









Project: Integrated Water Management in Urban Areas Implemented by: Waste Concern, Savar Municipality

Supported by: Bremen Overseas Research and Development (BORDA)

Funded by: BMZ









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WASH Baseline Assessment of Savar Municipality, Bangladesh

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Baseline Survey Conducted on: March, 2021 Photograph Courtesy: Waste Concern

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ABBREVIATIONS

BBS Bangladesh Bureau of Statistics

DEWATS Decentralised Wastewater Treatment System
DPHE Department of Public Health Engineering
FHTC Functional Household Tap Connection

FS Fecal Sludge

FSM Fecal Sludge Management
FSTP Fecal Sludge Treatment Plant
GoB Government of Bangladesh
GPS Global Positioning System

HH Household

KLD Kilo Litres Per Day

LGED Local Government Engineering Department

LPCD Litres Per Capita Per Day

MT Metric Ton

O&M Operation and Maintenance
PPE Personal Protective Equipment
STS Secondary Transfer Station
SWM Solid Waste Management

Tk Bangladeshi Taka ULB Urban Local Body

WASH Water Sanitation and Hygiene

CURRENCY CONVERSION

1 USD = 84.75 Taka

1.0
Town Profile

1.0 Town Profile

1.1 Background

Savar Municipality is situated under the Savar Upazilla of Dhaka District in the Division of Dhaka. It is located at about 24 kilometers to the northwest of Dhaka city. Savar Municipality was established in 1992. The municipality lies between 23°44' and 24°02' N latitude and 90°11' and 90°22' E longitude. It has an area of 14.08 km². The Savar Pourashava is bounded by Kaliakair and Gazipur Sadar Upazilla on the north, Keranigonj Upazilla on the south, Dhaka City on the east and Dhamrai and Singair Upazilla on the west. The Savar Pourashava is situated on the bank of the river of Bangshi.

1.2 Demography

The current estimated population of Savar Municipality is 6,65,687 with an average density of 47,278 person per sq.km. Main income sources of the inhabitants of the municipality are service 28.74%, business 20.55% and agriculture 20.46%. Other income sources include non-agricultural labor, industry, transport and communication, construction, religious service, rent and remittance and others. The Pourashava has 09 (Nine) wards as shown in table 1

Table 1: Town Profile

Name of the Town/City	Savar Munici	Savar Municipality					
Province/District/State/UT	Dhaka/Savar	Sub-District, Bangla	desh				
Area of the Town (sq. km)	14.08 sq. km	(Population and Ho	using Census-2011,	BBS)			
Number of Wards	9						
	2011: 2,86,0	08 (Census 2011)	Estimated Presen	t: 6,65,687 (2021)			
Total population	Male	Female	Male	Female			
	148,958 137,050 346,702 318,986						
Population growth rate (%)	8.8 (2001-2011)						
Floating population (If applicable)	1,966 (Source)						
No Dranoution	Residential Commercial and Institutional Others						
No. Properties	72,201 111 2,203						
No. of Notified Slum	10						
No. of Non-Notified Slum	None	None					

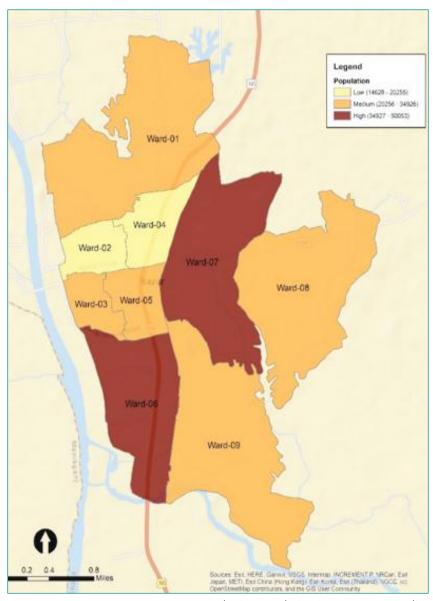
Source: BBS. Population Census 2011

¹Urban Area Report. (2011). Bangladesh Bureau of Statistics (BBS).

