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## Tripura Urban Sanitation Strategy (Draft), 2011

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# TRIPURA URBAN SANITATION STRATEGY

DRAFT

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## **SECTION 1: SITUATIONAL ANALYSIS**

### **A. Preamble**

Environmental sanitation is one of the basic needs and has become urgent requirements for protection and improvement of urban people's health and living conditions. It is remained one of the serious development challenges and is appropriately included in the Millennium Development Goals (MDGs), 11th Five Year Plan and all major national level development programs like Jawaharlal Nehru National Urban Renewal Mission (JnNURM), Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), Integrated Low Cost Sanitation (ILCS), Seventh Point Charter in Integrated Housing and Slum Development Program (IHSDP), Raji Awas Yojana (RAY) etc. Despite programs and interventions by Government of India (GoI), only 22% are using sewerage system, 35% are using septic tank and 26% of households have no latrines (54th round of NSS). According to Central Pollution Control Board (CPCB), the wastewater generated in 300 Class I cities, is estimated at about 15800 million liters a day (MLD) while the treatment facilities exist for hardly 3750 million liters per day. Only 21% of the wastewater generated is treated and 80% pollution of surface water is due to municipal sewage alone (Tenth Five Year Plan). Impact of poor sanitation is more on women, children and the elderly and especially significant on the urban poor. Research findings suggest a loss of 2% in GDP due to lack of sanitation related facilities. Provision of appropriate sanitation facilities is linked to policy, institutional, socio-cultural, technical and financial problems. National Urban Sanitation Policy (NUSP) has been formulated by the Government of India in 2008 with a vision to provide appropriate sanitation facilities in all cities and towns, through policy, institutional, technical and financial interventions. Some of the areas to address under NUSP include open defecation free towns, providing access to toilets for poor people, waste water and solid waste treatment and disposal and achieving public health outcomes and environmental standards. It is expected that all states will draw Sanitation Strategies and Urban Local Bodies (ULBs) prepare "City Sanitation Plans (CSP)" that address all issues such as; awareness of citizens, technology choices, regulation, finances and equity.

### **B. The Background**

Tripura is one of the low urbanizing states in India. In 2001, the state had 23 urban centres with a total population of 5.45 lakhs (2001 census) accounting to 17.1% of the total states' population as compared to the national average of 28 %. The incidence of urbanization ranges from 26.7 per cent in West District to a mere 6 per cent in Dhalai. The urban population is thus unequally distributed, with West District accounting for 75 per cent and Agartala, the capital, alone accounting for 35 percent of the urban population of the State. Dharamnagar, the second biggest town in the State, is only one-sixth the size of Agartala. The smallest urban area is Kamalpur Nagar Panchayat with 5,143 persons in 2001.

Human Development Index (HDI) for Tripura for the year 2001 was 0.59, which is 3 percentage points higher than India’s HDI of 0.56. Individual components of HDI and GDI show that Tripura performs much better than India with respect to the education index, close to the Indian average with respect to the health index, and lower than India in terms of the income index. Further, between 1991 and 2001, improvements in HDI and GDI in Tripura were greater than in India as a whole.

In 2001, Tripura was declared free of the practice of manual removal of night soil, subsequent to Government of Tripura’s Order on prohibition of Manual Scavengers and construction of Dry Pits with effect from 1 July, 1999. Substantial improvements in sanitation have occurred since then on account of the implementation of the Total Sanitation Campaign (TSC). As a result urban Tripura is better positioned than rest of urban India in sanitation provision and only 2.5 -3.5 % people defecating in open as compared to national average of 18%. But when it comes to treatment and disposal of human waste, no single town has sewerage system and Sewerage Treatment Plants (STPs).

### C. Situation Analysis and Problem Assessment

Status of service levels in environmental sanitation includes Water supply, Sanitation, Solid waste management and Drainage and their related aspects such as management (community participation etc), design standards, technology usage, construction, operation and maintenance, sanitation implication on health, awareness on sanitation & hygiene, environmental issues, finances, cost recovery aspects (PPP , user charges) etc are analysed in Situation Analysis to provide comprehensive assessment of the existing urban sanitation situation across the state.

#### Situational Analysis study highlighted the following key findings:

##### a. Coverage:

Findings from the Situation Analysis show that around 74% of the total urban households have access to adequate sanitation facilities, while around 23% use unimproved facilities. The following table explains the details of sanitation coverage:

Sl. No.	Type of sanitation system	% of HHS	Remarks
<b>A. Sanitary toilets (<i>Pucca latrines</i>)</b>			
1.	Septic Tank	74	Little is known about designs and specifications. Mostly done by the households without proper regulation.
2.	Single pit/Twin pit pour flush latrines		Three design variables are observed. First by the Drinking Water Supply Department, second by the

			Sulabh International and third by the State Building centre promoted by HUDCO.
<b>B. Unsanitary latrines (<i>Kutcha</i> latrines)</b>			
1.	Dry pit latrines	23	Pit covered by RCC/CC slab with an integrated pan/hole. Odour and fly nuisance are major concern.
2.	Open pit /unimproved latrines		Open pit not fully covered and with some sitting arrangement with wooden logs/ soil bags etc. Odour, fly nuisance and safety are major concerns.
3.	Covered enclosure with raised platform with or without pit and opened to river Nallah.		Odour, fly nuisance, personal safety, environmental pollution of water, soil and air are major concerns.

- Open Defecation is prevalent at around 2.5% which is comparatively low and can be totally made Open Defecation Free (ODF) urban Tripura with in a year as the scale of problem is easily doable.
- Ranir Bazar, TeliaMura and Santir Bazar *Nagar Panchayats* data indicated higher percentage of Open defecation in double digits (10% -25%).
- Use of unsanitary toilets (24% – 26 %) exists in large percentage even after prohibition of dry latrines and drain discharge directly in to nearing water bodies.
- About 30% of urban population live in slums. Among slum dwellers about 40% of total urban HHS use sanitary latrines and around 4% population defecate in open remaining use unsanitary latrines.
- The condition of SC and ST households, slum-dwellers and residents in the smaller towns<sup>1</sup> is reported to be much worse than the state average. The great majority of slum dwellers do not have sanitary latrines. Use semi enclosed “Hung Latrines” that drain in to water bodies & ponds.
- The numbers of public toilets to serve the floating population is grossly inadequate and are mostly not maintained well.
- Lack of credible Baseline Information about the full cycle of sanitation (viz. household arrangements to collection to disposal/treatment) forms a limitation and State Sanitation Strategy.
- Lack of awareness amongst public and institutional stakeholders at all levels about the linkages to public health and environmental outcomes of sanitation.
- Land scarcity is a problem in Agartala even in notified slums and congested areas for latrine provision.
- Apart from program based approach there is no mechanism in place ensuring access to sanitation to the un-served, poor and slum resident households.

