

UDDP-Solid Waste Management Programme

Project Completion Report March 2015 - March 2016





Resource Integration Centre (RIC)

UDDP Solid Waste Management Programme Project Completion Report

> Project Duration March 08, 2015 - March 07, 2016

Implemented By Resource Integration Centre (RIC)

Supported By







UDDP Solid Waste Management Programme Project Completion Report

Published by

Resource Integration Centre (RIC) House # 20, Floor # 2nd Road # 11 (New) Dhanmondi, Dhaka-1209 Phone # 8802-8118475 Email: ricdirector@yahoo.com Web: www.ric-bd.org

Overall Coordination

Abul Haseeb Khan Director, RIC

Published

April 2016

Produced by

S.M.A. Muyeed, Project Coordinator Md. Abdur Rashid, Monitoring & Documentation Officer

Assisted by UDDP

Design

Mohammed Shamim Jafar, RIC

Printed by

Fair Ace Printing Press, 220 Fakirapool, Dhaka-1000 Tel.: +8802-7193505



This report is the documented evidence of the completed tasks of "UDDP-Solid Waste Management Programme" as per the approved project plan that incorporated in the signed agreement between RIC and Vitens Evides International. It also documented outcomes and achievements based on the set indicators according to project objective.

We are happy to prepare and submit the report just at the very end of the project for better understanding of the outcomes and short-termed results by the donors and interested stakeholders, produced in terms of behavioral change in the community on solid waste management, in the project catchments areas through the interventions. Other than that, it would also be helpful for the practitioners to get into the social mobilization challenges, and lessons learned related on the way to improved solid waste management and sewerage management system in urban context.

Initially it seemed a complicated task, although it comes to a reality when the responsible frontline organizers of the project able to provide all the valuable data, facts-findings and evidences of the achievements against the stipulated actions accomplished by them, and shared their experiences in a workshop, arranged under preparation phase of the report.

The report provided all qualitative data of the completed activities, and quantitative information against the measurable indicators following the previously accomplished progress reports, collected information through field visits & verified data and information through monitoring and cross-checking. It also described the challenges and overcoming strategies of the social mobilization works of the community led project including opportunities, recommendations etc.

We wish to thank all the actors including filed level Community Liaison Officers who assisted us to complete this valuable report through providing us appropriate data, evidence based information and photographs of the completed activities.

We would like to express our sincere thanks to the DNCC & DSCC Chief Waste Management Officers, Zone level Conservancy Officers, Ward level Conservancy Inspectors, Waste Handlers, primary waste collectors and especially to the elected Ward Counselors who continued their all-out support to achieve the expected outcomes of the project.

We would like to express our gratitude to Vitens Evides International, UDDP project concerns, and DWASA management to given the opportunity of implementing this exceptional project for the interest of grassroots level inhabitants for the development of environment and decrease health hazards by improving SWM and effective sewerage system in project area.

Finally all credit goes to the local community, CEDC members, CBO leaders, who made our dreams come true through effectively participated and took all responsibilities on their own shoulder.

However, it would be finally great if the tasks really contributed any fruitful changes in the lives of the grassroots people in terms of environmental development and health hazard decrease in the project area.

Thanks to all

Abul Haseeb Khan Director Resource Integration Centre (RIC)

List of Abbreviations

BCC	: Behavior Change Communication
CBO	: Community Based Organization
CEDC	: Citizen Environment Development Committee
CI	: Conservancy Inspector
CLO	: Community Liaison Officer
DCC	: Dhaka City Corporation
DNCC	: Dhaka North City Corporation
DSCC	: Dhaka South City Corporation
DWASA	: Dhaka Water Supply and Sewerage Authority
HH	: Household
IEC	: Information, Education & Communication
KPS	: Kallyanpur area
M & D	: Monitoring and Documentation
NASaF	: Nagorik Adhiker Sangrakkhan Forum (a renowned citizen organization)
NR	: Non-residence
O & M	: Operation & Management
RIC	: Resource Integration Centre
PCSP	: Primary Collection Service Provider
SB	: Segunbagicha box culvert area
SWM	: Solid Waste Management
UDDP	: Urban Dredging Demonstration Project
VEI	: Vitens Evides International (VEI)
WED	: World Environment Day
WTD	: World Toilet Day

Executive Summary

Dhaka city drainage system, both underground and surface drains, is mainly managed and supervised by DWASA and DCC. Vitens Evides International (VEI) made a partnership with DWASA to improve its services through demonstrating improved, modern and effective methods in storm water drainage cleaning and management in selected areas of Dhaka City through "Urban Dredging Demonstration Project (UDDP)" supported by the Embassy of the Kingdom of the Netherlands with the overall objective is to contribute to improve the performance of the Dhaka's urban storm water. It was understood by the initiators of UDDP that there is strong relevance of awareness, community mobilization and behavior change communication (BCC) to a sustainable solution of problems and then VEI made another partnership with RIC to carry out a follow up project.

