



## **Social Safeguard Assessment Report On**

### **Solid Waste Management Subproject of DNCC**



**Municipal Governance Services Project (MGSP)**

**Bangladesh Municipal Development Fund (BMDF)**

**July 2018**

**Traffic Engineering Circle**

**Dhaka North City Corporation (DNCC)**

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### List of Acronyms

B MDF	Bangladesh Municipal Development Fund
BDT	Bangladesh Taka
DCC	Dhaka City Corporation
DNCC	Dhaka North City Corporation
DSM	Design, Supervision Management Consultant
DWASA	Dhaka Water Supply and Sewerage Authority
FGD	Focus Group Discussion
GoB	Government of Bangladesh
KII	Key Informants Interviews
LGED	Local Government Engineering Department
MD	Managing Director
MGSP	Municipal Governance and Services Project
MSW	Municipal Solid Waste
NGO	Non-Governmental Organization
OP	Operational Policy
PAP	Project Affected Person
PIU	Project Implementation Unit
PMU	Project Management Unit
PWCSP	Primary Waste Collection Service Provider
SIA	Social Impact Assessment
SMF	Social Management Framework
SMP	Social Management Plan
SSS	Social Safeguards Specialist
STS	Secondary Transfer Station
ULB	Urban Local Body
WB	World Bank
WMD	Waste Management Department

## SECTION 1: INTRODUCTION

### 1.1 Background of the Project

The Government of Bangladesh is implementing the Municipal Governance and Services Project (MGSP) through the Local Government Engineering Department (LGED) and the Bangladesh Municipal Development Fund (BMDF). This project is funded by the World Bank and aims to improve municipal governance and basic urban service provision at participating Municipalities and City Corporations (Urban Local Bodies – ULB). Under the MGSP, component-1 is implementing by the LGED in 26 ULBs including 4 City Corporations and 22 Municipalities. The investments under component 2 of MGSP in about 200 ULBs across the country is managed by BMDF through provision of demand-based sub-credits to eligible ULBs for basic urban services improvement investments at an 80:20 grant to loan ratio.

The social assessment was intended to help making the project responsive to social development concerns and assist LGED, BMDF and the ULBs in reaching out the vulnerable and the poor, as well as to ensure that the project objectives are acceptable to the target beneficiaries.

The social assessment reviewed project approach and implications of project interventions in compliance with the legal framework and the Bank's Operational Policies on social safeguards and guidelines on social inclusion and gender.

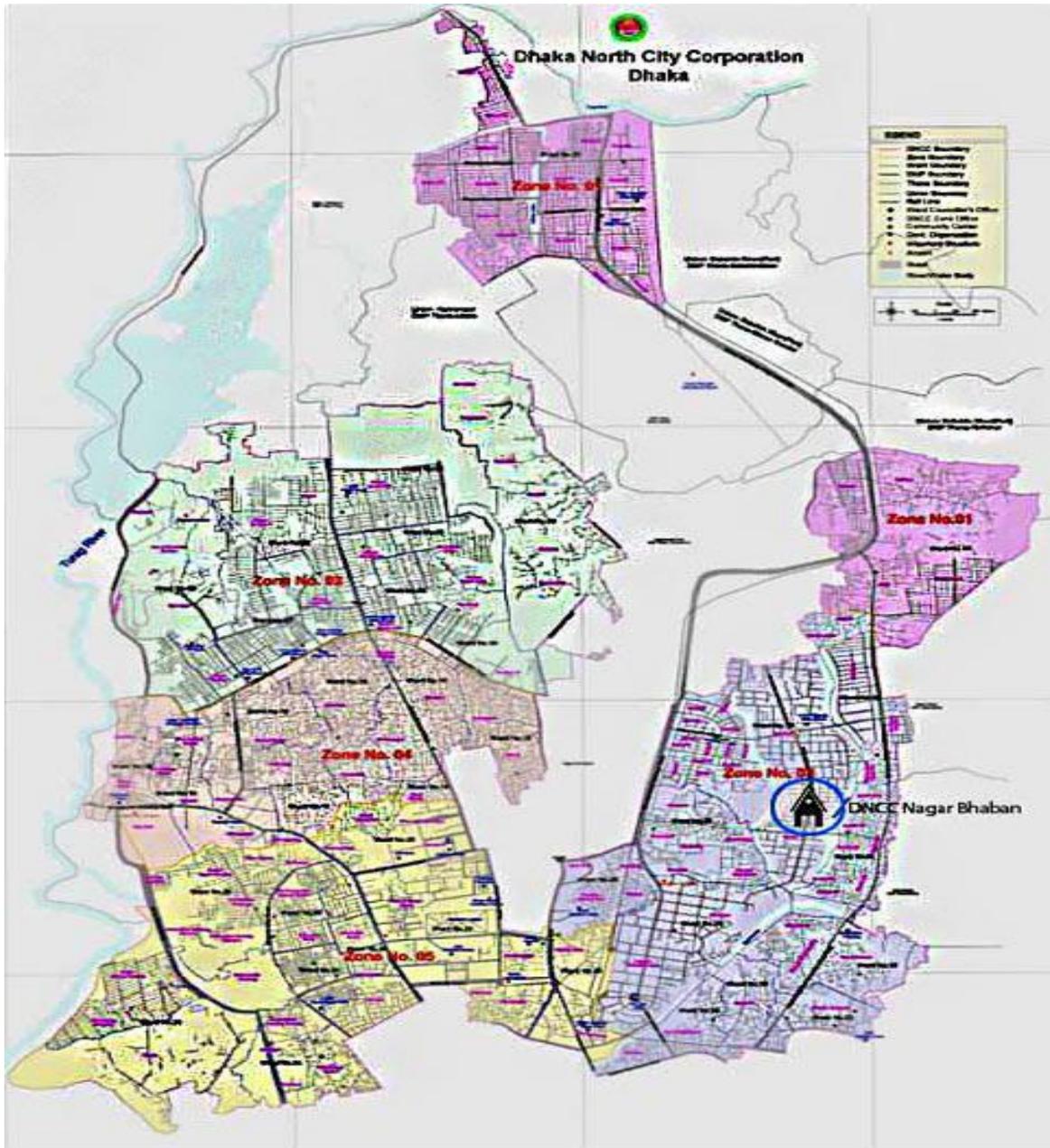
### 1.2 Background of the City Corporation and subproject

Dhaka became the capital of Bangladesh with the independence in the year 1971. In 1978, Dhaka Municipality was awarded the status of Corporation. The Corporation was statute with the introduction of Dhaka Municipal Corporation Ordinance, 1993, repealing the application of Pourashava Ordinance, 1997. In 1990, Dhaka Municipal Corporation was renamed as Dhaka City Corporation and was divided into 10 zones. The Dhaka City Corporation was dissolved by the local govt. (City Corporation) act 2009, (Amendment bill-2011 on 29 November 2011), passed in the Parliament of Bangladesh, and formally ceased to exist on 1 December 2011, following the President's approval, making way for a Dhaka South City Corporation (DSCC) and a Dhaka North City Corporation (DNCC). Dhaka North City Corporation (DNCC) is an autonomous body that governs 36 wards of Dhaka.

DNCC is located between 23<sup>0</sup>44' and 23<sup>0</sup>54' latitude and between 90<sup>0</sup>20' and 90<sup>0</sup>28' longitude. The DNCC area is surrounded by Gazipur City Corporation in north, DSCC in south, Savar in the west and Rupgonj Upazila (Narayangonj) in the east. There are 43 markets, 13 community centers, 6 graveyards, 28 parks, 40 play grounds, 3 bus/truck terminals, 2 underpass, 12 cinema halls, 37 public toilets, 110 hospitals, 121 clinic, 721 schools, 191 colleges, 37 universities, 302 Madrashes, 673 Masjids, 42 Mandirs in the City Corporation area (source: DNCC website DNCC at a glance).

DNCC is divided into 5 zones; total area is 82.638 sq. km. consisting of 36 wards approximately with total population of 3957302 (source: population and housing census,

2011) among which 2201051 are male and 1756251 are female with the density of 47887 per sq.km. The total household of the DNCC is 899387 and average household size is 4.4. The subproject area is under zone-1 and total population of this zone is 379777.



**Map:- Geographical location and area of Dhaka North City Corporation**

Dhaka North City Corporation is implementing different kind of development projects like Internal Drainage Improvement Project (IDIP), Urban Resilience Project (URP) funded by World Bank, construction of road, drain & footpath, construction of housing building for shebok at Gabtali, etc with the fund of Annual Development Programme allotted by the

government, DNCC own fund and other donor funded projects. DNCC has prepared “Solid Waste Management” subproject plan, identified required equipments following a participatory approach with the technical assistance from Bangladesh Municipal Development Fund (BMDF). The significant features of the subproject are given in **table 1-1** as below:

**Table 1-1: The significant features of the proposed sub-project**

Name of the Subproject	“Solid Waste Management”.
Name of District	Dhaka
Name of ULB	Dhaka North City Corporation
Location of the subproject	This subproject is located at whole DNCC area.
Name of the package	Procurement of Brand New Latest Model Truck Mounted Vacuum Type Road Sweeper Machine 4 (Four) nos. and Brand New Latest Model, Swamp/Apex Track type (LGP) 1 (one) no. Chain Dozer.
Service areas	All the VIP roads under the DNCC area.
Beneficiary population	All the citizens of DNCC will be benefitted from this subproject.
Description of the equipments	<p><b>Truck mounted vacuum type road sweeper machine:</b> Truck mounted and hydraulically operated Vacuum Cleaner with sweeping system is to be suitable for all cleaning, brushing and vacuuming of surface dusts, leaves, mud, soil, sand, stone chips, gravels and other small particles on the ground of city/ municipal roads and areas. This unit shall be suitable for street cleaning job as well as dust suppression with water spray in the road side and narrow lanes.</p> <p>A high pressure water system shall be used for removing &amp; cleaning the stubborn road debris and the machine itself. The spray bar and sweep gear can be used together for high performance cleaning, particularly around building sites or on road laying operations etc.</p> <p><b>Swamp/Apex track type Chain Dozer:</b> The proposed Brand New Latest Model, Swamp/Apex Track type (LGP) chain Dozer will be used for waste dressing as well as compaction purposes at Amin Bazar landfill.</p> <p><b>Note:</b> Specification of the equipments is detailed in the project description of 1.5.</p>
Estimated cost	BDT 250,000,000.00 (Twenty five Crore taka only)
Subproject Duration	6 months

### 1.3 Justification of Selecting the Subproject

Dhaka is one of the most densely populated cities in Asia, with many people living in slums and squatter settlements. Waste management is an important part of the urban infrastructure as it ensures the protection of the environment and of human health. It is not only a technical issue, but also a highly social one, Waste management is closely related to a number of issues such as urban lifestyles, resource consumption patterns, job income levels and other socio-economic cultural factors.

DNCC focus has been the management of Municipal Solid Waste (MSW) although other categories of wastes like medical waste, electronic wastes, different types of industrial waste, construction wastes etc being generated in the city. These wastes, like the MSW, are also hazardous to public health and the environment and needs environment friendly disposal. But DNCC does not have the organizational strength to undertake regulatory management to these wastes.

DNCC has been experiencing waste growth which is the consequence of rapid population. In 2016-2017 DNCC transported 852,391 ton waste to landfill at Boliarpur, Savar which is 24.77% higher than 2015-2016(source: DNCC Waste report 2016-2017). It is contemplated in the context of addition of 18 new wards combined with population growth. DNCC will have to manage environment friendly disposal of approximately 6 million ton waste in next five years. Given the current organizational strength of the Waste Management department (WMD), it will be challenging.

Principal challenge in waste management is the environment friendly disposal of wastes. Other challenges include managing current landfill, construction new landfill, collection and transportation of increasing volume of waste, taking measures to reduce waste volume etc.

Although it recently adopted a Solid Waste Master Plan, most areas of the city lack of sufficient waste collection services. Only 70%-80% (Source: WMD of DNCC) of Dhaka's waste is collected and transported to the landfills. Uncollected waste is deposited in open dumps and common areas, creating public health and environmental hazards. Considering the city's rapid growth and insufficient waste services, the need for improved solid waste management presents a key opportunity for simultaneously addressing health, development, and environmental issues in Dhaka.

So, this subproject is required for improvement of Solid Waste Management by the Waste Management Department under the DNCC.

### 1.4 Importance of Social Safeguard Assessment

The Social Management Framework (SMF) that is developed by BMDf according to regulatory framework of the country and policy guidelines of the World Bank indicates that any subproject to be implemented by ULBs through the finance of BMDf must consider some social issues. It is expected in the SMF that the subproject to be selected for infrastructural improvement preferably use land available with ULBs and avoid acquisition of additional lands and displacement of people from public or private land. Though this subproject is not related to any kind of infrastructural improvement activities but in order to assess the possible social impacts associated with the proposed

subproject, and review public perceptions and recommendations over the need and approach towards improvement of solid waste management, a social assessment is required for this subproject. The social assessment is intended to help making the project responsive to social development concerns and assist the DNCC in reaching out the proper waste management, as well as to ensure that the project objectives are acceptable to the target beneficiaries. So, it becomes important to conduct social safeguard assessment under the proposed subproject.

Now, as per the social management framework of BMDF, it is required to conduct a social safeguards assessment of the proposed subproject to meet the regulatory framework of the Government of Bangladesh and World Bank policies. Therefore, the DNCC has deployed an individual Consultant to carry out the social safeguards assessment on the proposed subproject area.

### **1.5 Project Description**

The proposed subproject will be consisted of procurement of two types of equipment 1) Procurement of Brand New Latest Model truck mounted vacuum type Road Sweeper machine 2) Brand New Latest Model, Swamp/Apex Track type (LGP) 1 (one) no. Chain Dozer.

The proposed 4 nos. Brand New Latest Model truck mounted vacuum type Road Sweeper machine will be covered all VIP roads under the DNCC area and approximately 60 kms. VIP Road will be cleaned every day. Truck mounted and hydraulically operated Vacuum Cleaner with sweeping system is to be suitable for all cleaning, brushing and vacuuming of surface dusts, leaves, mud, soil, sand, stone chips, gravels and other small particles on the ground of city/ municipal roads and areas. This unit shall be suitable for street cleaning job as well as dust suppression with water spray in the road side and narrow lanes.

A high pressure water system shall be used for removing & cleaning the stubborn road debris and the machine itself. The spray bar and sweep gear can be used together for high performance cleaning, particularly around building sites or on road laying operations etc.

The proposed Brand New Latest Model, Swamp/Apex Track type (LGP) chain Dozer will be used for waste dressing as well as compaction purposes at Amin Bazar landfill.

#### **Technical Specification of Brand New, Latest Model Truck Mounted Vacuum Type Road Sweeper Machine is given bellow:**

General:

Truck mounted and hydraulically operated Vacuum Cleaner with sweeping system is to be suitable for all cleaning, brushing and vacuuming of surface dusts, leaves, mud, soil, sand, stone chips, gravels and other small particles on the ground of city/ municipal roads and areas. This unit shall be suitable for street cleaning job as well as dust suppression with water spray in the road side and narrow lanes.

A high pressure water system shall be used for removing & cleaning the stubborn road debris and the machine itself. The spray bar and sweep gear can be used together for high performance cleaning, particularly around building sites or on road laying operations etc.

All the sweeping as well as cleaning system shall be control from within the cab. Noise sources shall be soundproofed to minimize disturbance making the machine particularly suited to urban use throughout the day and night.

All the components of the equipment shall be brand new and factory in build. The manufacturer and their authorized Assembly/Mounting factory shall be latest ISO 9001, ISO 14001 certified. The manufacturing year of the equipment shall be latest 2017 or onward. Reconditioned elements or components shall not be considered. The supplied equipment should be of UK/USA/Japan standard.

Any other distinctive feature not mentioned above, the tenderers are requested to elaborate in their offer and shall be supported by original catalogue.

