Annexure 1

Checklist for obtaining Data/Information for Evaluation of Solid Waste Management in the Towns

Profile of the City

Name of the City/Town
Population (Past, present and future)
No. of Wards
Ward-wise population
No. of Slums
Ward-wise slum population
Organisational structure

Existing levels of Infrastructural Facilities;

Water supply
Roads,
SWM,
Drainage,
Sewerage,
Streetlights etc.
Any schemes/programmes/projects launched to improve the above services
Are the projects funded by the Municipality/Government/Other agencies
Organisational chart for MSW management
Whether any ward level/decentralized mechanism for SWM exist.
No. of Vegetable and fruit markets and quantity of waste generated
No. of Hospitals/Nursing homes, beds and waste generated
No. of Hotels and restaurants in the city
Industries./factories, shops, offices etc. in the city
Tourist spots in the city
No. of Paurakarmikas in street sweeping
No. of Paurakarmikas in cleaning of drains, toilet etc
Supervisory staff
Tools and equipment given to PKs

Existing System of SWM Practices

Storage of waste at source
1. Bis used at the source of generation
2. Is segregation done at the source for recycling?
3. Percentage of waste thrown indiscriminately in the drains/open spaces etc.

Primary Collection of waste
1. Any door to door collection of waste and coverage of area/wards
2. System of collection of waste from households, Hotels, industries, markets, hospitals, construction sites etc.

Storage of waste
1. Storage bins: Type and spacing
2. Population per bin in the wards

Street Sweeping
Road length
- Widthwise (>100 ft, 80 ft, 60 ft, 40 ft, 20 ft < 20 ft)
- Length of roads and density
- Street sweepers
- Work norms for street sweepers
- Works schedule for street sweepers
- No. of hand carts and availability and condition of handcarts
- Type of brooms (Short/long handled)

Transportation
- No. and Type of vehicles used
- No. of Drivers
- Shifts
• Trips/shift
• Waste transported per shift
• Whether the waste transported is weighed at the weigh bridge
• Frequency of clearing waste from the bins
• Distance of travel of vehicles to the disposal site
• Work schedule
• Any arrangement of transportation of biomedical waste

Processing of waste
• Any composting is done by municipality/any agency
• Are any RWAs involved in the process
• Area of processing
• Distance of the site from the city
• Method of composting
• Quality of compost
• Marketability of compost
• Recovery of recyclables
• Income generated from the recyclables

Disposal
• How the final disposal of municipal waste takes place
• How the final disposal bio-medical waste takes place
• Distance disposal point from, city centre, and residential area
• No. of disposal sites available with the municipality with area of each site
• Is there a sanitary land fill
• If not what do you propose
• Any incineration plant exists for bio-medical waste
• Equipment available at the land fill site

Institutional and Financial Aspects
• Any training programme for the workers such as PKs and Sanitary Inspectors
- Any alternative arrangement of employees to work on holidays
- Any incentives to motivate the PKs/sanitary workers
- Receipts and expenditure of the municipality
- Allocation of fund for the SWM and amount spent including salary component of the staff
- Involvement of NGOs/Community/RWAs/Private sector etc.

Problems and Deficiencies in the current system of SWM at various steps
List the problems
Annexure 2

Checklist for obtaining Data/Information for Evaluation of Integrated Development of Small and Medium Towns Projects

Profile of the City

Name of the City/Town
Population (Past, present and future)
No. of Wards
Ward-wise population
No. of Slums
Ward-wise slum population
Organisational structure

Existing Levels of Infrastructural Services

Water supply
Roads,
SWM,
Drainage,
Sewerage,
Streetlights etc.
Any development schemes/programmes/projects launched to improve the above services
Are the projects funded by the Municipality/Government/Other agencies

Project Specific Feedback of Integrated Development of Small & Medium Towns Scheme in the town/city