RIC just completed the yearlong project titled" UDDP Solid Waste Management Programme with the financial assistance of VEI in Kallyanpur Canal and Segunbagicha box culvert area and this report is a documented evidences of community mobilization and advocacy efforts by the project aimed at behavioral change of community related to SWM make a reality that would ultimately contribute to achieve the specific objectives of UDDP.

Outcomes/results expected

- Households (HH) and small businesses in target areas would demonstrate/ participate in improved SWM and neighborhood cleanliness practices/ activities.
- Civil society and DCC would be more involved in improving neighborhood cleanliness and SWM processes in target areas.

Some indicators were set under RIC project to measure the status of SWM e.g. waste bin usage for onsite storage, van service coverage for primary collection from the points of waste generation to DNCC/DSCC secondary collection points, situation of secondary collection, clean-up of neighbourhood and unofficial dumping points along with the status of beautification and dredging works by UDDP etc. It can be said that the SWM is directly linked to storm water management of DWASA.

Key efforts undertaken

Separate project inaugural meetings were organized in Kallyanpur and Segunbagicha to share project information with the community and local SWM actors. Representatives of the community groups as well as existing community based organizations; VEI, DCC and DWASA were attended. The inaugural meetings were fruitful as participants enthusiastically supported the project concept and reacted very positively through their comments and suggestions. Representatives from service providing agencies responded positively when some queries raised by the community participants. They also expressed their commitment to assist RIC in improving solid waste management situation in the project catchment areas.

RIC continued full concentration on promoting community approach with a view to achieve immediate result by the project efforts and sustainability of the SWM. Entire catchment area divided into 12 small clusters and Citizen Environment Development Committee (CEDC) formed. CEDCs were capacitated through involving potential community personalities, organizing trainings and orientations, inspiring them to work independently - communicating, advocating, pusuading, lobbying with the service providing agencies. CEDCs developed Community Action Plan (CAP) for their respective localities.

Awareness campaign activities carried out in the localities to increase community awareness on onsite storage and disposal of waste, advocacy efforts taken to increase quality and coverage of primary collection along with regularize secondary collection by the concern authority. Rickshaw vans, trolleys and waste bins distributed to fill up the gaps of SWM in the grassroots areas.

All out efforts were given to promote multi-stakeholders participation through arranging bilateral meetings and

dialogues with the concerns of DNCC, DSCC & PCSP owners and CBO leaders. They also invited to attend awareness campaign rallies, mikings, neighbourhood cleaning demonstrations, door to door & market places visits etc.

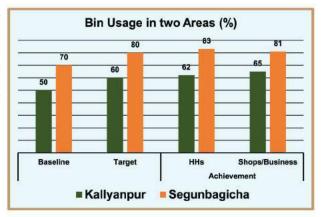
Special attention given to promote a gender inclusive SWM system through increasing participation of female and disadvantaged groups in the committees, meetings, training sessions, fixing gender friendly venues and time schedules, creating scopes to express views by the female, older people, and persons with disability, using messages and photographs in IEC materials etc.

Communication between CEDCs and CBOs along with a prominent citizen organization of NASaF (experienced in SWM) developed to promote sustainability of the SWM.

RIC monitored the project activities through some set indicators, given feedback to the frontline staffs, taken corrective measures and ensured quantitative and qualitative achivement of the project activites.

List of achievements

 Bin usage for onsite storage of waste increased in 62 % HHs and 65% shops/businesses of Kallyanpur canal and 83% in HHs and 81% shops/businesses of Segunbagicha box culvert area (Bin use status was 50% in Kallyanpur and 70% in Segunbagicha as per RIC-UDDP baseline survey and target set for 10% increase in both the areas).



- 2) Van service coverage for the primary collection of solid waste increased by 71 % HHs and 76% shops/businesses of Kallyanpur canal and 95% HHs and 95% shops/businesses of Segunbagicha box culvert area (Van service coverage was 50% in Kallyanpur and 70% in Segunbagicha as per RIC-UDDP baseline survey and target set for 10% increase in both the areas).
- 17 illegal dumping points were cleaned through neighborhood clean-up activities.