- a) Name of the Manufacturer: To be mentioned by the tenderer.
- b) Brand of the Equipment?s: To be mentioned by the tenderer.
- c) Model of the Equipment?s: To be mentioned by the tenderer.
- d) Country of Origin of Sweeping Unit : UK/USA/JAPAN/EU Standard.
- e) Country of Origin of Chassis : UK/USA/JAPAN/EU Standard.
- f) Country of Assembly & Shipment :  
UK/USA/Japan/Germany/France/EU/Thailand/Malaysia
- g) Year of Manufacture: Not before 2017 or onward

Hydraulic Systems/Controls :

All sweeping operations are controlled from the master module inside the cabin. This incorporates an audible and visual raised hopper warning, equipment fuel gauge; auxiliary engine is infinitely variable ensuring optimum operational and fuel efficiency with no performance compromise. Exhauster fan will be driven from the auxiliary engine via step-up gear box and fluid flywheel coupling driven.

All the components required for operation of the complete system are grouped and mounted at a convenient place, so that the entire control/operation of the system can be carried out from within the cab.

The vacuum tank with all above vacuum and hydraulic system is to be mounted on a suitable Truck Chassis (with 2 people with driver) with hydraulic tipping/dumping to 50 degree (min.) at rear. All above arrangements must be suitable for vacuuming dust and dirt as mentioned above.

- a) Type of Pump: To be mentioned by the bidder
- b) Hydraulic Steering Pump Type: To be mentioned by the bidder
- c) Hydraulic circuit diagram: To be submitted by the bidder.

Hydraulic System components shall be of reputed brand from USA/UK/JAPAN/EU

Standard.

Brand Name: To be mentioned by the bidder

Manufacturing Country: To be mentioned by the bidder

Truck Chassis With Engine :

4x2, RHD with Forward control driver's cabin for 02 person ; 2 front and 4 rear tire & 1 Spare.

Wheel Base : Min. 3700 mm

Overall Length : Min. 6300 mm

Ground Clearance: Min. 235 mm

Pay load : 5 ton to 6 ton

GVW : 13000-15000 Kg.

Turning radius: Max. 6.8 m

Engine : 6 Cylinder, in-line, Diesel operated Water cooled, Direct injection, Turbo intercooler.

Fuel System : Electronic Control. Common rail Type.

Combustion System : Direct Injection Type.

Piston Displacement : min. 7500 CC

Emission Standard : Min. EURO III

(Certificate in this regards from Engine Manufacturer or appropriate authority is to be submitted with bid)

The power shall not be less than 175 KW @ rated rpm and it shall be enough to operate the truck and hydraulic system. For Sweeping and Vacuum System Power Must be come from a separate Auxiliary Engine.

Main Engine :

a) Power : Min. 175 KW (HP-235) @ speed not exceeding 2500 RPM (The Corresponding engine performance curve must be enclosed with the bid).

b) Torque : 700 N-m @ 1400-1500 RPM

c) Drive : 4x2, RHD (right hand drive)

d) Steering L Telescopic type recalculating ball with Hydraulic Booster.

e) Electrical system :

i) 12x2 Volts, 120 AH

ii) Alternator 24Volts, 60A

All external loom connections are full automotive IP67 rated or better.

f) Clutch : Single plate with cushioning springs, dry Friction. Hydraulic power assisted

g) Transmission : Minimum 6 forward & 1 reverse, Synchronesh.

h) Brakes:

i) Service Brake : Air Over Hydraulic, Dual circuit.

ii) Parking brake : Mechanical at rear transmission

iii) Auxiliary brake : Exhaust Brake

- i) Suspension : Semi-elliptical alloy steel leaf spring
- j) Fuel Tank Capacity : Main Vehicle: Min. 150 Ltrs. Sweeping System: Min. 120 Ltrs.
- k) No. of Wheels : 7 (Front 2, Rear 4 & Spare 1)
- l) Tire size : Min. 11.00-20-16 PR (Textile) suitable for off and on road use.

#### Auxiliary Engine

Diesel engine, 4 strokes, 4 cylinder, in line, Liquid cooled and shall be suitable for smooth operation of the sweeping systems and others.

- i) Power : Min. 80 KW (HP107) @ rated rpm Min. 2200
- ii) Emission Level : Min. Tier 3 or Equivalent

#### Performance:

Broom sweeper type : Mechanical and vacuum technologies

Broom operation: Hydraulic motor

Channel Brush Dia : Min. 700 mm

Wide Sweep Brush Dia : Min. 400 mm

Brush speed : 0-200 rpm

Sweeping width : Min. 2400 mm

Suction Hose : Heavy duty, Flexible hose, and minimum 250 mm diameter.

Dumping Angle : Variable tilting to a min. of 50°

Discharge System : Two stage double acting ram

Monitoring System : Camera Monitoring

#### Water Sprinkler and dust suppression system :

Pressurized sprinkler system through nozzles at min. 0.5 bar. Dust spray bar pressure shall not be less than 3.5 bar. Super wash pressure min. 100 bar. The system shall be capable of operation as street washer as well as self-cleaning of the body.

Water Tank capacity : Min. 1500 liters.

Water Tank material : Heavy Duty Stainless steel.

#### Debris Hooper :

a) Volume : 5.5 m<sup>3</sup>- 6.5 m<sup>3</sup>

b) Material : Min 4003 Grade Stainless steel, with 5mm or more thickness.

#### Spare Parts :

a) The supplier should provide manufacture's certificate stating that the spare parts will be made available for the period of next 10 years.

b) Tenderer should have enough capability to undertake after sales services with documentary evidences and that would be taken into consideration during tender evaluation.

#### Safety System :

a) Back up alarm when the transmission is set in reverse, all sweep function shall stop & rise.

- b) One top mounted LED warning lights shall be supplied with light protector, LED warning lights shall be provided at the rear of cab.
- c) In cab noise min. <75 dB(A) generally (dependent on chassis selection)
- d) Exterior noise/Sound power level LWA 110 dB(A) for standard power engines measured in accordance with EC directive 2000/14/EC. LWA 112 dB (A) for high power engines measured in accordance with EC directive 2000/14/EC.
- e) Two flush mounted LED warning lights should be installed on tail gate/bumper bottom right and left corners.
- f) Fluorescent marker should be placed across and around the truck to make it visible during night operation. Paint should be weather resistant

Following must be supplied with each Unit:

- a) Original Operation/Owner's manual, Original Brochure with the offer;
- b) Manufacturer's standard tools with equipment;
- c) Driver's Manual (English)-one copy each with equipment; and
- d) Workshop manual (English): one set original parts catalogue, repair manual one copy each with equipment.

Training & Other Services:

Training shall be imparted by expert Technician or Engineer in Supplier's/Local agent's workshops or stockyards for at least two weeks for the following :

Operators-2 persons

Technicians-2 persons

Engineers -2 persons

For 2 (two) person nominated by the purchaser to be trained in the Manufacturer's factory on the detailed operation, repair and maintenance for minimum of 10 (Ten) working days. The cost of this service shall not be paid as a separate item but be deemed to be included with the tender price.

Warranty: 3(Three) Years

The Road Sweeper after sales service and Warranty period shall be for 3(Three) Years.

### **Specification of Supply of Brand New Latest Model, Swamp /Apex Track Type (LGP) . Chain Dozer is given below:**

General Purpose of Procurement: Supply of Brand New Latest Model, Swamp /Apex Track Type (LGP) 1(one) No. Chain Dozer will be used for waste dressing as well as compaction purposes at Amin Bazar landfill.

(1) General:

Supply of Brand New Latest Model, Swamp /Apex Track Type (LGP) 1(One) No. Chain Dozer having minimum 27 Tons operating weight with required consumables.

All the components of the equipment shall be brand new, Unused and factory in-built. The manufacturer should have latest ISO 9001 & ISO 14001 certified. The manufacturing year of the equipment shall be latest 2017 or onward.

Any other distinctive feature not mentioned above, the tenderer are requested to elaborate in their offer and shall be supported by original catalogue.

(2) Name of the Equipment : Swamp/Apex Track Type (LGP) Chain Dozer (Elevated/Oval).

(3) Name of Manufacturer : To be mentioned. (Manufacturer must be submitted latest updated ISO 9001 & ISO 14001 certification).

(4) Model of the Equipment : To be mentioned. (2017 or onward)

(5) Brand of the Equipment : To be mentioned.

(6) Country Of Origin : Japan/USA/Thailand/EU Standard.

(7) Country Of assembly & Shipment : Manufacturer Country Only.

(8) Year of Production : 2017 or onward.

(9) Operating Weight : Operating weight is 25 ton to 30 ton (includes lubricants, coolant, 100% fuel, hydraulic oil and operator).

(10) General Dimension :

(a) Overall length (without Ripper) : Min 5800 mm

(b) width : Min 3300 mm

(c) Height (TOP of ROPS) : Min 3300 mm

(d) Ground Clearance : Min 450 mm

(11) Engine :

(a) Type : The engine is of diesel type, four stroke cycle, cylinders vertical in line, Direct fuel system, water cooled direct injection.

(b) Make & Model : 2017 or onward (Engine, Hydraulic System, Chain, Blade Must be same brand).

(c) Rated Horse power : Engine shall be Horse Power Min 250 Rated Speed Min. 1900 RPM.

(d) Displacements: Min 8.5 Ltr.

(e) Bore : Min 110 mm

(f) Stroke : Min 140 mm

(g) RPM : @ Manufacturer's standard.

(h) No. Of Cylinder : 6 Cylinder in line vertical

(i) Fuel Tank Capacity : Min 475 Ltr.

(j) Emission Level : Min. Tier 2 or Tier 3

(12) Transmission :

(a) Type : To be mentioned

(b) Speed : Shall provide at least three speeds forward and three speeds in reverse.

(13) Monitoring System : Monitoring System Shall

- have i. Fuel level gauge
- ii. Hydraulic oil temperature gauge
- iii. Engine coolant temperature gauge
- iv. Power train oil gauge
- v. Hour Meter (Electronic System)

(14) Undercarriage :

- (a) Type : Swamp/Apex Track Type (LGP) Chain Dozer.
- (b) Track Rollers : Min. 7(Seven) nos. Track rollers each side & Min. 1(One) nos. Carrier roller each side.
- (c) Length of Track (On Ground) : Min 3150 mm
- (d) Width of track shoe : Min 910 mm (Swamp/Apex Track Type)
- (e) No of shoe (Each side) : Min 42 Nos.
- (f) Sprocket System : Pinion type
- (g) Ground Pressure : Max 46.00 Kpa
- (h) Grouser Height : Min 71 mm

(15) Hydraulics System :

- i. A fully enclosed protected system.
- ii. A load-sensing displacement gear or piston pump.
- iii. A load-sensing pressure compensating piston/gear-type pump.
- iv. Max. Pressure of relief valve is 42 mpa.
- v. Max. Pump output is 280 litre/min.

(16) Grade Ability : Min. 45 Degree

(17) Dozer Blade with Trash rack (The image is linked to the download options)

- (a) Type : Straight/SU with tilting (landfill blade)
- (b) Capacity : Min 5.9 m<sup>3</sup> or 7.5 yd<sup>3</sup>
- (c) Blade Length : Min 4500 mm
- (d) Blade Height : Min 1300 mm

(18) Brake System : To be mentioned

(19) Electrical System :

- (a) Batteries 2 No's (Maintenance free) 12x2 Volts, Min. 190 Ah.
- (b) Alternator : Min 70 amps

(20) Lighting System : Min. 2(Two) nos. at front side & Min. 2(Two) nos. at rear side.

(21) Cab : Fully protected operators ROPS cabin with A/C for easy operation.

(22) Standard accessories : Backup alarm, Horn (forward warning) adjustable seat, rear-view mirror, necessary indicators and gauges, seatbelt, wiper, etc.

(23) Required Consumables : Different types of required filters and other consumables.

- (a) Air filter (primary)-12 Nos.
- (b) Air filter (secondary)-12 Nos.
- (c) Fuel filter-24 Nos.
- (d) Engine Oil filter-24 Nos.
- (e) Water separator-24 Nos.

- (f) Hydraulic filter-12 Nos.
- (g) V-belts-10 sets
- (h) Different types of hydraulic pipe with nipple : 30 Nos. Minimum 100 working hours fuel.

(24) Warranty : 1 (One) year and 10 (Ten) Servicing, with all filters Maintenance and all kinds of repairing.

(25) O & M Training :

(a) O & M Training of at least 4 (Four) Landfill Management Officials nominated by the DNCC authority for at least 5(Five) days before delivery in the manufacturer's country preferably within the pre-shipment period.

(b) O & M Training of 4(Four) Operators & 2(Two) Mechanics for supply Equipment nominated by the purchaser for at least 5(five) working days at the work site within 7(seven) days of delivery.

Any other distinctive feature not mentioned above, the tenderer are requested to elaborate in their offer and shall be supported by original catalogue. The catalogue must be attested by the respective Manufacturer without attestation the tender will not be considered as responsive.

Special Condition :

\*The tenderer must have work shop and evaluation committee may visit if necessary.

\*The tenderer must have landfill equipment supply experience.

\*Engine and other vital units brand must be same.

(Note: source of information: WMD of DNCC)

### 1.6 Project Location

The proposed subproject will be covered all VIP roads under the DNCC area i.e whole area of the DNCC and Amin Bazar landfill. Following are the pictures of the proposed equipments:



Picture: proposed Chain Dozer



Picture: Road sweeping machine

### 1.7 Justification of Selecting the proposed equipment

The procurement of equipments has significant importance for cleaning, brushing and vacuuming of surface dusts, leaves, mud, soil, sand, stone chips, gravels and other small particles on the ground of city/ municipal roads and areas. This unit shall be suitable for street cleaning job as well as dust suppression with water spray in the road side and narrow lanes.

Secondly the Swamp/Apex track type Chain Dozer will be used for waste dressing as well as compaction purposes at Amin Bazar landfill.

There are 300 Kms. VIP roads under the DNCC area. These VIP roads are intended to clean by the DNCC in stipulated time. It has been experienced that maintained time and quality of work is difficult through manual cleaning by the Sweeper. During cleaning the roads, Sweepers has victimized fatal accident by the road vehicles. Presently DNCC is using one road sweeper truck for mechanical cleaning of roads from February 2018 which is cleaning 15 Kms. Roads everyday and approximately 4 tons waste collected and disposal in the landfill. Mechanical cleaning is more effective, economically viable and no pollution of the environment during the cleaning.

DNCC is covering 36 wards and every day on an average 3000-3200 tons waste dumped in the Amin Bazar landfill. Presently one platform is using in the landfill out of 4 platform due to shortage of Chain Dozer. Chain Dozer is using for waste dressing as well as compaction purpose at landfill. Now, 5 nos. Chain Dozer is using for dressing and compaction of the waste at Amin Bazar landfill which not enough is considering the volume of waste dumped in the landfill every day.

Therefore, considering the above reasons and benefits, 4 nos. Road sweeper truck is needed for cleaning the road every day and 1 no. Swamp/Apex track type Chain Dozer is required for dressing and compaction of waste at Amin Bazar landfill.