²Municipality history. (2017). Savar municipality. http://www.savarmunicipality.gov.bd/home/all_history



Map 1: Location Map of Savar Municipality



Map 2: Ward-wise Population in Savar Municipality

Table 2: Ward Level Data

Wards	Area	No.of	Estimate population in 2021		021	Remarks
	(Sq.Km)*	Households**	Total	Male	Female	
1	3.06	8,638	81,291	40,683	40,609	Badda, Baktarpur, Shahid Maznu Academy
2	0.72	5,171	47,144	23,615	23,529	Ara para, Uttar Para Savar Bazar
3	1.52	7,861	70,300	35,974	34,326	Banpuku,Jaleshyar, Savar City Center and Razzak Plaza
4	0.51	3,424	34,047	17,785	16,262	Maddhya Para, Dakkhin Para Savar Sub-Registry Office
5	1.29	6,858	66,039	34,545	31,494	Bank Colony, ACED School Laboratory School
6	1.4	12,399	101,352	53,640	47,712	Enam Hospital, Savar Upazila Office Doel Group of Industry
7	2.21	13,192	116,499	61,009	55,490	Radio Colony, Savar New Market CRP Dgormora Area
8	0.36	7,944	71,929	37,110	34,819	Raj Ashan, Savar Textile Mill Savar Catholic Church
9	2.46	9,028	77,087	42,342	34,745	Anandapur, Genda, Bank Town Savar Municipal Office
Total	13.53	74,515	665,687	346,702	318,986	

Source: * BBS, Small Area Atlas of Bangladesh 2016 ** BBS. Population Census 2011

1.3 General Landuse

Land use of Savar Paurashava is mixed land use which consists of residential, commercial, industrial, agricultural and institutional land use, open space, water bodies and road network. Most of the area of the municipality is used for residential use (54.85%) and agricultural use (24.55%). In the municipality, major status of the inhabitants is the result of migration from other areas of Bangladesh. These people mostly migrate for the employment purpose.³

1.4 Slum Info

There are 10 notified slums are in the jurisdiction of Savar Municipality. Ward wise slum population data is shown in Table 3. Based on the available data 4.4% of the total population of the municipality is living in the notified slums mentioned in Table 3.

Table 3: Slum Data

Sr. No.	Slum Name	Ward	Category	No. of		Populati	on	Remarks
3111101	Sidili I valile	· · · · · ·	category	House-holds	Total	Male	Female	rterriario
1	Ara Para	2	Notified	800	3,139	1,111	1,028	
2	Karna Para	6	Notified	585	1,993	970	1,023	
3	Mazidpur	7	Notified	761	2,749	1,352	1,397	
4	Imandipur	7	Notified	1,118	3,938	2,987	953	
5	West Amtala	8	Notified	1,001	5,504	2,938	2,566	Slums are located in
6	Kaizar tek	8	Notified	250	1,180	823	357	private land
7	Nama Genda	9	Notified	871	2,984	1,937	1,965	iaiiu
8	Bank Town	9	Notified	196	625	320	305	
9	Baroi Graam	6	Notified	634	2,049	1,012	1,037	
10	Bede Para	1	Notified	1,234	5,047	2,510	2,537	
	Total			7,450	29,208	15,960	13,168	

Source: Data collected by Waste Concern as discussed with BRAC 2021.