**b. Treatment and Disposal:**

- Under Ground Drainage is not available and all cities/towns dispose off their sludge, untreated in an unsafe manner and there are number of challenges posed in providing de-sludging services. Even in Agartala in the absence of sewerage net work untreated sewage gets discharged into several drainage channels of the city and eventually finds its way into river Haora and Akhaora channel (UGD Detailed Project Report estimated about 8520 kg/ day of BOD is entering the Haora river).
- Septic tanks (around 45%) are not regulated and households discharge liquid waste from Septic tanks directly in to *Nallahs*.
- Septic tanks are cleared with Cesspools but many narrow areas of the towns can not be reached. Generally sludge is disposed in open dumping yards making animals and rag pickers vulnerable to septage. Disposal of the septic tank sludge is a major problem in the ULBs. Adequate number of cesspool cleaners are usually not available with the ULBs and nor are there proper disposal facilities.
- Cesspools are available only in Agartala MC. In 2009 revenue collected on Cess pool revenue collected on Cesspool operations is about Rs 4.5 lakhs.
- Disposal of the septic tank sludge is a major problem in other ULBs and generally cleaned manually by hiring local labour at Rs.2500 per cleaning. Mostly this sludge is disposed in nearby drains and sprinkled with Kerosene so that it will not give foul smell.
- River Water quality appears to contain bacterial load much above the permissible limit as the pollution caused by inadequate sanitation facilities in the human settlements and non treatment of liquid waste along the river – course. (State of Environment Report by state PCB)
- Due to inadequate maintenance, the drainage channels are gradually getting silted and are also getting affected with over grown vegetation. There are temporary settlements and other encroachments along the channels. Some drains even have large water pipe lines running through them. The channel capacities have been grossly reduced, resulting in contamination of water supply pipelines thus flooding of the area served.

**c. Institutional Arrangement:**

- The Government of Tripura (GoT) has a clear policy of promoting local self government and entrusting civic functions to the ULBs. As per the Tripura Municipal Act 1994, ULBs are responsible for managing the cycle of sanitation (Chapter X from section 156 to 168) and public health within their cities, in coordination with various departments.
- Though Sanitation is a matter for ULBs to address, for a variety of reasons, the state level agencies continue to plan and implement sewerage and sanitation related schemes. ULBs yet to be strengthened to take on this mandate in a systematic manner.
- Sanitation is managed by two main departments viz. The Public Health department (usually headed by a medical professional) and the Public Work Wing (only in Agartala MC) headed by an Engineering professional. Education and Poverty wing

also has a role in selecting beneficiaries for toilets and imparting training to health workers. But there is no single section defined to uphold the entire responsibility of the sanitation.

- The Public Health officer has support staff, largely in the category of sanitary workers/ sweepers. The main works are related to municipal solid waste management and provision and maintenance of public toilets is not given due importance. All the ULBs including *Nagar Panchayats* lack necessary technical capacity to understand and manage the entire gamut of issues under sanitation. Though provision of sanitation lies with ULB there is no designated officer responsible for over all sanitation.
- Lack of human resources and capacity at local level to implement and permit instructions.
- Adequate attention is not given to *safai karamcharies* – there is no policy to remedy their social, occupational and health issues. Lack of equipment (e.g. de-sludging trucks), tools (e.g. safety gear), and facilities (proper treatment and disposal facilities) constrain them further in discharging their responsibilities.
- Some current financing and cost recovery mechanisms practised in Urban Tripura for toilets and sewerage systems are; subsidies, local taxes, cross-subsidies, service charges usually included in water bills.

**d. Regulation:**

- Lack of standards and regulations on the following issues:
  - Standards for effluent discharge.
  - Proper assessment procedures prior to the construction of on site sanitation systems (pit latrines or dry latrines).
  - Code of practices for on site sanitation systems.
  - Proper instructions for the disposal of dry human waste.
- Enforcement is very weak due to the lack of staff, regulations and no/low level of fines.
- In Agartala alone, on Hobra River side around 1145 households discharge toilets waste in to river and water is drawn for other than drinking purposes from the same river. (Source: Field survey report by Pollution Control Board).
- The solid waste is not collected at doorstep in many ULBs and is found indiscriminately in open drains etc.
- These are many areas wherein there is no sufficient space to construct toilet though financial support is given under ILCS. Low cost two pit toilets have been developed with the help of ARKANEER of North Eastern Regional Educational Trust. Due to space problem people are building toilets with one pit but with increased depths, and in some cases adjacent to foundation of the main building structure. This may cause severe danger to main structure and may affect ground water.

**e. Ongoing interventions:**

- ILCS scheme is a single big programme implemented to provide toilets with a total cost of the project Rs.2348.75 lakhs (unit cost of Rs.12,500/-). About 18,790 beneficiaries with in 35 wards of AMC are covered.
- Under JnNURM, a DPR has been prepared for all the three Zones in Agartala MC covering population of 4,60,980 (Year 2040) for Rs. 378 crores and 90lakhs. This means that the cost of sewerage connection is at the rate of Rs 8,200/ per capita. This needs to be studied for considering toilet provision, treatment and disposal.
- BSUP, IHSDP programmes and SC - ST welfare schemes also provide toilet provision in urban areas of Tripura. Rajiv Awas Yojana (RAY) recently initiated with the support from Ministry of Housing and Urban Poverty Alleviation to provide facilities in slums. This will provide a very good opportunity to map slums with extensive details.
- “Nagaroday” a urban programme with a an objective to ensure direct participation of the people in the process of planning and implementation to provide better civic amenities and facilities needs further strengthening. The scheme is for below ward level in urban areas, dividing the ward into sub sectors. The main activities are to (a) collect basic information (b) hold open meetings of all adults in the sub sectors and (c) prepare development plans.