Picture: Existing manual road sweeping by the Sweeper



**Picture: Present situation of the Amin Bazar landfill including leaching pond**

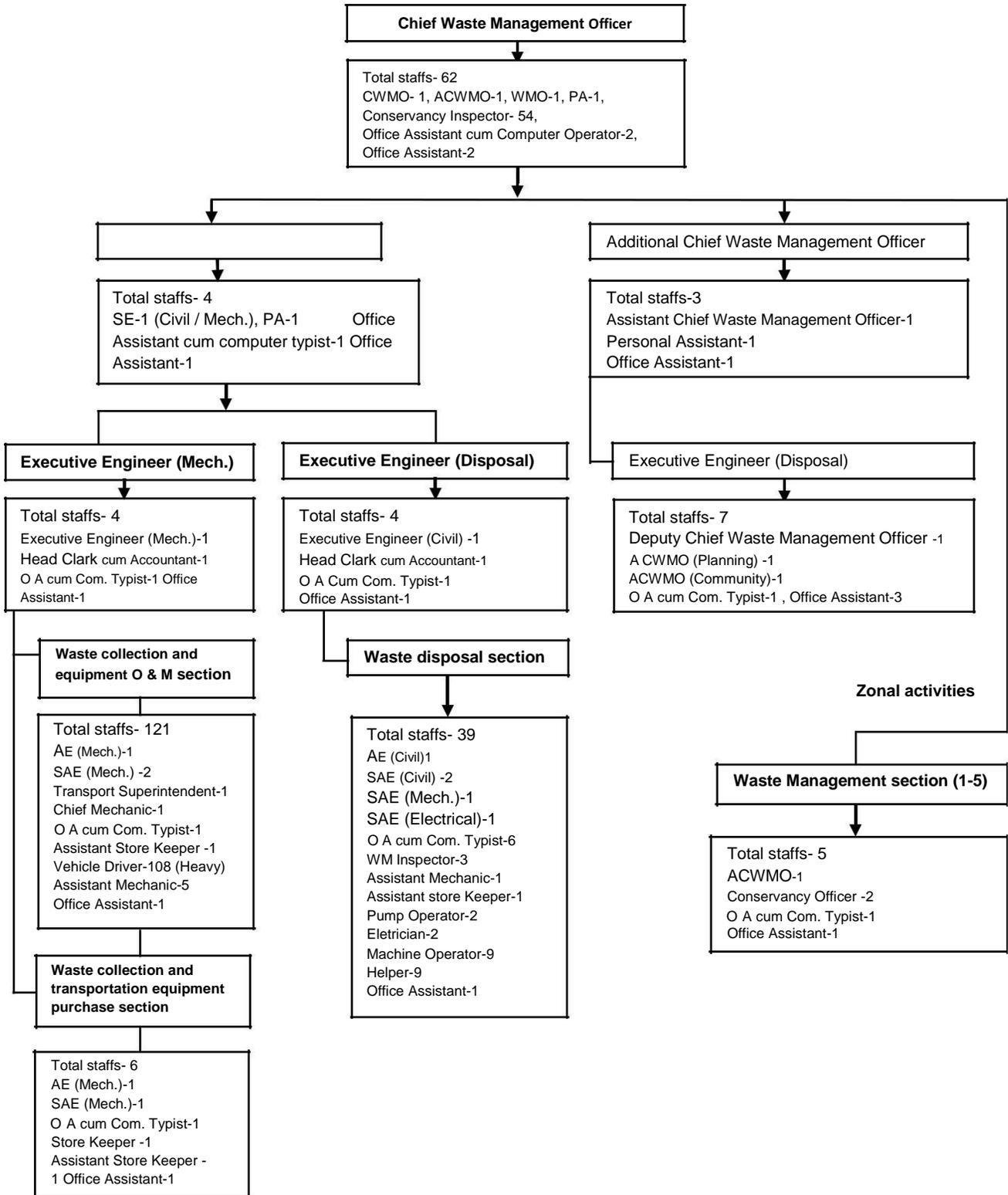
## **1.8 At a glance scenario of waste management Department (WMD) under DNCC**

Dhaka is one of the most densely populated cities in Asia, with many people living in slums and squatter settlements. Although it recently adopted a Solid Waste Master Plan, most areas of the city lack of sufficient waste collection services. Only 70%-80% of Dhaka's waste is collected and transported to the landfills. Uncollected waste is deposited in open dumps and common areas, creating public health and environmental hazards. Considering the city's rapid growth and insufficient waste services, the need for improved solid waste management presents a key opportunity for simultaneously addressing health, development, and environmental issues in Dhaka.

### **1.8.1 Organogram of Waste Management Department (WMD)**

Waste Management Department is managing the waste collection, transportation and disposal in the landfill side. Following are the organogram of the WMD:

## Organogram of WMD



### 1.8.2 Present status of Cleaners and Drivers under WMD

#### Number of Cleaners and Drivers in DNCC

Category of workers	Quantity
Manual Cleaner (street sweeping)	2000 nos. (approx.)
Manual Cleaner (Drain cleaning)	200 nos. (approx.)
Mechanical Drain Cleaner (Jet & Sucker)	02 nos
Waste management Drivers	120 nos. (approx.)
# of private operators were registered with the PWCSP	280 nos. (approx.)

#### Present status of equipment for waste management by WMD of DNCC

Types of equipment	Quantity
Numbers of Waste carrying container carrier (vehicle)	45 nos. (approx.)
Number of Waste Collection Trucks (Dump truck)	40 nos. (approx.)
No. of Compactor	48 nos. (approx.)
Wheel Dozer (landfill area)	02 nos.
Excavator (Landfill area)	05 nos.
Jet & Sucker deep drain cleaner	02 nos.
Road Sweeping track	01 nos.
Chain Dozer (Landfill area) { oval type-6, elevated type-2}	08 nos.

### 1.8.3 Functions of WMD

- Street sweeping: All kinds of road sweeping inside the ward boundary.
- Removing illegal banner festoon (which are not approved by WMD)
- Giving permission of PWCSP (Primary Waste Collection Service Provider)/ door to door waste collection from household /Van services.
- Collect solid waste from domestic, business, hospital, street, public toilets and drains.
- Provide dustbins and other receptacles for accumulating the waste.
- DNCC cleaners clean the roads, drains and sewerage lines.
- Establishment of secondary transfer station.
- Collection and transportation of medical waste.
- Development of hospital waste landfill
- Arrange community meeting for promoting community base solid waste management
- Development and management of sanitary landfill
- DNCC started community based waste management activities in collaboration with JICA
- Manage the private solid waste management and NGO based solid waste management
- Budget preparation

### **1.8.3.1 Awareness raising activities:**

- Community meeting at ward level
- Conduct training program for community people for developing the waste management system of their local community.
- Conduct lots of program like rally and miking distribution leaflet and sticker, conduct cultural program among different community.
- Conduct Environmental Education program , mobile and model school program to increase the awareness about environment among the student at primary level.
- Publish quarterly newsletter.

### **1.8.3.2 Ward Based Approach**

- Construction and renovation of conservancy Inspector's ward office
- Develop workers manual, safety and sanitation committee.
- Community based solid waste management activities
- Develop and introduce new collection system like compactor, road sweeper and modification of existing collection system like arm roll, new type of hand trolley, rickshaw van.

### **1.8.3.3 Training activities**

- Community training
- PWCSP training
- Drain and storm sewerage cleaner training
- Road cleaner training
- Planning and implementation of capacity building training for waste management related staffs
- Abroad training

### **1.8.3.4 Way of Activities**

- Street sweeping: Every day morning cleaners sweeping main roads, alleys footpath and put together the whole waste in a common place. Then bring it to the designated point/dustbin/container by hand trolley.
- Drain cleaning: Every day a team contains 10 to 12 cleaners send to the different location of ward for cleaning open drain/deep drain/surface drain and storm sewerage line.
- PWCSP activities: PWCSP collect the waste from household and storage to the container from 1 pm to 7 pm

### **1.8.3.5 Procedure of delivery system of Waste Management work**

- Receive complain letter/oral/by phone about different problem from different point
- Conservancy Inspector receive complain from the community people directly
- It may come to the Zonal Executive officer/Zonal ACWMO/ZCO from the community
- DNCC HQ from different organization
- DNCC Control room to the city dwellers/organization
- Different Print media and electronic media

#### 1.8.4 Waste facts

- Area: 82.638 sq km
  - No. of Wards: 36
  - Population (2016-2017): 47,516,171<sup>1</sup>
  - Population density (DNCC): 57,499
  - Population density (Ward):
    - Highest 1,10,863 (Ward # 36)
    - Lowest 22,300 (Ward # 19)
  - Actual volume of waste generation/day: 3800-4000 tons
  - Total waste collected:
    - 683,174 ton (2015-2016)
    - 852,391 ton (2016-2017)
  - Waste collection growth (2016-2017): 24.77%
  - Share of total waste transportation:
    - DNCC vehicles: 62% (28 wards)
    - Contractors' vehicles: 38% (8 wards)
  - Highest waste collection in a day: 3,520 ton on 17 June 2017
  - Highest waste collection in month: 86,594 in June 2017
  - Per capita waste collection/day: 0.513 kg
  - Waste transportation cost:
    - DNCC: TK. 665.00/ton
    - Contractor: TK. 553.00/ton
  - Landfill operating cost: TK. 134.00/ton
  - Aggregate load per trip
    - DNCC vehicles: 3.7 ton
    - Contractors vehicles: 7.8 ton
  - Estimated waste volume 2017-2018 to 2021-2022
    - 6 million ton approximately
- (Source: DNCC waste report 2016-2017)

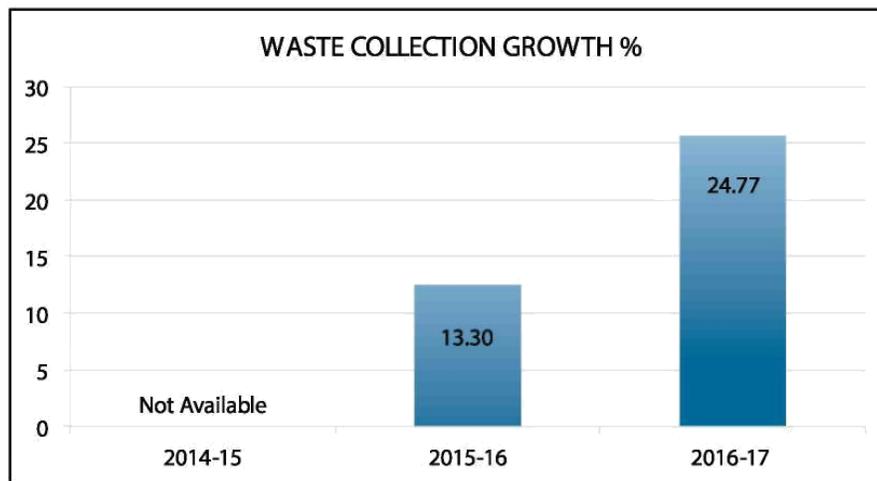
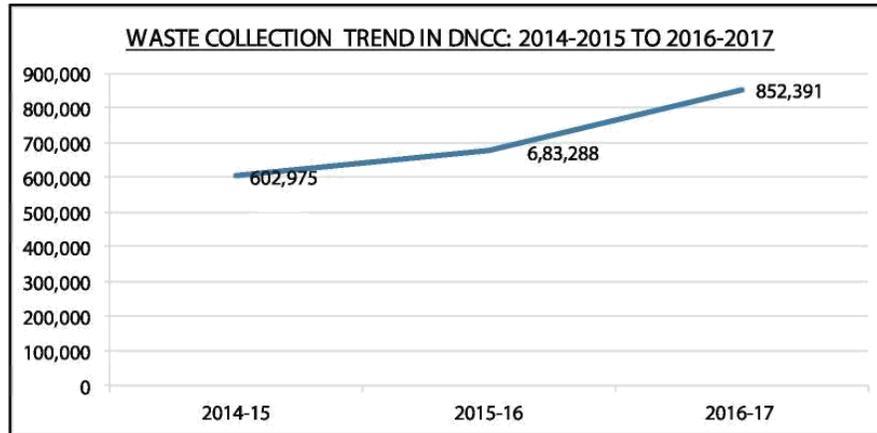
#### 1.8.5 Solid waste management

Managing the Municipal Solid Waste (MSW) is the principal task of Waste Management Department (WMD). A main activity is waste management functions have been the collection, transportation and crude dumping of waste in the landfill.

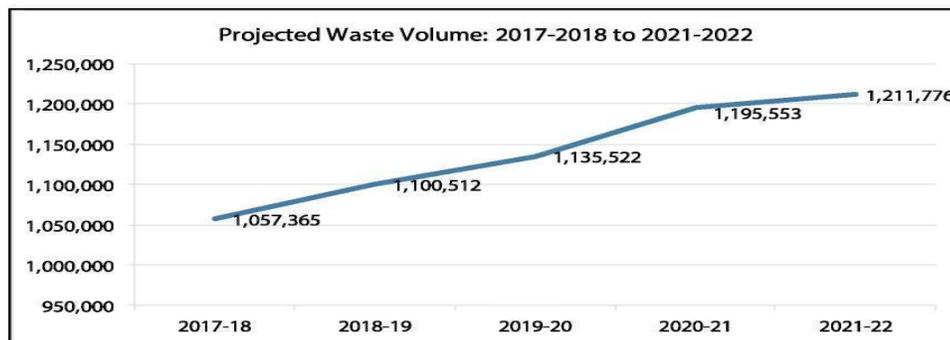
Dhaka city has been experiencing incremental growth in waste generation and collection. In 2016-2017, DNCC transported 852,391 ton waste to the landfill which is 24.77 % higher than 2015-16. Waste collection trend since 2014-2015 and growth percentage are presented in the charts below:

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<sup>1</sup> There are different opinions about the population of DNCC. Opinion varies between 10 and 15 million. Population of DNCC in 2016-2017 is based on the National population census 2011.



It is evident from facts, figures and developing situation that waste volume will continue to climb the graph. Factors likely to influence waste volume are - population growth, life style change and addition of 113 sq km new area to current 82.638 sq km. Projected waste volume during the period between 2017-2018 and 2021-2022 is appended in the chart below. The projection suggests that DNCC might have to manage over 5,637,728 ton waste in next five years.



To manage growing volume of waste, DNCC will need robust collection and transportation network. DNCC has engaged private entrepreneurs to meet the growing challenges of waste management. Currently four entrepreneurs in eight wards (25.976 sq km; 31.43% of DNCC area) sweep streets and transport waste from Secondary Transfer Stations (STS) to landfill.