Land use

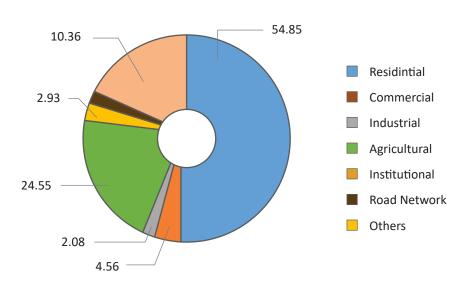
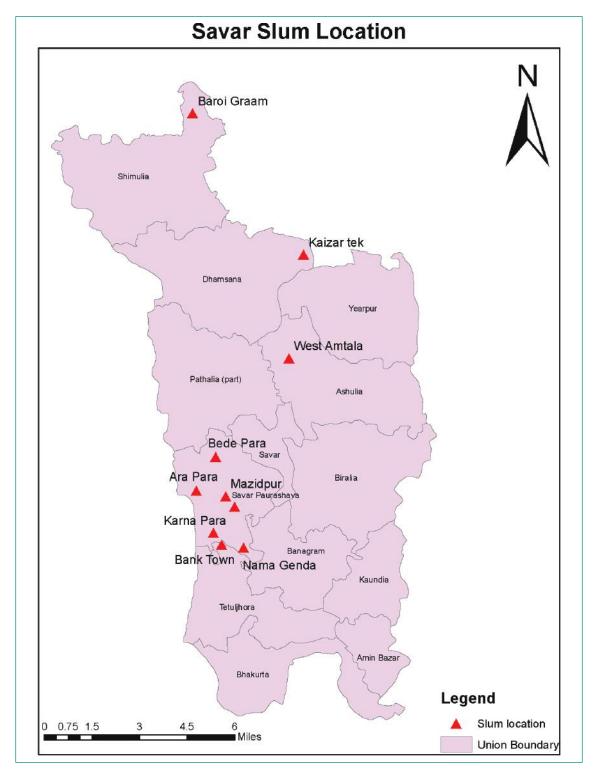
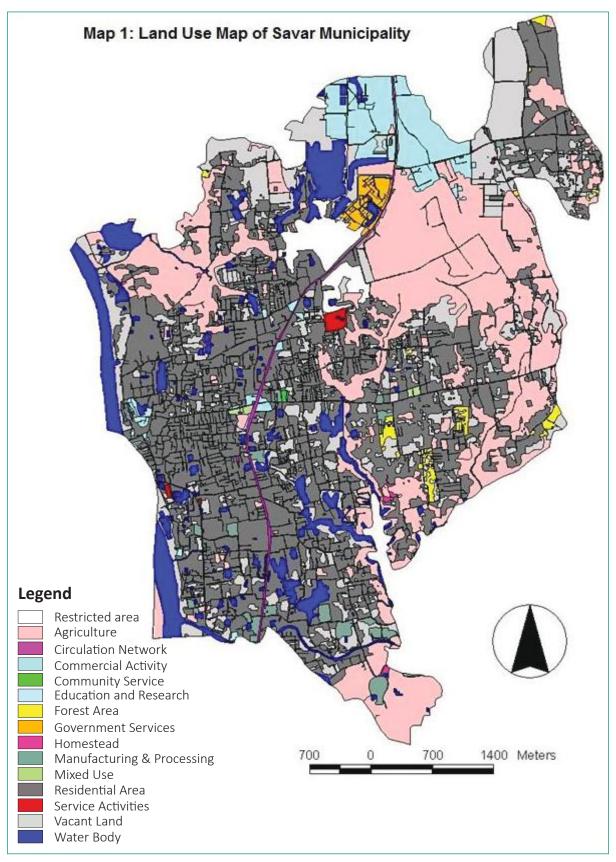


Figure 1:Landuse Pattern of Savar Municipality

³Bangladesh Municipal Development Fund (BMDF). (2018). Environmental Assessment Report: Improvement of Road and Drain at Different Location of Savar Paurashava.



Map 3: Location of Slums in Savar Municipality



Map 4: Landuse Map of Savar Municipality

2.0
Access to Toilet

2.0 Access to Toilet

2.1 Baseline Status

Individual Toilets:

There is no network-based sanitation system in the Savar Paurashava. At present, pit latrine of different types, water sealed latrine and septic tank-based latrine are generally used as a sanitary system in the municipality. However, a minor percentage of population about 1% use hanging latrine. Most of the household (54%) has either single pit or twin pit latrine. As most of the household have minimal income level so they can afford pit latrine facilities. 45% households have septic tank with flush. There is also small amount of household who do not have hygienic sanitation facilities.

Table 4: Type of Latrine in Savar Paurashava

Туре	Percentage
Single pit latrine⁵	32
Twin pit latrines ⁶	22
Septic tank ⁷	45
Unsanitary ⁸	1

Source: Field survey, 2021

Based on the field observation, it was found that about 80% of the containment structures are connected to drains or water bodies.

Shared Toilets: Shared toilets are toilets shared between a group of households in a single building or plot. This can cover very different situations: for example, a toilet shared by 20 tenant families each occupying one room in a large building; or a toilet shared by 3 related families living within a single plot or compound. These types of toilets are mostly common in slum areas.

2.2 Gaps & Issues

- Majority of the toilets are directly connected to the drains
- Non availability of public toilets due to lack of land
- Lack of hygienic toilets in the slums

⁴ Water sealed latrines are similar to simple pit latrines, but instead of having a squatting hole in the cover slab, they have a shallow toilet pan with a water seal.

⁵ It is one of the most widely used sanitation technologies. Excreta, along with anal cleansing waste (water or solids) are deposited into a pit. Lining the pit prevents it from collapsing and provides support to the superstructure.

