

PROFORMA FOR SUBMITTING INFORMATION ON SOLID WASTE MANAGEMENT

Name of City/Town:	Bijapur	District:	Bijapur
Name of Municipal Body:	City Municipal Corporation	Division:	
Address:	City Municipal Corporation MG Road Bijapur	State:	Karnataka
Telephone:	250557	Fax:	
Email:		Website:	
<b>• DEMOGRAPHY</b>			
.1	Name of Officer In-Charge	N.R. Math	
.2	Area of Municipal Corporation /Council (Please provide map showing legal limits of municipal body) (km <sup>2</sup> )	98	
.3	No. of wards / zones	35 division (old wards 10 )	
.4	Total population (as per 1991 census)	1,57,000	
.5	Total population (as per 2001 census)	* 1,80,000	
.6	Population		
	• Urban		
	• Slums	38 slums	
.1	Floating population	Not known approximately 5000	
.2	Total no. of household	33,000	
.3	Average maximum temperature (°C)	43	
.4	Average minimum temperature (°C)	30	
.5	Average yearly maximum rainfall (mm)	** 760-800 mm	
.6	Average maximum humidity	NA	
.7	Average minimum humidity	NA	
.8	Average depth of water table	300-400	
.9	Altitude (i.e. mean sea level)	NA	

Waste are mixed

Dumping site:

Indi road 20 acres 8 kms away from the city

Ukkali road 11 acres 5 kms away from the city

\*The figure in GOL GUMBAZ is 2, 53,000 in 2001

\*\* From web site it is found that the average rainfall is about 720-800mm

- **GENERATION OF MUNICIPAL SOLID WASTE**

.1 Total MSW generation (MT/day) 36 (70% of waste is collected ) estimated

.2 MSW generation (gms/capita/day) 509

.3 Of the total MSW generated

- Quantity of domestic MSW (MT/day)
- Quantity of commercial MSW (MT/day)
- Quantity of industrial (non-toxic and non-hazardous) waste (MT/day)
- Quantity of waste from markets (MT/day)
- Quantity of waste from hotels and restaurants (MT/day)

.1 Composition of MSW (Attach separate sheet)

- Physical characteristics
  - Biodegradable (%)
  - Paper (%)
  - Plastic (%) NA
  - Glass (%)
  - Metal (%)
  - Inert, ash, debris (%)
- Chemical characteristics
  - Carbon (%)
  - Nitrogen (%)
  - Phosphorous as P<sub>2</sub>O<sub>5</sub> (%)
  - Potassium as K<sub>2</sub>O (%) NA
  - C/N ratio
  - Calorific value (kcal/kg)
  - Density of MSW (kg/m<sup>3</sup>)

- **SWEEPING**

.1 Total length of roads (with or without footpath) (km)

- Total length of cement-concrete roads (km)
- Total length of asphalted roads (km)
- Total length of Kutchha roads (km)

.1 Total no. of sweepers employed

	• Departmental	180
	• Contracted	100 (required staff >100)
.1	Working hours of sweepers	8hr 5.30-9.30 13.30-17.30
.2	Norms of sweeping (e.g. one sweeper per ... population, or one sweeper per ... sq. m. area, or one sweeper per ... RMT road)	
.3	Sweeping carried out at a location by	○ One sweepers
.4	Sweeping waste is put in a...	○ Box type wheel barrow ○ Containerised handcart ○ Cane or bamboo basket ○ Roadside bin ○ Open dump ○ Directly in the vehicle
	Cement dust bins (Metal dust bins replaced)	
.5	Frequency of sweeping	○ All seven days a week
.6	Total no. of wheel barrows provided	100 exact figure not available
.7	Total no. of containerised handcarts provided	
.8	Total capacity of wheel barrow (kg)	NA
.9	No. of containers and its capacity in kg	
.10	Type of broom provided	○ Long handle (No.: )
.11	Any other equipment provided (e.g. spade, shovel, tikow)	
.12	Protective gear provided (e.g. leather hand gloves, gumboots, mask)	
	• <b>COLLECTION, STORAGE AND TRANSPORTATION</b>	
.1	Area covered for collection of MSW	All trucks
.2	No. of households covered	All
.3	No. of households covered under door-to-door collection (bell ringing)	
.4	Is the collection carried out by municipal authority or private contractor or NGO?	Municipal authority
.5	Is the segregation is carried out at source?	No
	If no, what steps have been taken?	None yet
.6	Total quantity collected (MT/day)	All mentioned
.7	MSW collected in mixed form (MT/day)	All mentioned

.8	MSW collected in segregated form (MT/day)	
.9	Whether littering is prohibited by the municipality?	No. but people are orally told not litter around .
.10	Whether litterbins are provided?	Yes
.11	Frequency of waste collection	o Twice in 24 hours
.12	Is waste collected every day <i>i.e.</i> 7 days a week and 365 days a year?  If no, give details	Yes
.13	Total number, type, size, and capacity of storage bins / container / trailers provided	
.14	Whether the bins are open or closed?	Open
.15	Whether all bins are attended/cleaned daily? <i>(i.e.</i> 7 days a week and 365 days a year)  If no, mention details	Effort are to be attend daily
.16	Whether the lifting of waste from the bins is manual or mechanical?	Manual