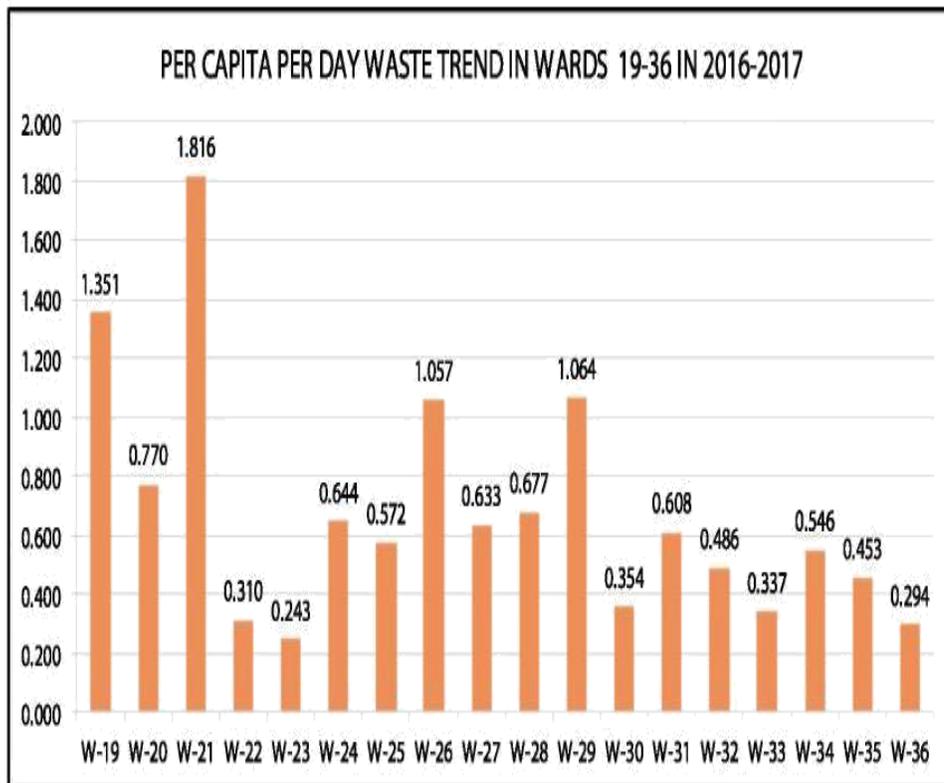
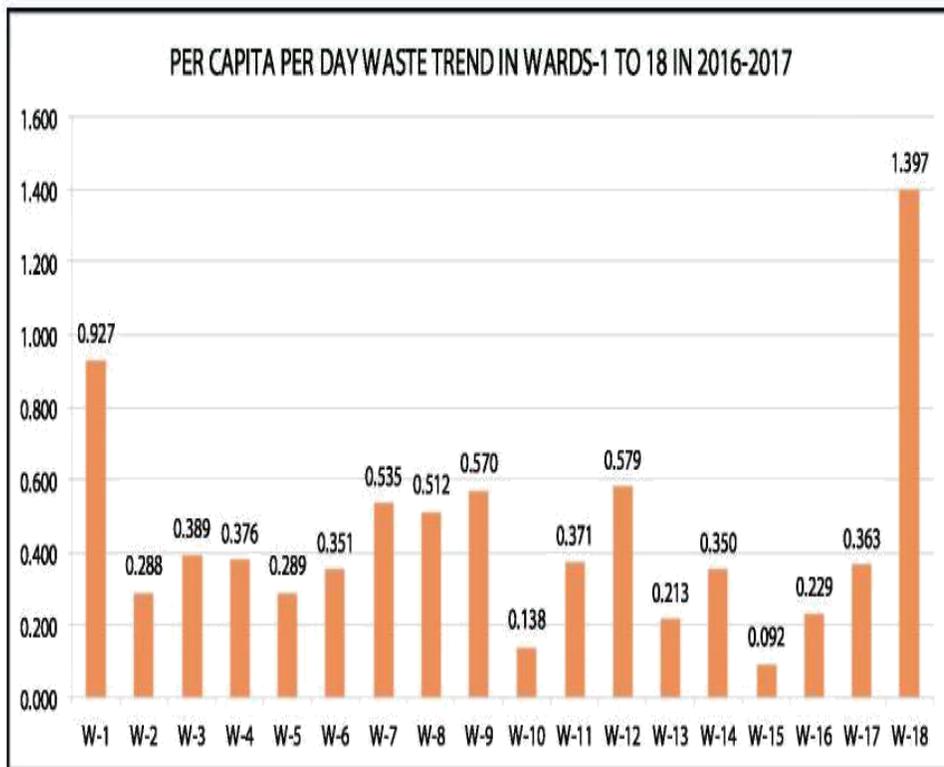
In DNCC area on an average 3800-4000 tons per day and 1460,000 tons (approximately) of solid waste generate annually. It has been informed by the WMD that on an average 70%-80% waste collected and disposal at landfill and last year (2017-2018) about 1000,000 tons of waste collected and disposal at landfill. In 2015-2016 and 2016-2017 per capita waste collection/day was 0.391 Kg and 0.513 Kg respectively. It is to be noted that in the context of DNCC the term "waste" comprises of all throw away things that have been transported to landfill.

Wards-1, 18, 19, 21, 26, 29 have very high per capita/day waste collection. Horirampur, Uttar Khan and Dokkhin Khan are three unions abutting Ward-1. Although these areas have the status of Union, they are quite populated and almost built up area. Wastes from some parts of these Unions are discharged into different areas of Ward-1, which cannot be separated from the wastes actually generated within the boundary of Ward-1. However, population of those Unions was not included in the calculation. Therefore, per capita per day waste collection appeared very high in Ward-1.

Similarly, Ward-18 has couple of populated and built up Unions like Satarkul, part of Beraid, Vatara etc as its neighbors. These Unions share border at Progati Sharani of Ward-18. Wastes from these Unions come into the city, which cannot be separated from the wastes actually generated within Ward-18.

Large quantity of garden waste is generated in Ward-19, which includes Gulshan and Banani. Garden waste includes tree branches, which are quite heavy. Within the city area, waste from one Ward goes into another due to the proximity of STS to a ward. That is why per capita waste per day collection in Ward-21, 26, 29 are high and low in Ward-22, 23, 10 and 15.

However, following per capita per day waste data gives an idea about the waste generation in each Ward, which could help future planning of ward based waste management.



Construction of 52 STS has been the notable development in waste management. This has enabled DNCC to remove large number of waste containers/open dumping spots from the street, which was much desired relief for the people. Containers/dumping spots on the street were bottlenecks in vehicular movements, which were also solved through the construction of STS. DNCC has planned to build 2-4 STS in each of the 36 Wards. Implementation of the plan will depend on the availability of land. Some pictures of the primary and secondary transfer station are shown below:



Primary waste collection



Secondary transfer station



Final disposal at landfill

In the areas of primary collection, Primary Waste Collection Service Provider (PWCSP), an NGO is coordinating collection from households to secondary transfer station. In 2016-2017, 340 private operators were registered with the PWCSP. Presently 280 registered private operators are working with the capacity of 1503 rickshaw van and 3300 manpower. There are also unregistered operators collecting wastes from households to STS (source: DNCC waste report 2016-2017 and DNCC update information).

Besides solid waste, Medical Waste, Electronic Waste, Construction Waste, Food Waste, and different types of Industrial Wastes are generated in the city. DNCC does not have the capacity to perform regulatory management of these wastes. Besides lack of capacity, there are no laws to regulate the management of Electronic Waste, Construction Waste, Food Waste and Industrial Wastes.

## Waste Disposal Site

Landfill, the back yard of DNCC, is an integral part of waste management. It is the final disposal site for wastes. Landfill at Boliarpur, Savar is the only landfill where DNCC dumps waste. Dhaka City Corporation (DCC) built the landfill on 52 acres land in 2005. According to the projection of JICA, capacity of the landfill was to exhaust in 2017. The process to acquire 80 acres land for a new site began in Feb. 2017. It will take couple of years to start the operation of new landfill.



Satellite image of landfill at Boliarpur (Amin Bazar) Savar

In the context of current waste growth and additional waste from 113 sq km new area, it is estimated that DNCC will have to manage approximately 6 million ton waste in next five years. In future, finding land on the periphery of Dhaka city for waste dumping will be extremely difficult. In this critical situation, incineration perhaps will be the best possible option to reduce the volume of waste. Incineration can reduce waste volume by 80%-90%. Use of ash in the cement industry can ultimately reduce waste volume by 90%-95%.



Landfill operation by the wheel Dozer



Landfill operation by the Chain Dozer

Anyway, until a new site is ready, current landfill is the only option to dump waste. As the landfill is at the fag end of its life and new landfill is not in sight, it has been, therefore, decided as a matter of short-term measure, to extend the service life of the current disposal site. Given all these limitations, disposing off the huge volume of waste in environment friendly way, let alone crude dumping, is likely to be the worst possible challenge for DNCC.

Like any disposal site, landfill at Boliarpur has operating cost. Generally a sanitary landfill involves high operating cost. But the landfill at Boliarpur has very low operating cost. Because, important hygienic activities like periodic soil cover over the waste, methane gas recovery, etc are not done. Cost breakdown of DNCC's landfill operation is appended below:

**Landfill operation cost**

Item of Expenditure	Million Taka
Fuel cost for landfill equipment	<b>50</b>
Equipment depreciation cost	<b>10</b>
Outsourcing and infrastructure cost	<b>30</b>
Staff salary	<b>15</b>
Miscellaneous	<b>10</b>
<b>Total</b>	<b>115</b>
Waste handled	<b>8,52,391 ton</b>
Landfill Operating cost per ton	<b>134.00</b>

At the end of service life, a landfill must not be left exposed to environment. It must be covered hygienically. Land being scarce and precious, next use for such big chunk of land should be planned. As the landfill is in the last year of its service life, DNCC has conceived a post closure plan to use the land as sports complex. Implementation of end use plan should start after the landfill has settled completely, which may take 30 years.

## Glimpses of Landfill Operation



Chain Dozer in waste dressing



Wheel Dozer in operation



Dump truck in the landfill



Compactor in the Landfill



Equipment used in the landfill



Waste dressing



DIUDP Consultants visit landfill site



DIUDP Consultants visit Chain Dozer at Landfill

### Waste Transportation Cost

Wastes are transported to landfill by DNCC vehicles and DNCC's Contractors vehicles. In 2016-17 DNCC vehicles transported 5,25,963 ton (62%) waste from 28 Wards and Contractors transported 3,26,428 ton (38%) from 8 Wards (Ward-1,17,18,19,20,21,24 and 25). DNCC vehicles generated 141,890 trips. Aggregate load per trip for DNCC vehicles was 3.7 ton. Contractors' vehicles generated 41,837 trips with 7.8 ton aggregate load per trip.

Costs of waste transportation by DNCC and contractors' vehicles are different. Landfill operation cost elements included following elements:

Items of Expenditures	Million Taka
Petroleum, Oil, Lubricant	200
Vehicle Maintenance Cost	45
Drivers and maintenance staff's wages	55
Vehicle Depreciation Cost	50
Total	350

Total waste Transported by DNCC vehicles: 5,25,963 ton

Cost per ton of waste transportation by DNCC in 2016-2017 was Tk. 665.00

Contractors' cost in DNCC's context is fixed. During the period between July 2016 to June 2017, contractors transported 326,428 ton waste and DNCC paid Tk. 180,631,002.00.

Thus cost of per ton waste transportation through contractor was Tk. 553.00. Comparative performances of DNCC and contractors' vehicles are given in the table on next page.

## Comparative performance of DNCC's and Contractors waste transport fleet

Month	Total waste	Total trip	DNCC's load	Contractor's load	DNCC's trip	Contractor's trip	DNCC's aggregate load/trip	Contractor's aggregate load/trip	DNCC's load share (%)	Contractor's load share (%)
July 16	65,966	14,187	50,870	15,096	11,748	2,439	4.3	6.2	77	23
August	75,853	15,508	55,415	19,438	12,368	2,870	4.5	4.3	74	17
Sept.	67,408	15,291	43,673	23,735	11,833	3,458	3.7	6.9	65	35
Octo.	66,485	15,307	40,174	26,311	11,735	3,572	3.4	7.4	60	40
Novem.	63,493	15,673	39,041	24,452	12,242	3,431	3.2	3.6	61	19
Decem.	66,200	15,890	40,509	25,691	12,227	3,663	3.3	3.3	61	18
Janu.-17	69,142	16,251	42,036	27,106	12,371	3,880	3.4	7.0	61	39
Feb.	63,446	14,581	37,525	25,921	10,870	3,711	3.5	7.0	59	41
March	72,948	15,870	42,823	30,124	11,842	4,028	3.6	7.5	59	41
April	71,780	14,500	40,989	30,790	11,320	3,180	3.6	9.7	57	43
May	84,076	15,935	47,617	36,459	12,260	3,675	3.9	9.9	57	43
June-17	86,594	15,004	45,290	41,304	11,074	3,930	4.1	10.5	52	48
<b>Total</b>	<b>852,391</b>	<b>183,997</b>	<b>525,963</b>	<b>326,428</b>	<b>141,890</b>	<b>41,837</b>	<b>3.7</b>	<b>7.8</b>	<b>62</b>	<b>38</b>

### 1.9 Drains

Dhaka City Corporation has two types of drainage network: 1) Storm water drainage system and 2) Household waste water drainage system. Dhaka Water Supply Sewerage Authority (DWASA) is responsible for storm water drainage system and City Corporation is responsible for household waste water drainage system. The City Corporation has 1201.565 km. drainage network to run out the household waste water and storm water. DNCC is using a Jet & Sucker (deep drain cleaner) machine for cleaning the deep drain.



Picture: Jet & sucker (Deep Drain Cleaner) Machine

### 1.10 Water Supply and sanitation facilities

Dhaka Water Supply and Sewerage Authority (DWASA) are mainly responsible for water supply to the household level including the commercial areas. Dhaka WASA has almost 100% water coverage and the water demand in Dhaka city is 2.25 million cubic meters per day (2250 MLD), which slightly exceeds the present supply of almost 2.11 million

cubic meters per day (2110 MLD). At present 87% of the supplied water is from ground water abstraction from Dhaka WASA's 605 deep tube wells. The remaining 13% water comes from surface water treatments (Source: DWASA article book from DWASA website).

The upper and lower aquifers of Dhaka city are about to exceed its withdrawal limit. Ground water depletion is occurring at alarming rate. In most places the layer of ground water has been decreasing by two to three meters each year due to lifting of ground water. Dhaka WASA has to change its focus to using surface water instead of underground water because abstracting ground water is no longer ecologically viable. The ground water aquifer inevitably and urgently needs to be recharged through rain water harvesting.

According to the population and housing census 2011, 61% people are using sanitary toilet with water seal, 34.2% people are using sanitary toilet without water seal, 4.6% people using non sanitary toilet and 0.2% people have no toilet facilities.

### **1.11 Fecal sludge management system**

DWASA is responsible for management of fecal sludge in the Dhaka city area. In Dhaka city no proper sludge management (emptying & treatment) is available and limited use of emptying services by the some private organization but it is not easy access & affordable to all. As a result high rate of fecal sludge is discharging in to the storm water drain.

### **1.12 Legal and policy framework**

For the sub-project preparation and implementation, the World Bank's Operational Policy (OP) on Involuntary Resettlement (OP 4.12) and on Indigenous Peoples (OP 4.10) has been triggered to the subproject. A Social Management Framework (SMF) has been adopted by BMDF for the subproject that meets the requirements of the country's legal frameworks in Bangladesh "The Acquisition and Requisition of Immovable Property, Ordinance, 1982" and the Bank's requirements including OP 4.12 and OP 4.10. The SMF also requires that the sub-projects are prepared ensuring inclusion, participation, transparency, and social accountability. The sub-projects have been prepared by the respective urban local bodies (ULBs) in a process complying with the SMF requirements. BMDF reviews the sub-project proposals for technical, engineering, environmental, social development, and safeguards compliance before allocation of the financing to the ULBs.

## **SECTION 2: Methodology of Social Safeguards Assessment**

### **2.1 Objective of the Study**

This assessment is undertaken to complement the necessary social compliances relevant to the proposed sub project as per the Government of Bangladesh and World Bank safeguards compliances. The key objectives of the study are:

- To provide an accurate representation of the social, cultural and economic conditions of the population surrounding the subproject areas;
- To identify the potential socio-economic positive and negative impacts on local community, organizations and groups;
- To develop attainable mitigation measures to enhance positive impacts and to eliminate, reduce or avoid negative impacts; and
- To develop management and monitoring measures to be implemented throughout the life of the subproject.

## 2.2 Methodology of the Study

This is a qualitative study. However, both quantitative and qualitative data are collected and analyzed to achieve the objective of the study and show the baseline information of the study areas. The quantitative data are collected from secondary sources through literature review and qualitative data are collected from primary sources using different qualitative approach and methods. The approach and methods those are employed during the assessment include: (i) literature review of relevant national and local documents ; (ii) social survey; (iii) key informant interview; (iv) consultative meeting; and (v) focus group discussion; vi) Waste report of DNCC

Relevant national, City Corporation documents are reviewed for gathering available and updated quantitative data of socio-economic condition of the community people.

Social survey through random interview is done for gathering both qualitative and quantitative data of community people living around the subproject areas and representatives of DNCC those who are working in the landfill area.

Key informant interview is done to know about the key features of the areas on which the proposed subproject might have an impact.

Consultative meeting with different stakeholders such as Ward Councilors, available businessmen, available local people, representatives of shop keepers adjacent to the VIP road etc, male and female community participants has done to know their attitudes towards the proposed subproject, its impact and their feedback, and suggestions on mitigating the potential negative impacts and enhancing the positive impacts of the subproject.