⁶ Twin pit technology consists of two alternating pits connected to a pour flush toilet. The blackwater is collected in the pits and allowed to slowly infiltrate into the surrounding soil. Overtime, the solids are sufficiently dewatered and can be manually removed with a shovel

⁷ It is a watertight chamber made of concrete through which blackwater flows for primary treatment. Settling and anaerobic processes reduce solids and organics, but the treatment is only moderate

⁸ Unsanitary latrines are toilets which include pit latrines without slabs, hanging latrine or open defecation, and any toilet that is connected to ponds, canals, ditches and/or is suffering from leakage issues

2.3 Proposal for New Public Toilet

No public toilets are available in Savar Pourashava. However, the municipality is in the process of identification of four potential sites for construction of public toilets



3.0 Water Supply

3.0 Water Supply

3.1 Baseline Status

There is no piped water supply in Savar Municipality area. Residents of the town are using individual tubewells and electric water pumps to lift water.

There are 300 shallow tube wells and 125 deeps pumps installed by the residents for the provision of water supply in the municipality.

3.2 Gaps & Issues

- There is no piped water supply system in the town
- All the residents are dependent upon tube wells
- Estimated demand for water supply is 119,824 cubic meters/day.



Figure 3: Tubewell at Slums

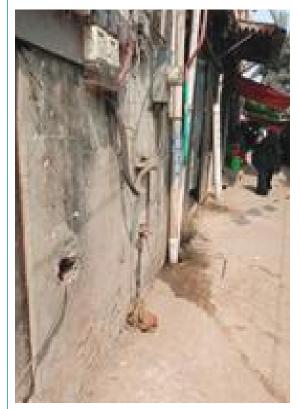


Figure 5: Waste water leakage point



Figure 4: Water Tank at Bede Para Slum

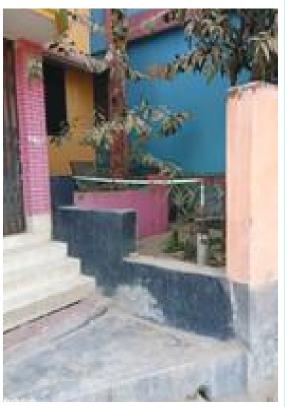


Figure 6: Use of Electric Pumps in Non-slum Areas Source: Field Survey,2021

4.0

Management of Local Water Resources

4.0 Management of Local Water Resources

4.1 Baseline Status

Table 5: Water Body Status

Type of water resource	Rivers	Canals	Ponds and Lakes	Marshland/ Ditch	Khal
Approximate Area (acres)	71.11	41.28	53.24	79.88	46.59
Present condition (Visual observation)	Poor	Poor	Poor	Poor	Poor
Quality of water	Poor	Moderate	Moderate	Poor	Poor
Current use			Fishing	Dumping of solid waste and sewage	
*Identify existing Problem (If any)	Industries dump waste	Nearby residents dump waste	Filling up of ponds and lakes for different purposes	Filling and development activities in the marshland causing water logging.	Nearby residents dump waste
Any initiative taken for conservation of water resource	No	No	No	No	No

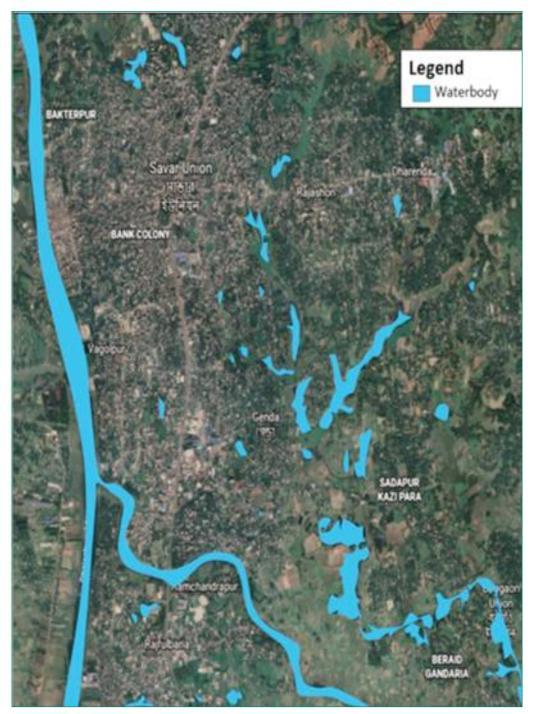




Figure 7: Industrial waste polluting river and water bodies Figure 8: Discharge of waste water in nearby water bodies