**f. Financial Performance:**

- The financial position of the study urban centres indicates an over dependency on grants-in-aid from state, central or local (MPLADS/MLALADS) for the ULBs. The ULBs are significantly dependent on devolved funds from the state and central governments as per the recommendations of Finance Commissions. Thus intensive operating expenditure investment choices in ULBs in addressing the sanitation question need adequate consideration.
- Own revenue sources contribute a small proportion of total expenditure. Much of the expenditure on “sanitation” is actually cornered by solid waste management.

The Tripura Urban Sanitation Strategy has, therefore, been framed looking at the requirements of urban Tripura, emerging out from situational analysis and also as per the requirements of NUSP through extensive consultations with all the stakeholders. The Strategy defines the state targets, unified approach and resources that will be necessary to enable the ULBs to achieve strategy goals in a systematic and time – bound manner. The strategy also mandates and guides ULBs to develop CSP detailing how to plan for delivering sanitary outcomes defined in the State Urban Sanitation Strategy. This should be in coordination with other line departments to ensure a well collaborated approach engaging all stakeholders including governmental and non governmental service providers. Other Departments and Institutions carrying out sanitation related projects in urban areas are also recommended to follow this strategy.

## SECTION 2: – URBAN SANITATION STRATEGY

### D. Sanitation Mission Statement

*“All cities and towns in Tripura become totally sanitized by 2015 so as to ensure good public health standards, human dignity, and privacy for all citizens”*

.....*This covers – collection, transportation, treatment and disposal to prevent disease, pollution and safeguard dignity.*

#### Milestones of the Mission:

Immediate Term (2011/12)	Medium Term (2013/14)	Long Term 2014 onwards
1. Elimination of open defecation 2. Universal access to safe sanitation (households and Community level) ➤ Up gradation of <i>kutchra</i> to <i>pucca</i> toilets. (1st year-50% and 2nd year another 50% short fall ) 3. School and institutional sanitation 4. Public areas 5. Credible Information (MIS) 6. Sanitation improvement plans (CSP) 7. Septage management 8. Institutional arrangements and Capacity building.	9. Regulation 10. Sanitary and safe disposal of human excreta and liquid waste 11. Systems in place for good O & M (individual, community level toilets and disposal systems) through behavior change and good mgmt practices 12. Door to door collection of MSW and safe transport	13. Water recycle and reuse 14. Monitoring and evaluation 15. Decentralized technology options e.g. DEWATS.

### E. Guiding Principles

- i. Keeping focus on following vital aspects of total sanitation:
  - 100% safe confinement of human excreta.
  - 100% safe transport of sludge
  - 100% safe treatment and disposal
  - Reuse of the sludge to achieve environmental total sanitation.
- ii. Demand creation with focus on public health, human dignity and privacy involving the community in planning, implementation and management of sanitation infrastructure. There by a sense of community ownership in the infrastructure is achieved.

- iii. Adoption of locally suitable methods and technologies and provide necessary facilitation support to the ULBs. Fostering multi-stakeholder partnerships - where citizens, governments, NGO’s, donors, media and academics all work together for improved sanitary living conditions.
- iv. Bringing coordination among the various departments such as Health, Education, PHED, Industry, Environment, transport, PCB etc, working in water and sanitation sector
- v. Better utilization of funds allocated under Finance Commission for management of environmental sanitation. Encouraging novel ideas for fund generation including reforming tax regime, public private partnership, financial market, private companies, users’ fees and their contribution, etc.
- vi. Bringing coordination among various externally aided projects and schemes in the state so as to achieve better outcomes.
- vii. Major areas identified to be addressed are:

Supply Side	Demand Side	Usages
1. Policy interventions 2. Institutional arrangements 3. R&D and Promoting Market Forces (Sanitary Marts) 4. Financial Advocacy ( Subsidies, Cost recovery, PPP)	1.Partnerships (Schools/Angan Wadi / Health) and encourage drivers 2.Information Education and Communication ( IEC) 3.Capacity Building and skill Development ( ULB people, masons, local manufacturers) 4.Low cost Sanitation technology promotion and marketing City ratings, Rewards and Incentives.	1. Regular monitoring and evaluation Health, Environmental indicators

Therefore, in order to achieve mission statement and milestones specified a favourable social, political and economic environment is required for programs to transform hygiene and sanitation behaviours. The major themes of sanitation strategy and its elements to create enabling environment include:

### 1. Recognising Central Role of ULBs

Under 74th CA and subsequent Municipal Act of Tripura, Local Governments in Tripura have statutory responsibility for sanitation planning and provision with the help of state level institutions and therefore plays an important role. However, the ULBs in the state have a number of structural and operational constraints in taking custodianship of sanitation and providing proper services. To support municipal bodies state Government along with Urban Development Department need to make concerted efforts to devolve powers, roles and responsibilities along with financial and personnel resources necessary for ULBs to discharge their functions. An apex policy body of twelve members - “**State Sanitation Committee (SSC)** ” as recommended by NUSP has been setup drawing members at state level (Ref

Annexure -) which is responsible for sanitation strategy framework and coordination to create demand generation, provision of finances, technical and regulation barrier to urban areas including informal settlements.

The roles and responsibilities of the SSC are:

- SSC is a custodian of the State Sanitation Strategy and will revise and amend as deemed necessary.
- Give an over all direction to achieve mission goals within the time frame.
- Improve comprehensive information base linking with GIS maps.
- Undertaking periodical studies on sanitation situation of urban Tripura.
- Setting standards, revising guidelines and benchmarks at state level to follow all the ULBs at every five years, Environmental Outcomes (e.g. PCB standards on effluent parameters), Public Health Outcomes (e.g. Health Departments), Processes (e.g. safe disposal of on-site septage) and infrastructure (e.g. design standards) (PHEDs), Service Delivery Standards – water quality, faecal coliform).
- Guide, mentor and finalize the CSPs for all ULBs.
- Review implementation of the Sanitation Projects.