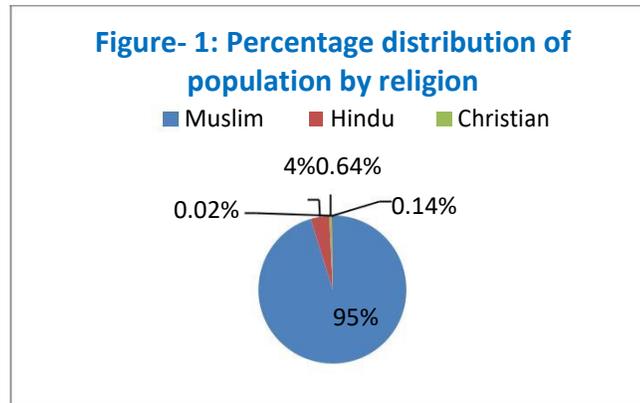
In addition, social screening of the subproject is done using prescribed social safeguard assessment form of BMDF with the participation of different stakeholders and community representatives.

## Section 3: Socio economic Baseline of DNCC

### 3.1 Population Status and Household Size

DNCC is divided into 5 zones; total area is 82.638 sq. km. consisting of 36 wards approximately with total population of 3957302 among which 2201051 are male (55.62%) and 1756251 are female (44.38%) with the density of 47887 per sq.km. The total household of the DNCC is 899387 and average household size is 4.4. The subproject area is under zone-1 and total population of this zone is 379777 (source: population and housing census, 2011).

The Census 2011 also revealed that most of the people in the City Corporation are Muslim. There are 3771705 Muslim, 153939 Hindu, 25327 Christian, 5540 Buddhist and 791 others people living in the DNCC areas. Figure 1 shows the percentage distribution of people by religion.



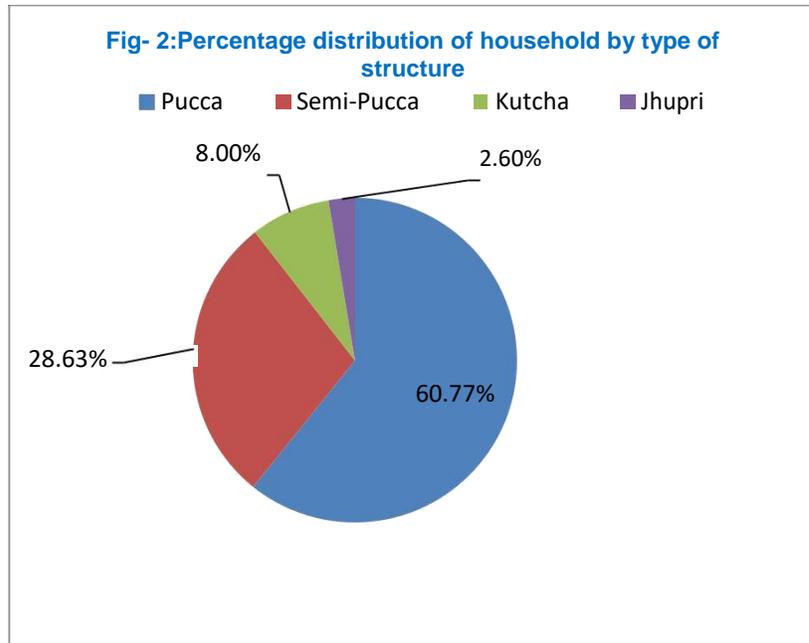
The Census 2011 also shows that the highest percentage of population lies on the age group of 20-29 and it is 26.28% of the total population. The population status by age group is given in the bellow table:

**Table- 3.1: population by age group**

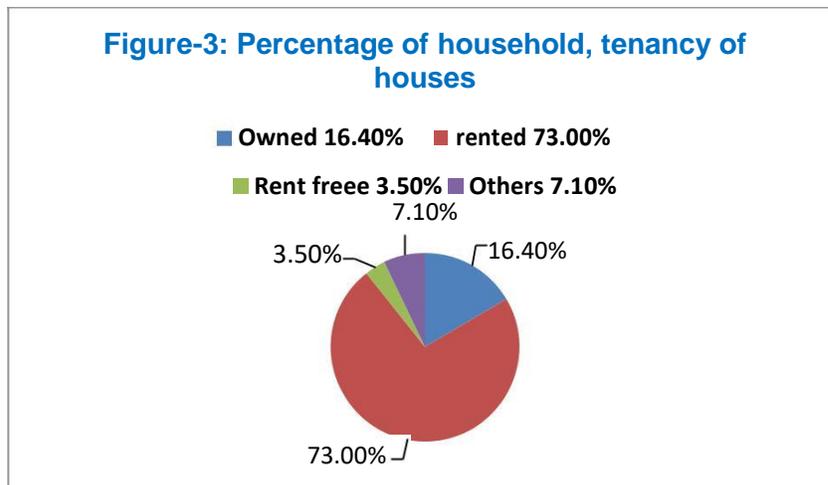
Age group	Total population	% of total population
0-09	633564	16.01
10-19	792252	20.02
20-29	1039979	26.28
30-39	676699	17.10
40-49	420265	10.62
50-59	224379	5.67
60-69	111596	2.82
70and above	58568	1.48
<b>Total</b>	<b>3957302</b>	<b>100%</b>

### 3.2 Housing and settlement pattern

The Population and Housing Census 2011 reveal that the people of the City Corporation live in Pucca, Semi-Pucca, Kutcha and Jhupri houses. The **Figure 2** shows that the highest percentage of general households of the City Corporation is Pucca (60.77%). The percentage of other general household by the type of structure of the City Corporation are semi Pucca-28.63%, kutcha households-8.00% and only 2.60% jhupri households.

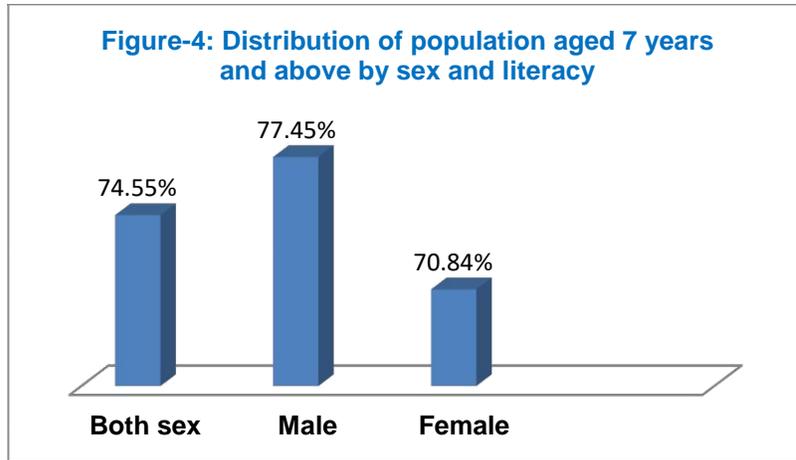


Further, the people of the City Corporation live in owned, rented and rent free houses amongst which most of the people have no houses as their own. The **Figure 3** shows that 16.4% people live in own house while 73% people live in rented house, 3.5% people live in rent free house and 7.1% people live in others.



### 3.3 Education

According to the Population and Housing Census 2011, the literacy rate of the DNCC area is 74.55%. The **Figure 4** shows that the literacy rate among the male is 77.45% and the female is 70.84%.

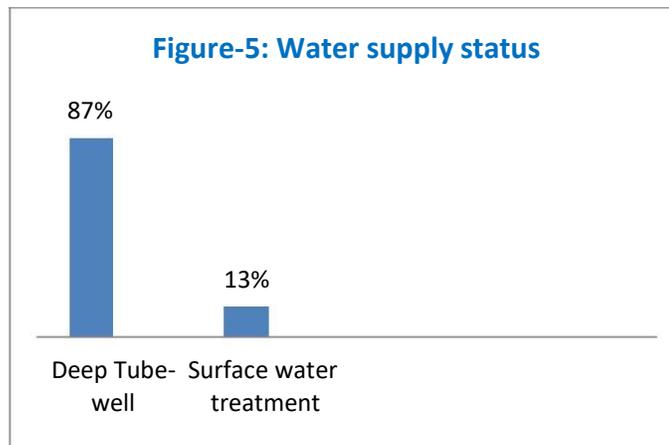


### 3.4 Educational and Cultural Institutions

There are 721 schools (all kind of schools), 191 colleges, 37 universities, 302 Madrashas which are contributing to enhancing the educational status of the citizens living within the City Corporation.

### 3.5 Water Supply facilities

Dhaka Water Supply and Sewerage Authority (DWASA) are mainly responsible for water supply to the household level including the commercial areas. Dhaka WASA has almost 100% water coverage and the water demand in Dhaka city is 2.25 million cubic meters per day (2250 MLD), which slightly exceeds the present supply of almost 2.11 million cubic meters per day (2110 MLD). At present 87% of the supplied water is from ground water abstraction from Dhaka WASA's 605 deep tube wells. The remaining 13% water comes from surface water treatments (Source: DWASA article book from DWASA website).

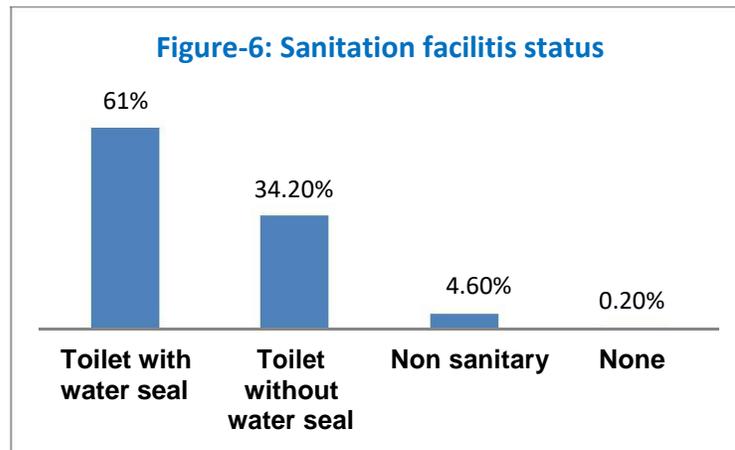


### 3.6 Health and sanitation status

In Dhaka city health service delivery system is provided through government and non government organization. In DNCC area total 118 hospitals and 121 clinics to provide health services to the citizens.

Drainage, sewerage and latrine facilities are very much important facilities for any urban areas. DNCC is maintaining the drainage system both for household waste water and storm water drainage system. DNCC has 1201 km. drainage facilities for discharge of household waste water and storm water. However DWASA is responsible for maintain the sewerage facilities but till now this facilities is not available for all areas of the city Corporation.

According to the population and housing census 2011, it is found that most of the people are using sanitary latrine with water seal. The **figure-6** shows that, 61% people are using sanitary toilet with water seal, 34.2% people are using sanitary toilet without water seal, 4.6% people using non sanitary toilet and 0.2% people have no toilet facilities.



### 3.7 Mode of Transportation, Road Network and Traffic Volume

Road is the main mode of transportation in the City Corporation area. Also railway is one of the options of transportation. In Dhaka City, Railway network is started from the southern part of the city towards the north and connected with the different divisions and districts network.

The total length of the road network of the DNCC is 1337.913 km. In Dhaka city different kind of motorized and non-motorized vehicles are operated in all the roads. Mostly private transportation is main source of transport for the city people, although there is a government bus services for internal communication of the city people but this is not sufficient considering population residing in the city. DNCC has the own bus services for the city people especially in Gulshan and Banani area.

Dhaka city is one of the most densely populated areas and traffic volume is high. Dhaka is the central of Bangladesh and road is the main transport network for communication with the divisional and district towns.

### 3.8 Land acquisition

The proposed subproject is Solid Waste Management and no requirement for acquisition of any land. So, there is no need to compensation payment for acquiring the land and preparation of resettlement plan.

### 3.9 Tribal communities

There is no indigenous or tribal people settlement will affect for implementation of solid waste management subproject. Therefore, there is no need to take any kind of protective measures for indigenous peoples safeguard.

### 3.10 Economic Benefits

There is no possibility of any adverse impact in terms of losing income or livelihood of the people living and/or running their business within the markets and industries at the subproject areas.

### 3.11 Stakeholder Identification and Analysis

As a part of the overall assessment, the study identified the key stakeholders of the proposed sub-project areas and assessed the power relationships as well as influence and interests of stakeholders involved in the development work of the subproject. The key stakeholders for Solid Waste Management were identified in consultation with the Councilor and officials of DNCC, local elites, representatives of business associations, and community people etc who are involved directly and indirectly with management and are benefited from the subproject. **Table 3.2** shows a list of stakeholders, their benefits from the road, drain, footpath and median and the level of their influence to the road, drain, footpath and median.

**Table 3-2: List of stakeholders and anticipated benefits of stakeholders**

Potential stakeholders	How they become stakeholders	Benefit	Level of influence and interest
City Corporation authority	City Corporation authority is owner and key implementation, operation and maintenance authority of the subproject.	City Corporation authority will fulfill their commitment to the people as a service providing institution.	High
Citizens of the DNCC	Management of households level waste and assist to city corporation for proper functioning of the waste management	People will live in healthy environment.	High
Mayor and Ward Councilors	Key persons of taking decision in implementation, operation and maintenance of equipment.	Can fulfill the requirements of the citizen and show the commitments to the voters.	High
Primary waste collection service provider	PWCSP collected waste from the HHs and commercial places and transported to the STS	Healthy environment as well as financial benefit of the PWCSP	High
City Corporation street Sweeper	Use of vacuum type cleaner machine for sweeping the VIP road is reduce the fatal accident of Sweepers	Economically benefitted of DNCC as well as reduce the fatal accident of Sweepers.	High

### 3.12 Gender and Vulnerability Analysis

The implementation of subprojects under the MGSP of BMDF are inclusive in nature and involves all categories of local stakeholders particularly women in different stages of the subproject planning, design, implementation and operation. The gender and vulnerability analysis in consultation with female participants at City Corporation Office and community level shows some concerns. The concerns and its mitigation measures are shown in the **Table 3.3** as below:

**Table 3.3: Concerns on gender and mitigation measures**

SL no.	Likely Negative Impacts	Suggested Mitigation Measures	Institutional Responsibility
01	Women, particularly of weaker sections may be discouraged to speak and demand equitable benefits in the name of porda/ dignity of women or lineage	Engage competent women ward councilor speaking for women and working for them to participate in the sub-project selection, designing, implementation and participatory M&E	PIU of DNCC
02	ULBs may lack of information, awareness and expertise to take up implement sub-projects specially beneficial to women	Impart awareness training for both elected representatives and employees (executives). Impart more detailed training for the executives and staff.	PIU of DNCC
03	Participation	Occupational groups men and women consultation process; Beneficiary options reflected in subproject design and implementation.	PIU of DNCC
04	Equal opportunity for men and women Sweepers	Ensure equal opportunity for all men and women Sweepers working in the street. Also ensure safety net of the all Sweepers	PIU of DNCC

## Section-4: Socio Economic Impact Assessment

### 4.1 Social Safeguard Assessment Using Screening Format

The social safeguard assessment of proposed “ Solid Waste Management “ subproject using the screening format given in the SMF of MGSP, BMDF, has been conducted with the participation of different stakeholders and community people. The screening format is used to collect some key information regarding the social safeguard issues includes: (i) identification of the subproject, participants in screening exercise and would-be affected people; (ii) land requirements and ownership; (iii) current use of existing and additional lands and potential impacts; and (iv) information on tribal people living in the subproject areas. The filled in screening format for social safeguard issues and the list of participants attended in the screening exercise are attached as **Annexure-1** and **Annexure -2** respectively.

The key findings of the screening exercise are given as below:

**(i) Subproject site and would-be affected people:** The subproject namely Solid Waste Management will be implemented whole area under the DNCC and landfill site at Boliarpur, Amin Bazar. No people will be affected from this subproject rather people will be benefitted and will live in healthy environment.

**(ii) Land requirements and ownership:** The owner of the proposed equipments and landfill at Amin Bazar is the Dhaka North City Corporation. An ownership document of landfill is attached as **Annexure-7**. Basically, this subproject is procurement of equipments for improvement of the solid waste management through using these machines in the VIP road as well as landfill at Amin Bazar. Hence, no compensation is required for the subproject.

