		2 Publication of e-newsletter, Digital India Initiative	6 months	Yes	
		3 Support Digital India (ducting to be done on PPP mode or by the	6 months	-	-
2	Constitution and professionalization	1 Policy for engagement of interns in ULBs and implementation.	12 months	-	Yes
3	Augmenting double entry accounting	1 Complete migration to double entry accounting system and obtaining an audit certificate to the effect from FY2012-13 onwards.	12 months	-	Yes
		2 Publication of annual financial statement on website.	Every year	-	Yes
4	Urban Planning and City Development Plans	1 Preparation of Service Level Improvement Plans (SLIP), State Annual Action Plans (SAAP).	6 months	Yes	

Sr N	Type	Steps	Implementation Timeline	Target to be set by State in SAAP	
				April to Sept-2015	Oct-2015 to March- 2016
		2 Make action plan to progressively increase Green cover in cities to 15% in 5 years.	6 months	Yes	
		3 Develop at least one children park every year in the AMRUT cities.	Every year	-	Yes
		4 Establish a system for maintaining of parks, playground and recreational areas relying on People Public Private Partnership (PPPP) model.	12 months		Yes
5	Devolution of funds and functions	1 Ensure transfer of 14th FC devolution to ULBs.	6 months	Yes	-
		2 Appointment of State Finance Commission (SFC) and making decisions.	12 months	-	Yes
		3 Transfer of all 18 function to ULBs.	12 months	-	Yes
6	Review of Building by- laws	1 Revision of building bye laws periodically.	12 months	-	Yes
		2 Create single window clearance for all approvals to give building permissions.	12 months	-	Yes
7(a)	Municipal tax and	1 At least 90% coverage.	12 months	-	Yes
		2 At least 90% collection.		-	Yes

Sr N o.	Type	Steps	Implementation Timeline	Target to be set by State in SAAP	
				April to Sept-2015	Oct-2015 to March- 2016
	fees improvement	3 Make a policy to, periodically revise property tax, levy charges and other fees.		-	Yes
		4 Post Demand Collection Book (DCB) of tax details on the website.		-	Yes
		5 Achieve full potential of advertisement revenue by making a policy for destination specific potential having dynamic pricing module.		-	Yes
7(b)	Improvement in levy and collection of user charges	1 Adopt a policy on user charges for individual assessments differential rate is charged for water safeguards are included to take care of the interests of the vulnerable.	12 months	-	Yes
		2 Make action plan to reduce water losses to less than 20 % and publish on the website.		-	Yes
		3 Separate accounts charges.		-	Yes
		4 At least 90% billing.		-	Yes
		5 At least 90% collection.		-	Yes
8	Energy and Water audit	1 Energy (Street lights) and Water Audit (including non-revenue water or losses audit).	12 months	-	Yes
		2 Making STPs and WTPs energy efficient.		-	Yes
		3 Optimize energy consumption in street lights by using energy efficient lights and increasing reliance on renewable		-	Yes

Table 5.2: SAAP - Reforms Type, Steps and Target for AMRUT Cities FY-2016-2017

Sr No.	Type	Steps	Implementation Timeline	Target to be set by State in SAAP				
				April to Sept-2015	Oct-2015 to March-2016	April to Sept-2016	Oct2016 to March -2017	
1	E-Governance	1	Coverage with E-MAAS (from the date of hosting the software)					
		i	Registration of Birth, Death and Marriage,	24 Months				
		ii	Water & Sewerage Charges					
		iii	Grievance Redressal,					
		iv	Property Tax,					
		v	Advertisement tax,					
		vi	Issuance of Licenses,					
		vii	Building Permissions,					
		viii	Mutations,					
		ix	Payroll,					
		x	Pension and e-procurement.			-	-	-
2	Constitution and professionalization of municipal cadre	1	Establishment of municipal cadre.	24 Months				
		2	Cadre linked training.			-	-	-

3	Augmenting double entry accounting	1	Appointment of internal auditor.	24 Months	-	-	-	Yes
4	Urban Planning and City Development Plans	1	Make a State Level policy for implementing the parameters given in the National Mission for Sustainable Habitat.	24 Months	-	-	-	Yes
5	Devolution of funds and functions	1	Implementation of SFC recommendations within timeline.	24 Months	-	-	-	Yes
6	Review of Building by- laws	1	State to formulate a policy and action plan for having a solar roof top in all buildings having an area greater than 500 square meters and all public buildings.	24 Months	-	-	-	Yes
		2	State to formulate a policy and action plan for having Rainwater harvesting structures in all commercial, public buildings and new buildings on plots of 300 sq. meters and above.	24 Months	-	-	-	Yes
7	Municipal tax and fees improvement	1	Establish and operationalize financial intermediary- pool finance, access external funds, float municipal bonds.	24 Months	-	-	-	Yes
8	Credit Rating	1	Complete the credit ratings of the ULBs.	4 Months	-	-	-	Yes
9	Energy and Water audit	2	Give incentives for green buildings (e.g. rebate in property tax or charges connected to building permission/development charges).	24 Months	-	-	-	Yes

Table 5.3: SAAP - Reforms Type, Steps and Target for AMRUT Cities FY-2017-2018

S r N o.	Type	Steps		Implementation Timeline	Target to be set by State in SAAP					
					April to Sept-	Oct-2015 to March- 2016	April to Sept- 2016	Oct-2016 to March- 2017	April to Sept- 2017	Oct-2017 to March- 2018
1	E-Governance	1	Personnel Staff management.	36 Month	-	-	-	-	-	Yes
		2	Project management.		-	-	-	-	-	Yes
2	Urban Planning and City Development Plans	1	Establish Urban Development Authorities.	36 Month	-	-	-	-	-	Yes
3	Swachh Bharat Mission	1	Elimination of defecation.	36 Month	-	-	-	-	-	Yes
		2	Waste Collection (100%),		-	-	-	-	-	Yes
		3	Transportation of Waste		-	-	-	-	-	Yes
		4	Scientific Disposal (100%).		-	-	-	-	-	Yes
		5	The State will prepare a Policy for Right-sizing the number of functionaries on, say, population of the ULB, generation of internal resources and expenditure on salaries.		-	-	-	-	-	Yes

Table 5.4: SAAP - Reforms Type, Steps and Target for AMRUT Cities FY-2018-2019

S r N	Type	Steps	Implementa tion Timeline	Target to be set by State in SAAP								
				April to Sept- 2015	Oct-2015 to March- 2016	April to Sept- 2016	Oct-2016 to March- 2017	April to Sept- 2017	Oct-2017 to March- 2018	April to Sept- 2018	Oct- 2018 to March- 2019	
1	Urban Planning and City Development Plans	1 Preparation of Master Plan using GIS.	48 Months	-	-	-	-	-	-	-	-	Yes

Table 6.2 Checklist - Consolidated State Annual Action Plan of All ULBS To Be Sent for Assessment by MOUD

Sl. No.	Points of Consideration	Yes/No	Give Details
1	Have all the Cities prepared SLIP as per the suggested approach?	Yes	First priority has been given to universal coverage i.e. Water Supply and Sewerage/Septage.
2	Has the SAAP prioritized proposed investments across cities?	Yes	Priority has been given looking to existing service level especially for Water Supply & Sewerage.
3	Is the indicator wise summary of improvements proposed (both investments and management improvements) by State in place?	Yes	Indicator wise improvement proposal both for investment and management has been considered as per requirement
4	Have all the cities under Mission identified/done baseline assessments of service coverage indicators?	Yes	The base line assessment of service coverage has been done for Shimla city
5	Are SAAPs addressing an approach towards meeting Service Level Benchmarks agreed by Ministry for each Sector?	Yes	SAAP has been prepared to meet Service Level Benchmarks as agreed by Ministry for each Sector.
6	Is the investment proposed commensurate to the level of improvement envisaged in the indicator?	Yes	Investment proposed commensurate with Service Level
7	Are State Share and ULB share in line with proposed Mission approach?	Yes	State Share shall be 20% & ULB Share shall be 30%.
8	Is there a need for additional resources and have state considered raising additional resources (State programs, aided projects, additional devolution to cities, 14th Finance Commission etc.)?	Yes	Efforts are being made to mobilize additional financial resource through 14th Finance Commission, and State Program etc.
9	Does State Annual Action Plan verify that the cities have undertaken financial projections to identify revenue requirements for O & M and repayments?	Yes	SAAP has been prepared considering O & M charges to be reimbursed by collecting user charges. Cost of O & M shall be borne by concerned ULB. Additional funds required for O & M and repayment shall be worked out while preparing the DPR

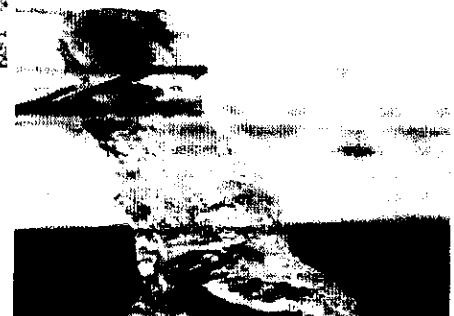
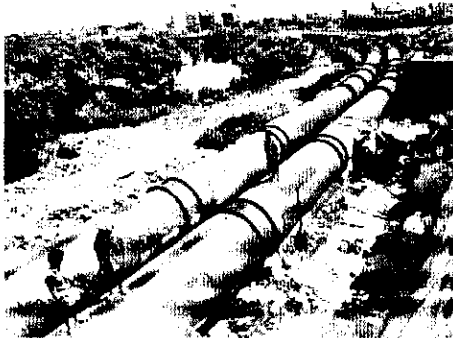
Sl. No.	Points of Consideration	Yes/No	Give Details
10	Has the State Annual Action Plan considered the resource mobilization capacity of each ULB to ensure that ULB share can be mobilized?	Yes	SAAP has been prepared considering Financial Positions of ULB & if required funds shall be raised through financial institutions.
11	Has the process of establishment of PDMC been initiated?	Yes	The appointment of PDMC has not been started
12	Has a roadmap been prepared to realize the resource potential of the ULB?	Yes	The resource potential of ULB has been considered while preparing the SAAP.
13	Is the implementation plan for projects and reforms in place (Timelines and yearly milestones)?	Yes	All Departments concerning implementation of reforms has been directed to implement reforms in given time lines.
14	Has the prioritization of projects in ULBs been done in accordance with para 7.2 of the guidelines?.	Yes	Prioritization of project has been done accordance with Para 7.2 guidelines. Priority is given where the service level gap is more in order to achieve universal coverage.

SERVICE LEVEL IMPROVEMENT PLAN (SLIP)

FOR WATER SUPPLY UNDER



*Atal Mission for Rejuvenation
and Urban Transformation*



Submitted To,
Ministry of Urban Development,
Govt. of India

Submitted By
M. H. KHAN, IAS (Retired)
New Delhi
On Behalf of Department of Town Planning & ULB
Govt. of Arunchal Pradesh
Itanagar



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 & b). This will also include existing institutional framework for the sector. AMRUT is focused on improvement in service levels. The zone wise data should 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 apart for 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)

Answer: In terms of base line information for water supply city have City Development Plan (CDP)-December 2006, Departmental Data of water supply in the municipal area, Details of plans and reports of water supply, Data of Door to Door Survey conducted in January 2013 and Census data 2011. Water Supply Zones are divided on the basis of zonal reservoirs serving to the particular colonies and Sectors. The zone wise information about users, demand and supply is available at department level.

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

Answer: Yes, we have collected census 2011 data and correlated our data with census and the base line survey data's of the Ministry. The minor variation are found due to increase in population over time.

Table: Status of Water Supply service levels

Sr. No.	Indicators	Present Status	MOUD Benchmark	Reliability
1	Coverage of water supply connections (census 2011)	85.00%	100.00%	B
2	Per capita supply of water (As per census 2011)	245.9 LPCD	135 LPCD	C
3	Extent of metering of water connections	0.00%	100.00%	A
4	Extent of non-revenue water	35 %	20.00%	C
5	Quality of water supplied	65 %	100.00%	B
6	Cost recovery in water supply services	22.84%	100.00%	C
7	Efficiency in collection of water supply related charges	69.60%	90.00%	C

Question: How do you estimate the water supply system to be reliable and efficient? (75 words)

Answer: The Gap is self-explanatory from the above table.

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?

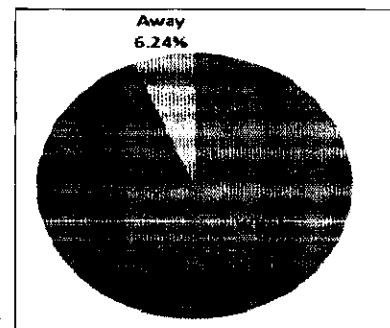
The main source for water supply systems in the region is surface water. Present capacity of this water supply source is around 128 MLD, however, the 25 MLD water is being tapped only to cater the current demand. Out of the total 25 MLD water supply to Itanagar Capital Complex, Itanagar receives 18 MLD water (From Mehi River (11 MLD) and the Senki River (7 MLD)) whereas remaining 7 MLD water from other source is supplied to Naharlagun and Nirjuli

Details of Water Supply

Sl. No.	Source	Capacity of the System	Area Supplied	Treatment Facility
1	Mehi River	11 MLD	Itanagar	Water Treatment Plant
2	Senki River	7 MLD	Itanagar	Filtration Plant
3	Nyrochi River	7 MLD	Naharlagun	Primary treatment, i.e. Chlorination
	Dam site			
	Kankar River			
	Near Youth Hostel			
	Nirjuli Nallah			
4	Karmajuli Nallah		Nirjuli	
	Karmajuli Nallah			
Total	All Sources	25 MLD	Itanagar Capital Complex (Partial)	-

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

Yes, treatment is provided to water from these sources. 25 MLD water is being treated daily through three treatment plants located at Senkiview (7 MLD), Gekerputung (11 MLD) & Rakap colong (3.5 MLD). In Naharlagun water treatment plant is located near the Rakap Colony and its treatment capacity is 3.5 MLD.