- 4) Regular collection from secondary collection points and clean-up of container sites (1 in Kallyanpur and 6 in Segunbagicha) improved by DNCC/DSCC authority. Use of all secondary points have been ensured by the intended beneficiaries, as they are disposing waste through existing and newly introduced rickshaw van services with due motivation under the project.
- 5) UDDP established beautification in 16 points (14 in Kallyanpur and 2 in Segunbagicha) with netting, pocket gates and sitting arrangements in the spots identified by the community, in effect waste throwing decreased in canal sites, and inhabitants have benefitted with the overall beautification and sitting arrangements.
- 6) Canal sites of Kallyanpur remain clean after being carried out dredging by the UDDP as awareness on SWM increased amongst the inhabitants and stopped throwing waste in the canal by them.

- 7) A gender inclusive environment ensured for an improved SWM in the project area. Female groups, persons with disability and older people got equal opportunities for participating in project activities. In effect bin usage for onsite storage and waste disposal through van services increased especially, by the direct initiatives of the female members at HHs level.
- 8) ACME Laboratory authority beautified the Laboratory building (canal site) boundary wall and set up a vigilance light aiming to stop waste dumping by the people at the UDDP beautified spot through joint initiatives by project and Ward Councillor of DNCC Ward # 11.
- 9) A strong relation established between NASaF & CEDC and NASaF convening committee was formed in four CEDC cluster areas with the help of CEDC.

Challenges faced

- Resisting DWASA land occupiers of cow farmers of 16 Comfort Housing, constructing narrow footpath at the two sides of canal from the canal sites, who are still producing and dumping waste in the canal;
- Changing life-long practices/mind set of the community about waste disposal, through a short duration project and without creating enough alternative scopes;

The challenges were overcome through building effective rapports with the positive and influential community personalities & local social activists including Ward Counselors and DCC officials. The whole process helped to ensure close communication with the local community groups resulting infruitful community participation.

Lessons Learned

- The project efforts indicate that if citizen groups react properly, service providing agencies are bound to act positively. So, efforts are needed to increase appropriate reactions of demand side to ensure appropriate actions taken by the supply side policy initiatives. CEDC had a great role of facilitating in raising community demand and ensuringservice providing actors behavewith positive actions;
- Lack of coordination between DWASA & DCC is one of the main factors for poor SWM and drainage system in the project area; DCC can play the role of establishing effective coordination amongst the service providing agencies, according to the DCC Act 2009;
- Sustainable change of mindset of the community along with volunteerism development, in this short duration is
 a highly ambitious concept. For more sustainable effective results, the project needed to be of longer duration,
 a year is too short for any effective results.

Contents

Preface		iii
List of Abb	reviations====	iv
Executive	Summary	v
Chapter 1	Background of the Project	
	1.1 Background	11
	1.2 Project Objectives	13
	1.3 Project Outcomes	13
Chapter 2	Project Implementation Strategies	
	2.1 Project Implementation Arrangements (Staffing, Office Set Up, Logistics, Working Areas,	15
	Target Groups, Stakeholder Groups etc.)	
	2.2 Chain of SWM and Identification of the Gaps	20
	2.3 Citizen Engagement (Cluster Dividation, CEDC Formation etc.)	20
	2.4 Roles of the CEDC (CAP formation and implementation, communication	22
	and advocacy with the key service providers etc.)	
	2.5 Stakeholders involvement	22
	2.6 Female group involvement	25
	2.7 Coordination and Monitoring of the project	26
Chapter 3	Targeted & achievements of the project	
	3.1 Targeted & Achievements (Quantitative)	28
	3.2 Indicator Wise Target & Achievement	34
	3.3 Documents (Guidelines, Manuals and Reports) Produced	35
	3.4 Training	36
Chapter 4	Project Budget and Expenditure	39
Chapter 5	Gender Inclusiveness	41
Chapter 6	Challenges and Overcoming Strategies	44
Chapter 7	Sustainability of the Project	46
Chapter 8	Lessons Learned, Conclusions and Recommendations	51
List of Figu	Ires	
Figure 1.	Typical SWM problem of Dhaka City	12
Figure 2.	Google-map of Kallyanpur Canal	16
Figure 3.	Google-map of Segunbagicha Box Culvert	18
List of Tab	les	
Table 1.	Population Information of Kallyanpur Canal Area	19
Table 2.	Population Information of Segunbagicha Box Culvert Area	19
Table 3.	Activities and achievements	33
Table 4.	Indicators and achievements	34
Table 5.	Budget and expenditures	39