**(iii) Current use of proposed land and potential impacts:** The proposed subproject is solid waste management and under these project two types of equipment will be procure for VIP road sweeping of the total area of DNCC and waste dressing & compaction at landfill, Amin Bazar. DNCC is owner of the total road as well as landfill site. After implementation of this subproject, citizens of the city will be benefitted, healthy environment, reduce the health hazard, and reduce the fatal accident of DNCC Sweepers.

**(iv) Information of tribal people:** There is no indigenous or tribal people settlement in the subproject area. Therefore, there is no need to take any kind of protective measures for indigenous peoples" safeguard.

## **4.2 Community Consultation and Participation**

### **4.2.1 Consultation and participation process**

Public consultation about the planning, design, implementation and operation is done at different stages following different participatory methods. The methods followed in public consultation are: (1) consultative meeting with different stakeholders, (ii) Focus group discussion with community people through the participation of male participants, (iii) Focus group discussion with community people through the participation of female participants, girls and boys, and disable people, and (iv) key informant interview with relevant persons of City Corporation and local elites.

The subproject will be covered all VIP road under the DNCC for road sweeping through using the vacuum type cleaner and landfill at Amin Bazar for waste dressing and compaction using Chain Dozer. To ensure the community participations, separate community consultation meeting and FGD were organized in the different places at city as well as landfill site at Amin Bazar.

**Two consultative meeting** (one in Mirpur and one in Landfill at Amin Bazar) were organized at community level through the participation of concern stakeholders including local leaders, community elites and representatives of business men living near the VIP road and working at landfill Amin Bazar. The participants were informed about the detail activities of subproject going to be implemented. They were asked to their opinion, feedback and suggestions on potential social and environmental impacts of the subprojects as well as the mitigation measures to avoid or reduce the potential

impacts. All the participants provided their opinions spontaneously. The list of participants is attached as **Annexure- 3**.



**Pictures stakeholders meeting**

Further, **one focus group discussion** was organized with male community participants from different professions residing at the surrounding areas of the subproject site. The participants were informed about detail of the equipments, its function and activities of subproject going to be implemented and asked about their opinion, feedback and suggestions on social and environmental impacts of the subprojects as well as the mitigation measures to avoid or reduce the potential impacts.



**Picture: FGD with community people (Male)**

All the participants provided their opinions spontaneously and raised different important issues to be considered for proper management of solid waste. The list of participants of the FGD is attached as **Annexure- 4**.



Another **focus group discussion** was organized with female community participants living at the surrounding areas of the proposed subproject site. The participants were also informed about the detail of the proposed equipments, its function and activities of subproject going to be implemented and asked about their opinion, feedback and suggestions on social and environmental impacts of the subprojects as well as the mitigation measures to avoid or reduce the potential impacts.

In this session, all the participants provided their opinions spontaneously and raised different important issues to be considered for proper management of solid waste. Most of the female participants gave emphasis on timely collection of households waste by the primary waste collection service providers. They also emphasis to construction more STS and ensure regular disposal of waste from STS to landfill. The list of participants of FGD is attached as Annexure-5.

The **key informant interviews** were done with local elites and City Corporation representatives to get the in-depth information about the surrounding socio-economic environment of the subproject area and the potential impacts of subproject on surrounding communities and livelihood.

Special efforts were made to include the elderly, women, and vulnerable groups and to allow them to express their views regarding the subproject implementation. In all cases, the impression of stakeholders and general mass regarding subproject implementation found highly positive.

#### **4.2.2 Key findings of community consultation: Issues and recommendation**

Different issues were raised by the participants related to subproject during community consultation. The issues, concerns and recommendations by the participants are given as below:

- ❖ All VIP road including the lane also need to be cleaning regularly by the DNCC
- ❖ Primary waste collection service providers should be collected waste everyday from the households and disposal in the STS, not in the open places.
- ❖ DNCC registered institutions/organizations should ensure the safety net of the primary waste collectors (like hand gloves, masks, safety shoes).
- ❖ DNCC should ensure the safety net of the road Sweepers those who are sweeping the road every day.

- ❖ DNCC should ensure the safety net of the Worker those who are working at landfill site.
- ❖ Community people and shop keepers should be mobilized through awareness campaign, so that they can keep generated solid waste in own waste bin and no waste is thrown on the road and drain.

## **Section-5: Social Management plan**

### **5.1 Key Issues Considered in Social Management Plan**

Social management principles such as inclusion, participation, transparency, social accountability and social safeguards are considered at different stages of subproject cycle such as subproject identification, subproject planning and detailed subproject preparation as well as the principles will be followed during subproject appraisal, subproject implementation, and operation and maintenance. The social screening and community consultation identified some key social issues or impacts (both negative and positive) that need to be brought under social management and monitoring plan. Some other additional issues are considered in social management plan following the guidelines of SMF of BMDF.

### **5.2 Access to Information and Disclosure**

The social safeguards assessment report should be translated into Bengali and disseminated locally. The copies of the report (both in English and Bengali) will be sent to all the concerned personnel responsible for subproject implementation. It will also be made available to the public. The final assessment report (both English and Bangla) will also be uploaded in the Dhaka North City Corporation website, BMDF website and the World Bank website after approval.

### **5.3 Grievance Redress Mechanism**

The subproject-specific Grievance Redress Mechanism (GRM) is established by the PIU of DNCC to receive, evaluate, and facilitate the solution of affected people's (APs) concerns, complaints and grievances concerning the social and environmental performance of the subproject. The GRM is aimed to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the subproject.

The grievance mechanism is related to resolve the risks and adverse impacts of the subproject. It addresses APs concerns and complaints promptly, using an understandable and transparent process that is also gender responsive, and culturally appropriate. It is readily accessible to all segments of the affected people at no costs and without retribution. The mechanism should not impede access to the country's judicial or administrative remedies. The affected people will be appropriately informed about the mechanism.

BMDF has its own Grievance Redress Procedure (GRP) and they operate it to address any dissatisfaction and complaints by the local people regarding its activities. This

procedure is being applied to address any complaints or grievances through negotiations with the community leaders and representatives of the APs during implementation of the MGSP.

### 5.3.1 Grievance Redress committee (GRC)

The DNCC has formed a Grievance Redress Committee (GRC) headed by the Chief Executive Officer (CEO). It is noted here that, as per SMF of BMDF under MGSP, ULB Mayor will be the Chairman of the GRC but considering the largest City Corporation of DNCC, Project Director of Dhaka Integrated Urban Development Project (DIUDP) consulted with BMDF and decided that CEO will be the Chairman and Project Director will be the Member Secretary of GRC of DNCC. With the facilitation of Consultant, the CEO nominated the GRC members and included representative from the Government Agencies, local NGO, and Civil Society. The GRC will nominate a focal person. Complaints will be received through drop box, by post, email and Website of City Corporation. The grievance box will be set up at suitable place because this subproject will be implemented total area under the DNCC to receive complaints. The grievance response focal point will be available at the DNCC for recording the complaints and necessary response to an aggrieved person. It will receive complaints or suggestions, and produce them to the GRC for hearing and resolution. If any complaint is not resolved at City Corporation level then the complaint will be produced to MD-BMDF. If it is not resolved by the MD-BMDF, then the subproject will be dropped.

The structure of the GRC and membership are given as below:

Chairman : Chief Executive Officer of DNCC  
Member-Secretary: Project Director, Dhaka Integrated Urban Development Project  
Member : Representative from local administration  
: Teacher from a local Educational Institution  
: Representative of a local NGO  
: Representative of civil society  
: Female ward councilor (of respective area)

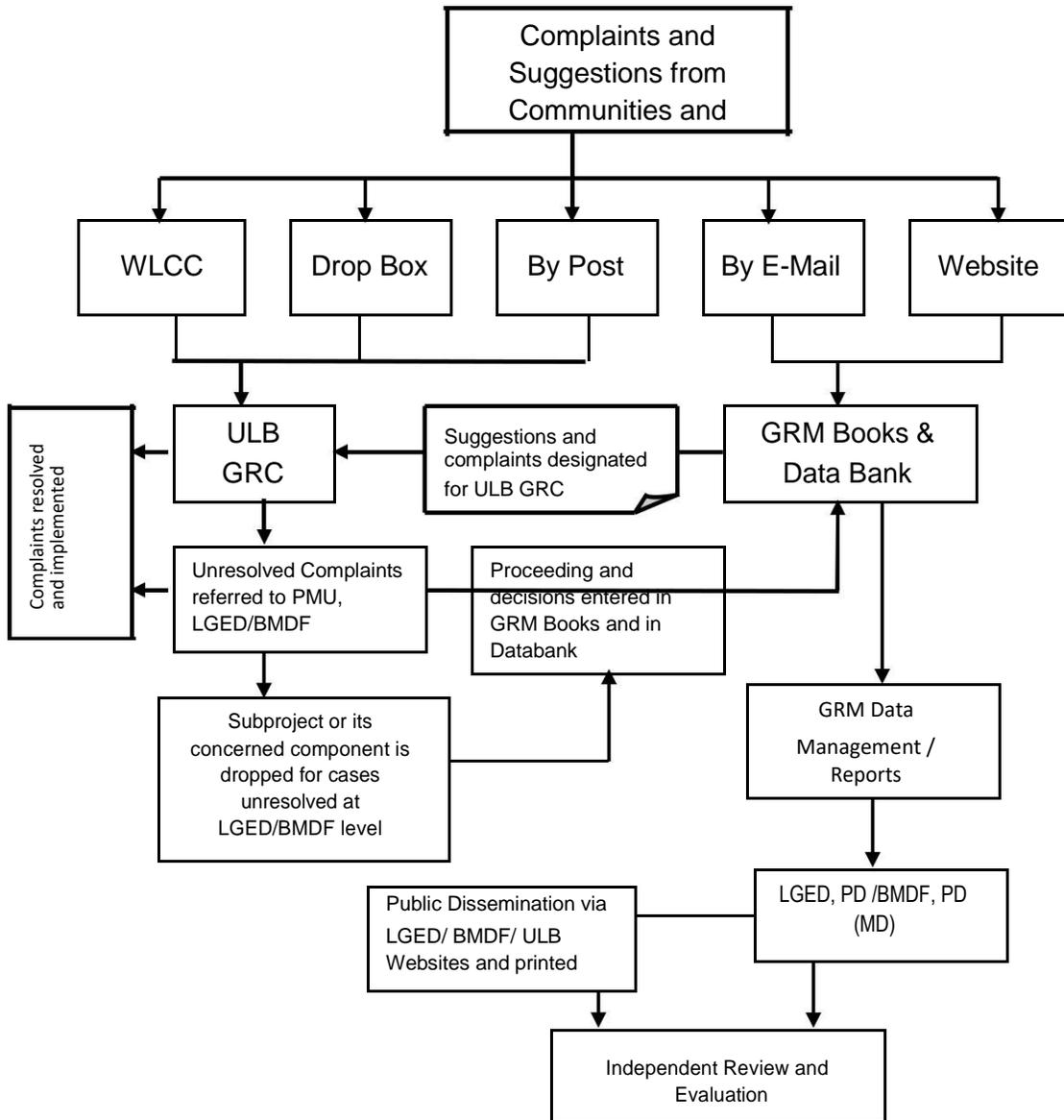
The list of GRC members along with office order from the Secretary of DNCC is attached as **Annexure- 6**.

**It is to be noted that** if the appellant is still not satisfied, he or she has the right to take the case to the public courts. The DNCC should also publish the outcome of the cases on the public notice boards. All costs involved in resolving the complaints (meetings, consultations, communication, and information dissemination) will be borne by the DNCC. The City Corporation authority will try to resolve the issues (in most of the cases, in amicable settlement) within shortest possible time. However, the public court system is always open to resolve the issues.

### 5.3.2 Grievance resolution process

The grievance resolution is a systematic process. The flow chart to be followed as grievance resolution process for this subproject is given next page:

#### GRM Institution and Focal Points



**Flow chart 5-1: Grievance Resolution Process**

## 5.4 Labor Influx and Management

The proposed subproject is solid waste management and under this project two types of equipment will be procured. DNCC has Drivers for these equipments. So, any kind of labor from outside is not required for this subproject.

## 5.5 Institutional Capacity Building

As per SMF, the LGED and Project Management Unit (PMU) of BMDF will extend technical assistance to the PIU of DNCC in order to enhance the ULB's capacity in preparation and design of subprojects in compliance with the Bank guidelines in addition to the legal provisions of the country. The Social Development Specialist will be trained on social development as per local system and the Bank policy on social issues and safeguards to conduct Social Impact Assessment to be done for any proposed subproject.

The Design, Supervision and Management Consultants will provide technical orientation to the Councilors, ULB staffs on Social Management Framework including social accountability tools. The training program will be jointly developed by the LGED and BMDF Consultants and shared with the Bank for concurrence before execution. Later the PIU of DNCC will be organized an orientation of equipment Operators, Technicians , Landfill Management Officials & Engineers and other support staff on social safeguard issues to be considered and mitigation measures to be taken during implementation of the subproject.

## 5.6 Social Management Plan

Based on the social safeguards assessment, it is found that the City Corporation is the legal owner of the land of existing landfill and all VIP roads under the DNCC area. So, there is no need to acquire any land for implementation of the subproject. Therefore, no people will be directly or indirectly affected by the proposed subproject. Hence the issues of resettlement and compensation are absent here. Further, no tribal people are living in subproject and its adjacent area. On the other hand, the community people and businessmen have raised some concerns that need to be addressed as part of social management to avert or minimize the potential social impacts. Considering the above mentioned situation, the social management plan (SMP) has been developed and will continue to be updated for the subproject period. The **Table 5-1** depicts the SMP to be adopted during the implementation and operation of the BC road, footpath, drain and median.

**Table 5-1: Social management plan matrix**

<b>Issues/ Impacts identified</b>	<b>Proposed mitigation or enhancement measures to be taken</b>	<b>Responsibility</b>	<b>Timeframe</b>
Sweeping VIP road and waste disposal at landfill	Ensure proper sweeping at night (12:00 am-6 am). Prepare and follow road sweeping schedule	PIU and WMD of DNCC	During operational phase
Waste transportation and disposal	Prepare a proper work schedule of transportation and disposal of waste at landfill.	PIU and WMD of DNCC	During operational phase

	Follow the schedule properly.		
Training for operators, Technicians, Engineers and landfill management officials	Organized training for the related staffs on handling the equipments as well as O & M of the equipments.	Suppliers, PIU & WMD of DNCC	Before operation of the equipments
Operation and maintenance of equipment	Technicians and Operators should prepare schedule for regular and periodic maintenance.	Technicians & WMD	During operational phase
Gender and vulnerability	Include female and other vulnerable groups in every work related to planning and implementation of the subproject activities.	PIU of DNCC	During planning & implementation periods
Solid waste disposal on road	Arrange awareness campaign among the shop keepers and businessmen and community people not to throw solid waste on the road and use waste bin. The PWCSF should collect the waste from waste bin and dispose the waste in a selected transfer station and City Corporation will disposal in the landfill.	PIU and City Corporation Authority of DNCC	During operational phase.

## Section- 6: Monitoring plan of SMP

### 6.1 Monitoring Strategy

Monitoring of the subproject will be done in a participatory manner and will be a bottom up process. The participants, in monitoring and evaluation particularly in reporting the grassroots level activities on social management issues in sub-project planning and implementation, will be the community people, equipment users and assigned staff of City Corporation authority. The PIU of DNCC and the Specialist of PMU under BMDF will ensure the monitoring of social management issues during procurement of equipments and operational phase. The monitoring of social management issues as identified during social safeguard assessment will be done from inclusiveness, participation, transparency and social accountability point of view.

### 6.2 Internal Monitoring

Social Development Focal Point of the City Corporation will be responsible for internal monitoring of the social management actions. He or she will monitor the subproject activities and provide report to City Corporation authority after certain interval as suggested by the BMDF.