## **2. Institutional Arrangements**

### **2.1 State level:**

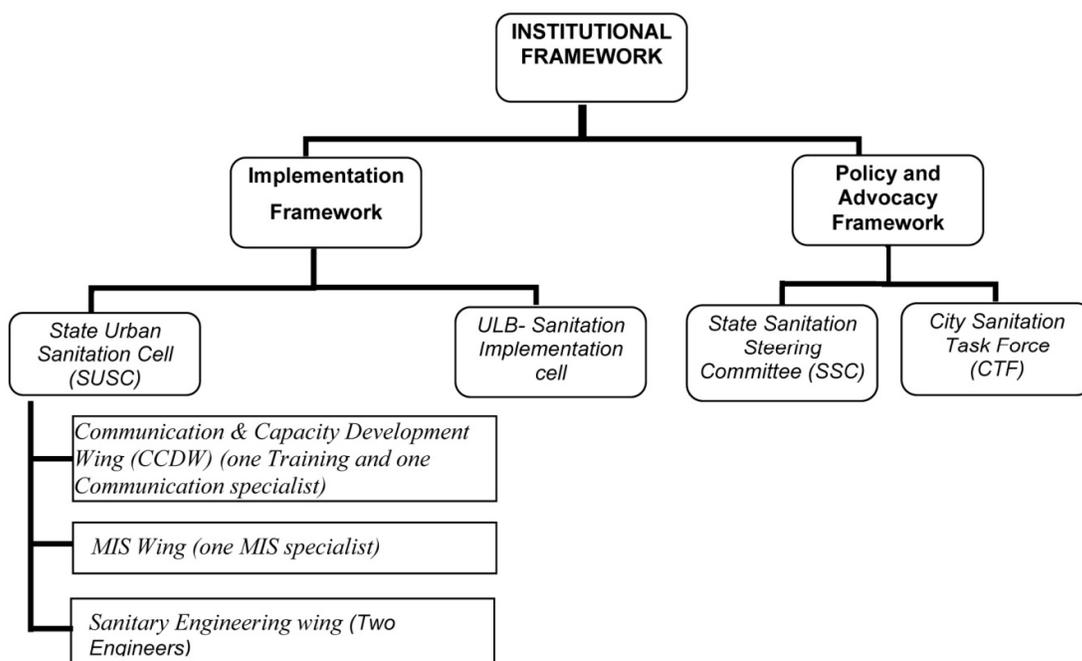
Urban Development Department needs to be strengthened for the purpose of functioning as a Sanitation Nodal Agency with a dedicated Sanitation Cell. The Cell will have a complete office set up with the following constitution, terms of reference. (To elaborate on Roles and responsibilities, on investment flows, Policy and standards setting, Asset Creation, Financing of Capital Investments, Planning and implementation, Operation and maintenance, Environmental Regulation, Monitoring and Evaluation, Land Use / Building regulations, Ongoing programs, Implementation, Execution, Legal Regulatory Responsibility, Capacity Building and IEC).

#### **2.1.1 Constitution of State Urban Sanitation Cell (SUSC):**

- Creation of a strategic urban sanitation cell at Urban Development Department (UDD), Govt of Tripura, to be headed by a “Director” equivalent officer with a fixed tenure of five of mission period for better coordination and integrated development.
- SUSC is expected to provide over all direction and strategic support to ULBs and coordinate with state level organisations in achieving the strategy objectives in a time- bound manner.

- SUSC will support cities in preparing CSPs by giving over all direction, frame work etc with in the first year of mission period.
- It will have three strategic wings (ref: fig no 1) with specific and designated expertise to offer and support in achieving the mission objectives. Each wing will have two expert staff in required field with the support from “Sanitation Fund”.
- SUSC will be central coordinating body and need to coordinate with State, Districts and ULBs. IEC wing of SSMC should work closely with State Health Department, Education Department and design awareness programmes for convergence. Engineering wing and MIS wings of SSMC should coordinate regularly with Town and Country Planning Department to ensure all convergence and effective planning.

**2.1.2 Proposed Institutional Set up for Sanitation:**



**Fig1: The Proposed Institutional Set-up for Improvement of Sanitation**

The responsibilities of the State Urban Sanitation Cell (SUSC) are:

- Monitor integrated planning for sanitation promotion.
- Guide the ULBs in conceptualizing, planning and implementing the sanitation programmes while preparing CSPs.
- Will initiate sector reforms so as to invite more investment from lateral and bilateral funding agencies in the sector.
- Channelize the financial and technical support to the ULBs and coordinate with other state departments and agencies engaged in sanitation promotion.

- Design & arrange capacity building programmes for ULB staffs and concerned other line Departments. Develop initiatives to promote and facilitate the process of community development.
- Work out standard designs and specifications including construction practices and O&M aspects and bring out a “**Sanitation Guidance Manual**” to facilitate the target groups in identifying and recommending appropriate technology options for on-site sanitation considering (1) affordability and acceptability by the end users, (2) soil, groundwater and climatic conditions of a location, (3) associated environmental, ecological and health aspects, and (4) availability of water and long term sustainability of the system.
- Monitor the sanitation arrangement and public health & hygiene following the Tripura Acts & Rules.
- To take up sector studies and strategy papers, to facilitate partnerships and assist DUSCs.

## 2.2 ULB Level

With the active support of SSC ULB is responsible for over all implementation of sanitation including ensuring quality aspects, regulation and monitoring and are accountable in implementing all the milestones specified. All ULBs in Tripura will prepare CSPs by 2012 and implement by 2016. A multi-stakeholder “**City Sanitation Task Force (CSTF)**” comprising representatives from multidisciplinary fields has been constituted in Agartala Municipal Council (ref Annexure ---) for over all guidance. Similarly CSTFs should be constituted in all ULBs and conduct meetings once in a month to oversee sanitation related activities. Presently in the ULB there is no responsible official to look after sanitation. Within the ULB, there is a need to identify “**Sanitation Implementation Unit**” in-house from the existing staff for all practical implementation purposes. The unit shall be responsible for preparation and implementation of the city sanitation plan. Commissioner/ CMO shall be the head of the unit and may appoint suitable officer as the in-charge officer. Commissioner/CMO may also nominate other suitable officers as members of the unit. This unit should be supported by additional staff like Sanitary Inspector depending on the population of ULBs. This unit can monitor the progress every month, develop and update database on sanitation in ULB.

The unit will ensure preparation of ward maps as part of CSPs with the help of councillors showing community concerns, pinpoint problem areas to address, prioritise projects for implementation, and monitor quality checks. They will identify actions and related spatial and non spatial interventions. For day to day implementations existing institutional mechanism at ULB level like Ward Committees, Ward Development Committees, Task Force needs to be strengthened with orientation trainings and capacity building training.