Access to Water Supply

Question: What per capita water supply in LPCD (litre per capita per day) comes out, if you divide total water supply by the total population.

Per capita water supply in LPCD (litre per capita per day) on dividing total water supply by the total population comes as 245.9 LPCD as per 2011 census population. Considering population projections @ 5% growth rate for 2015 it comes around 192 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?

Answer: The Itanagar capital region is divided in Itanagar Town and Naharlagun zones. Further there are 3 sub zones in Itanagar and 4 sub zones in Naharlagun area.

Table: Zone Wise Coverage of Households

Table: 102 Provide details of total no of Households (HH) in each zone, no of HH with and without water tap connections in the Table

Households by Access to Water Supply (Census of India, 2011)								
	Nos. of Households	Tap (treated source)	Tap (untreated source)	Hand-pump	Tube-well/ Bore well	Well (Covered)	Well (Uncovered)	All Other
Within Premises	13,868	11,807	1,130	7	140	604	180	-
Near Premises	4,530	2,461	710	19	122	398	376	444
Away	1,225	401	94	16	30	94	110	480
Urban-Total	19,623	14,669	1,934	42	292	1,096	666	924
%	100	74.75	9.86	0.21	1.49	5.59	3.39	4.71

STORAGE OF WATER

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

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

The storage capacity for Itanagar capital complex has been estimated 30% of total supply. Over Head Service Reservoir (OHSR) and Under Ground Reservoir (UGR) accounts 62% for the capital complex. There are 62 numbers of Storage reservoir. Out of which in 34 Itanagar, 21 in Naharlagun and 7 are in Nirjuli.

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

Answer: No City does not need ground level reservoirs to store raw treated water.

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

Water is supplied to the consumers by ESRs and at some locations from GSR through direct pumping.

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

Yes, although overall capacity is sufficient to meet the current demand of the city. However in some area (new and old) there is a deficit of the storage reservoir.

DISTRIBUTION NETWORK

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

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

The total length of the distribution system in Itanagar capital complex is 89 km (source: CSP, 2013). Besides this there are 33 Km transmission and 48.17 km rising main network is also available to bring water to supply tanks. The details are given as below.

Water Supply Transmission Line Details for Itanagar

S. No.	From	To	Length (km)	Diameter (mm)
1	Mophu River	Mehi River	3	450
2	Mehi River	Water Treatment Plant(WTP)	15	450
3	WTP	Mowb II	15	450
Total			33	

Raising Main Details for Itanagar

S. No.	From	To	Length (km)	Diameter (mm)
1	WTP	Service Reservoir(1)	11.2	200
2	WTP	Service Reservoir(2)	3.05	100
3	WTP	Service Reservoir(3)	7.52	300
4	Service Reservoir	Tank(1)	1.5	300
5	Service Reservoir	Tank(2)	0.2	250
6	Service Reservoir	Tank(3)	2	200
7	Service Reservoir	Tank(4)	13.45	150
8	Service Reservoir	Tank(5)	8.2	100
9	Service Reservoir	Tank(6)	1.05	80
Total			48.17	

Question: What is the total road length in the city? Is the pipe lines are laid in all streets? Is the objective of universal coverage of water supply pipe line is achieved?

The total road length of the city is approx. 262.7 Km. Pipe line is not laid on all the streets. No, the objective of universal coverage of water supply pipe line is yet not achieved, the gaps are already stated.

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

The pipe materials used in distribution system includes DI, ERW, MS, PVC and GI pipes.

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

Table: Zone Wise length of distribution network

Zone No.	Total Street Length	Street length with water distribution pipe line	Street length without water distribution pipe line
1	262.7	170	92.7

INSTITUTIONAL FRAMEWORK

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

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

Table: Functions, roles, and responsibilities

Planning and Design	Construction/ Implementation	O&M
PHE and Water Supply Department	PHED and Water Supply Department	PHE and Water Supply Department

Question: How city is planning to execute projects?

City is planning to continue with the institutional system in place.

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

Implementation of projects will be done by PHE & WS Department

2. BRIDGE THE GAP

Identify gaps in service delivery and service levels in the city based on initiatives undertaken in different ongoing programs and projects by Corporations and developed to bridge the gaps to achieve universal coverage (AMRUT Guidelines para 8.2.9, 8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5, 8.3.6, 8.3.7, 8.3.8, 8.3.9, 8.3.10, 8.3.11, 8.3.12, 8.3.13, 8.3.14, 8.3.15, 8.3.16, 8.3.17, 8.3.18, 8.3.19, 8.3.20, 8.3.21, 8.3.22, 8.3.23, 8.3.24, 8.3.25, 8.3.26, 8.3.27, 8.3.28, 8.3.29, 8.3.30, 8.3.31, 8.3.32, 8.3.33, 8.3.34, 8.3.35, 8.3.36, 8.3.37, 8.3.38, 8.3.39, 8.3.40, 8.3.41, 8.3.42, 8.3.43, 8.3.44, 8.3.45, 8.3.46, 8.3.47, 8.3.48, 8.3.49, 8.3.50, 8.3.51, 8.3.52, 8.3.53, 8.3.54, 8.3.55, 8.3.56, 8.3.57, 8.3.58, 8.3.59, 8.3.60, 8.3.61, 8.3.62, 8.3.63, 8.3.64, 8.3.65, 8.3.66, 8.3.67, 8.3.68, 8.3.69, 8.3.70, 8.3.71, 8.3.72, 8.3.73, 8.3.74, 8.3.75, 8.3.76, 8.3.77, 8.3.78, 8.3.79, 8.3.80, 8.3.81, 8.3.82, 8.3.83, 8.3.84, 8.3.85, 8.3.86, 8.3.87, 8.3.88, 8.3.89, 8.3.90, 8.3.91, 8.3.92, 8.3.93, 8.3.94, 8.3.95, 8.3.96, 8.3.97, 8.3.98, 8.3.99, 8.3.100). Each of the identified objectives will be achieved through the following initiatives: (i) the opportunity to bridge the gap.

Question: List out initiatives undertaken in different ongoing programs and projects to address these gaps. For this provide details of ongoing projects being carried out for sector under different schemes with status and when the existing projects are scheduled to be completed? Provide information in Table

Table: Status of Ongoing/ Sanctioned

S. No.	Name of Project	Scheme Name	Cost	Month Compilation	of	Status (as on Date)
1	Nil	Nil	Nil	Nil		No. Ongoing project

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)

The Existing system is able to provide water supply to the major area of town (around 85 % coverage).

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

Answer: Yes, there is a need of additional infrastructure of water supply system. The requirement are as below:-

1. Distribution network and other support structures for Missing links, newly developed / habited area and few slum pockets to achieve the universal coverage. (Immediate requirement – first Priority)
2. Treatment plant and additional water source for Naharlagun & Nirjuli area. . (Immediate requirement – first Priority)
3. Provide zonal reservoirs for equitable and continuous supply.
- 4.To reduce the NRW (increase the per capita supply and supply hours without more infrastructure creation): NRW study, Condition assessment of WS infrastructure, replacement of the old pipes/refurbish the distribution network, installation of bulk flow meters and establishment of DMA's.
5. Energy audit, replacement of pumps, old lines and installation of SCADA system to reduce the O&M cost.

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?

No replacement projects are proposed in this stage. Only Infrastructure deficit area is considered to increase the coverage and availability of treated water.

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

No, city yet not conducted any assessment/study of Non-Revenue Water. However, in preliminary study /door to door sample survey in 2013 it is assessed around 45%

Yes, City is planning to reduce NRW through proper studies and revamping of the distribution system.

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

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.

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

Yes, each identified objectives will be evolved from the outcome of assessment along with citizen consultation.

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

Yes, each objective meets the opportunity to bridge the gap.

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

1. Distribution network and other support structures for Missing links, newly developed / habited area and few slum pockets to achieve the universal coverage. (Immediate requirement – first Priority)
2. Treatment plant and additional water source for Nahariagun & Nirjuli area. . (Immediate requirement – first Priority)
3. Provide zonal reservoirs for equitable and continuous supply.
4. To reduce the NRW (increase the per capita supply and supply hours without more infrastructure creation): NRW study, Condition assessment of WS infrastructure, replacement of the old pipes/refurbish the distribution network, installation of bulk flow meters and establishment of DMA's.
5. Energy audit, replacement of pumps, old lines and installation of SCADA system to reduce the O&M cost.

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.

Sr. No.	Objective	Activities	Financing Source
1	Distribution network and other support structures for Missing links, newly developed / habited area	Laying of Distribution lines in the infrastructure deficit area/Outer Growth, Construction of Storage	AMRUT Funding (as per sharing pattern); O&M through user charges;

	and few slum pockets to achieve the universal coverage. (Immediate requirement – first Priority)	reservoirs, Valves specials etc.	
2	Treatment plant and additional water source for Naharlagun & Nirjuli area. (Immediate requirement – first Priority)	Construction of treatment plant for Naharlagun area, Head works for Source, storage works	AMRUT Funding (as per sharing pattern); O&M through user charges;
3	Energy & Water Audit	NRW Study, Condition assessment study of water supply asset, identification of pipes to be refurbish /replaced, Identification of locations and nos. for installation of bulk flow meters, establishment of DMA's. Energy consumption assessment of pumping machineries and recommendations for reduction.	AMRUT Funding (Audits through A&OE budget, 100% central funding); O&M through user charges;
4	Provide zonal reservoirs for equitable and continuous supply. NRW reduction and automation of services.	Construction of Storage and Service reservoirs as per annex. Implementation of Audit recommendation. Replacement of pumps, old lines and installation of SCADA system to reduce the O&M cost. Installation of automation instruments	AMRUT Funding (as per sharing pattern); O&M through user charges;

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

Presently there is no convergence option is available, however convergence will be explored at the time of preparation of DPR. The energy conservation programme can also be converged with solar mission.

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

No ongoing project.

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

It is found from past experiences that delay in projects and cost overrun is due to approvals from line departments. All the land issues and approval will be taken in advance before the initiation of the project. The project will be closely monitored during its execution and corrective action will be taken in time.

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

The O& M cost is proposed to be recover through levy of user charges /additional surcharges. In case the 'user fee' is not sufficient to meet full cost of operation, the Municipal Council may meet the O&M cost of water supply through other Taxes.

Question: Will metering system for billing introduced?

No

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

Yes, NRW reduction project is taken up. Project also includes automation through SCADA and energy audit.

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

Yes, each objective meets the opportunity to bridge the gap.

Sr. No.	Objective	Activities	Financing Source
1	Distribution network and other support structures for Missing links, newly developed / habited area and few slum pockets to achieve the universal coverage. (Immediate requirement – first Priority)	Laying of Distribution lines in the infrastructure deficit area/Outer Growth, Construction of Storage reservoirs, Valves specials etc	AMRUT Funding (as per sharing pattern); O&M through user charges;
2	Treatment plant and additional water source for Naharlagun & Nirjuli area. (Immediate requirement – first Priority)	Construction of treatment plant for Naharlagun area, Head works for Source, storage works	AMRUT Funding (as per sharing pattern); O&M through user charges;
3	Energy & Water Audit	NRW Study, Condition assessment	AMRUT Funding (Audits

		study of water supply asset, identification of pipes to be refurbish /replaced, Identification of locations and nos for installation of bulk flow meters, establishment of DMA's. Energy consumption assessment of pumping machineries and recommendations for reduction.	through A&OE budget, 100% central funding); O&M through user charges;
4	Provide zonal reservoirs for equitable and continuous supply. NRW reduction and automation of services.	Construction of Storage and Service reservoirs as per annex. Implementation of Audit recommendation. Replacement of pumps, old lines and installation of SCADA system to reduce the O&M cost. Installation of automation instruments	AMRUT Funding (as per sharing pattern); O&M through user charges;

City will organize ward level 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 identified. The project selection and prioritization will be done based on the feedback received. The project selection and prioritization will be done based on the feedback received. The project selection and prioritization will be done based on the feedback received. Please explain following questions in not more than 200 words detailing out the needs, aspirations and wishes of the local people.

Question: Has all stakeholders involved in the consultation?

Yes, Almost consultation with all the stock holders has been done.

The consultation with RWAs, Councilors, MPs, MLA, Mayors and on various open platform has been conducted to identify field deficiency and prioritization of the projects.

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

Yes, up to the extent possible open ward and zone level consultations has been made.

Question: Has alternative proposed above are crowd sourced?

No.

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

The project selection and prioritization and modification has been done with due weightage to the citizen feedback.

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

Yes, Alternative taken up for discussions are prioritized on the basis of consultations as per AMRUT guidelines.

Question: What methodology adopted for prioritizing the alternatives?