### 6.3 External Review and Evaluation

External review and evaluation will be carried out to assess how effectively and efficiently social development and social safeguards issues have been identified, management and mitigation measures planned and implemented. An independent consultant (individual expert or an organization) will be employed upon agreement and jointly by both BMDF and DNCC for carrying out independent evaluation.

## 6.4 Monitoring Plan Matrix

The monitoring plan matrix as given in **Table 6-1** will be followed in monitoring the social impacts:

**Table 6-1: Monitoring plan matrix**

Key issues to be Monitored	Indicators to be monitored	Responsibility	Frequency of monitoring
Technical specification	<ul style="list-style-type: none"> <li>Contractors followed technical specification as per tender document</li> </ul>	PIU of DNCC	Once (during evaluation of the proposal submitted by the Contractors)
Supply of equipments	<ul style="list-style-type: none"> <li>Supplied equipments are as per approved bid documents</li> </ul>	PIU of DNCC	Once ( during receive equipments from Contractors/suppliers)
Regular use of equipments	<ul style="list-style-type: none"> <li>Drivers and Operators are use equipments as per schedule</li> </ul>	PIU & WMD of DNCC	Once in a week
Operation and maintenance	<ul style="list-style-type: none"> <li>Weekly and periodically maintenance done by the operators and technicians</li> </ul>	PIU & WMD of DNCC	Once in a month
Solid waste disposal	<ul style="list-style-type: none"> <li>Number of business centers and households have installed waste bin in front of their centers and households.</li> </ul>	PIU of DNCC	Once in a month

## 6.5 Reporting

The DNCC will provide progress reports to the PMU of BMDF on progress and achievements against the social management plan. The following reports will submit to the BMDF by the DNCC:

- Monthly, Quarterly, semi-annual and annual progress report indicating progress on social safeguards and mitigation measures;
- Updates for formal supervision missions, if the report produced for the current quarter is deemed not sufficiently informative.
- The independent social Consultant will produce a baseline report, mid-term review report and final evaluation report.

## Section-7: Conclusion and recommendations

### 7.1 Conclusion

The proposed subproject ( Solid Waste Management) has been selected by the Dhaka North City Corporation through a close consultation with the Zonal office, Ward Councilors (both male & female), different tiers of the community people and considered of the needs to improvement of the waste management and transport to the landfill at Amin Bazar, Savar.

Waste management is an important part of the urban infrastructure as it ensures the protection of the environment and of human health. It is not only a technical environmental issue, but also a highly social one. The City Corporation has the priority plan of ensuring the important public facilities in various infrastructures and socio economic development sectors in the city and the proposed “Solid Waste Management” sub project considered as one of the priority action for the DNCC.

During the field visit, it has been observed that with the implementation of such a proposed “Solid Waste Management” subproject there will be no negative impact on physical as well as socio economic aspects. Potential positive impacts also assumed to have on diversified social and economic parameters like protection of the environment and of human health.

## 7.2 Recommendations

During the Community consultation meeting, Focus Group Discussion both male and female, it has been found that the attitudes of the community people towards the improvement of solid waste management system highly positive as well as they have some recommendations to minimize the social impacts during operational phase of the equipments. The Government of Bangladesh and World Bank have some legal and social safeguard compliance issues those are applicable during implementation of the solid waste management subproject. Considering the above-mentioned issues and findings of the study, following key recommendations are made for smooth implementation of the subproject:

- ❖ All VIP road including the lane also need to be cleaning regularly by the DNCC
- ❖ Primary waste collection service providers should be collected waste everyday from the households and disposal in the STS, not in the open places.
- ❖ DNCC registered institutions/organizations should ensure the safety net of the primary waste collectors (like hand gloves, masks, safety shoes).
- ❖ DNCC should ensure the safety net of the road Sweepers those who are sweeping the road every day.
- ❖ DNCC should ensure the safety net of the Worker those who are working at landfill site.
- ❖ Community people and shop keepers should be mobilized through awareness campaign, so that they can keep generated solid waste in own waste bin and no waste is thrown on the road and drain. The City Corporation should ensure the collect, disposal of solid waste properly.
- ❖ The grievance should be redressed properly as per GRM.

DNCC is gradually encountering new challenges in terms of waste volume and waste diversity. To handle upcoming challenges, DNCC will need a robust and dynamic waste management

organization backed by law. Development of following areas has been identified as waste management imperatives for environment friendly disposal of wastes.

- ❖ Organizational capacity development, which implies organizational expansion and human capacity development.
- ❖ Enact waste management law to follow consistent waste management practices.
- ❖ Formulate landfill operation policy to guide staffs to manage the landfill complying with the environmental needs.
- ❖ Volume reduction through incineration is an option to reduce growing waste volume and ease pressure on scarce land.
- ❖ Environment Education Program in the school, which should motivate young students to keep own environment clean.
- ❖ Waste segregation at source can reveal economic value of waste.
- ❖ Develop capacities of Waste Management Department to undertake regulatory management of:
  - => Medical waste
  - => Electronic waste
  - => Food waste
  - => Construction waste
  - => Industrial waste
  - => Municipal Solid Waste (MSW)

## REFERENCES

1. Bangladesh Bureau of statistics, Bangladesh population and housing census 2011 ( National volum-3, Urban area report)
2. Dhaka North City Corporation website, DNCC at a glance information
3. DNCC waste report 2016-2017
4. Bangladesh Municipal Development Fund, Social Management Framework,2017
5. DWASA article book from DWASA website

## Annexure 1: Format I: Screening format for social safeguards issues

### A. Identification

1. Name of ULB: Dhaka North City Corporation, Ward/Mahalla: All ward under DNCC	District: Dhaka
<b>2. Subproject Name: “Solid Waste Management”.</b>	
Project Component: The key components of the subproject are as below: (i) Procurement of Brand New Latest Model truck mounted vacuum type Road Sweeping machine (4 nos.) and (ii) Procurement of Brand New Latest Model, Swamp/Apex Track type (LGP) 1 (one) no. Chain Dozer.	
<b>3. Brief description of the physical works:</b>  The proposed subproject will be consisted of procurement of two types of equipment 1) Procurement of Brand New Latest Model truck mounted vacuum type Road Sweeper machine 2) Brand New Latest Model, Swamp/Apex Track type (LGP) 1 (one) no. Chain Dozer.  The proposed 4 nos. Brand New Latest Model truck mounted vacuum type Road Sweeper machine will be covered all VIP roads under the DNCC area and approximately 60 kms. VIP Road will be cleaned every day. Truck mounted and hydraulically operated Vacuum Cleaner with sweeping system is to be suitable for all cleaning, brushing and vacuuming of surface dusts, leaves, mud, soil, sand, stone chips, gravels and other small particles on the ground of city/ municipal roads and areas. This unit shall be suitable for street cleaning job as well as dust suppression with water spray in the road side and narrow lanes.  A high pressure water system shall be used for removing & cleaning the stubborn road debris and the machine itself. The spray bar and sweep gear can be used together for high performance cleaning, particularly around building sites or on road laying operations etc.  The proposed Brand New Latest Model, Swamp/Apex Track type (LGP) chain Dozer will be used for waste dressing as well as compaction purposes at Amin Bazar landfill.  The major activities/issues to be ensured during procurement of equipment and implementation of the subproject, which include: <ul style="list-style-type: none"><li>• Supplied equipments are as per specification provided in the tender document and work order by the purchasing authority of DNCC.</li><li>• Warranty and guaranty period shall be mentioned in the documents.</li><li>• Training shall be imparted by the supplier to the nominated persons of DNCC (Operators, Technicians &amp; Enginners) for proper operation and maintenance of the supplied equipments.</li></ul>	
4. Screening Date(s):19 July 2018	
<b>B. Participation in Screening</b>	
5. Names of Consultants representatives who screened the subproject: (i) Ruksana Begum, Social Development Specialist (Individual Consultant)	

<p>6. Names of ULB officials participated in screening:</p> <p>(i) Md Ekramul Haque Khandaker, Assistant Engineer (Landfill Manager), Waste Management Department, DNCC</p> <p>(ii) Md. Al Amin, Computer Operator, Waste Management Department, DNCC</p> <p>(iii) Md. Javed, Head Mechanic (Landfill site), Waste Management Department, DNCC</p> <p>(iv) Md. Mahfuzullah, Supervisor (Landfill site), Waste Management Department, DNCC</p>
<p>7. Representatives of Waste Management Department and Landfill area of ULBs participated in screening: List of participants is attached as Annexure 2.</p>
<p>8. Would-be affected persons participated in screening: List them in separate pages with names, addresses in terms of road sections/spots where they would be affected, and any other information to identify them during preparation of impact mitigation plans. N/A</p>

**C. Land Requirements & Ownership**

10. Will there be a need for additional lands <sup>2</sup> to carry out the intended works under this contract?  
 Yes  No

11. If „Yes“, what will the additional lands be used for? (Indicate all that apply): Not applicable  
 road widening  curve correction  construction/expansion of physical structure  
 strengthening narrow eroding road section  Others (Mention): .....  
between high and low lands

12. If „Yes“, the required lands presently belong to (Indicate all that apply): Not Applicable  
 ULB  Government – khas & other  Private citizens  
GOB agencies  
 Others (Mention): .....

13. If the proposed activities have been planned to use the existing available land, is it free from encroachment and encumbrances by private people? Not applicable.  
 Yes  No

**D. Current Use of Existing and Additional Lands and Potential Impacts**

14. If the required lands belong to Private Citizens, they are currently used for (Indicate all that apply): Not Applicable  
 Agriculture  Residential purposes  Commercial purposes  
 Other Uses (Mention) : Existing road  
Number of households using the lands:  
Number of households using them: .....  
Number of persons using them: No. of shops:  
No. of users: N/A

15. If the required lands (existing and additional) belong to ULB and/or other Government

<sup>2</sup> Additional lands’ mean lands beyond the carriageways and shoulders in case of roads/drains and outside currently used space for markets, community centers or other interventions.

agencies, they are currently used for (Indicate all that apply):

<input type="checkbox"/> Agriculture	Number of persons/households using the lands:	
<input type="checkbox"/> Residential purposes	Number of households living on them:	
<input type="checkbox"/> Commercial purposes	Number of persons using them:	No. of shops: N/A
<input checked="" type="checkbox"/> Other Uses (Mention):	There is exiting road.	No. of Users: N/A

16. How many of the present users have lease agreements with any government agencies? N/A

17. Number of private homesteads that would be affected on private lands: N/A

Entirely, requiring relocation: N/A

Partially, but can still live on present homestead: N/A

18. Number of business premises/ buildings that would be affected on private lands : N/A

Entirely and will require relocation: N/A

# of businesses housed in them: N/A

Partially, but can still use the premises: N/A

# of businesses housed in them: N/A

19. Residential households will be affected on ULB's own and & public lands: No

Entirely affected and will require relocation: N/A

No. of these structures: N/A

No. of structures built with brick, RCC, & other expensive and durable materials: N/A

No. of structures built with inexpensive salvageable materials (bamboo, GI sheets, etc): N/A

No. of structures built with brick, RCC, & other expensive and durable materials: N/A

No. of structures built with inexpensive salvageable materials (bamboo, GI sheets, etc): N/A

20. No. of business premises that would be affected on ULB's own & other public lands: N/A

Entirely affected and will require relocation: N/A

No. of these structures: N/A

No. of businesses housed in these structures: N/A

No. of persons presently employed in the above businesses: N/A

No. of these structures built with brick, RCC, & other durable materials: N/A

No. of structure built with inexpensive salvageable materials (bamboo, GI sheets, etc): N/A

Partially affected, but can still stay in the present premises: N/A No. of these structures : N/A

No. of businesses housed in these structures: N/A

No. of persons presently employed in these businesses: N/A

No. of these structures built with brick, RCC, & other durable materials: N/A

No. of structure built with inexpensive salvageable materials (bamboo, GI sheets, etc): N/A

No. of businesses housed in these structures: N/A

No. of persons presently employed in these businesses: N/A

No. of these structures built with brick, RCC, & other durable materials: N/A

No. of structure built with inexpensive salvageable materials (bamboo, GI sheets, etc): N/A

**21.** No. of businesses/trading activities that would be displaced from make-shift structures on the road, and other areas/spots: None

**22.** Do the proposed subproject works affect any community groups' access to any resources that are used for livelihood purposes?

Yes  No

**23.** If „Yes“, description of the resources: N/A

**24.** Do the proposed works affect community facilities like school, cemetery, mosque, temple, or others that are of religious, cultural and historical significance?

Yes  No

**25.** If „Yes“, description of the facilities: N/A

**26.** Describe any other impacts that have not been covered in this questionnaire? N/A

**27.** Describe alternatives, if any, to avoid or minimize use of additional lands: N/A

#### E. ADDITIONAL INFORMATION ON TRIBAL PEOPLES

(This section must be filled in if subprojects are located in areas that are also inhabited by tribal peoples) No tribal people inhabits in proposed subproject areas. So this section is not applicable for the proposed subproject.

**28.** Names of tribal community members and organizations who participated in screening: N/A

**29.** Have the tribal community and the would-be affected TPs been made aware of the potential positive and negative impacts and consulted for their feedback and inputs? N/A

Yes  No

**30.** Has there been a broad-based community consensus on the proposed works? N/A

Yes  No

**31.** Total number of would-be affected tribal households: N/A

32. The would-be affected tribal households have the following forms of rights to the required lands: N/A

- |  |                          |
|--|--------------------------|
| <input type="checkbox"/> Legal:                                  | No. of households: ..... |
| <input type="checkbox"/> Customary:                              | No. of households: ..... |
| <input type="checkbox"/> Lease agreements with any GoB agencies: | No. of households: ..... |
| <input type="checkbox"/> Others (Mention): ....                  | No. of households: ..... |

33. Does the subproject affect any objects that are of religious and cultural significance to the IPs?

- Yes  No

34. If „Yes“, description of the objects: N/A

35. The following are the three main economic activities of the would-be affected tribal households: N/A

- a. ....
- b. ....
- c. ....

36. Social concerns expressed by tribal communities/organizations about the works proposed under the subproject: N/A

37. The tribal community and organizations perceive the social outcomes of the subproject: N/A

- Positive  Negative  Neither positive nor negative

**On behalf of the ULB, this Screening Form has been filled in by:**

Name: Ruksana Begum Designation: Social Development Specialist,  
DIUDP, DNCC

Signature: *R Begum* Date: 19 July, 2018

**The attached filled out format has been reviewed and evaluated by: Decision on selection:**

**Reviewed by : Md. Ekramul Haque Khandaker**, Assistant Engineer (Landfill Manager),  
Waste Management Department, DNCC

Signature: Date: 19 July 2018

## Annexure-2: Attendance of participants in screening exercise



**Name of Sub-Project** : "Solid Waste Management"  
**Name of package** : Procurement of Brand New latest model Truck Mounted Vacuum type road sweeper machine and Brand New latest model, Swamp/Ape track type chain Dozer.  
**Package number** : 01(0w)  
**Name of ULB** : Dhaka North City Corporation (DNCC), **Name of District:** Dhaka  
**Name of place** : Landfill at Boliarpur (Amin Bazar), Savar **Date:** 19/07/2018  
**Level of participants** : Local stakeholders, community members, ULB representatives

### Attendance of local participants in Social /Environmental screening exercise

SL No.	Name	Gender	Social Status	Contact number	Signature
01	Md. Ekramul Haque Khandaker	Male	Asst. Engineer (Landfill Manager)	017115 33576	
02	শ্রী: প্রদীপ	"	হেল্পার	01777682058	
03	শ্রী: সিরাজ কবির	"	ট্রাক হেল্পার	01719623619	
04	কমলাকান্ত	উপ-বর্ড অফিসার	উপ-বর্ড 0178222 অফিসার	0178 2220462	
05	শ্রী: আব্দুল রশিদ চিদ্দি	Male	কন্সাল্টার	01714-580664	
06	Md. Jobed	"	প্রবিন অফিসার	01872556558	
07	Md. Mahfuzullah	"	Supervisor	0174-6853828	
08	Ruksana Begum	Female	SDS, DIUDP DNCC	01711824537	
09	Farhana Shannu	"	Consultant DNCC	01715121652	
10					
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13					
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20					

Nayam  
 22/7/18  
 নায়েম বায়হান খান  
 সহকারী প্রকৌশলী (পূর্ব)  
 জাতিক ইকসিকিউটিভ সার্ভিস  
 পল্লী উন্নয়ন সচিবালয়

12/7/18  
 মোঃ সাইদুল ইসলাম  
 নির্বাহী প্রকৌশলী (পূর্ব)  
 জাতিক ইকসিকিউটিভ সার্ভিস  
 পল্লী উন্নয়ন সচিবালয়

## Annexure-2: Attendance of local participants in screening exercise



Name of Sub-Project : "Solid Waste Management"

Name of package : Procurement of Brand New latest model Truck Mounted vacuum type road sweeper machine and Brand New latest Model swamp/Apex track type Chain Dozer.