## 2. Financing Mechanisms

Achieving universal access and milestones set under mission statement to cover Residential, School, and Community/ Public toilets facilities require substantial fund requirements. Capital expenditure currently is financed by borrowings, and some grant finance like JnNURM (UIG, UIDSSMT, BSUP and IHSDP) and ILCS. Funding from ILCS programme is a not an assured option but can be certainly deepened depending on the availability in future. To provide systematic, consistent financial support it is proposed that Urban Development Department to have a separate Budget head on Sanitation with Token amount starting from FY 2010/2011.

A separate centralised “**Urban Sanitation Fund**” should be created, pooling resources from bilateral and lateral organisations, State Finance Commission and Central finance Commission and both tied and untied funds to make sustained effort in environmental sanitation. Other departments of State Governments may contribute to specific components on School Sanitation Maintenance Grant. For IEC component money should be contributed by Public Health Department and pooling resources from Corporate Social Responsibility (CSR). To reach unreached **at least 20% of the funds** under the sanitation sector should be earmarked for the urban poor. Urban Sanitation Fund will have allocations for all the components like capacity building, incentives and rewards, technology promotion, IEC and etc. SSC will work out modalities of the composition of Sanitation Fund. All investments in sanitation should be guided by **the principle of optimal utilization of fund and their implementation** and on utilisation of their allocation in the past year. Rewards and incentives should be based on city ratings on sanitation. IEC and Reward programmes components can tap resources for funding under Corporate Social Responsibility (CSR) of various companies.

School sanitation will be financed by Sarva Siksha Abhiyan (SSA), Primary, Secondary & Higher Secondary Boards and respective departments launched non-formal education centres. All educational facilities and schools should take approval from ULB for building construction so as to ensure toilet facility. For up keeping of sanitation, a provision should be made by Department of Education in the budgets of all primary, secondary and higher secondary government schools in the form of “**maintenance grant**”.

There is a need to eliminate subsidies for toilet construction through interventions and intensive awareness programme. Subsidies, if provided, should be at low levels and carefully-administered only for the very poorest people. The issues of cross subsidisation of the urban poor and their involvement in the collection of O&M charges should be addressed. The setting of tariff should take into account household affordability and user willingness through survey especially in the areas where sewerage projects are planned. Tariff levels should be decided at local authority level within an agreed structure. Recurring expenditure (operation

& maintenance, replacements, administration, loan repayment) should be financed by current income, comprising consumer charges, local taxes etc. These aspects should be addressed in detail while preparing CSPs.

### **3.1 Private – Public Partnership (PPP)**

PPP may be taken as option and promoted in big way for construction and Operation & Maintenance of Community and Public toilets with the help of WC, WDC, CDS, private contractors/companies and NGOs as Government can not address the sanitation backlog alone.

The private sector should be encouraged to take over responsibility for networked services such as sewerage and can also be involved in sanitation provision at the local level especially in peri urban areas. The private sector, especially the business sector, can manufacture and install sanitation systems, partner with ULBs in service provision and provide finance. Private sector and NGO investment will be encouraged in manufacturing, sale and distribution of sanitary installations etc.

Given the current state, PPP will necessarily have to be gradual. Preparatory work for PSP in the sector like fostering a culture of commercialization, encouraging out sourcing, building local capacity and most importantly identifying and expediting the necessary legislative institutional and regularly changes that are necessary for PPP will be undertaken in the meanwhile. Given the very different sizes of urban areas in the State, the GoT should allow a range of different PPP methods of service provision and service providers.

### **3.2 Funds Requirement**

The State government will mobilize the following funds through own sources in combination with the help of central government and external donors. The quantum of funds is estimated based on deliverables as identified in the table below.

Estimated Fund Requirement (in lakhs)						
Components/ Year	2011/12	2012/13	2013/14	2014/15	2015/16	
<b>Hard Components</b>						
1	Construction of toilets ( HH, Community etc....	1766	1854.3	1947.015	2044.366	2146.584
2	Public toilets Gender Sanitation, School sanitation etc.....	200	100			
3	Vacuetag and cesspools	160	32	33.6	32	
4	Sewerage for AMC	5000	5000	10000	10000	7890
5	Septage treatment and disposal			100	100	200
<b>Sub total (A)</b>		<b>7126</b>	<b>6986.3</b>	<b>12080.62</b>	<b>12176.37</b>	<b>10236.58</b>
<b>Soft Components</b>						
1	CSP preparation @10lakhs per ULB	160	0	0	0	0
2	DPR preparation (1%of A)	71.26	69.863	120.8061 5	121.76366	102.3658404
3	IEC (2%)	142.52	139.726	241.6123	243.52732	204.7316808
4	Rewards -Lump sum	25	25	25	25	25
5	Capacity Building (2% of A)	142.52	139.726	241.6123	243.52732	204.7316808
6	Admin and other expenses (15% of A) (Health of sanitation workers, staff cost, ASHA workers/volunteers, NSS and Youth Sports Ministry)	1068.9	1047.94 5	1812.092 3	1826.4549	1535.487606
<b>SubTotal (B)</b>		<b>1610.2</b>	<b>1422.26</b>	<b>2441.123</b>	<b>2460.273</b>	<b>2072.316808</b>
<b>Grand Total (A+B)</b>		<b>8736.2</b>	<b>8408.56</b>	<b>14521.74</b>	<b>14636.64</b>	<b>12308.90085</b>
<b>Grand Total in lakhs</b>						<b>58,612.04</b>
<b>Grand Total in Crores</b>						<b>586.1203805</b>
<b>Assumptions:</b>						
1. Construction of Toilet @Rs15000/- per toilet						
2. Every year 5% increase in BPL HHs (Shortage in proportion of 70:30 for APL and BPL)						
3. Vacuetag one each to all ULBs and cesspool extra for AMC from .						
4. Depending on local situation and total septage to handle 10MLD on avg except AMC annually including O&M						
Possible Source of Funds : IHSDP/BSUP,ILCS, Rajiv Awas Yojana(RAY), JnNURM / UIDSSMT, Bilateral lateral agencies, Matching grants, beneficiary share, SCST well fare schemes, CSR contributions.						
<b>5. Rewards:</b>						
➤ Open Defecation free Ward Rs. 2 Lakhs						
➤ Litter free Ward Rs. 3 Lakhs						
➤ Foul Water Free Ward Rs. 5 Lakhs						
➤ Cleanest Ward						
➤ 1st: Rs. 10 lakh						

