

Somaliland

Berbera

Berbera is a town of 55385 inhabitants. The Municipality manages MSW collection of the town. Garbage is collected door-to-door by collectors/employees who bring garbage to the collection points with wheelbarrows. In the city there are 26 collection points consisting of a small wall with three sides. Most garbage in the landfill is derived from wet sugar imported in the port. The landfill is located 5 Km NE from the town and it has been working for three years. The Municipality has a bulldozer for compacting the garbage after burning. There is a pilot project consisting in the recycling of plastic bags that are then used to produce pillows and cushions. The collection of the garbage in the port is carried out by one truck that is used only for the port (two loads per day). The "Nicola fishing" facility is under rehabilitation, and it's going to start freezing fish to export to the international market. The activity datum required to implement the calculation is fuel consumption of each employee using the car from home to work or used during field trips or other work related trips, and the relative type of fuel.

Main remarks

- Population covered by the garbage collection is about 70%.
- Lack of services in IDP's settlements: dumpsite too near the houses.
- Big quantity of garbage is abandoned on the beach, mainly in the northern part of the town.
- There are collection points along the beach not protected where animals can scavenge.
- Although there is a project to collect plastic bags and re-use them, there are a lot of plastic bags stored after a cleaning campaign and waiting for reuse.

Municipality of Berbera		
	Unit	Value
Waste		
Waste Density	kg/ m ³	300
Waste Daily Production per person	m ³ / inh*d	0.0013
Waste Daily Production of the town	m ³ / d	72
Inhabitants		
Population of the Municipality	inh	55385
Density of inhabitants	inh/ha	82
Number of inhabitants per household	inh/hh	6
Number of households per km of street	hh/km	60

Boroma

The Municipality is responsible for waste collection in the town, but the members are thinking about the implementation of a PPP system after the successful existing one for water distribution.

Main remarks:

- At the present the population served is about 50% of the total inhabitants of the town
- They have skips provided by UNICEF that are not used because of the lack of equipment; in fact the existing tipper trucks are not useful for the available skips.
- There isn't a primary collection: the truck passes and collects the garbage in sacks placed along the streets.
- The garbage disposed in the street is often burnt
- Other garbage is left on the ground around the skips
- There is a taxation system but not for the MSW

Municipality of Boroma		
	Unit	Value
Waste		
Waste Density	kg/ m ³	300
Waste Daily Production per person	m ³ / inh*d	0.001
Waste Daily Production of the town	m ³ / d	120
Inhabitants		
Population of the Municipality	inh	120000
Density of inhabitants	inh/ha	200
Number of inhabitants per household	inh/hh	5
Number of households per km of street	hh/km	133

Burao

Privates (including IDPs and refugees) collect the waste produced in households and place them in the 19 collection points placed inside the town.

The collection points are provided with 2 m³ skips; they each have several skips.

The Municipality uses two trucks to transport the skips full of garbage to the two landfills placed outside the city. The employees involved in SWM are 45 altogether.

Main remarks:

- Scarcity of skips and equipment for moving wastes.
- Wastes are abandoned in drainage channels and near the river.
- Insufficient capacity in solid waste collection.
- IDPs live in illegal plots without any services.
- Hazardous waste from hospital needs appropriate management.

Municipality of Burao		
	Unit	Value
Waste		
Waste Density	kg/ m ³	300
Waste Daily Production per person	m ³ / inh*d	0.001
Waste Daily Production	m ³ / d	120
Inhabitants		
Population	inh	120000
Density of inhabitants	inh/ha	167
Number of inhabitants per household	inh/hh	6
Number of households per km of street	hh/km	107

Gabiley

Workers provided with wheelbarrows and donkey carts carry out the door-to-door collection. Two tipper trucks with a capacity of 4m³ each go through the main roads, load the garbage placed in the collection points and along the streets, and then transport it to the disposal site.

Despite the fact that the Municipality carries out the door-to-door collection, there are other subjects who collect and dispose the waste in illegal dumpsites.

About 10% of the budget from tax collection is allocated to solid waste management but this fund is insufficient to cover its total cost. There is no private participation.

Main remarks:

- At the moment the population served is about 45% of the total inhabitants of the town
- The existing trucks are not sufficient for the whole collection
- For the primary collection there isn't a sufficient number of wheelbarrows and donkey carts
- The collected waste is deposited in unfenced sites near inhabited quarters without environmental protection
- The waste is either burnt directly at the source or disposed in illegal dumpsites

Municipality of Gabiley		
	Unit	Value
Waste		
Waste Density	kg/ m ³	300
Waste Daily Production per person	m ³ / inh*d	0.00096
Waste Daily Production of the town	m ³ / d	53
Inhabitants		
Population of the Municipality	inh	55000
Density of inhabitants	inh/ha	152
Number of inhabitants per household	inh/hh	5
Number of households per km of street	hh/km	83