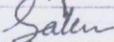
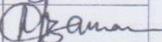
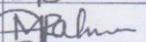
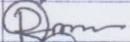
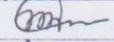
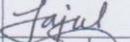
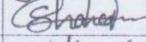
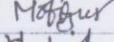
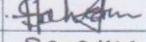
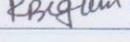
Package number : 01 (One)

Name of ULB : Dhaka North City Corporation (DNCC), Name of District: Dhaka

Name of place : Mirpur main road section-2, Mirpur Date: 23/07/2018

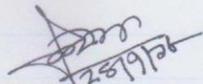
Level of participants : Community people (Male group)

Attendance of community people in ~~the~~ screening exercise

Sl No.	Name	Gender	Social Status	Contact number	Signature
1	Md. Obaidul Haque	Male	Asst. Professor	01718682142	
2	AKM Salim	"	Business	01711174693	
3	Masuduzzaman	"	Lecturer	01917191388	
4	Mukhtegar Rahman	"	Ret. Person	01711227966	
5	Rawshonuzzaman	"	Service	01711957183	
6	Mizanur Rahman	"	Service	019401819450481	
7	Kazi Tajul Islam	"	Business	01716735491	
8	Shehidullah	"	Nbto Worker	01716620498	
9	Mobizur Rahman	"	Teacher	01711247482	
10	Md. Shafiqul Islam	"	Doctor	01553266905	
11	Ruksana Begum	Female	Consultant	01711824537	
12			/		

*Nayem*  
28/9/18

নয়ম হাফিজুল কাদের  
সহকারী প্রোগ্রামার (স্ব)  
উপস্থিত অংশগ্রহণকারী পরিচালক  
স্বাস্থ্য ও পরিবেশ সুরক্ষা বিভাগ

  
28/9/18

স্বাস্থ্য ও পরিবেশ সুরক্ষা বিভাগ  
উপস্থিত অংশগ্রহণকারী পরিচালক  
স্বাস্থ্য ও পরিবেশ সুরক্ষা বিভাগ

**Annexure -3: Attendance of stakeholders meeting**



Name of Sub-Project : "Solid Waste Management"  
 Name of package : Procurement of Brand New latest model Truck Mounted vacuum type road Sweeper machine and Brand New latest model Swamp/Apex track type chain Dozer.  
 Package number : 01(001)  
 Name of ULB : Dhaka North City Corporation (DNCC), Name of District: Dhaka  
 Name of place : Landfill at Boliarpur (Amin Bazar), Savar Date: 19/07/2018  
 Level of participants : Local stakeholders, community members, ULB representatives

Attendance of local participants in Social/Environmental-screening exercise stakeholders meeting

Sl No.	Name	Gender	Social Status	Contact number	Signature
01	Md. Eusangul Haque	Male	Asst. Exec. (Sanitation)	01711533576	[Signature]
02	[Handwritten Name]	"	[Handwritten Title]	01747682059	[Signature]
03	[Handwritten Name]	"	[Handwritten Title]	01719623413	[Signature]
04	[Handwritten Name]	"	[Handwritten Title]	01982220-462	[Signature]
05	[Handwritten Name]	"	[Handwritten Title]	01714-520664	[Signature]
06	Md. Javed	Male	[Handwritten Title]	01872556558	[Signature]
07	MD. Mahfozullah	"	Supervisor	01746853828	[Signature]
08	Ruksana Begum	Female	SDS, DNCC	01711824537	[Signature]
09	Fahana Shannu	"	DNCC Consultant	01715121652	[Signature]
10					
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*Handwritten signature and date: 22/7/18*  
 Dhaka North City Corporation (DNCC)  
 Office: Boliarpur, Savar  
 Dhaka

*Handwritten signature and date: 22/7/18*  
 Dhaka North City Corporation (DNCC)  
 Office: Boliarpur, Savar  
 Dhaka

## Annexure-4 : Attendance of community people in FGD (Male group)



Name of Sub-Project : "Solid Waste Management"  
 Name of package : Procurement of Brand New latest model Truck Mounted vacuum type road sweeper machine and Brand New latest Model swamp/Apex track type Chain Dozer.  
 Package number : 01 (One)  
 Name of ULB : Dhaka North City Corporation (DNCC), Name of District: Dhaka  
 Name of place : Mirpur main road  
 Date: 23/07/2018  
 Section-2, Mirpur  
 Level of participants : Community people (Male group)

### Attendance of community people in FGD

SL No.	Name	Gender	Social Status	Contact number	Signature
1	Md. Obaidul Haque	Male	Asst. Professor	01718682142	
2	AKM Salim	"	Business	01711174693	
3	Masuduzzaman	"	Lecturer	01917191388	
4	Mukhtegar Rahman	"	Ret. Person	01711227966	
5	Rawshonuzzaman	"	Service	01711957183	
6	Mizanur Rahman	"	Service	019401819450481	
7	Kazi Tajul Islam	"	Business	01716735491	
8	Shahidullah	"	NGO Worker	01716620498	
9	Mobizur Rahman	"	Teacher	01711247482	
10	Md. Shahidul Islam	"	Doctor	01553266905	
11	Ruksana Begum	Female	Consultant	01711824537	
12			/		

Nayem  
 28/9/18  
 নাজিম হোসেন খান  
 সহকারী প্রোগ্রামার (স্ব)  
 উন্নয়ন উন্নয়ন সার্ভিস  
 ঢাকা উত্তর সিটি কর্পোরেশন

28/9/18  
 মোঃ নাজিম হোসেন খান  
 সহকারী প্রোগ্রামার (স্ব)  
 উন্নয়ন উন্নয়ন সার্ভিস  
 ঢাকা উত্তর সিটি কর্পোরেশন

**Annexure-5: Attendance of community people in FGD (Female group)**



Name of Sub-Project : "Solid Waste Management"

Name of package : Procurement of Brand New latest model Truck Mounted vacuum type road sweeper machine and Brand New latest Model swamp/Apex track type Chain Dozer.

Package number : 01 (One)

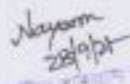
Name of ULB : Dhaka North City Corporation (DNCC), Name of District: Dhaka

Name of place : Near Manipur school, Pirerbag, Mirpur, Dhaka Date: 23/07/2018

Level of participants : Community people (Female group)

Attendance of community people in FGD

Sl No.	Name	Gender	Social Status	Contact number	Signature
1	Farhana Khanom	Female	Doctor	01787698308	F Khanom
2	Mehruin	"	Doctor	01687429270	Mehruin
3	Rehana Akter	"	Service	01914755676	Rehana
4	Baby	"	Housewife	01912075965	Baby
5	Munna Akter	"	"	01618945988	Munna
6	Reshna	"	Lecturer	01919164093	Reshna
7	Natasha Akter	"	Teacher	01517307015	N Akter
8	Nelofa Begum	"	Development Worker	01621283609	N Begum
9	Fatema Begum	"	Housewife	01714434338	Fatema
10	Nurjahan	"	Service	01756288205	Nurjahan
11	Ruksana Begum	Consultant	Consultant	01711824537	R Begum
12					



নয়াম জাফর  
সিনিয়র প্রোগ্রামার  
স্বাস্থ্য ও পরিবেশ বিভাগ  
স্বাস্থ্য সুরক্ষা সচিবালয়  
ঢাকা



স্বাস্থ্য সুরক্ষা সচিবালয়  
স্বাস্থ্য ও পরিবেশ বিভাগ  
স্বাস্থ্য সুরক্ষা সচিবালয়  
ঢাকা

## Annexure-6: The List of GRC members along with office order

ঢাকা উত্তর সিটি কর্পোরেশন  
নগর ভবন  
গুলশান সেন্টার পয়েন্ট, প্লট নং-২৩-২৬, রোড-৪৬, গুলশান-২, ঢাকা।

১২৬  
উন্নয়নের গণতন্ত্র  
শেখ হাসিনার মূলমন্ত্র

স্মারক নং-৪৬.১০.০০০০.০০৬.০৬.০০১.১৭ - ৫৬৬

তারিখঃ ০৬/০৭/২০২৮ খ্রি.

অফিস আদেশ

বাংলাদেশ মিউনিসিপ্যাল ডেভেলপমেন্ট ফান্ড (বিএমডিএফ) এর অর্থায়নে Dhaka integrated urban development Project (DIUDP) এর আওতাধীন Development drainage Rehabilitation and Communication Network System শীর্ষক উপপ্রকল্প বাস্তবায়নের নিমিত্তে নিম্নবর্ণিত কর্মকর্তাগণের সমন্বয়ে Grievance Redress Committee গঠন করা হলোঃ

১) মোঃ মেসবাহুল ইসলাম প্রধান নির্বাহী কর্মকর্তা, ডিএনসিসি	আহ্বায়ক, গ্রিভেন্স রিড্রেস কমিটি
২) মোহাম্মদ আরিফুর রহমান প্রকল্প পরিচালক, ঢাকা ইন্টিগ্রেটেড আরবান ডেভেলপমেন্ট প্রজেক্ট (ডিআইইউডিপি)	সদস্য সচিব, গ্রিভেন্স রিড্রেস কমিটি
৩) মোহাম্মদ সাজিদ আনোয়ার নির্বাহী ম্যাজিস্ট্রেট, ডিএনসিসি	সদস্য, গ্রিভেন্স রিড্রেস কমিটি
৪) মোঃ আসাদুজ্জামান সিনিয়র শিক্ষক, নওয়াব হাবিবুল্লাহ মডেল স্কুল এন্ড কলেজ	সদস্য, গ্রিভেন্স রিড্রেস কমিটি
৫) আল মনসুর রহমান (সুইট) এ্যাসিস্ট্যান্ট জেনারেল ম্যানেজার (এজিএম) রিসোর্স ইন্টিগ্রেশন সেন্টার, (আরআইসি)	সদস্য, গ্রিভেন্স রিড্রেস কমিটি
৬) মাহবুবুর রহমান দপ্তর সম্পাদক, উত্তরা ৩নং সেক্টর কল্যাণ সমিতি	সদস্য, গ্রিভেন্স রিড্রেস কমিটি
৭) তসলিমা হোসাইন সুমী সদস্য, উত্তরা ৩নং সেক্টর কল্যাণ সমিতি	সদস্য, গ্রিভেন্স রিড্রেস কমিটি

কমিটির কর্মপরিধিঃ

ক) Grievance Redress Committee (GRC) এর মাধ্যমে স্থানীয় অধিবাসীগণ প্রকল্প চলাকালীন সময়ে এলাকাবাসীর মৌলিক অধিকার সংরক্ষণ ও উক্ত এলাকার জনসাধারণের স্বাভাবিক জীবনযাত্রার মান সংরক্ষণ ও জনদুর্ভোগ লাঘবের বিষয়ে বিভিন্ন প্রস্তাবনা/অভিযোগ/পরামর্শ প্রদানের মাধ্যমে প্রকল্পে সক্রিয় অংশগ্রহণ করবে।

খ) প্রস্তাবিত কমিটি আলোচ্য প্রকল্পটি বাস্তবায়নকালে Social and Environmental Impact এর উপর গুরুত্বারোপ করবে।

০২। যথাযথ কর্তৃপক্ষের অনুমোদনক্রমে এ আদেশ জারি করা হলো।

স্বাক্ষরিত/-  
০৩/০৭/২০১৮ খ্রিঃ  
(দুলাল কৃষ্ণ সাহা)  
সচিব  
ফোন-৮৮৩৪৯৩০  
ফ্যাক্স-৮৮৩৪৯৮৩

বিতরণঃ গঠিত কমিটির আহ্বায়ক/সদস্য/সদস্য-সচিব.....।

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স্মারক নং-৪৬.১০.০০০০.০০৬.০৬.০০১.১৭ - ৫৬৬

তারিখঃ ০৬/০৭/২০১৬ খ্রি.

অবগতি ও প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য অনুলিপি প্রেরিত হলো (জ্যেষ্ঠতার ভিত্তিতে নয়):

- ১) বিভাগীয় প্রধান (সকল)..... ঢাকা উত্তর সিটি কর্পোরেশন।
- ২) প্রধান নির্বাহী কর্মকর্তার স্টাফ অফিসার, ঢাকা উত্তর সিটি কর্পোরেশন (প্রধান নির্বাহী কর্মকর্তা মহোদয়ের সদয় অবগতির জন্য)।
- ৩) মেয়র মহোদয়ের ব্যক্তিগত সহকারী, ঢাকা উত্তর সিটি কর্পোরেশন (প্যানেল মেয়র মহোদয়ের সদয় অবগতির জন্য)।
- ৪) সচিব মহোদয়ের ব্যক্তিগত সহকারী, ঢাকা উত্তর সিটি কর্পোরেশন (সচিব মহোদয়ের সদয় অবগতির জন্য)।
- ৫) অফিস কপি।

ইমান আলী  
৩১৭১৬

(মোঃ ইমান আলী)

সহকারী সচিব

সাধারণ প্রশাসন শাখা

ঢাকা উত্তর সিটি কর্পোরেশন

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ঢাকা উত্তর সিটি কর্পোরেশন, ঢাকা  
DHAKA NORTH CITY CORPORATION, DHAKA

হোমিং নং ২৩-২৬, রোড নং-৪৬, গুলশান-২, ঢাকা

আপনার পরিবেশ সুন্দর করে পরিষ্কার রাখুন  
আপনার শিগায়ে টিপে দিন  
প্রয়োজনে বই উপহার দিন

ফোনঃ ৮৩৪৮৪০

উন্নয়নের গণতন্ত্র  
শেখ হাসিনার মূলমন্ত্র

PM (E) (U)  
25-11-18

Memo NO: 46 10 0000 043 99 028 18 448

Date: 22/11/2018

To  
The Managing Director  
Bangladesh Municipal Development Fund (BMDf)  
Level 13, Mirpur-2, Dhaka

Rpd: 2018 Dt: 22/11/18

To: Pub:

in: Pub:

OE  
Dr. Chack  
and Fote wa  
25/11/2018

**Subject: Regarding revised sub-project proposal of solid waste management (equipment) of Dhaka North City Corporation (DNCC).**

Dear Mr. Syed Hasinur Rahman

Greetings. With reference to the letter forwarded through e-mail dated on 20 November, 2018 from BMDf, I cherish the pleasure to inform you that, due to the mechanization of the solid waste collection and disposal system, DNCC will not retrench its existing workers (sweepers men and women) and no service provider will be terminated without compensation. In this regard I would like to inform you that meanwhile the area of DNCC has been enhanced by about 114.58 sqkm. So retrenchment of existing workers (Sweeper men and women) would be hardly possible. Rather DNCC is still recruiting manual cleaners for street sweeping.

It would be followed occupational health and safety guidelines during the operation and maintenance of the equipment and will be taken into consideration the predicaments of the workers with the highest priority.

Thanking you

Best regards

**Md Jamal Mustafa**  
Panel Mayor  
Dhaka North City Corporation (DNCC)