The AMRUT guidelines are followed for the prioritization of the projects. Project to achieve universal coverage (with weightage to poor's affected with in this) is given first priority as per more with less approach. After this Treatment plant is given the next priority as per the demand of citizens and keeping in mind the health concerns of the citizens. Besides this citizen consultation, other approvals, coverage, benefit to urban poor are given due weightage up to the extent possible for prioritization.

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?

For Project components, AMRUT project fund will be the source as per sharing pattern given in the guidelines.

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

It will considered at DPR stage.

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

Yes the focus remains on only laying of lines in the new area.

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

Yes, universal coverage (with weightage to poor's affected with in this) is given first priority.

6. CONDITIONALITIES

Describe in not more than 300 words the Conditionality 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.

Land clearance is not a major issue in Arunachal Pradesh .Clearance with various departments will be taken before initiation of the project.

7. RESILIENCE

Required approvals will be sought from ULBs and competent authority and resilience factor would be built in to ensure environmentally sustainable water supply scheme. Describe in not more than 300 words regarding resilience built in the proposals.

Before initiation of the project required approvals will be sought from ULBs and competent authority and resilience factor would be built in to ensure environmentally sustainable water supply scheme

8. FINANCIAL PLAN

Once the activities are finalized and prioritized after consultations, investments both in terms of capital cost and O&M cost has to be estimated. (AMRUT Guidelines; para 6.5) Based on the investment requirements, different sources of finance have to be identified. Financial Plan for the complete life cycle of the prioritized development will be prepared. (AMRUT Guidelines; para 4, 6.6, 6.12, 6.13 & 6.14). The financial plan will include percentage share of different stakeholders (Centre, State and City) including financial convergence with various ongoing projects. While preparing finance plan please reply following questions in not more than 250 words

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

The new infrastructure creation is limited to the infrastructure deficient area (Missing Links) and the area where no lines (Outer Growth)

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

At present it is proposed that the projects identified will be financed by AMRUT only.

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

Yes, Plan is discussed with state officials

Question: How the proposed financial structure is sustainable?

Yes, Present financial structure is sustainable.

Question: How the proposed financial assumptions are listed out?

Yes, financial assumptions have been listed out.

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

Yes, financial plan for the complete life cycle of the prioritized development is prepared

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

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

Question: Does it include financial convergence with various ongoing projects

Only one project is going on which is likely to complete up to December 2015.

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

Yes, it provides year-wise milestones and outcomes.

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

Table 8.1 Master Plan of Water Supply Projects for Mission period
(As per Table 2.1 of AMRUT guidelines)

Sr. No.	Objective	Activities	Financing Source
1	Distribution network and other support structures for Missing links, newly developed / habited area and few slum pockets to achieve the universal coverage. (Immediate requirement – first Priority)	Laying of Distribution lines in the infrastructure deficit area/Outer Growth, Construction of Storage reservoirs, Valves specials etc.	AMRUT Funding (as per sharing pattern); O&M through user charges;
2	Treatment plant and additional water source for Naharlagun & Nirjuli area. (Immediate requirement – first Priority)	Construction of treatment plant for Naharlagun area, Head works for Source, storage works	AMRUT Funding (as per sharing pattern); O&M through user charges;
3	Energy & Water Audit	NRW Study, Condition assessment study of water supply asset, identification of pipes to be refurbish /replaced, Identification of locations and nos. for installation of bulk flow meters, establishment of DMA's. Energy consumption assessment of pumping machineries and recommendations for reduction.	AMRUT Funding (Audits through A&OE budget, 100% central funding); O&M through user charges;
4	Provide zonal reservoirs for equitable and continuous supply. NRW reduction and automation of services.	Construction of Storage and Service reservoirs as per annex. Implementation of Audit recommendation. Replacement of pumps, old lines and installation of SCADA system to reduce the O&M cost. Installation of automation instruments	AMRUT Funding (as per sharing pattern); O&M through user charges;

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

Table 8.1 Master Plan of Water Supply Projects for Mission period

(As per Table 2.1 of AMRUT guidelines)

S. No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost in INR
1	Laying of distribution lines in outer growth and missing links where habitation already in place.	1	2015-16	2017-18	5 Cr
2	Treatment plant for Naharlagun area	2	2015-16	2017-18	8 Cr.
3	Energy and water Audit	3	2015-16	2016-17	2 Cr
4	Construction of zonal reservoirs and All other/ non coverage works	4	2016-17	2018-19	35 Cr

8.2 DETAILS OF PRIORITIZED PROJECTS PREPARED UNDER AMRUT DURING CURRENT FY 2015-16

(As per Table 2.1 of AMRUT guidelines)

Sr. No.	Project Name	Physical Components	Change in Service Levels			Estimated Cost in INR
			Indicator	Existing (As-is)	After (To-be)	
1	Laying of distribution lines in outer growth and missing links where habitation already in place.	Laying of water supply lines	Coverage	85	100	5

ANNUAL FUND SHARING PATTERN FOR WATER SUPPLY PROJECTS

(As per Table 2.3.1 of AMRUT guidelines)

Sr. No.	Project Name	Total Project Cost	Share in INR (Values are in Crore)				
			GOI	State	ULB	Others	Total
1	Laying od distribution lines in outer growth and missing links where habitation already in place.	5 Cr.	4.5	0.5	0	0	5
	TOTAL		4.5 Cr	0.5 Cr			5 Cr.

ANNUAL FUND SHARING BREAK-UP FOR WATER SUPPLY PROJECTS

(As per table 7.1 of AMRUT guidelines)

All values are in Cr.

S N	Project Name	GOI	State			ULB			Convergence	others	Total Amount in INR
			14 th FC	Others	Total	14th FC	Others	Total			
1	Laying od distribution lines in outer growth and missing links where habitation already in place.	4.5 Cr	0.5 Cr	0	0	0	0	5 Cr	0	0	5 Cr.
2	Treatment plant for Naharlagun area	7.2 Cr	0.8 Cr	0	0	0	0	8 Cr.	0	0	8 Cr.
3	Energy and water Audit	2 Cr (A & OE)	0	0	0	0	0	2 Cr	0	0	2 Cr.
4	Construction of zonal reservoirs and All other/ non coverage works	31.5 Cr	3.5 Cr	0	0	0	0	35 Cr	0	0	35 Cr.

YEAR WISE PLAN FOR SERVICE LEVEL IMPROVEMENTS

(As per table 1 of AMRUT guidelines)

Proposed Projects	Project Cost in INR	Indicator	Baseline	Annual Targets					
				(Increment from the Baseline Value)					
				FY 2016		FY 2017	FY 2018	FY 2019	FY 2020
				H1	H2				
Laying of distribution lines in outer growth and missing links where habitation already in place.	5 Cr	Coverage	85%	0	90%	100%	100%	100%	100%
Treatment plant for Naharlagun area	8 Cr	Water Quality	70%	70	70	70	100	100	100
Energy and water Audit	2 Cr	NRW Assessment	-	-	-	-	-	-	-
Construction of zonal reservoirs and non-coverage item including NRW reduction	35 Cr	Storage , NRW	30, 40	30, 40	30, 40	35, 40	40, 35	45, 30	45, 25

SERVICE LEVEL IMPROVEMENT PLAN (SLIP)

FOR DRAINAGE SYSTEM UNDER



*Atal Mission for Rejuvenation
and Urban Transformation*

Submitted To,
Ministry of Urban Development,
Govt. of India

Submitted By
ANIL KUMAR SINGH
New Delhi
On Behalf of Department of Town Planning & ULB
Govt. of Arunachal Pradesh
Itanagar

1. ASSESS THE SERVICE LEVEL GAP

Question: 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)

Answer: The base line information available to the city for drainage system are City Development Plan (CDP)-2006, Departmental Data of capital region area, Details of drainage system available in City Sanitation Plan (CSP) and Census data 2011. Zone wise drainage system for Itanagar Township has not been done.

Question: 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)

Answer: As of now there is no record of baseline survey data of MoUD in the state of Arunachal Pradesh. However, the necessary data have been collected as per the records of census 2011 as well as the City Sanitation Action Plan, 2014 of Itanagar Capital Complex prepared by the Department of UD & H, GoAP.

Table 1: Status of Storm Water Level service levels

S. 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%	49.7 %
2	Incidence of sewerage mixing in the drains ¹	0%	<25%	<50%	90 %
3	Incidence of water logging ² (in nos. per year)	0	<25	<50	92

There are 61 number of drains aggregating to 130.6 km of length in Itanagar Capital Complex. This includes 45 numbers of drains aggregating to 75.5 km of length in Itanagar and 16 numbers of drains aggregating to 55.1 km of length in Naharlagun, which are to be channelized and networked.

Question: 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)

Answer: The mathematical Gap in service level are self-explanatory from the above table.

Question: What are major challenge facing the city in regard to achieving these service level benchmarks? (75 words)

Answer: The network of drains in the city is approximate 47% of the road network in the city. This system shortage along with torrential rains for a considerable longer period, Inadequate capacities of

¹ The incidence of sewerage mixing in the drains is the percentage of drains which are not channelized and networked.

drains make the system ineffective which needs to be developed/refurbished immediately. The inadequate funds to develop the required facilities/ to achieving these service level benchmarks is the key challenge city is facing

Question: Identify gaps in capacity in managing the services efficiently and also provide an innovative solution for efficiently managing these services. (100 words)

Answer: The Drainage master plan of the capital region is yet not prepared. There is a shortage of dedicated drainage network, manpower, cleaning machines for drains etc. Separate asset is not maintained and recorded for drainage. Human settlement along the banks of natural rivers streams, nallahs and encroachment on drains is the bigger problem. For efficiently management of drainage services drainage master plan should be prepared and accordingly drainage networks should be developed. Rules and strong penalty/punishment should be imposed on encroachment of the drains/drainage path and uncontrolled human settlement along the banks of natural rivers streams and nallahs should be restricted. Dedicated staff with adequate resources should also need to appoint for better management.

Question: 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? (75 words)

Answer: There is no on-going drainage project in the city. Yet, no proper storm water drainage projects have been implemented in Itanagar capital complex apart from the drainage constructed under road projects.

COVERAGE OF DRAINS

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

Question: 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?

Answer: Presently, the surface water and the waste water from the household are collected by the roadside drains & then to the natural streams and nallahs. There are 32 nos. of natural drains and 61 numbers of manmade drains aggregating to 130.6 km of length exists within the Itanagar Capital Complex as per the records of City sanitation Action Plan (CSAP) and City Development Plan (CDP).

The total road length in Itanagar Capital Region is 262.7 km. Hence the coverage of road side drain is estimated to be 49.7 % w.r.t. the total length of road networks in the region.

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

Answer: The capacity of roadside drain to carry the surface water is inadequate. The roadside drains have been designed to carry the surface water and cannot accommodate the discharge of storm water drain. Natural steep slopes of the drains make them unstable. These drains are eroding the surrounding

lands, which in turn causing danger to the lives and properties of the dwellers living near the drains Due to encroachment, high rate of silting, dumping of garbage and sewage/sullage infusions majority of drains are choked and not working to their full capacity. The situation became worst due to lack of proper storm water drainage network and high rate of rainfall Thus present drainage is insufficient to carry the peak flow of the catchment/water shed and needs immediate refurbished.

Question: 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?

Answer: No, city do not have separate sewerage/storm water drainage network system. Due to lack of sewerage system, individual septic tanks and community septic tanks are adopted for the collection of the effluents. The surface water and grey water mixes are flown naturally into the main natural nallahs and streams haphazardly

Table 2: Detail of Locations where storm water get mixed with sewer

S. No.	Locality/Ward No.	Merging with Which Sewer	Reason
1	Ward No.1	Not in Practice	No Sewerage System
2	Ward No.2	Not in Practice	No Sewerage System
3	Ward No. 3	Not in Practice	No Sewerage System
4	Ward No. 4	Not in Practice	No Sewerage System
5	Ward No. 5	Not in Practice	No Sewerage System
6	Ward No. 6	Not in Practice	No Sewerage System
7	Ward No. 7	Not in Practice	No Sewerage System
8	Ward No. 8	Not in Practice	No Sewerage System
9	Ward No. 9	Not in Practice	No Sewerage System
10	Ward No. 10	Not in Practice	No Sewerage System
11	Ward No. 11	Not in Practice	No Sewerage System
12	Ward No. 12	Not in Practice	No Sewerage System
13	Ward No. 13	Not in Practice	No Sewerage System
14	Ward No. 14	Not in Practice	No Sewerage System
15	Ward No.15	Not in Practice	No Sewerage System
16	Ward No. 16	Not in Practice	No Sewerage System
17	Ward No. 17	Not in Practice	No Sewerage System
18	Ward No. 18	Not in Practice	No Sewerage System
19	Ward No. 19	Not in Practice	No Sewerage System
20	Ward No. 20	Not in Practice	No Sewerage System
21	Ward No. 21	Not in Practice	No Sewerage System
22	Ward No. 22	Not in Practice	No Sewerage System
23	Ward No. 23	Not in Practice	No Sewerage System
24	Ward No. 24	Not in Practice	No Sewerage System
25	Ward No. 25	Not in Practice	No Sewerage System
26	Ward No. 26	Not in Practice	No Sewerage System
27	Ward No. 27	Not in Practice	No Sewerage System
28	Ward No. 28	Not in Practice	No Sewerage System

29	Ward No. 29	Not in Practice	No Sewerage System
30	Ward No. 30	Not in Practice	No Sewerage System

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

Answer: There is no sewerage system in place. During the peak rainy period, torrential rain occurs for which absence of drainage causes overflows in most of the places in the capital region. Which creates instances of some water-logging along with landslides. The mixing of sewerage and storm water creates very unhygienic conditions and health hazards.