	<p>➤ 2nd: Rs. 5 lakh</p> <p>6. For Drainage and Integrated Solid Waste Management (ISWM) as per MSW 2000 rules state govt should ensure sufficient funds from untied and tied fund for the success of the Sanitation mission. User Charges for these services also needs to be in place for the sustainability.</p> <p>7. Provision of the revision of Strategy and CSPs every five years is essential for sustaining the achievement of milestones.</p> <p>8. Social services – 44049 crores in 2005/6, Urban Out lay - 2365.24 Crores in 2005/6. Estimated requirement of Sanitation Strategy is 3-5% of urban outlay in each year.</p>
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#### 4. Reaching the unreached

Special attention should be given to ways of facilitating the improvement of sanitation for residents on land owned by others like informal settlement dwellers, tenants etc. Delinking **Land Tenure Ship** to have access to toilet needs to be considered on priority. Social Welfare Department will continue to provide financial support for **rehabilitation** of scavengers / *safai karmacharies* and their family members and Backward Class Department provide financial support for educational scholarship of the school going children of *Safai Karmacharies*.

Sanitation for new housing for poor & slum dwellers should normally be funded & subsidized through National Programmes but no separate subsidy for sanitation should be provided for households where sanitation is covered already by government programme. But at the same time to upgrade the facilities a loan can be given to all BPL families. Subsidies should be pre-allocated based on poverty indicators. For transparency and accountability, the lists of names should be displayed at ward office or in locality/ public places for two weeks. Complaints could be referred to the Ward Development Committee (WDC). Those who had registered for a toilet should be obliged to take part in three training sessions: on health, technical aspects and maintenance, and use. Health and technical education should be targeted at both sexes. CCDW of SUSC should impart training following training need assessment of different target groups.

#### 5. Community Participation

**Community groups and organisations** may take responsibility for providing and managing local services, sometimes with support from non-government organisations. Their direct interest in the functioning of services means that they may carry out these tasks more effectively than would a remote government department. If they are organised and informed, they play an important role in mobilising for better services from service providers.

Beneficiaries are to be involved in project cycle management and in the selection of technology options. Sanitation improvements should maximize the benefits to the local economy by optimally using local community builders (like CDS) and businesses.

Community involvement in the pre- planning, planning, decision making and implementation stages of sanitation projects is essential for increased commitment to and ownership of created assets & projects, which in turn essential to achieve sustainability.

## 6. IEC for Environmental Sanitation Provision

The first step in making cities 100% sanitized is to elevate the consciousness about sanitation in the mind of municipal agencies, government agencies and most importantly, amongst the people of the city. ULBs are in the frontline of implementation and have a key role in ensuring sanitation and should focus on **demand responsive approach**. State government should ensure support to ULBs in providing enabling environment in all respects and provide communication and awareness strategy. A **“communication need assessment”** for different Target Groups should be taken up while preparing CSPs. The objective of well driven IEC is to increase demand for toilets and ensure hygiene behaviours, promote no subsidies for household toilets in future and encourage diversity in technology and design through social marketing approaches.

The choices for IEC are:

- **Mass media** (Television, radio campaigns, newspapers, drama, local television fairs, videos, camps, rallies etc.), along with a media plan highlighting following:
  - a. Points to be highlighted through the media campaign especially on basic Hygiene, cleanliness with in and outside home, OD free spaces and use of Sanitary Latrines etc.
  - b. Improper discharge of septic tank effluents and grey water and environmental issues.
  - c. School sanitation.
  - d. Promoting low cost and environmental sustainable options and highlighting benefits.
- Group or personal communication (training classes, meetings, formation of women’s groups, home visits, neighbourhood or compound meetings)
- Participatory techniques and community/neighbourhood planning (mapping, ranking, community survey, sorting exercises).
- Mobilization of local government, institutions, community organizations, NGOs.
- Community analysis using PRA tools.

### **6.1 Players in sanitation provision and hygiene promotion**

The ULBs may utilise suitable player for inter-personal IEC and training from the existing system like; ward development committees, health institutions, schools, National Service Scheme (NSC) Volunteers, the private sector (retailers, contractors, suppliers, plumbers, masons), neighbourhood committees and NGOs, Angan Wadi workers. While involving **the existing ASHA workers**, incentives need to be created for them in the form of daily allowances or preference in Tripura Urban Employment Programme for employment opportunities, so as to encourage and motivate.

i. Following existing structures of urban Tripura who should actively involved in IEC are:

- Standing Committee related to Health, Sanitation and Public Health, The Urban Poverty Eradication Cell (UPE Cell) and Ward Committees.
- **Non- Government Organization (NGO):** SULABH and ARKANEER may be involved in hygiene awareness programmes, facilitate community participation, develop community based construction team (from CDS or user groups) and implement, monitor and evaluate the projects.
- **Youth Clubs:** Youth clubs are popular in Tripura and they may be involved in safe sanitation promotion.
- **Ward Education Committee** may be made responsible for planning, improvement and monitoring of School Infrastructure and Hygiene Promotion Programme.
- **Sishu Siksha Kendra, Integrated Child Development Service (ICDS), Sub Health Centre etc.** should be given with the responsibility to promote hygiene education within the community.

**6.2 Key IEC activities** To accelerate the process and achieve desired results key activities to take up under IEC are;

**6.2.1 Organising sanitation week/month** - during this period having high visible face to face enhanced IEC activities in relation to water, sanitation, hygiene and health through staff at commune health stations, ASHW and SSC volunteers. Improved basic health education in schools is another key activity, aimed at changing the behaviour of the young generation. This will be combined with the construction of WSS facilities in all schools and other public institutions. This can be clubbed along with some festivals (Durga Puja), fairs which are popular in Tripura.

**6.2.2 Knowledge Development:** Knowledge development and disseminating of knowledge on institutional development, technology choices and management regimes, planning new developments and up gradation, and sustainability issues.

**6.2.3 SSHE (School Sanitation and Hygiene Education programs):** Evidence shows that school interventions can improve the child's academic achievement and

increase girls' enrolment and school attendance (Cairncross, 1999; Nokes, 1992). As part of strategy to improve child health, increase in girl child enrolment and retain girls in school and influence households for improved hygiene and excreta disposal SSHE should be promoted jointly by Department of Health and Department of Education. Important elements for successful SSHE include: teacher training, supervisory visits to schools, mobilizing children through, for example, health clubs as well as ensuring effective coordination between key institutions leading the program (UNICEF, 1998). It is proposed that including curriculum on “Safe and environmental sanitation” as mandatory in the NSS activities with field activities to be taken up by volunteers.