4.2 Gaps & Issues

- Savar Pourashava consisting of 'Bangshi River and numerous ponds and ditches covering 292.1 acres which is about 9.03% of the total area
- There exist 23% of the other water bodies as pond which are distributed throughout the Pourashava acts as emergency retention pond for rainwater and are used for various other purposes such as bathing, fish cultivation, washing etc.
- Presently, about 79.88 acres of ditch are being used only for dumping of solid waste and sewage. It causes land degradation as well as water and air pollution by sludge and odour
- Pollution of surface water bodies and groundwater by leachate from solid wastes disposed of without proper planning and design.
- Inadequate service results in waste dumping in drains, which result in the overflow and blockage of the drainage system, which results in pollution of khal water as well as water logging during heavy rain.
- Dumping of hazardous wastes into water bodies degrades its quality and threatens aquatic ecosystem.
- Encroachment is also an issue with respect to the water bodies



Map 5: Water Bodies in Savar Municipality, Source: Google Maps 2021

5.0 Waste Water Management

5.1 Baseline Status

There is no sewer system the municipality. The municipality is dependant upon on-site sanitation system.

5.1.1 Waste water Disposal Arrangement

Table 6: Waste Water Disposal Arrangements

Ward	No. of	Waste water disposal arrangement in HH (No.)			Waste water disposal arrangement in Slum-HH (No.)			
	Households	Sewerage system	Onsite sanitation	No. of Insanitary Iatrines	Sewerage system	Onsite sanitation	No. of Insanitary latrines	
1-9	74,515		√			√	100%	

5.1.2 Sewage Management:

Savar Municipality does not have sewerage line installed within its municipal area

5.1.3 Septage Management

There is no FSTP in the municipality. LGED through City Region Development Project (CRDP) of Asian Development Bank has provided one vacuum truck to the municipality. Due to lack of trained manpower, the municipality is not operating the vacuum truck. Moreover, the municipality has not been able to locate any suitable land for construction of the FSTP. Currently, local sweepers are hired by residents to clean their septic tanks when required. Sweepers use manual emptying methods to clean the pits or septic tanks and dispose the sludge in low-lying areas and water bodies.



Figure 9: Existing Pit Latrines

5.2 Gaps and Issues

5.2.1 Gaps in Waste water Disposal Arrangement

- Presence of unhygienic toilets
- Direct disposal of waste water (black water) to open grounds, water bodies, drains and low lying areas
- Absence of proper containment units
- Containment systems are not designed as per the Bangladesh National Building Code

5.2.2 Gaps in Sewerage Management

Since there is no piped water supply system in the municipality, it is difficult to estimate the volume of wastewater generated in the town. Since wastewater generation is linked with the consumption of water by the residents, for the estimate purpose we have assumed per capita consumption as 100 lpcd. Based on this figure, estimated volume of wastewater generated in the municipality is 42,604 KLD. At present there is no wastewater treatment plant in the municipality. Construction of sewerage system in the town could be challenging considering the financial situation of the town. One option could be to explore the possibilities for construction of DEWATS as pilot in few wards where land is available.

5.2.3 Gaps and Issues Related to FSM

Septage Collection, Onveyance and Treatment:

Based on the population of the town, it is estimated that 46,598 KL of faecal sludge is generated per year. Currently, there is one vacuum truck available in the municipality which is not used due to lack of training for O&M of the truck. There is no FSTP in the municipality. Currently all the generated faecal sludge in the municipalities is collected by manual sludge cleaners and discharged in the open environment. The demand for faecal sludge collection is low as it is estimated that 80% of the toilets are connected to drains or water bodies.

Main Issues of FS Management:

- Absence of septage treatment facility
- There is one vacuum truck which is not used by the municipality due to low demand
- Lack of awareness with the municipal staff regarding proper FSM
- Majority of the containment structures in the town are connected to drains or water bodies resulting in low demand for desludging







Figure 11: Vaccum Trucks for FS Collection

6.0 Grey Water Management

6.1 Baseline Status

Currently in the Savar Municipality, there is no proper greywater management system. All the grey water are discharged in the open municipal drains. Some of these drains are already blocked because of indiscriminate disposal of solid waste. In some areas of the municipality grey water is discharged in nearby khals or rivers resulting in water pollution.