WATER LOGGING

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

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

Answer: There is no major water logging problem in Itanagar Township due to hilly topography. Few water logging problems are experienced in Naharlagun, Nirjuli and Banderdewa due to blockage of the water ways by encroachment. The water logging problem is handled by removing encroachments through eviction, cleaning and de-silting. Due to hilly topography, water logging problem is less in Itanagar Township compared to other cities. However due to heavy rain, downpour flash flood are quite often experienced.

Table 3: Flood prone points in the city

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")
1	Key road intersection	5	4 times
2	Along roads (50 m length or more)	9	4 times
3	Locality (affecting 50 HH or more)	12	3 times

CHOCKING OF DRAINS

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

Answer:

Table 4: Detail of Locations prone to chocking of drains due to solid waste

S. No.	Location/Ward No	Stretch Length Affected	Reason
1	Ward no 1	800 m	Heavy rainfall causing silting and littering of garbage
2	Ward no 2	1800 m	Heavy rainfall causing silting and littering of garbage
3	Ward no 3	600 m	Heavy rainfall causing silting and littering of garbage
4	Ward no 4	950 m	Heavy rainfall causing silting and littering of garbage
5	Ward no 5	1450 m	Heavy rainfall causing silting and littering of garbage
6	Ward no 6	350 m	Heavy rainfall causing silting and littering of garbage

7	Ward no 7	2300 m	Heavy rainfall causing silting and littering of garbage
8	Ward no 8	1250 m	Heavy rainfall causing silting and littering of garbage
9	Ward no 9	1650 m	Heavy rainfall causing silting and littering of garbage
10	Ward no 10	1850 m	Heavy rainfall causing silting and littering of garbage
11	Ward no 11	2450 m	Heavy rainfall causing silting and littering of garbage
12	Ward no 12	950 m	Heavy rainfall causing silting and littering of garbage
13	Ward no 13	1750 m	Heavy rainfall causing silting and littering of garbage
14	Ward no 14	1000 m	Heavy rainfall causing silting and littering of garbage
15	Ward no 15	950 m	Heavy rainfall causing silting and littering of garbage
16	Ward no 16	700 m	Heavy rainfall causing silting and littering of garbage
17	Ward no 17	1550 m	Heavy rainfall causing silting and littering of garbage
18	Ward no 18	1200 m	Heavy rainfall causing silting and littering of garbage
19	Ward no 19	750 m	Heavy rainfall causing silting and littering of garbage
20	Ward no 20	1700 m	Heavy rainfall causing silting and littering of garbage
21	Ward no 21	2500 m	Heavy rainfall causing silting and littering of garbage
22	Ward no 22	1850 m	Heavy rainfall causing silting and littering of garbage
23	Ward no 23	3100 m	Heavy rainfall causing silting and littering of garbage
24	Ward no 24	1450 m	Heavy rainfall causing silting and littering of garbage
25	Ward no 25	1600 m	Heavy rainfall causing silting and littering of garbage
26	Ward no 26	1950 m	Heavy rainfall causing silting and littering of garbage
27	Ward no 27	1800 m	Heavy rainfall causing silting and littering of garbage
28	Ward no 28	1650 m	Heavy rainfall causing silting and littering of garbage
29	Ward no 29	1750 m	Heavy rainfall causing silting and littering of garbage
30	Ward no 30	400 m	Heavy rainfall causing silting and littering of garbage

Question: How presently the problem is addressed? (100 words)

Answer: Due to lack of fund, man & Machineries, choking of drains is not properly addressed apart from periodical cleaning and de-silting. Proper drainage and sewerage system is urgently required to be adopted in a systematic manner with proper design parameters.

Institutional Framework

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

Answer: Functions, roles, and responsibilities

Table 5: Functions, Roles and Responsibility

Planning and Design	Construction/ Implementation	O&M
For Storm Water drains - Department of Urban Development	For Storm Water drains - Department of Urban	For Storm Water drains -Department of Urban Development & Housing

& Housing (DUDH), For Road Side drains- Public Works Deptt & Urban Local Bodies (IMC)	Development & Housing (DUDH), For Road Side drains- Public Works Deptt & Urban Local Bodies (IMC)	(DUDH), For Road Side drains- Public Works Deptt & Urban Local Bodies (IMC)
---	---	---

Question: How city is planning to execute projects?

Answer: City is planning to execute the projects through Itanagar Municipal council.

Question: 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.

Answer: The project shall be implemented by the Itanagar Municipal Council.

2. BRIDGE THE GAP

Status of Ongoing/ Sanctioned

Table 6: Status of Ongoing/Sanctioned Projects

S. N	Name of Project	Scheme Name	Cost	Month of Completion	Status (as on date)
1	Nil	Nil	Nil	Nil	Nil

Question: 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)

Answer: The proposed existing system will addressed the existing gap in the storm water drainage system to a great extent. The approval of the above proposals will cover almost all the wards of Itanagar Municipality and choking and stagnation of water problem will be reduced invariably.

Question: Does the city require additional infrastructure to improve the services? What kind of services will be required to fulfill the gap? (100 words)

Answer: Yes, the city requires additional infrastructure to improve the services. The services required to address drainage problem are as below-

1. Drainage master plan for a systematic drainage infrastructure development.
2. Construction of missing links of primary secondary and main drains and integration of the existing system.
3. Proper slope of drains and widening & deepening of critical Nalliah's to prevent encroachment.
4. Modification of cross drainage works.
5. Provision of retaining walls, boulder aprons, green passage along both sides of the natural streams and nallahs and similar erosion and flood control measures to control land slide and erosion.

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? (100 words)

Answer: Under The proposed projects optimum utilization of the existing network is proposed. New network is proposed where there is no network only.

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

Answer: Yes, the city has conducted O&M cost assessment of the drains. The specific data of drainage O& M cost is readily, separately not available. Due to favourable topographical conditions. No potable pumps are required in any points of the drainage networking system as the water would be flown through gravitation. The key O&M expenses are under erosion head. Under the proposed projects slope redesign and bank protection projects are proposed which will reduce this type of O&M expenses.

Demand Gap Assessment for Storm Water Drainage Sector

Table 7: Demand Gap Assessment for Storm Water Drainage Sector

Component	2015			2021	
	Present	Ongoing projects	Total	Demand	Gap
Major Drains (new construction)	Nil	Nil	Nil	181 km	100%
Network requirement to provide proper drainage to all identified water stagnant point/ flooding points up to the end discharge point (in Km)	Nil	Nil	Nil	181 km	100%
Network length where households discharging wastewater directly into the drains	Nil	Nil	Nil	130 km	100%
Rejuvenation of existing primary drains and primary drains including covering and installation of filter	Nil	Nil	Nil	130 km	100%

Question. Whether these gaps presented in measurable/ execution able ways considering all the ongoing projects? (75 words)

Answer: Yes, these are presented in measurable/executable ways. There are no ongoing projects in the city.

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

Answer: Yes

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

Answer: Yes

Question: Do objectives clearly address all these gaps /solution to all the problems related to storm water drainage of the city?

Answer: Yes

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

Answer:

1. Drainage master plan for a systematic drainage infrastructure development.
2. Construction of missing links of primary secondary and main drains and integration of the existing system.
3. Proper slope of drains and widening & deepening of critical Nallah's to prevent encroachment.
4. Modification of cross drainage works.
5. Provision of retaining walls, boulder aprons, green passage along both sides of the natural streams and nallahs and similar erosion and flood control measures to control land slide and erosion.

3 EXAMINE ALTERNATIVES AND ESTIMATE COST

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

Answer: Yes, all gaps clearly identified and addressed as per the ground survey of the city and records available in the respective Govt. departments.

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

Table 8: Objective, Activities and Financing Source

Sr. No.	Objective	Activities	Financing Source
1	Preparation of Drainage Master Plan	Preparation of Drainage Master Plan	A & OE part of AMRUT Funding
2	Construction of missing links of primary secondary and main drains and integration of the existing system.	Construction of missing links of primary secondary and main drains and integration of the existing system.	AMRUT Funding (as per sharing pattern); O&M through user charges /property tax;
3	Revamping of existing Drainage system	Proper slope of drains and widening & deepening of critical Nallah's to prevent encroachment; Modification of cross drainage works; Provision of retaining walls, boulder aprons, green passage along both sides of the natural streams and nallahs and similar erosion and flood control measures to control land slide and erosion.	AMRUT Funding (as per sharing pattern); O&M through user charges /property tax;

Question: 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)

There is no convergence identified as JICA/ADB/SBM/Smart City as these programmes have not been initiated or take up. However exercise is going on for convergence and funding from other sources.

Question: What are the options (financial alternatives) of completing the ongoing activities especially ongoing JnNURM projects? (75 words)

Answer: There is no ongoing activity.

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

Answer: It is found from past experiences on the similar projects by other ULBs that delay in projects and cost overrun is due to land /encroachment issues and approvals from line departments. All the land issues, encroachment removal from the identified path will be clear and approval will be taken in advance before the initiation of the project. The project will be closely monitored during its execution and corrective action will be taken in time.

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

Answer: Yes, the best practices and innovative solutions in drainage sector are studied to replicate in the city. It is proposed to replicate the best one suited in our model.

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

Answer: It is proposed to recover O&M through user charges.

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

Answer: Due to hilly topography, no pumps are required. Hence, it is not applicable.

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

Answer: This has not been considered as of now and there is very less scope of turning up for this proposal in the place like Itanagar. However, Viability of PPP options are under consideration

Table 9: Alternative Activities to Meet Objectives

Sr. No.	Objective	Activities	Financing Source
1	Preparation of Drainage Master Plan	Preparation of Drainage Master Plan	A & OE part of AMRUT Funding
2	Construction of missing links of primary secondary and main drains and integration of the existing system.	Construction of missing links of primary secondary and main drains and integration of the existing system.	AMRUT Funding (as per sharing pattern); O&M through user charges /property tax;
3	Revamping of existing Drainage system	Proper slope of drains and widening & deepening of critical Nallah's to prevent encroachment; Modification of cross drainage works;	AMRUT Funding (as per sharing pattern); O&M through user charges /property tax;

Sr. No.	Objective	Activities	Financing Source
		Provision of retaining walls, boulder aprons, green passage along both sides of the natural streams and nallahs and similar erosion and flood control measures to control land slide and erosion.	

4 CITIZEN ENGAGEMENT

Question: Has all stakeholders involved in the consultation?

Answer: Yes, Up to the extent possible stakeholders has been involved in the consultation.

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

Answer: Yes, the consultations have been done in each wards of the IMC and the other stakeholders at various levels of the Itanagar municipality as well as with the state Govt. up to the extent possible

Question: Has alternative proposed above are crowd sourced?

Answer: No, Citizen participation and consultation meeting has been conducted at each ward of IMC and their opinions and inputs have been integrated and incorporated while preparing the proposed new project of drainage network in Itanagar township.

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

Answer: The suggested alternatives has been appreciated by citizens.

Question: Is any new potential alternative is received? If so, how it is addressed?

Answer: No new alternative is received

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

Answer: No concrete alternatives for drainage system.

Question: What methodology adopted for prioritizing the alternatives?

Answer: First priority is given to the drainage master planning. Than for prioritization of selection of project due weightage is given to universal coverage approach, citizen consultation, feasibility of execution of project and resource available.

5 PRIORITIZE PROJECTS

While prioritizing projects, please reply following questions in not more than 200 words.

Question: What are sources of funds?

Answer: Source of funds for the proposed scheme is AMRUT.

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

Answer: No, at present there is no ongoing work. The project will be converged with other program of Schemes, where ever taken up.

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

Answer: Yes, the project has been prioritized based on “More with less” approach. Only the missing links are proposed to complete the drainage network. For optimum use of the existing infrastructure widening and deepening are proposed in patched only where essentially required.

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

Answer: Yes, Universal Coverage approach indicated in AMRUT guidelines has been followed for Prioritize of activities. After the drainage master plan priority is given for construction of missing links in the drainage network to achieve universal coverage.

6 CONDITIONALITY

Describe in not more than 300 words the Conditionality 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.

No fresh land acquisition is proposed for construction of storm water drain, however if required at the detailed DPR stage will be provided by the State. If required necessary NOC will be taken during implementation of project.

7 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.

All the necessary approvals for the Municipal Council and statutory authorities will be obtained for the project to make the project environmentally sustainable.

8 FINANCIAL PLAN

While preparing finance plan please reply following questions in not more than 250 words

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

Answer: It is proposed to get funds from GOI as per the AMRUT funding pattern. The rest funding will be bear by the State.

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

Answer: DPR is under preparation and projects will be taken up under AMRUT.

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

Answer: There is no financial convergence proposed at present. The project is proposed by the ULB with due consultation with State (approval through SHPSC).

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

Answer: The projects has been categorised as per the funding pattern of the central Govt. After Completion of DPR, the sustainable financial structure will be considered.

Question: Have the financial assumptions been listed out?

Answer: It will be listed out in the DPR Financial Plan.

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

Answer: Yes.

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

Answer: Yes, as per AMRUT guidelines (50:50:0). Considering the financial status of the ULB entire ULB share will be bear by the State.

Question: Does it include financial convergence with various ongoing projects?