.17 Vehicle details					
Type	Total No.	Capacity (MT)	Daily required	At present available	Additional proposed
Compactor (mobile)					
Dumper placer (with 2.5 m <sup>3</sup> containers)					
Dumper placer (with 4.5 m <sup>3</sup> / 7 m <sup>3</sup> containers)					
Open truck					
Open truck with tipping					
Tractor-trailer with tipping					
Tractor-trailer without tipping					
Auto rickshaw with or without tipping					
Tricycle with or without tipping					
Any other type (please mention)					

.18 Collection details								
Type of vehicle	No. of vehicles used	No. of shifts	Capacity (MT)	No. of trips/ shift	Distance travelled / shift	Quantity of MSW carried / shift (MT)	Quantity of MSW carried out / day (MT)	No. of workers / vehicle
Compactor (mobile)								
Dumper placer (with 2.5 m <sup>3</sup> containers)								
Dumper placer (with 4.5 m <sup>3</sup> / 7 m <sup>3</sup> containers)								
Open truck								
Open truck with tipping								
Tractor-trailer with tipping								
Tractor-trailer without tipping								
Auto rickshaw with/without tipping								
Tricycle with/without tipping								
<b>Total</b>								
.19	If the vehicles are open to atmosphere, are they covered with temporary plastic sheet?				Yes	open normally	not covered	
•	<b>COLLECTION SYSTEM</b>							
.1	Approximate MSW collected (MT)				Amounts individually not collected			

	o Household (urban)	Details of individual weight are quantities not known
	o Slums	
	o Street sweeping	
	o Shops & commercial establishments	
	o Markets	
	o Hotels, restaurants, eating houses	
	o Gardens, parks, fairs	
	o Slaughter houses	
	o Building sites (debris, earth, etc.)	
.2	No. of premises / establishments	
	o Households	
	o Shops, commercial establishments	
	o Slums, households, population	>3000
	o Vegetable and fruit markets	
	o Fish and meat markets	
	o Hawkers	
.3	No. of hotels, restaurants, eating houses	
	o Grade / class I	100
	o Grade / class II	100-200
	o Grade / class III	>500-5000
	o No. of star hotels	
.4	Guesthouses	3 ,PWD 2
.5	Marriage halls	50-100
.6	Hostels	25-30
.7	Cinema halls	5
.8	Theatres	1
.9	Stables and no. of animals	3
.10	Hospitals/ clinics/ nursing homes Total no. of beds	1 govt ,2 institute ,5 big and 200 small
.11	Parks, gardens, recreation places like lakes, amusement parks	Quite a few all over (area is large )
.12	Building sites (under construction)	
.13	Slaughter houses	2

- **PROCESSING AND DISPOSAL OF MSW**
- .1 Total quantity of MSW processed (MT/day) No processing
- .2 Technology / technologies adopted
  - Composting (MT/day)
  - Vermiculture (MT/day)
  - Pelletisation (MT/day)
  - Waste to energy (MT/day)
- .3 Composting
  - Compost produced (MT/year)
  - Is it done mechanically? Yes/No
  - Is it the compost sold? Yes/No
  - If yes, the quantity sold (MT/year)
  - Total revenue generated (Rupees/year)
- .1 Vermi-composting
  - Vermi-compost produced (MT/day)
  - Is the vermi-compost sold? Yes/No
  - If yes, the quantity sold (MT/year)
  - Total revenue generated (Rupees/year)
- .1 Pelletisation
  - Pellets produced (MT/day)
  - Are the pellets sold? Yes/No
  - If yes, the quantity sold (MT/year)
  - Total revenue generated (Rupees/year)
- .1 Waste to energy
  - Energy produced (MW/MT/day)
  - Incineration
  - Pyrolysis
  - Bio-methanation
  - Any other (Please mention)
  - Revenue generated (Rupees/year)
- .1 Dumping grounds/landfill sites



• MSW disposed off by open dumping (MT/day) [mixed/inert]	36
• MSW disposed off by controlled dumping (MT/day) [mixed/inert]	2 Nos one on indi road ,another one is on ukkali road
• MSW disposed off by sanitary landfill (MT/day) [mixed/inert]	
• No. of dumping grounds/ landfill sites	2 Nos one on Indi road, another one is on Ukkali road
Whether municipality legally owns them?	Yes
• Area of each dumping ground/ landfill site	31 acres
• Whether the area will be sufficient for next 25 years	Not known
• If no, then what steps have been taken to acquire land?	
• Distance (in km) of dumping ground / landfill site from ...	Indi dumping site -8 km away from the city Ukkali dumping site-5 km away from the city
○ Habitation	
○ Drinking water source	
○ Religious or monument places	
• Distance from airport or airbase	
• Has it been designed scientifically	No
• Has the existing dumping ground been upgraded as required by MSW Rules, 2000	No
If no, what steps have been taken (provide details)	Some planning are under way detail are yet to available
.1 Whether the following facilities are provided	
• Weighbridge	No
• Fencing	No
• Approach roads/ internal roads	No
• Lighting facility	No
• Site office with monitoring equipment	No
• Managerial staff and manpower	No
• Covering material used daily as per Rules 2000	No
Is it available in sufficient quantity?	No