Table 7: Status of Grey Water Management

Does HH have different discharge point for grey water and Black water?	No
What is the common practice in the town for grey water management	Discharging to the drain or water bodies
Are there any grey water treatment units in the town?	No
How grey water is managed in areas without sewerage network?	Through the drain and open field
Are there any common discharge point in the town for grey water collection?	No
Any special initiative taken in the town towards grey water management?	Not yet

6.2 Gaps and Issue

- Lack of technical knowledge on greywater management
- Grey water is directly discharged into open drains and fields
- Mixing of grey and black water with local water body
- There is no treatment mechanism at household, community, ward or at town level



Figure 12: Drain full of waste



Figure 13: Household Discharging Wastewater in the Open Drains, Source: Field Survey, 2021



Figure 14: Community initiative to install pipe drain



Figure 15: Grey water discharged in the open area

7.0 Solid Waste Management

7.1 Baseline Status:

Savar Pourashava has very inefficient solid waste collection and management system. Municipality is able to collect only 36% of the generated waste. Rest of the household solid wastes are thrown into open drains and low-lying areas which cause water logging throughout the year by clogging of the drains.

Table 8: Solid Waste Management Status

Quantity of waste generated from the town (MT/D)	185 tons
Does the town have D2D collection system/Primary collection	Yes
Coverage of Door-to-Door waste collection (%)	45%
D2D Waste collection frequency	Every Day
Number and Type of equipment present for Solid waste management	10 waste collection vehicles and 1 excavator Refer Table 9
Number of community bins available for secondary collection	24
Quantity of waste collected from the town per day (MT)	67 tons by Municipality trucks
Waste management system in slums	Direct discharge to the low-lying areas and water bodies

Source: Field Survey, 2021

There is no designated landfill within the municipality. One unofficial landfill has been found which is at Komlapur, Birulia Union, Savar Upazila. But it is located outside of the paurshava area. Area of the landfill is 1.5 acres and depth of it is 12 feet. Nearly 67 ton waste has been taken to the landfill daily. The landfill has been functioning for last 8 years. Total 10 waste collection vehicles are found for waste collection within municipality. There is no compost plant in the municipality. List of waste collection vehicles for carrying waste to the landfill, waste collectiors and waste composition of landfill have been given below:

Table 9: Waste Collection Vehicle of Savar Municipality

Type of Truck	Capacity	No. of truck	No. of Trip	Total Carried Waste/Day
1. Tipping Truck	3 ton	4	3	36 ton
2. Truck (Mahindra Brand)	3 ton	2	3	18 ton
3. Normal Truck	3 ton	1	2	6 ton
4. Container carrier	1.5 ton	2	2	6 ton
5. Tractor	1 ton	1	1	1 ton
Total carried waste to the la	67 ton			

Source: Field Survey, 2021

7.2 Gaps & Issues

Primary and secondary collection:

- Partial of door-to-door collection system of waste in the town
- no source segregation
- multiple handling of waste
- lack of secondary storage facility in the town
- lack of operational, health & safety standards

Conveyance (Transportation) to Treatment Facility:

- inadequate vehicles
- inadequate capacity of vehicles
- Inefficient routing plan

Processing (Treatment) of Solid Wastes:

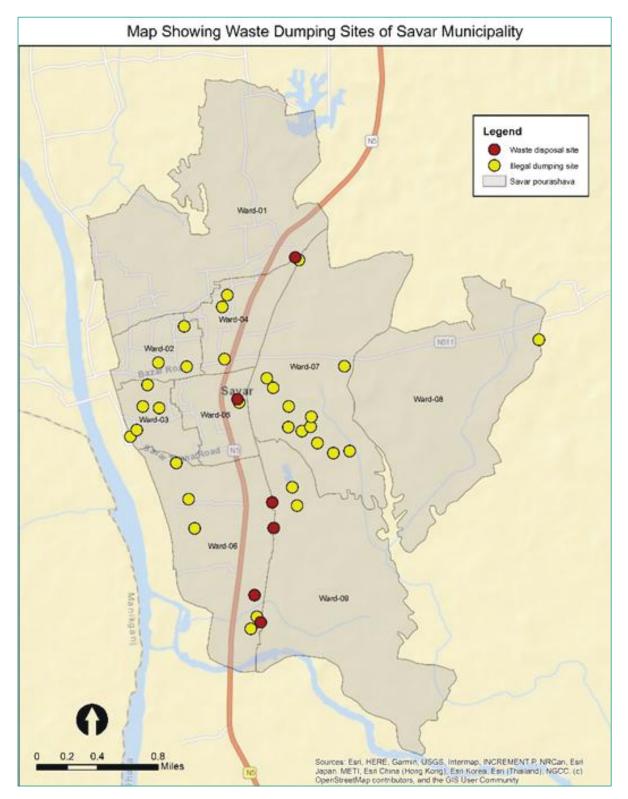
- non processing of biodegradable waste
- physical composition analysis shows more than 80% of the waste is organic in nature
- lack of information about opportunities available for recycling of organic waste