- When was the town selected under the scheme?
- When was the project prepared?
- Who prepared the project proposal?
- Was there a delay in the approval and sanction of the project?
- When were the funds released?
- Was there a delay in the funds release
• What was the cost of the project?
• What was funding mechanism?
• Which were the funding institutions
• Any loan component
• Did the municipality contributed its own source of funds for the project
• Various project components and cost of each component
• Release of funds with dates
• Progress and achievement of project components
• List the problems in legal, technical and financial aspects while implementing the project with reference to say;
  Land acquisition, sites and services, location, commercial components, social services etc., quality, supervision, cost over run etc., as experienced by the project staff.
  1. List any innovative aspects in technical, financial and political during the implementation
  2. What were the reasons for not achieving the target
  1. Land was a problem,
  2. No demand for the project
  3. Lack of funds
  4. Was the subsidy given was more to any public/public agency
  5. Any other reason
• Details of remunerative project component
• Details of revenue generated from the remunerative project components
• How were the shopping complex or other components auctioned/rented(method)
• Was there any legal problem for the agreement between the municipality and the other party
• Any shopping complexes vacant and reasons for the same
• Any un-utilized houses under sites and services and reasons for the same
• Location of the projects was far away/inconvenient and reasons it.
• How was the quality of construction?
• Was the demand survey done?
• How was the revenue generated from the project utilized?
• Was the revolving fund created? And how much fund was deposited?
• How is revolving fund generated out of the project being used: Give the details.
• Give the details on the following project components.
• Remunerative component
• Sites and services
• Low Cost Sanitation
• Solid waste management
• Roads and street lights
• Storm water Drains
• Traffic and Transportaion
• Improvement of parks and Playgrounds
• Construction of Community halls
• Construction of slaughter Houses

• Why only certain project components were included in the project report and not all components that are specified under the guidelines

• What is the decision making process for choosing project components while preparing projects?

Details of any project components dropped /deleted subsequent approval of project. Give reasons

• Reasons for dropping any project components while implementing. Was it due to;
  1. Faulty engineering design
  2. Land acquisition
  3. Delays in sanction
  4. change in perception
  5. legal issues
  6. political influence etc.

• Implementation Mechanism
  1. Tendering
  2. Contracting
  3. Supervision
4. Monitoring
5. Organizational structure for implementation

- Which were the new project components taken up which were originally not approved?

- Was there any deviation from the originally approved project.

- Any delay in implementation
  (Reasons)

- Is/was the Project successfully implemented in your town?
  If yes, why?
  If no, Why?

- Please explain if there are any innovations in the implementation of the project?

Benefits of the projects
  1. Social benefits
  2. Economic benefits

Reactions of the Users of the projects
Annexure 3

Checklist for obtaining Data/Information for Evaluation of Sewage Treatment Plant Project

Profile of the City

Name of the City/Town
Population (Past, present and future)
No. of Wards
Ward-wise population
No. of Slums
Ward-wise slum population
Organisational structure
Earlier sewage disposal arrangements prior to installation Sewage Treatment Plant
Need for the project

Project Specific Checklist

1. No of drainage districts in Mysore City
2. No. of Sewage Treatment plants
3. Capacity of Sewage Treatment plants in Mysore City (Details)
4. Sewage Generated in Mysore City in various drainage districts

Design Considerations

1. Engineering aspects
2. Environmental
3. Process
4. Cost

Engineering Aspects

1. Design period,
2. Project surveys done
3. Population to be served
4. Location of site
5. Expected sewage flow
6. Topography of the area to be served, slope and terrain, pumping stations and disposal works
7. Onsite disposal facilities

Environmental Considerations
1. Protection of surrounding water supply intake points
2. Any resistance by the people in the vicinity for the project
3. Compliance of treated effluent standards parameters like, BOD, suspended and floating solids, oil grease, nutrients, coliforms etc.
4. Mosquito and odour in vicinity of sewage treatment plant

Social costs and benefits
1. What are the social costs
2. What are the benefits of the projects (direct and indirect)
3. What are the medium and long term benefits of the project

Health Issues
1. Deterioration of drinking water resources including wells
2. Potential for nitrate and microbial pollution of ground water
3. Preventive measures for health and safety of sewage plant operators and sewage farm workers

Landscaping
1. Gardens, buildings such as office and laboratory
2. How the plant looks
3. Green belt around the plant if any etc.

Treatment Methodology adopted

Characteristics of treated sewage

Facilities of the plant
1. Land
2. Power
3. Operating equipment
4. skilled staff
5. maintenance problems
6. Disposal of sewage
7. Loss of head to avoid pumping

Project Cost and estimates
- Construction and equipment etc.
- Land cost
- Operation costs
  - Staff
  - Chemicals
  - Electricity
  - Transport
  - Maintenance and repairs
  - overheads

Financial Aspects
- Loans
- Grants
- Own sources
- Cost Benefit Analysis

Institutional framework for;
- Project formulation
- Execution
- Operation and maintenance
- Roles and responsibilities of the various institutions in the project
- Training needs of the staff

What are the deficiencies observed in
1. Planning
2. Implementation
3. Operation and maintenance

What are the innovative aspects in Planning, Implementation and Maintenance