#### **6.2.4 Rewards and Awards**

Cities should institute their own reward schemes to incentivise local stakeholders to participate in the process of improvements for reaching 100% sanitation. Rewards could be given following the national guidelines. The following could be units for rewards:

- a) Municipal Wards, Neighbourhoods and slums to which the following outcome oriented block grants shall be introduced:  
Stage I: Rewards to MC/NP for each ‘Open Defecation Free’ Ward;  
Stage II: Rewards to MC/NP for each ‘Litter Free’ Ward;  
Stage III: Rewards to MC/NP for each ‘Foul Water Free’ Ward;  
Stage IV: Awards to MC/NP for the ‘Cleanest’ ward
- b) Colonies or Residents’ Associations;
- c) Schools, colleges and other educational institutions
- d) Market and Bazaar Committees,

The indicator of ‘excellence’ in sanitation performance shall be ‘relative’ to other Wards and shall be based on a competition to identify the ‘Cleanest’ Ward in the State. This shall seek to ensure that the desired health and quality of life outcomes are being delivered from the ‘safe defecation’, ‘litter free’ and ‘grey water free’ Wards. This competition should be linked to performance in relevant health data (i.e. child weight / height, incidence of sanitation related diseases i.e. diarrhea, cholera, typhoid, hepatitis, malaria, skin diseases).

The reward may contain a nominal amount of money to be drawn from “Sanitation Fund”. A scroll of honour, public function to accord recognition, and rating of wards may also be considered as a part of rewards.

## 7. Standard Setting, Monitoring & Evaluation

In order to achieve the objective and as per the milestones of sanitation strategy it is important to monitor the progress from time to time. This strategy advocates a monitoring system that tracks all levels of achievements viz ***Outputs, Processes and Outcomes rather than capturing data related to investments and physical progress.*** Improved sector outcomes against standards set will be coordinated at the State level by SSC (Urban Development Department, Forest and Environment Department, State Pollution Control Board, Department of Health, Department of Education, Planning & Coordination Department, Finance Department). SSC is the apex body for monitoring urban sanitation promotion programmes and SUSC - Nodal Agency to implement sanitation strategy will prepare the report for state level. To manage and verify data a reliable management information system (MIS) will be established by MIS wing of SUSC and track the benchmarks of progress of MC/NPs in regards to those Sanitation as indicated in NUSP. All the ULBs should monitor the progress on these indicators and report to the state government on a yearly basis.

At ULB level City Sanitation Task Force monitor the programme in support of Standing Committees (Health, Sanitation, Public Works, and Water supply) based on Implementation Agency data, citizens' groups feedback, and primary Field Visits. Periodic verification of following Impact and Monitoring indicators at ULB level are suggested, using structured observation samples and focus group discussions.

**To measure 100% Sanitation Milestone achievements, a number of tools can be considered:**

**a. Impact Indicators**

- Reduction in incidence of diseases, e.g. - percentage children less than 36 months age with diarrhoea in last two weeks
- Quantity of water used per capita per day
- % of child caregivers, food prepares with appropriate hand-washing behaviour.
- Use of safe methods for disposal of infant excreta
- Knowledge of danger of unsafe excreta disposal and hand washing practice
- Demand for new toilets within towns and from neighbouring communities
- % of toilets upgraded with own funds by households after monsoon/filling up of pit

**b. Monitoring indicators**

- % of households with access to sanitary latrines: public and personal separately
- % constructed water supply facilities maintained by the communities served
- % households using safe drinking water regularly (public and personal separately)
- Use of toilets by household members (esp. men, aged, disabled, children under 5)
- Range of available affordable options for toilets.
- Use of Recycled Waste Water in Agriculture/ Horticulture as % and absolute quantity.

## 8. Capacity Building and Training

Capacity building and training of concerned state level agencies/departments, ULB level officials and elected representatives, CBOs and NGOs is crucial in achieving and sustaining 100 percent sanitation. The specific focus should be of two types: (i) Institutional Training and (ii) Systems Improvement within the organization. Training Need Assessment (TNA) should be taken up to assess current level of competence and establishment of a threshold level of skills and competencies required by different players to perform their expected role. HRD & IEC activities of sanitation projects need to utilize Govt. of India and State Government Schemes for training and capacity building. This assessment will be best done at the State level by wing of IEC and Capacity building of SUSC. This unit will work with local NGOs, Building Centres for technology training (ARKANEER). NGOs have an important role in the implementation of universal sanitation.

Technology fund created under sanitation fund will be used for further R&D of low cost and geographically suitable technologies for toilets, waste collection, treatment and disposal. SSMC wing will take the help of HUDCO, SULABH and ARKANEER to develop locally suited technologies, develop manual on options available for larger dissemination and also take up training for artisans, masons and households who are willing to support construction activity. ULBs will need to provide training on sanitation to their own staff – using state level resource agencies like ATI at Guwahati. They can be actively involved in IEC activities for bringing about awareness among the people for the need of sanitation and hygiene.

- The SSMC will be the nodal agency for training at state level and conduct a “Training need assessment” for all.
- The SSMC shall prepare a training plan, methodology, module and roaster for training of State, ULB, Community and Private functionaries. Indicative modules for training include project management, storekeeping, bookkeeping, procurement and other administrative issues, health and hygiene promotion amongst community members, training of community members, masons in the building and construction of toilet facilities, septic cleaners on safe methods of handling and disposal.
- SSMC shall empanel the resource persons and institutions for capacity building programmes of sanitation functionaries.
- Organise study / exposure visits at different levels, technical trainings / workshops to translate potential options into the local context.
- Manuals / hand holding / model contracts to support local partnerships for implementation and knowledge networks to raise awareness of potential options.