•	Gas venting arrangement	No
•	Leachate collection system	No
•	<b>INSTITUTIONAL ARRANGEMENTS</b>	
.1	SWM services provided in the city/town by	Municipality
.2	Total no. of Supervisory Staff provided (e.g. Health officer/ Assistant Health officer/ Chief Sanitary Inspector/ sanitary Inspector/ Sanitary Supervisors, etc.)	
.3	Total no. of sweepers/ Pourakarmikas/ labourers/ Mukadam/ Jathedars/ Daffedars, etc.	
.4	Organisational structure	(Furnish separate sheet)
•	<b>PRIVATISATION</b>	
.1	Whether any of the following service is privatised?	
•	Sweeping	Yes/No
•	Door-to-door collection	Yes/No
•	Community collection	Yes/No
•	Transportation	Yes/No
•	Processing of MSW	Yes/No
•	Sanitary landfilling	Yes/No
	If yes, provide details	
	If no, whether any future plans for privatisation	
•	Details of NGO/ CBO/ Residential groups involved in any schemes/ projects initiated by municipal body in SWM/ clean city program	
•	<b>COST IMPLICATIONS IN SWM</b>	
.1	Expenditure (in Rupees/Year)	

- Total cost of SWM services under various heads
- Establishment including salaries, uniforms, *etc*
- Tools, equipment, and consumables including disinfectant
- Operation and maintenance of garbage vehicles including fuel, oil, spare parts, tyres, batteries, *etc*
- Hiring charges for contractors' vehicle & machinery, bulldozers, JCBs, *etc*
- Other miscellaneous expenses

.1 The above total cost in terms of following activities (Rupees/Year)

- Sweeping cost
- Collection cost
- Transportation cost
- Processing cost
- Disposal / sanitary landfill cost

.1 Cost recovery

- Tipping fee or trade refuse charges (Rupees/Year)
- Revenue generation (by sale of compost, vermi-compost, energy/ gas, *etc.*) (Rupees/Year)
- Annual expenditure for SWM services

Cost of SWM services in Rupees per capita per year

Cost of SWM services in Rupees per tonne of MSW

- **OTHER FACILITIES**

.1 What facilities are provided for the following?

• Biomedical waste	
• Diary related activities	
• Slaughter house and unauthorised slaughtering	
• Construction, demolition, debris and silt	
• Encroachments on footpaths, in parks	
• How many slums have been identified and whether there are provided with sanitation facilities?	
• Is there any enforcement wing for taking renal actions?	Yes/No
Recovery of administrative charges	
Fines under Municipal/Police Act	
Recourse to Municipal Act bye-laws	
• Whether any cases are registered and settled during last three years?	Yes/No
No. of cases registered during last three years	
No. of cases settled during last three years	
Total recovery during last three years	
• <b>SPECIAL/ UNIQUE SCHEMES OR INITIATIVES<sup>1</sup></b>	
.1 Recycling schemes for plastic, PET bottles	No
.2 Encouraging community activity such as ALM <sup>2</sup> formation	No
.3 Encouraging people's participation by building-wise or building complex-wise waste segregation and processing of organic waste by vermi-composting or composting	No
.4 Training needs for sanitary workers on health and safety issue	Need of training very much there
.5 Development of tools and implements	No
.6 Please provide list of potential NGO for implementing any of the initiatives (any association registered with municipal body/ unregistered local area management)	

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<sup>1</sup> Details of schemes can be provided on a separate sheet

2 Advance Locality Management

• **AWARENESS**

- .1 Are you aware of the various notifications of the Ministry of Environment and Forests, Government of India No
- Municipal Solid Waste (Management and Handling) Rules, 2000 Yes
  - Recycled Plastics Manufacture and Usage Rules, 1999 Yes
  - Biomedical Waste (Management and Handling) Rules, 1998 Yes
  - Coastal Regulatory Zones Rules, 1991 (amended up to 2002) No

Place:

Date:

Signature of the Municipal Commissioner /  
The Health Officer/ The Chief Engineer (SWM)

Stamp

Note: Please provide small note on the geographical and historical background of the city, tourist places, monuments, pilgrimage places, main industrial areas, industries, GNP, GDP, Airport, Airbase, main events and main people of national and international importance, *etc.*