Answer: There is no on-going project

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

Answer: Yes.

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)

(Amount in Rs. Cr)

Sr. No.	Project Name	Priority number	Year in which to be implemented	Year in which proposed to be completed	Estimated Cost
1.	Preparation of Drainage Master Plan	1	2015-16	2017	0.70
2	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -1)	2	2015-16	2017	11.92
3	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -2)	3	2016-17	2019	120*
4	Revamping of existing Drainage system in ICC	4	2017-18	2020	90.68*
Grand Total					223.3*

* These are primary estimates. The actual figures will be as per the detailed drainage master plan requirements.

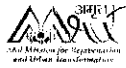


Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System

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

(Amount in Rs. Cr)

Sr. No.	Project Name	Physical Components	Change in Service Levels			Estimated Cost
			Indicator	Existing (As-Is)	After (To-be)	
1.	Preparation of Drainage Master Plan	1. NIL	-	-	-	0.70
2	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -1) existing system.	1. Construction of primary, secondary and main drains. 2. Protection Works & Soil Stabilization, Plantation along both sides of the drain	coverage	49.7	55	11.92
3	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -2)	1. Construction of primary, secondary and main drains. 2. Protection Works & Soil Stabilization, Plantation along both sides of the drain	coverage	49.7	80	120*



Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System

4	Revamping of existing Drainage system in ICC	<ol style="list-style-type: none"> 1. Slope modification, widening & deepening of critical Nallah's; 2. Modification of cross drainage works; 3. Construction of retaining walls, boulder aprons, green passage along both sides of the natural streams and nallah and similar erosion and flood control measures 	Coverage, Water ; Logging	49.7; 90	100 ; 0	90.68*
---	--	--	---------------------------	----------	---------	--------

Table 1.9 Annual Fund Sharing Pattern for Storm Water Projects
 (As per Table 2.3.1 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Name of Project	Total Project Cost	Share				
			City	State	CB	Others	Total
1.	Preparation of Drainage Master Plan	0.70 (A & OE fund)	0.70	0	0	0	0.70



Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System

2	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -1)	11.92	10.73		-	-	33.84
3	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -2)	120*	108		-	-	120
4	Revamping of existing Drainage system in ICC	90.68*	81.61		-	-	90.68
	al						245.22

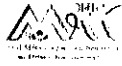


Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System

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

Project	State	ULB	Converg	Others	Total
---------	-------	-----	---------	--------	-------

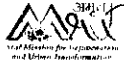
(As per Table 2.3.2 of AMRUT Guidelines)



Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System

Sl. No.	Description	Budgeted	2014-15			2015-16			Total	Balance	Total
			Actual	Others	Total	Actual	Others	Total			
1.	Preparation of Drainage Master Plan	0.70	0	-	0	-	-	-	-	0.70	
2.	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -1)	16.92	16.92	-	16.92	-	-	-	-	33.84	
3.	Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -2)	60	60	-	60	-	-	-	-	120	
4.	Revamping of existing Drainage system in ICC	45.34	45.34	-	45.34	-	-	-	-	90.68	
	Total	122.96	122.26	-	122.26					245.2	

(Amount in Rs. Cr)



Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System

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



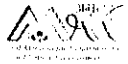
Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System

Proposed Projects	Project Cost	Indicator	Baseline	Annual Targets (Increment from the Baseline Value)					
				FY2016		FY 2017	FY 2018	FY 2019	FY 2020
				H1	H2				
Preparation of Drainage Master Plan	0.70	Nil	Nil	-	-	-			
Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -1)	11.92	Coverage	49.7		52	55	100	200	200
Construction of missing links of primary secondary and main drains and integration of the integration of the existing system. (Phase -2)	120	Coverage	49.7			55	75	80	
Revamping of existing Drainage system in ICC	90.68	Coverage; Incidence of water logging	49.7; 90					90; 40	100; 0

ANNEXURE -1

DEATAILS OF DRAINS IDENTIFIED FOR CHANNELISATION AND NETWORKING:

Settlement	Drains
Itanagar	Kimmey Pakke Colony Via IG park to Chandranagar River (L=4.50 km), Hotel Arun Subansiri to IG Park Gate)L=1.7 km),
	western gate of Raj Bhawan at B –Sector to Donyi Polo River(L=1.80 km),
	Raj Bhawan helipad at A-Sector to Donyi Polo river(L=2.00 km),
	Raj Bhawan helipad at P-Sector to Donyi Polo River(L=2.00 km),
	Raj Bhawan helipad at P-sector via co-operative to Hotel Arun subansiri
	Nallah(L=1.00km),
	Raj Bhawan Helipad at P -sector via backside of Gandhi Market to Hotel
	Arun Subansiri Nallah(L=1.00km),
	CE,RWD/PHED office at C –Sector to State museum Nallah.(L=1.00 km),
	Hotel Ashoka via Legi complex at C-Sector to IG park.(L=1.80 km), Hotel Ashoka via Legi Complex at C-Sector petrol pump to IG park Nallah.(L=1.80 km),
	DC bunglow via Punjabi daba at C-sector to IG park(L=2.00km),
	DD Kendra via RWD colony at C-sector to IG park Nallah(L=2.00 km), DC Banglow via Punjabi Daba at C sector to I.G Park (L=0.80 km),
	DD Kendra via RWD Colony at C sector to I.G Park Nallah. (L= 2.50),
	Secretariate complex to Abo Tani Colony Nallah (L=0.80km),
	MLA Cottage via Talang Hira Memorial to Abo TAni Colony Nallah(L = 0.90km),
	Hill Top at ESS sector via Backside of Higher Secondary School to
	Akash Deep Nallah(L = 0.60km),
	Hill Top Road via Akash Deep complex to Division IV culvert points (L = 2.30km),
Dokum colony via SP office and Ganga market area to Division IV main Nallah	



**Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System**

(L = 1.50km)
RK Mission Hospital via F&G sector to Chandra nagar NALLAH (L = 1.8km),
Ty-V colony via Vivek VIHAR to Chandranagar (L = 2.70km), Arunadaya School via F&G sector to Chandranagar Nallah (L = 1.60km),
GIS colony via Police Petrol pump Chandranagar River (L = 1.40km), Sangring colony to Chandranagar River (L =0.50km),
Bomdila Hotel via Lower Putung colony to Zoo Nallah (L =1km),
Forest Corporation via KV no. @ to Chandra River (L = 1.80km),Chimpu (L = 6km),
Minister Bunglow at Mowb II to Senki Park Lobi River (L =1.50km), Mowb II ridge Tinali via Shiv Mandir view River (L =1km),
CM Bunglow to Abo Tani colony culvert point Nallah (3.90km),
CM Bunglow to Green Mount Nallah (0.9km),
Mowb II via Mehendra company to Science and Technology building at IG Park Nallah (0.70km),
Mowb II to IG Park Nallah (0.7km),
Senior Architecture Office via UD & Housing to energy Park Nallah (1.3km),
CE Western Office to CRPF camp Nallah (1.50km), Gumpa Mandir to Kimmey Pakke colony Nallah (0.7km),
Backside of Gumpa Mandir to DOnyi Polo River (2.00km), Mowb II to Kemmey Pakke colony Nallah (0.8km),
Panch Ali Tinali to Kemmey Pakke colony Nallah (1.8km), Ganga Village to Ganga River. (2km).
PWD Coordination office to down side colony area (1 km),
Ganga village area to Ganga river (1.8 km)
Vivek Vihar to Ganga river via Dera Natung College and Polytechnic college (1.5 km)
From Old Legal Metrological office, Vivek Vihar to Ganga river via Dera Natung College and Polytechnic college (1.8 km)
S.E. Office (PWD), Moub II to Museum Colony Drain (2km)

	From Senior Architect office, Mowb II to I.G. Park Drain via downside UD Office (1.5 km)
Naharlagun	A sector to Doimukh River via Model village (Drain – I) (8km), Rakap colony via Industrial area of NH 52 A to Dikrong River (Drain – II) (1.6km), Shiv Mandir to Dikrong River via Nada Pharmacy (Drain – III) (8km), Damsite to Dikrong River via G Extension (Drain – IV) (5km), Papu Hill to Pachin River (Drain –V) (2km), P sector near Power Grid (TT) to Dikrong River via Lamtic complex at Nirjuli (4km), Yaan colony to Pachin River via Forest colony Naharlagun (3km), Damsite to Lagun River at Naharlagun (2km), P sector, Backside Poultry Farm to Dikrong River via Balaji complex Nirjuli. (4km), NH 52A to Zing Gang colony to Papu Nallah (1km), Sangri colony to Dikrong River via Power house and Bazar Line at Doimukh (6km), Rono Hill to Dikrong River via Hr. Sec. School Doimukh (3km), Yaan colony (RRL) to Lagun River via G sector Naharlagun. (4km). From Pachin Road to Pachin river, near Jesi Devyi Residence (1.5 km) From NH52 to Pachin river, near Lekha Thungam’s residence (2 km) From Pappu Village I to Pachin river, near Tok Bopi’s residence

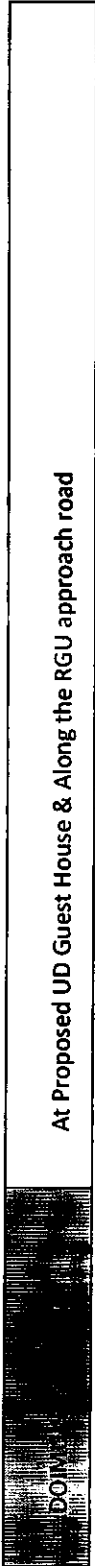
ANNEXURE-2

DETAILS OF LOCATIONS FOR PROTECTION WALL:

Sector	
TANAGAR	<p>Around CM Banglow, DUDH Office, Around Raj Bhawan, Protection wall of 5 km at identified places in each Zone, Behind RK Mission, Backside of P' Sector, Field Hostel/Proposed AG Office, Down side of State Museum, Vivek Vihar (upper and lower), B Sector, downside of Museum colony along the main nallah, Behind Gandhi Market, Behind Gophur Gas Agency at Research colony along Chandranagar River, Behind Mahendra company at Mowb II, Lobi Colony, Kola CAMP, Gohpur Tinali to Kendriya Vidhya School (along valley side), Anganwadi Training Institute, Vivek Vihar, D Sector and RWD Colony, State Museum to Chandra nagar along the main nallah, Near PWD Coordination office at Mowb II, E-Sector, upper ridge of P&C Sector to Legi complex, Near</p>
NAHAR	<p>Backside of Polo Park, Proposed Medical College, Papu Hill near Govt. Qtr Ty III, Govt Middle School Papu Nalla, G' Ext along</p>
KARSING BANDER	<p>Lagun River, Polo Colony near B.J. Memorial School, At G Sector along the sector nallah, Prem Nagar, 3 miles area, Helipad from C' Sector to Model Village, Vegetable Market at Badapani, Badapani, Near Tadar Rachung's residence at G Sector, Breast Wall at G' sector near Tadar Kakus Residence, near General Manager Office – Pappu Village, at G Sector near Panyo Siro's residence, near Tok Nalo's residence at Pappu Village, Near Bai Ete's resident. Near Abo Tani Basti, Near Police Station-Banderdewa & at Police Training Centre</p>
NIRJUL	<p>Dikrong Colony near Burial Ground Nirjuli, Dikrong colony near Burial Ground, Near ST. Thomas school & At P sector</p>



Atal Mission for Rejuvenation and Urban Transport
Service Level Improvement Plan (SLIP) for Drainage System



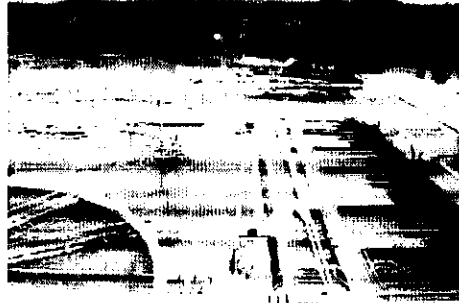
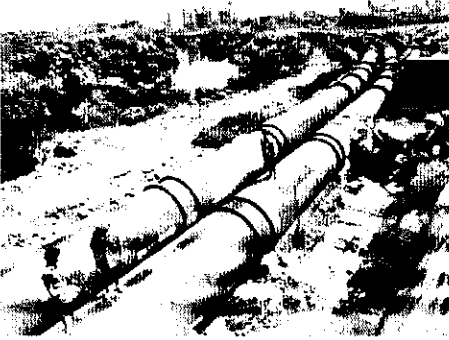
At Proposed UD Guest House & Along the RGU approach road



**SERVICE LEVEL IMPROVEMENT PLAN (SLIP)
FOR SEWERAGE & SEPTAGE SYSTEM UNDER**



*Atal Mission for Rejuvenation
and Urban Transformation*



Submitted To,
Ministry of Urban Development,
Govt. of India

Submitted By
DDF-MSN-SGI Consortium
New Delhi

On Behalf of Department of Town Planning & ULB
Govt. of Arunchal Pradesh
Itanagar



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 generally following questions, not more than were 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)

Answer: The base line information available to the city for sewerage system are City Development Plan (CDP)-2006, Departmental Data, Data of City Sanitation Plans, Census data 2011. There is no sewerage system in place in the city, as well no sewerage zoning has been done. Data is correlated with census and is on same lines regarding sewerage system.

What are the indicators for sewerage management for which you are benchmarking? (MOUD) and collection of sewerage and effluent treatment. Provide information in table.