## 9. Enabling legal and regulation environment

In the sanitation sector, one of the major constraints for coordinated regulation is the fact that responsibilities for standard setting, evaluation and enforcement are dispersed amongst various government stakeholders. In recognition of this, the NUSP guidelines requests State governments to develop a regulatory framework for sanitation, The Urban Development Department shall therefore develop a regulatory framework encompassing the sanitation sector. The allocation of functions, funds and functionaries necessary to implement this framework will be detailed following the approval of this strategy framework. For instance, while the responsibility for water and sanitation service delivery policy lies with the Local Government, the responsibilities for regulating water quality/hygiene and environmental standards are dispersed between, the Department of Health and the State Pollution Control Board respectively. Direct action points to be undertaken are:

- Local authorities are responsible to provide water and sanitation services to the population. But each individual has the obligation to equip his/her house with an adequate sanitation facility (to be incorporated in Municipality Act).
- SSC will draft bye - law for regulating the construction, operation and maintenance and control of latrines in all constructions. This will be incorporated in existing building bye-law. (Model bye-law is annexed).
- Buildings bye-laws should be strengthened to make it mandatory for all constructions to have minimum water seal type of latrine with treatment and disposal conforming to meeting environmental standards, designs specifications set by sanitation committee.
- Punitive measures should be taken for not providing and maintaining the toilet as well as discharge of effluents in to the drain as per standards.
- A **“Toilet Regularizations Scheme”** especially in Agartala MC to be introduced with immediate effect to regularise all toilets construction practices. Along with this, ULB has to maintain a database of all properties with toilet details.

## 10. Special Focus

### 10.1 Gender and Sanitation

Gender and sanitation are integral and can improve sanitation conditions considerably. Women are to be involved in the decision making process at all levels. A maximum of 2- 4 percent of the budget provision from “Sanitation Fund” is recommended for Sanitary Complexes for Women and separate school toilets for girls. The role of women in the process of planning, decision making and management shall be promoted through their increased representation in management committees/boards for increased participation in sanitation related matters. Schools and community sanitary complexes will set up incinerators for proper disposal of sanitary napkins and other wastes. The construction of toilets also should

be given to women labourers. This would ensure girl child enrolment in schools and provide employment opportunities to Women Groups. In all public places toilets should provide facilities convenient for women, children and disabled persons.

### **10.2 Health and safety of sanitation Workers**

Social and Occupational aspects of Sanitation needs to be paid special attention. Despite the appropriate legal framework, progress towards the elimination of manual scavenging has shown limited success, little or no attention has been paid towards the occupational hazard faced by sanitation workers daily. All sanitation workers need to be covered under Health Insurance Policy.

**10.3 “Tripura Sanitation Net Work” (TS NET)** under Town and Country Planning Wing of Tripura to forger partnerships and understanding among sector stakeholders; Civil society, NGOs, HUDCO, SULABH, building marts and external support agencies. To bring high quality and strengthen the participatory framework in Tripura.

### **10.4 Incentives and Disincentives by MC/NPS**

The incentives within the City Sanitation Plans could provide infrastructure funding to those communities that successfully achieve excreta free, litter free or foul water free status. The incentives within the TC/NPs may include:

- **Increased funding for municipalities** that succeed in implementing effective sanitation programmes
- The provision of collective ‘in kind’ rewards to motivators that successfully support wards and neighborhoods to achieve ‘excreta free’, ‘litter free’ or ‘foul water free’ status (e.g. sewing machines to local female mobilizers).
- Publicly recognizing those wards and neighborhoods that achieve ‘excreta free’, ‘litter free’ or ‘foul water free’ status.
- Communities that have achieved ‘excreta free’, ‘litter free’ or ‘foul water free’ status must place a signboard to this effect at the entrance to the neighborhood / ward.
- The prioritization of infrastructure investments in those wards which have already achieved ‘open defecation free’ status.
- Entering into ‘outcome based contracts’ with local activists where payment is linked to the successful triggering of ODF status in certain wards.

The disincentives the ULBs may consider within the CSP include:

- Exercising all provisions within the Municipal Act/ Water Act to levy fines, bills for costs incurred and instigate court proceedings for encroachments, releases of

industrial waste or effluent, illegal slaughter houses, markets, burial grounds, and the provision of essential water/sewerage/drainage connections.

- The provision of ‘fine’ for all individuals that dispose excreta, litter or foul water in an unhygienic manner in public spaces.
- Sanctions against harmful actions and/or failure to act - for instance, a ban, supported by fines on the use of untreated sewage to irrigate crops/water bodies.

### **10.5 Recognizing Innovative Approaches**

The Sanitation Strategy offers a series of rewards to local governments that successfully reduce the exposure of the public to the unsafe disposal of waste. To create incentives for MC/NPs to develop innovative solutions to eradicate the indiscriminate disposal of waste, the UDD shall identify the ‘best practice’ innovations in sanitation service delivery. These may be characterized by innovations in the communication and financing strategies, the technologies, the forms of partnership and/or the approaches to performance monitoring. (Guidance Notes for MC/NPs are included at Appendix 3).

Govt. of Tripura  
Urban Development Department

No: F.2 (333)-GL/ UDD/TCPO/2009 1879-91

Dated: Agartala, the 12<sup>th</sup> January, 2010

**NOTIFICATION**

**Sub:-** Constitution of State Sanitation Committee (SSC)

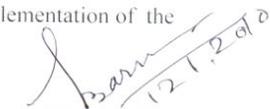
Governor, Tripura has been pleased to constitute State Sanitation Committee with the following members.

1	Chairperson	Agartala Municipal Council
2	Chairperson	Udaipur Nagar Panchayat
3	Principal Secretary	Urban Development Department
4	Joint Secretary	Finance Department
5	Joint Secretary	Revenue Department
6	Director	Department of Health & Family Welfare
7	Director	Department of Social Education & Social Welfare
8	Director	Urban Development Department
9	Director	Education Department (School Education)
10	Chief Engineer	PWD (DWS)
11	Town and Country Planner	Town and Country Planning Organization
12	Assistant Engineer	Tripura Pollution Control Board

The terms of reference of State Level Sanitation Committee are as follows:

- o To finalize the State Urban Sanitation Policy
- o To finalize the City Sanitation Plans

The Committee members will meet as and when required to review implementation of the Sanitation Projects.

  
Deputy Secretary to the  
Govt. of Tripura

To  
Director, GA(P&S) Department, Govt. of Tripura, Agartala, Tripura with request to publish the Notification in an extra-ordinary issue of Tripura Gazette. 50(Fifty) Nos. of Gazette Notification may kindly be sent to this Department immediately.