Disposal of Solid Wastes:

- no landfill in the town. Collected waste disposed by the highway.
- non-conformity to solid waste management rules and ill effects (along with location) of open dumping of solid waste.

Main Issues of Solid Waste Management:

- There is no town wise primary collection system of solid waste available in the municipality
- Lack of program/project from government or local government and private sector for raising social awareness on hygiene, sanitation and solid waste management
- No designated landfill within the municipal boundary
- No organic waste treatment facility in the municipality
- Waste is improperly disposed of in a crude dumping manner in unauthorized places
- Lack of adequate number of dustbins or containers within municipality for dumping waste
- The number of cleaners in the municipalities is not correlated with the population of the municipality. It is important to hire cleaners based on the population to be served
- No proper O&M of the waste collection trucks
- No training has been provided to the waste collection workers



Map 6: Legal and Illegal Dumping site of Savar Paurashava



Figure 16: Waste Collection Truck



Figure 17: Waste collection van

Health and Hygiene of Sanitation Workers

8.0 Health and Hygiene of Sanitation Workers

8.1 Baseline Study

Total number of sanitation workers working in the town		
Under SWM (Specify contractual employees separately)	Municipality 250, Private 100	
Under wastewater management (Specify contractual employees separately)	Municipality 50, Private 25-30	
Operators under water supply	Nil	

Water and Sanitation Related Facilities:

Municipality tries to provide adequate WASH facilities to its sanitation workers, however, due to shortage of fund the number of WASH facilities provided are not adequate.

Use of PPE Kits:

Municipality provides PPE to its sanitation workers like hand gloves, apron, gumboots, protective glass once a year.

Training on Safety:

No training is provided to solid waste collection staff.

Existing Living/Housing Condition:

Sanitation workers are not provided with municipal housing facility. All the sanitation workers are living in slums. Water supply and toilet facility is totally inadequate. Moreover, drainage facility is absent in the sweeper's colony.

Health services/Benefits Provided to Sanitation Workers:

No insurance is provided to the sanitation workers.

8.2 Gaps and Issues:

- Lack of awareness on safe working procedure
- Lack of PPE support from municipality
- Poor living condition without access to basic services

9.0 Institutional Arrangement

The Paurashava headed by an elected Mayor. The city is divided into 9 Wards. This political leadership guides the functions of the Pourashava. The Mayor heads the administrative structure of the Paurashava.

A simplified administrative organizational structure related to the SWM and FSM is shown in organization chart. The Chief Executive Officer is under the Mayor and under him are six functional Sections including Waste Management section also known as Conservancy Section. The main functions of these sections are SWM and FSM.

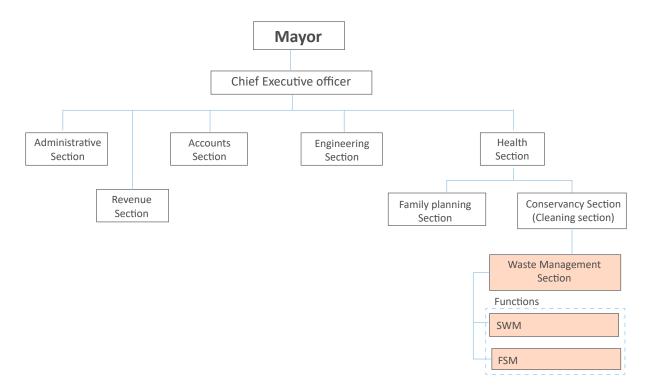


Figure 18: Organizational structure related to SWM and FSM

9.1 Baseline Status

Table 10: Institutional Roles and Responsibility Under WASH

Urban Services	Institutions in charge of planning	Institutions in charge of implementation	Institutions in charge of O&M	Institutions in charge of collecting user charges
Water Supply	Water Supply & Sanitation Section of the Engineering Department	Water Supply & Sanitation Section of the Engineering Department	Water Supply & Sanitation Section of the Engineering Department	Revenue Section
Sewerage	NA	NA	NA	NA
Septage management	Conservancy Section	Conservancy Section	Conservancy & Engineering Department	Revenue Section
Storm Water Drainage	Conservancy Section	Conservancy Section	Conservancy & Engineering Department	No user charge
Solid waste management	Conservancy Section	Conservancy Section	Conservancy & Engineering Department	Revenue Section
Public Toilets	Engineering Section	Engineering Section	Conservancy & Engineering Department	Revenue Section