Table 1: Status of sewerage network and Service Levels

Sr. No.	Indicators	Existing Service Level	MOUD Benchmark	Reliability
1	Coverage of latrines (individual or community)	92%	100%	C
2	Coverage of sewerage network services	0%	100%	D
3	Efficiency of collection of sewerage	0%	100%	A
4	Efficiency in Treatment: Adequacy of sewerage treatment capacity	0%	100%	A

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

Answer: There is 100% gap in terms of sewerage /Septage Management and Treatment. Presently the fecal sludge from the pit latrines and Septage from the septic tanks are disposed unscientifically (buried into the nearby ground or drain constructed for storm water collection and disposal).

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

Answer: There is no sewerage lines and sewage/septage treatment facility in the town. The effluent from septic tank flows to drains.

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

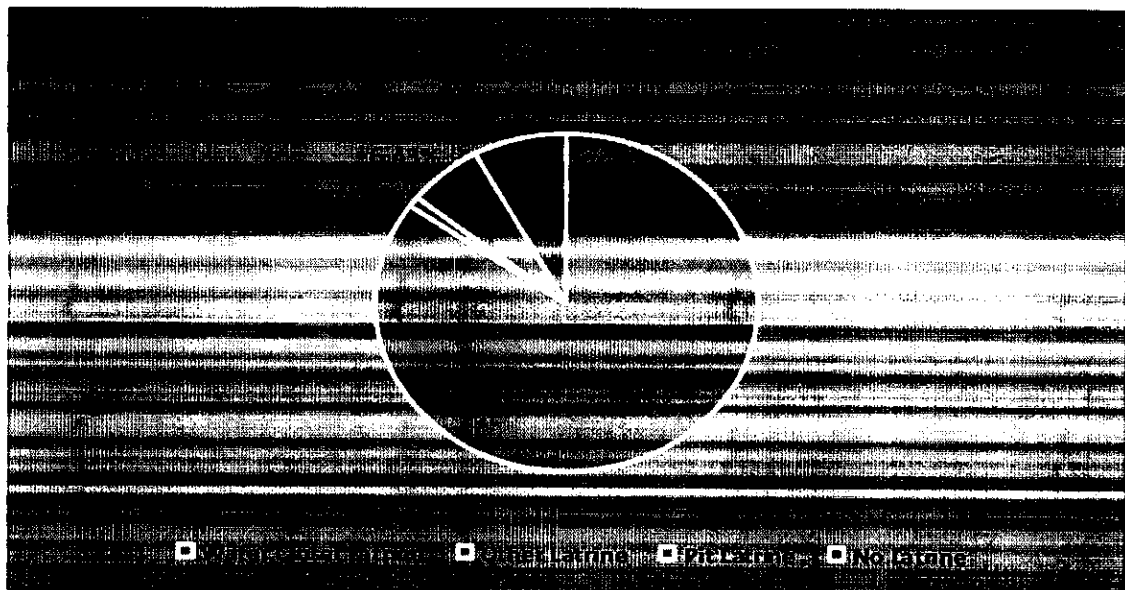
SEWERAGE NETWORK AND COLLECTION OF SEWERAGE

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.

Answer: There is no sewerage system within the jurisdiction of Itanagar Municipal Council area.

Table 2: Zone Wise Coverage of Households

Zone No.	Total number of Households (a)	Total number of Households with individual or community toilets within walking distance (b)	Coverage of latrines (%), (b/a)*100%
1	19623	18062	92%



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)

Answer: There is no sewerage system in place within the jurisdiction of the Municipal limit.

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)

Answer: No, currently there is no systematic and organized method to collect and treat waste from septic tank. Presently the owner of the individual facility is responsible for collection, conveyance, treatment and disposal of sludge / septage. As on date, the area does not have any sludge / septage management. The over flow details in numbers are not available. Under AMRUT project, it is proposed that on request machines and trained staff/operator will be made available by the Municipal Council to the house holds for cleaning of their septic tanks. The waste thus collected will be transferred to the nearby STP for further treatment.

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)

Answer: There is no sewerage system in place in the Municipal limit.

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

Answer: There is no sewerage treatment plant in the City.

Table 3: Status of Existing STPs

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

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

Answer: No, at present no waste treatment facility is available in the city for hygienic and scientific disposal of the waste. : Presently the faecal sludge from the pit latrines and septage from the septic tanks are disposed unscientifically (buried into the nearby ground or disposed in to the nearby Khal or drain constructed for storm water collection and disposal. There is no sewage/septage treatment facility in the town. The effluent from septic tank flows to drains. Considering the ground realities i.e. no existing sewerage system, financing from state and central, no wastewater cess/ tariff; mixed topography of hills and plains; inadequate availability of space for infrastructure, high density in core/ bazaar area and scattered settlements at other places, the Itanagar and Naharlagun Capital Complex town, which forces to have a water carriage system in the core area and septic tank and soak pit in scattered populated areas. City is planning to develop a system of decentralized waste treatment system which will work on septage management and later can be converted in decentralized sewerage system.

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)

Answer: The sewerage generation in city is approximately 20 MLD (as per projected population 2015), out of which 0 MLD reaches to the STPs (as of now there is no STP). In absence of proper collection system, it was not possible to collect the representative sample of the influent, the BOD & COD details are not available. As per the primary departmental assessment the BOD and COD of waste discharged in the drains are as below.

BOD - Incoming = 100-175 mg per litre

COD- Incoming = 200-375 mg per litre

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)

Answer: There is no treatment plant.

INSTITUTIONAL FRAMEWORK

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

Table: 4: Functions, roles, and responsibilities

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

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)

Answer: City is planning to continue with the institutional system in place. Project implementation is proposed to be done by Municipal Council / PHED.

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: Status of Ongoing/ Sanctioned

S. No.	Name of Project	Scheme Name	Cost in Rs Crore	Month of Completion	Status as on date
1	Nil	Nil	Nil	Nil	Nil

Question: How much the existing system will be 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).

Answer: As stated above, No new project is going on for sewerage system.

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

Answer: Yes, to cater the demand of the city, there is an urgent need of Decentralized waste treatment system/Decentralized sewerage System in pockets with Septage management system.

The development of the city is in pocket, there is no continuous city habitation. Considering the ground realities i.e. no existing sewerage system, financing from state and central, no wastewater cess/ tariff; mixed topography of hills and plains; inadequate availability of space for infrastructure, high density in core/ bazaar area and scattered settlements at other places in the Itanagar and Naharlagun Capital Complex towns, which forces to have a water carriage system in the core area and septic tank and soak pit in scattered populated areas. City is planning to develop decentralized waste treatment system (DEWATS) which will work on septage management and later can be converted in decentralized sewerage system. The collection, treatment, and disposal/reuse of wastewater various type of Septage management machineries are required.

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?

It is proposed to procure the sewerage cleaning machines and construct a treatment plant (as per proper sewerage network design) for optimum utilization of Septic tank system in phase -1.

Provide information in Table

Table 4: Demand Gap Assessment

Component	2015			2021	
	Existing	Ongoing projects	Total	Demand	Gap
Sewerage network (km)	0	0	0	260 Km	260 Km
No of Households covered under sewerage system	0	0	0	32000	32000
Sewerage Treatment Plant (MLD)	0	0	0	20	20



Based on assessment of existing infrastructure and ongoing / sanctioned projects, we have calculated existing gaps and estimated demand by 2021 for sewerage network, number of household to be covered with connections and required STP of 20 MLD, capacity, area to be covered under septage management. Based on the demand and gap assessment, evolved objectives to achieve bridging these gaps.

Question: Does each identified objectives will be evolved from the outcome of assessment? (75 words)

Answer: Yes, each identified objectives will be evolved from the outcome.

Question: Does each objective meet the opportunity to bridge the gap? (75 words)

Answer: Yes, each objective meets the opportunity to bridge the gap.

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

Answer:

1. Development of Safe management of human excreta including the confinement and transportation (i.e. Procurement of machinery for Sewerage/Septage management)
2. Development of Treatment facilities for safe and scientific disposal of waste.
3. Development of Decentralized sewerage network in the core area having relatively denser population.
4. 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?

1	Treatment of Domestic Waste Water	Construction of decentralize waste treatment plant (one treatment plant for Itanagar and one for Naharlagun)	AMRUT Funding (as per sharing pattern) O&M through user charges /property tax; DPR/ Studies exercise through A&OE budget of AMRUT
2	Transportation of waste water in scientific manner	Procurement of Septage collection Machinery	AMRUT Funding; O&M through user charges

3	Development of Sewerage network in the core area in phased manner.	Laying of Main, Submain and distribution lines, Sewerage pumping stations and allied works.	AMRUT Funding (as per sharing pattern); O&M through user charges /property tax; DPR/ Studies exercise through A&OE budget of AMRUT
---	--	---	---

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

Answer: At present, the projects are proposed to be taken up under AMRUT scheme, however others financial convergence options will be explored at the time of DPR preparation

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

Answer: There is no ongoing activity.

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

Answer: It is found from past experiences on similar type of projects in other states that delay in projects and cost overrun is due to land issues and approvals from line departments. All the land issues (especially for pumping station and STPs) and approval will be taken in advance before the initiation of the project. The project will be closely monitored during its execution and corrective action will be taken in time.

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

Answer: Yes, Project includes the O&M. The O& M cost not a part of AMRUT funding, but will remains an integral of Project as per AMRUT.

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.

Answer: The O& M cost is proposed to be recover through levy of user charges /additional surcharges, sale of manure, sale of recycled water/treated waste water.

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

Answer: The decentralized waste treatment is proposed along with Septage management. The network is also proposed in the core area, rest area will initially work on Septage management. For O&M recovery, sale of manure and waste water, for energy cost reduction, adoption of solar energy (up to the extent feasible), adoption of earlier best practices for projects design and technology selection, SCADA system etc. are explored.

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

Answer: Yes, PPP in operation part of STPs and IPS are under consideration.

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

Answer: It is proposed to reuse of the treated waste water from STP at least 20% for industrial purpose/Horticulture and fire demand of the city.

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

Answer: Yes, the best practices and innovative solutions in sewerage sector are studied to replicate in the city. The decentralized sewerage system with septage management are proposed.

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.

Answer: Yes decentralize waste treatment system is proposed. The feasibility is under consideration for replacing septic tanks by bio-digesters/ bioremediation in the areas which area located at remote locations

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

Table 2.7 Alternative Activities to Meet Objectives

Table 5: Alternative Activities to meet Objectives

S. No.	Objective	Activities	
1	Treatment of Domestic Waste Water	Construction of decentralize waste treatment plant (one treatment plant for Itanagar and one for Naharlagun)	AMRUT Funding (as per sharing pattern) O&M through user charges /property tax; DPR/ Studies exercise through A&OE budget of AMRUT
2	Transportation of waste water in scientific manner	Procurement of Septage collection Machinery	AMRUT Funding; O&M through user charges
3	Development of Sewerage network in the core area in phased manner.	Laying of Main, Submain and distribution lines, Sewerage pumping stations and allied works.	AMRUT Funding (as per sharing pattern); O&M through user charges /property tax; DPR/ Studies

		exercise through A&OE budget of AMRUT

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. 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?

Answer: Yes, Almost consultation with all the stakeholders has been done. The consultation with Councilors, MP, MLAs and on various open platform has been conducted to identify the requirement and for prioritization of the projects up to the extent possible.

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

Answer: Yes, within the time frame up to the extent possible open ward and zone level consultations have been made.

Question: Has alternative proposed above are crowd sourced?

Answer: No, these are discussed on the various open meetings but due to the limited time frame it was not crowd sourced.

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

Answer: Development of the Decentralized Septage Management and treatment is the first most requirement of the city and should be taken up on priority. The project selection and prioritization and modification has been done with due weightage to the citizen feedback.

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

Answer: Yes, Alternative taken up for discussions is prioritized on the basis of consultations, feasibility and availability of funds.

Question: What methodology adopted for prioritizing the alternatives?

The AMRUT guidelines are followed for the prioritization of the projects. Universal coverage (with weightage to poor's affected with in this) and "more with less approach" (Septage Management and treatment) is given the first priority. Development of decentralized sewerage network is given the next priority.

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?

Answer: At present source of funds identified under AMRUT. State is also looking for external funding as financial convergence to eliminate the basic Infrastructure gaps.

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

Answer: Project is proposed to converge with Swachh Bharat Mission (SBM) to convert insanitary latrines/dry pit latrines in sanitary latrines and to provide the HH/Community toilets using SBM funds. The convergence with Special schemes for North East and also for reduction of O& M cost reduction up to the extent feasible with solar mission (By adoption of solar energy) is also under consideration.

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

Answer: Yes, the focus is on use of existing asset in place in the city (Septic Tank) and provided the optimum hygiene through Decentralized Septage Management and Treatment is given the first Priority.

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

Answer: Yes, universal coverage is given first priority. Also weightage is given to poor's affected with in this by providing toilet facility in term of HH/Community toilet (Convergence with SBM).

6. CONDITIONALITIES

Describe the Conditionality 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.

The process of the basis on tentative requirement has already been initiated for land acquisitions. Only State consent is required for Land. Clearance with various departments will be taken before initiation of the project.

7. RESILIENCE

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

Answer: Before initiation of the project, required approvals will be sought from ULBs and competent authority and resilience factor would be built in to ensure environmentally sustainable scheme

8. FINANCIAL PLAN

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

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

Answer: Yes, financial plan for the complete life cycle of the prioritized development including O&M cost in the next five years prepared.