9.2 Gaps & Issues

Overlapping functions between Engineering, Conservancy, and Revenue Section are creating major problem for proper planning and executing projects related to solid waste management and sanitation. Moreover, lack of trained professionals in the conservancy section is also a big hurdle. Some of the permanent positions in conservancy and water supply section are vacant for decades.

10.0 Municipal Finance

10.0 Municipal Finance

10.1 Baseline status

Table 11: Overview of Municipal Budget Under WASH

Particulars		Amount (Taka. in Lakhs)			
		2018-19	2019-20	2020-21	
A.	Revenue Income				
1	Income from Taxes	1,178.34	1,126.89	1,787.86	
2	Income from Non-Taxes	230.87	304.06	484.03	
3	Income from Assigned Revenue				
	Total Revenue Income (1+2+3)	1,409.21	1,430.95	2,271.89	
В	Capital Income				
4	Grants and Loans				
	Total Capital Income (4)	2,375.53	5,878.65	14,358.23	
	Total Income (1+2+3+4)	3,784.74	7,309.6	16,630.12	
С	Revenue Expenditure				
5	General, Establishment and Other Revenue Expenditure	714.37	458.35	906.8	
6	O&M of Sanitation including SWM	245.80	312	335	
	Total Revenue Expenditure (5+6)	960.17	770.35	1,241.8	
D	Capital Expenditure				
7	Capital Expenditure				
	Total Capital Expenditure (7)	1,205.97	1,082.35	1,576.8	
	Total Expenditure (5+6+7)	2,166.14	1,852.7	2,818.6	
	Revenue Surplus/Deficit (1+2+3-5-6)	449.04	660.6	1,030.09	
	Capital Surplus/Deficit (4-7)	1,169.56	4,796.3	12,781.43	
	Overall Surplus/Deficit (1+2+3+4-5-6-7)	1,618.6	5,456.9	13,811.52	

Source: 30th Budget of Savar Paurashava, Fiscal year 2020-2021

ULB's budget year marked for next 3 years under water and Sanitation	2020-21 (BDT)	2022	2023
	335 Lakh		
Name the schemes running in your city that includes sanitation/ water supply funding as one of their components?	Not available		
Has the city received any funds from external funding agency for WASH projects (CSR?)	No		

Analysis of the budget reveals that for the year 2019-20, the budget for solid waste management including drain cleaning was earmarked as Tk. 31,200,000. During the same period revenue collected as conservancy tax was only Tk. 1,579,000. As such, there is a huge gap of Tk. 29,621,000 (95%) between expenditure made and revenue earned. Based on the budget of Tk. 31,200,000, per ton expenditure on solid waste management for the year 2019-20 is estimated at Tk. 462.05 whereas revenue earned is only Tk. 23.4.

The municipality is currently charging a conservancy fee only for the management of solid waste. As per the model tax rate for the municipalities published in 2014, municipalities are entitled to charge up to 15% of the annual rental value of the property as a sanitation fee for management of faecal sludge. Municipalities may also charge up to 7% of the annual rental value of the property as a conservancy fee. Currently, the municipality is only charging conservancy fee and no sanitation fee is charged by the municipality.

10.2 Gaps & Issues

- Poor cost recovery from solid waste management
- Poor collection efficiency for cost of services
- Lack of budget for efficient O&M of existing assets
- No budget allocation for managing faecal sludge and improvement of unhygienic toilets
- No budget allocation for improvement of sanitation facilities for the notified slums

Main Issues of Municipal Finance:

- Lack of budget for sanitation services
- High establishment cost for managing solid waste management services whereas collection efficiency is only 37%
- Lack of financial planning for cost recovery

11.0 Capacity Enhancement

11.0 Capacity Enhancement

Currently, no project is on-going for capacity development of municipal staff on sanitation and solid waste management. None of the staff working in waste management, drainage and public toilet operation has any training.

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