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

Answer: Yes, As per AMRUT guide lines Central share is limited to 1/2. Rest project fund and gaps in O&M cost will be bear by the State.

Question: Does it include financial convergence with various ongoing projects

Answer: There is no on-going sewerage project.

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

Answer: Yes, it provides year wise mile stones and outcomes.

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 Plan of Sewerage Projects for Mission period

(As per Table 2.1of AMRUT guidelines)

Table 7: Master Plan of Sewerage Projects for Mission Period

S. No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost in INR
1	Construction of decentralize domestic waste water treatment plant (One for Itanagar Town and one for Naharlagun area) for immediate requirement	1	2016	2018	16 Cr.

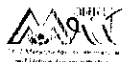
Service Level Improvement Plan (SLIP) for Sewerage & Septage Management

S. No.	Project Name	Priority number	Year in which to be implemented	Year in which to be completed	Estimated Cost in INR
2	Procurement of Septage collection Machinery	2	2016	2016	2 Cr.
3	Construction of Trunk Lines in urban area of Itanagar area (Approximate 10 km)	3	2016	2017	5 Cr.
4	Laying of Main and Submain lines for households' connection, Sewerage pumping stations and allied works, STP (57 Km in Urban Itanagar and 17 Km in Urban Naharlagun area)	4	2017	2019	26 Cr.
5	Expansion of Treatment plant capacity from 20 MLD to 33 MLD for 2031 year demand	5	2017	2019	10.4 Cr.
6	Laying of Main, Submain and distribution lines, Sewerage pumping stations and allied works. (in the rest area as per design requirement approximate 70 km)	6	2018	2020	30 Cr.

DETAILS OF PRIORITIZED PROJECTS PREPARED UNDER AMRUT DURING CURRENT FY
(As per table 2.2 of AMRUT guidelines)

Table 8: Details of Prioritized Projects Prepared under AMRUT during Current FY

Sr. No.	Project Name	Physical Components	Change in Service Levels			Estimated Cost in Crore
			Indicator	Existing (As-Is)	After (To-be) (Independent Improvement)	
1	Construction of decentralize domestic waste water treatment plant (One for Itanagar Town and one for Naharlagun area) for immediate requirement	STP, MPS	Treatment	0	60	16
2	Procurement of Septage collection Machinery	Sludge suction and transport machinery, Septage machinery	Coverage	0	20	2
3	Construction of Trunk Lines in urban area of Itanagar area (Approximate 10 km)	Network lines, Manholes	Coverage	0	10	5
4	Laying of Main and Submain lines for households' connection, Sewerage pumping stations and allied works, STP (57 Km in Urban Itanagar and 17 Km in Urban Naharlagun area)	Network lines, Manholes	Coverage	0	30	26
5	Expansion of Treatment plant capacity from 20 MLD to 33 MLD for 2031 year demand	STP, MPS	Treatment	0	40	10.4
6	Laying of Main, Submain and distribution lines, Sewerage pumping stations and allied works. (in the rest area as per design requirement approximate 70 km)	Sludge suction and transport machinery, Septage machinery	Coverage	0	40	30



	Total	89.4 Crore
--	--------------	-------------------

ANNUAL FUND SHARING PATTERN FOR SEWERAGE PROJECTS

(As per Table 2.3.1 of AMRUT guidelines)

Table 9: Annual Fund Sharing Pattern for Sewerage Projects

Sr. No.	Name of Project	Total Project Cost (INR in Cr.)	Share				
			GOI	State	ULB	Others	Total
1	Construction of decentralize domestic waste water treatment plant (One for Itanagar Town and one for Naharlagun area) for immediate requirement	16	14.4	1.6	0	0	16
2	Procurement of Septage collection Machinery	2	1.8	0.2	0	0	2
3	Construction of Trunk Lines in urban area of Itanagar area (Approximate 10 km)	5	4.5	0.5	0	0	5
4	Laying of Main and Submain lines for households' connection, Sewerage pumping stations and allied works, STP (57 Km in Urban Itanagar and 17 Km in Urban Naharlagun area)	26	23.4	2.6	0	0	26
5	Expansion of Treatment plant capacity from 20 MLD to 33 MLD for 2031 year demand	10.4	9.36	1.04	0	0	10.4

6	Laying of Main, Submain and distribution lines, Sewerage pumping stations and allied works. (in the rest area as per design requirement approximate 70 km)	30	27	3	0	0	30
Total		89.4	80.46	8.94	0	0	89.4

TABLE-8 4: ANNUAL FUND SHARING BREAK-UP FOR SEWERAGE PROJECTS

(As per Table 2.3.2 of AMRUT guidelines), All values are in INR (Crore)

TABLE 9: ANNUAL FUND SHARING BREAK-UP FOR SEWERAGE PROJECT

Sr. No.	Project	GOI	State			ULB			Convergence	others	Total
			14th FC	Others	Total	14th FC	Others	Total			
1	Construction of decentralize domestic waste water treatment plant (One for Itanagar Town and one for Naharlagun area) for immediate requirement	14.4	1.6	0	1.6	1.6	0	1.6	0	0	16
2	Procurement of Septage collection Machinery	1.8	0.2	0	0.2	0.2	0	0.2	0	0	2
3	Construction of Trunk Lines in urban area of Itanagar area (Approximate 10 km)	4.5	0.5	0	0.5	0.5	0	0.5	0	0	5
4	Laying of Main and Submain lines for households' connection, Sewerage pumping stations and allied works, STP (57 Km in Urban Itanagar and 17 Km in	23.4	2.6	0	2.6	2.6	0	2.6	0	0	26

	Urban Naharlagun area										
5	Expansion of Treatment plant capacity from 20 MLD to 33 MLD for 2031 year demand	9.36	1.04	0	1.04	1.04	0	1.04	0	0	10.4
6	Laying of Main, Submain and distribution lines, Sewerage pumping stations and allied works. (in the rest area as per design requirement approximate 70 km)	27	3	0	3	3	0	3	0	0	30
	Total	80.46	8.94	0	8.94	8.94	0	8.94	0	0	89.4 Cr.

TABLE 10: YEAR WISE PLAN FOR SERVICE LEVELS IMPROVEMENTS

(As per table 10 of AMRUT guidelines)

Table 10: Year Wise Plan for Service Levels Improvements (All values are in Crore)

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
Construction of decentralize domestic waste water treatment plant (One for Itanagar Town and one for Naharlagun area) for immediate requirement	16	Treatment	0	0	0	20	40		

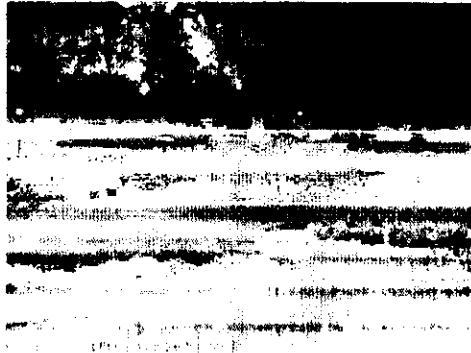
Procurement of Septage collection Machinery	2	Coverage	0	0	0	20			
Construction of Trunk Lines in urban area of Itanagar area (Approximate 10 km)	5	Coverage	0	0	0	5	5		
Laying of Main and Submain lines for households' connection, Sewerage pumping stations and allied works, STP (57 Km in Urban Itanagar and 17 Km in Urban Naharlagun area)	26	Coverage	0	0	0	10	10	10	
Expansion of Treatment plant capacity from 20 MLD to 33 MLD for 2031 year demand	10.4	Treatment	0	0	0	0	0	20	20
Laying of Main, Submain and distribution lines, Sewerage pumping stations and allied works. (in the rest area as per design requirement approximate 70 km)	30	Coverage	0	0	0	0	10	10	10

SERVICE LEVEL IMPROVEMENT PLAN (SLIP)

FOR GREEN SPACES & PARKS UNDER



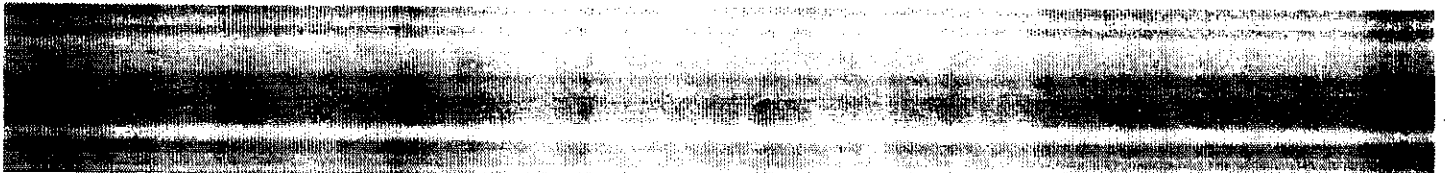
*Atal Mission for Rejuvenation
and Urban Transformation*



Submitted To,
Ministry of Urban Development,
Govt. of India

Submitted By
[Name of the organization]
New Delhi

On Behalf of Department of Town Planning & ULB
Govt. of Arunchal Pradesh
Itanagar



1. ASSESS THE SERVICE LEVEL GAP

The first step is to assess existing situation and service levels gaps for organized Green Space and Parks based on standards prescribed in URDPFI Guidelines and National Building Codes (Refer AMRUT Guidelines; Para 3.1.6 & 6.2). This includes describing existing institutional framework vis-à-vis development and maintenance of organized green space/ parks. In order to assess the service level gap the City reviewed all policies, plans; scheme documents etc., held discussions with concerned officials and citizens, as per the requirement and conducted physical assessment of city parks to understand the current status

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

Answer: Departmental data, census data and CDP-2006 exists as to regards development and maintenance of parks. The departmental data for green spaces and parks have been collected from the department of Social Forestry, Itanagar. Recreation forestry Scheme under the State Plan presently exists in the city for development and maintenance of the parks under state forest department.

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

Answer: The Master Plan of the city recommends an area of 10-12 Sq. m per person for open/ green Spaces at the city/ town level. The existing green cover of the city is 3.0 Sq. m per person. As per the Department of Forestry, among the 30 wards in the city, following wards are deficient of open/green space: **Ward no. 7, 9, 17, 18, 19, 27, 28, 29 and 30.**

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?

Answer: No. The ULB does not follow the URDPFI guidelines to categorize its organized greens/ parks/ open space neither it has its own categorization.

Question: What is the per person open space availability in the city in general?

Answer: Area of Parks in the City = 3, 00,000 Sq. m
 Total Population in the City (Census 2011) = 101671 Persons
 Therefore, Per Person Open Space availability = 3.0 Sq. m/ person

Table 1: Service Level Status

S. No.	Indicators	Present Status	Benchmark	Source*	Reliability Factor**
1	Per Person Open Space in Plain Areas as per URDPFI	3.0 Sq. m	12-14 Sq. m/person	Others (Department of Forestry)	B

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)

Answer: No, ULB has not prepared park wise inventory of facilities and amenities.

The ULB has identified **Indhira Gandhi Park in Itanagar** and **Mahatma Gandhi Park in Naharlagun** as quick win parks which could be developed with minimal intervention. Following are the amenities required for the development of quick win parks:

- Provision of sufficient Street Lighting
- Provision of High Mast Light
- Beautification of drainage
- Provision of paved pathways
- Provision of Public Toilets
- Provision of Drinking water facilities
- Special provision for child-friendly components
- Renovation of entry gates
- Provision of litter bins
- Development of Commercial spaces: Snacks and Ice-cream parlour and kiosks

Question: How is the physical condition of parks in the city? Do they have boundary wall, fenced area, facilities of public conveniences, tube well/ piped water supply, dustbins etc.

Answer: There are two main public parks in the City: **Indira Gandhi Park (I.G Park)** located in Itanagar having an area of 24.0 Ha and **Mahatma Gandhi Park (M.G Park)** in Naharlagun with an area of 5.7 Ha. I.G Park has a proper boundary wall whereas M.G Park is fenced around its boundaries. Both the parks do not have proper public conveniences such as tube well/ piped water supply, dustbins etc.

Question: Whether parks have well planned play area encouraging physical activity? Are they equipped with child friendly play equipment's, snack/ ice cream parlours/ kiosks etc.

Answer: The parks do have well planned play area encouraging physical activities. The park is mainly used for strolling and jogging purpose only. The parks are not equipped with child friendly play equipment's. There are no snacks/ Ice-cream parlor/ kiosks in the vicinity of the park.

Question: How well aesthetics component have been built in parks of your city? Are they well illuminated, landscaped – manicured with water bodies/ fountains etc. wherever possible?

Answer: There is only 1 high mast installed in I.G Park. Other than that, there are no aesthetic components built in the parks.

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?

Answer: Only maintenance works for park are being funded by the state government under forest recreation scheme. The department of forestry also engages labourers for day to day up keeping of lawn and gardens of the parks in the city. ULB does not fund for the development of parks/green spaces.

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.

Answer: Major parks shall be given priority for development. The city does not have a rationale for park selection for development. It is done on Ad-hoc basis.

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.

Answer: Department of Forestry is the authority responsible for development of parks in Itanagar capital city. Following are the roles and responsibilities of the department:

1. Daily up keeping of lawn and gardens, hedge line, flower beds, garden plant, trees, etc.
2. Plantation on the eve of World Environment Day and Van Mohatsava.
3. Creation of avenue plantation.
4. Security against encroachment of parks by public.

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

Answer: In future, new parks can be developed in each of the 30 wards in the city. The concerned ward councillors will make available an area of 1400 Sqm for development of each park within their jurisdiction area. Hence an area of 4.2 Ha would be made available in the city for development of new parks in the future.

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

Answer: 233 Ha of area for Parks/ Open/ Recreational space is proposed in the master plan of the city.

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

Answer: The Department of Forestry is presently managing the parks in the city. No RWA/ NGO have been delegated to manage the park in the capital complex area.

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

Answer: None

Question: Does the ULB have any guidelines for providing safe and secure access to parks for children and elders?

Answer: No, as off now there are no guidelines issued by the ULB for providing safe and secure access to parks for children and elders

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

Answer: Yes, proper system is in place for preventing the entry of animals into parks. Boundaries are well fenced with compound walls provided with mild Steel gates. Daily labourers are also engaged to mend the gates.

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

Answer: Not yet. The city does not have any guidelines for horticulture. As per the site/ location/ space available, proper plant species are chosen and planted. Mainly flowering and evergreen trees are preferred. Deciduous trees are avoided for plantation.

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.

Sr. No.	Jurisdiction	No. of Parks	Area of Parks (in sqm.)	Proportion (in %age)
1	ULB			
2	Development Authority	4	302000	
3	Private Ownership – Corporate/ NGOs			
Total		4	302000	

Table 2: Hierarchy of Organized Greens in the City (As per URDPFI -2014)

Sr. No.	Category	No. of Parks	Area under the Category (In sq. m)	% Area under Parks/ Open Space
1	Housing Area Park (HAP) (Less than 5,000 sq. m.)	2	2000	0.66%
2	Neighbourhood Park (NP) (5,000 -10,000 sq. m.)			
3	Community Park (CP) (10,000 - 50,000 sq. m.)			
4	District Park (DP) (50,000 – 2, 50,000sq.m.)	2	300000	99.34%
5	Sub-City Park (SCP) (2,50,000sq.m. & above)			
Total		4	302000	100%

2. BRIDGING 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.

Question: Have the city took physical assessment of city parks?

Answer: The physical assessments of the two major parks as per Annex-1 in the city are as follows:

- 1. General Space:** The parks cater a population of 45000 people with good condition in a partially undulating ground.
- 2. Paved Pathways:** A width of 2.5 meters of bituminous paved pathway is available in the park
- 3. Water areas:** small streams and nallahs are running in the park with an average size of 8000 Sqm. These streams have average quality of water.
- 4. Eating drinking features:** There are no eating and drinking facilities in the park
- 5. Facilities:** The parks have been provided with Brick Boundary wall. There are 3 nos of entry gates in IG Park and 1 No in MG Park. These entry gates are made of metallic fence. The parks do not have recreational centre, illumination point, and parking space, toilets, dustbin and rain water harvesting facility.
- 6. Sitting or resting features:** There are approximately 8-10 benches in the park but no picnic table/semi pucca huts are available.
- 7. Landscaping:** There are a variety of flowers and trees in the park
- 8. Play set for children:** Not available
- 9. Play area for Adolescent:** Not available

Question: Estimate the demand gap of open/ green space in the city as per the URDPFI norms.

Answer:

Present status of open spaces in the city = 3.0 Sqm/ person
URDPFI Benchmark = 12-14 Sqm / person

Therefore a gap of 9 Sqm/ person for open space is being observed

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.

Answer: New parks would be developed in each and every ward. If land is not available in the city for development of new parks, City plans to fill the gap in green cover and progressively enhance green cover by raising roadside/ drain side avenue plantation. There are many unused spaces left in govt. and semi govt. office premises which can be taken up for greenery plantation with short and dwarf tree species.

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

Answer: No provision as per Master Plan and other State legislation have 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.

Answer: Under the AMRUT mission, first priority is given to develop the children play area with playing equipment's. The below mentioned are proposed to be developed in both the parks:

General play set, soft ball play area, thing to hang from, slide down, climbing, descending and standing features, swings, blacktop, spring, toys, play structures, hanging sets- sea saw etc.

Besides this, it is proposed to develop specific area for children's with play equipment under each ULB level park proposed under AMRUT Mission.

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.

Answer: Till date the existing parks are maintained and managed under state plan only for minor maintenance and up keeping works. And there are no other ongoing programs or projects for development of parks.

S. No.	Name of Project	Scheme Name	Cost Rs Cr.	Scheduled Month of Completion	Status (as on date)
NA	Nil	Nil	NA	NA	NA

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.

- Development of Children and elderly facilities along with other requirements in city level parks i.e. IG and MG Park.
- To develop new parks in every ward in phased manner during the mission period to increase the green cover.
- To facilitate the parks with child friendly equipment's.
- To promote universal accessibility in the parks for ease of access for the elderly as well as the differently abled.

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. (Word Limit: 100 Words)

There are no ongoing projects in the city. In phase one Both IG Park and MG Park is selected. Both having the basic facilities and can be developed quickly

S. No.	Component	Rate In Rs. Cr	Amount in Rs. Cr
1	Construction & Beautification of Drainage System	0.50	1.00
2	Walking Track	1.25	2.50
3	Fountains	0.15	0.3
4	Toilets	0.15	0.3
5	Drinking Water Facility	0.25	0.5
6	Children Play Items	0.75	1.5
7	Renovation of entry Gates and benches	1.00	2.00
8	Dustbin	0.05	0.10
9	Snacks/ Ice cream Parlour	0.50	1.00
10	Kiosks	0.05	0.10
1	Play Equipment and benches	0.233	6.99
2	Boundary Wall	0.173	5.19
3	Lawn (Grass)	0.113	3.39
4	Land Development	0.093	2.79
5	Walking Pavement	0.113	3.39
6	Lighting	0.073	2.19
7	Drinking Water Facility	0.068	2.04
8	Shed	0.134	4.02
Grand Total (In Crores)			39.30

5. PRIORTISE 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?

Answer: The source of fund for development is AMRUT funding. The remaining part (i.e. 50%) will be shared by the state.

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

Answer: There are no other programs or schemes in the city

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

Answer: Yes the projects has been prioritized based on "more with less" approach. The renovation or development of existing parks will be prioritized with respect to new parks.

5. CONDITIONALITIES

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. (Word Limit: 100 words)

For the quick win parks selected for first year, land is adequately available and there is no need of any permission (as the parks are existing one). For the proposed new parks in each ward -

- **Land** will be made available by the concerned ward councillors free of cost.
- **Environmental & social obligation and clearances:** The concerned ward councillor will look after the issues on environmental and social obligations.
- **Required NOC:** will be obtained from ULB
- **Financial commitment:** 50% of the Share shall be borne by the State.
- **Approval and permission** needed to implement the project will be taken from the ULB.

6. RESILIENCE

Required approvals will be sought from competent authority and organizations. The resilience factor would be built in to ensure environmentally sustainable, safe and secured park development schemes. (Word Limit: 100 words)

The proposed development will be friendly in all aspects with environmentally sustainable, safe and secure. The play equipment's in the park are proposed to be procured of fibre glass materials as far as possible. The materials will be procured from authorized dealer and manufacturer to ensure sustainability of the product.

7. FINANCIAL PLAN

Once the activities are finalized and prioritized after consultations, investments both in terms of capital cost and O&M cost has to be estimated. (AMRUT Guidelines; para 6.5) Based on the investment requirements, different sources of finance have to be identified. Financial Plan for the complete life cycle of the prioritized development will be prepared. (AMRUT Guidelines; para 4, 6.6, 6.12, 6.13 & 6.14). The financial plan will include percentage share of different stakeholders (Centre, State and City) including financial convergence with various ongoing projects.

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

Answer: Structure of financial Plan is as per the sharing indicated in AMRUT Guidelines. The financial plan for creating parks has been phased considering the priority of development. The numbers of parks taken for development and financial estimates are phased year wise. Line estimates have been made for the proposed projects under SLIP. The share of ULB, State and Centre has been estimated. As decided at state level the ULB share will be borne by the State.

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

Answer: Nil. At present all the projects are proposed under AMRUT.

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

Answer: There is no other funding partner. All funding is proposed from AMRUT funds.

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

Answer: Yes, the proposed financial structure is sustainable. The projects are categorized based on financial consideration. To make project sustainable, revenue generating mechanisms will be introduced through minimal entry fees, user charges for public amenities, food courts and coffee vendors etc.

Question: Have the financial assumptions been listed out?

Answer: The financial assumptions are yet not listed fully. However, it is discussed and finalized that considering the financial condition of the ULBs, all the share will be borne by the State. ULB is also trying convergence through various schemes and will also share funds with other line departments to make its contribution.

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

Answer: Yes, the financial plan for the complete life cycle of the prioritized development has been prepared.

Question: Does financial plan include percentage share of different stakeholders

Answer: Yes, financial plan include percentage share of different stakeholders as per AMRUT guidelines. Considering the financial condition of ULB, all the ULB share will be borne by the State only.

Question: Does it include financial convergence with various ongoing projects?

Answer: No. There is no ongoing project.

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

Answer: Yes, year wise milestones and outcomes have been proposed for the development of parks.

Table 3 Master Plan of Projects w.r.t. Park Development for Mission Period

(As per Table 2.1 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Project Name	Priority number	Year in which to be implemented	Year in which proposed to be completed	Estimated Cost
1	Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-1)	1	2015-16	2016	1.02
2	Development of Ward level park in each ward.	2	2016-17	2018	15
3	Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-2)	3	2017-18	2019	2
4	Development of Green Belt near CM Bungalow and Abotani Colony	4	2018-19	2020	20
5	Development of Botanical Garden	5	2018-19	2020	12
Grand Total					50.02

As per Table 2.2 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Project Name	Physical Components	Change in Service Levels			Estimated Cost
			Indicator	Existing (As-Is)	After (To-be)	
1	Development of Children and elderly facilities along with other requirements in	Sitting areas, Children Play equipment's and sitting shades, Walking tracks for elderly persons and other facilities.	Provision of playing facilities for children and Development of	-	-	1.02
2	Development of Ward level park in each ward.	Boundary Wall, Lawn (Grass), Land Development, Walking Pavement, Play Equipment and benches, Lighting, Drinking Water Facility, Shed	Enhancing Green Space	3	4.5	15
3	Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-2)	Sitting areas, Children Play Equipments, and sitting shades, Walking tracks for elderly persons and other facilities. (balance activities of phase-1)	Provision of playing facilities for children and Development of green spaces	-	-	2
4	Development of Green Belt near CM Bungalow and Abotani Colony	Steel railing and other fencing, plantation, landscaping and electrical installation, development of tracks.	Enhancing Green Space	3	5	20
5	Development of Botanical Garden	Providing and fixing park equipment's and other Related infrastructure for development; Site Development Including guard room and boundary wall, play area, walking tracks, benches, toilet block, steel railing, special botanical plantation and electrical installation etc.	Enhancing Green Space	3	6	12

Table 5: Annual Fund Sharing Pattern for Projects w.r.t to Park Development

(As per Table 2.3.1 of AMRUT guidelines)

(Amount in Rs. Cr)

Sr. No.	Name of Project	Total Project Cost	GOI	Share			
				State	ULB	Others	Total
1	Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-1)	1.02	0.918	0.102	-	-	1.02
2	Development of Ward level park in each ward.	15	13.5	1.5	-	-	15
3	Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-2)	2	1.8	0.2	-	-	2
4	Development of Green Belt near CM Bungalow and Abotani Colony	20	18	2	-	-	20
5	Development of Botanical Garden	12	10.8	1.2			12
	Total	50.02	45.018	5.002			50.02

Table 8.4: Annual Fund Sharing Break-up for Projects w.r.t to Park Development
(As per Table 2.3.2 of AMRUT Guidelines)

(Amount in Rs. Cr)

S. No.	Project	Gol	State			ULB			Conver gence	Others	Total
			14th FC	Others	Total	14th FC	Others	Total			
1	Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-1)	0.918	0.102	0	0.102		0	0	0	0	1.02
2	Development of Ward level park in each ward.	13.5	1.5	0	7.5		0	0	0	0	15
3	Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-2)	1.8	0.2	0	1		0	0	0	0	2
4	Development of Green Belt near CM Bungalow and Abotani Colony	18	2	0	10		0	0	0	0	20
5	Development of Botanical Garden	10.8	1.2	0	6		0	0	0	0	12
	Total	45.018	5.002	0	25.425		0	0	0	0	50.02

Table 8.5: Year wise Plan for Service Levels Improvements
(As per Table 2.5 of AMRUT guidelines)

Proposed Projects	Project Cost	Indicator	Baseline	Annual Targets (Increment from the Baseline Value)					
				FY2016		FY 2017	FY 2018	FY 2019	FY 2020
				H1	H2	2017	2018	2019	2020
Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-1)	1.85	Provision of playing facilities for children and Development of green spaces	-	-	-	-	-	-	-
Development of Ward level park in each ward.	15	Enhancing Green Space	3	-	4	4.5			
Development of Children and elderly facilities along with other requirements in IG and MG Park. (phase-2)	2	Provision of playing facilities for children and Development of green spaces	-	-	-	-	-	-	-
Development of Green Belt near CM Bungalow and Abotani Colony	20	Enhancing Green Space	3	-	-	-	-	5	
Development of Botanical Garden	12	Enhancing Green Space	3	-	-	-	-	-	6