Contents

List of Photos

1.	Previous situation of Naya Paltan near FPAB (28 July 2015), Segunbagicha	11
2.	Previous situation of Kallyanpur canal site Ali Akber Bhuyian 4th Lane (12 June 2015)	11
3.	CEDC meeting in Segunbagicha (August 16, 2015)	21
4.	CEDC meeting in Sunibir Housing (January 07, 2016)	21
5.	Kickoff meeting in Kallyanpur canal area	22
6.	Kickoff meeting in Segunbagicha box culvert road area	22
7.	Mr. Rashed Khan Menon, MP, delivers speech in a WED rally in Segunbagicha	23
8.	Chief Waste Mgt. Officer, DNCC delivers speech in a WTD rally in Kallyanpur	23
9.	VEI representative delivers speech in a WTD rally in Kallyanpur	23
10.	A Female Group Workshop in Sunibir Housing	25
11.	A Female Group Meeting in Titipara, Segunbagicha (September 13, 2015)	25
12.	Bin use in 9/M, South Kamalapur (20 September 2015)	26
13.	Bin use in Golden Street (14 December 2015)	26
14.	A DNCC Female Ward Counselor visits shops in Monsurabad (27 July 2015)	28
15.	A DNCC Female Ward Counselor visits HHS in Darus Salam (15 February 2016)	28
16.	Meeting in Segunbagicha High School (August 27, 2015)	29
17.	Meetings in Arambag Girls School and College (September 10, 2015)	29
18.	Miking going on in Road # 10, Monsurabad (July 27, 2015)	30
19.	Beautification beside ACME building, Kallyanpur	30
20.	News coverage	30
21.	IEC/BCC materials	31
22.	Van Coverage at 26 topkhana Road	31
23.	Rickshaw van distribution	31
24.	A community person watering the plantation of Shapla Housing (16 November 2015)	32
25.	Street drama performing in Mehedibag, November 15, 2015	32
26.	DWASA representatives watch street drama in Comfort Housing (January 10, 2016)	32
27.	Guidelines, Manuals and Reports	35
28.	DSCC SWM Officer watching Waste Handlers group work August 22, 2015	36
29.	Imam of Habibi Mosque, West Agargaon, motivating shop owners (18 October 2015)	37
30.	Female group participated in a SWM campaign in Mehedibag on December 27, 2015)	41
31.	CEDC manage primary collection with RIC provided van (February 15, 2016)	46
32.	Meeting between CEDC and NASaF, RIC confrence room, February 5, 2016	47
33.	Unofficial dumping adjacent Rahima School, previous situation (August 11, 2015)	48
34.	Rahima School, situation after being cleaned on August 23, 2015	48
35.	Ward Counselors led cleaning demo in Kallyanpur main road August 22, 2015	48
36.	Ward Counselors led cleaning Darus Salam February 15, 2016	48
37.	Unofficial dumping point near ACME building, Kallyanpur cleaned February 22, 2016	49
Ann	exes	
1.	Social Map of Kallyanpur	54
2.	Social Map of Segunbagicha	55

View of waste bin use practices in low income housing area.

- 20

Holcim

14

Chapter 1 Backgound of the Project

1.1 Background

Dhaka is one of the fastest growing metropolis in the world and the capital of Bangladesh; where Dhaka Water and Sewerage Authority (DWASA) is the institution, legally responsible for supplying drinking water, managing sanitation and storm water drainage system for the city. Proper management of drains helps to prevent seasonal flooding. Rapid urbanization, inappropriate use of the storm water drains by the population and a backlog of maintenance of these drains are just some examples which are increasing the waterlog problems.

The density of the population coupled with the flat geography of the area and rain intensities during the monsoon season has now resulted in Dhaka becoming prone to yearly flooding. This is aggravated by rapid urbanization and by the filling up of low-lying wet and marshy lands, which in turn destroys natural drainage systems, reducing hydraulic capacities, causing debilitating water logging and flooding. Between 1960 and 2008 the total area of water bodies and lowlands, serving as retention basins in periods of heavy rainfall or high waters, has reduced by 33% and 53% respectively. These changing trends is making the Dhaka drainage system more vulnerable; as a consequence adequate Operation and Maintenance (O&M) have become more critical. However the O&M of the primary drains and canals by DWASA have woefully fallen behind to accommodate the in recent years as the high increase in population growth in recent years as which was not matched with a similar rise in funding and increase in staffing for the O&M Drainage Circle of DWASA.



Photos 1 & 2, Previous situation of Naya Paltan near FPAB (28 July 2015), Segunbagicha & Ali Akber Bhuyian 4th Lane, Kallyanpur canal site (12 June 2015)

It is stipulated in the DWASA's Yearly Report 2010-2011 that the disposal of different types of solid waste such as green coconut husks, empty plastic bottles, polyethylene bags, construction waste and other solid wastes into the manholes and sewer lines causes the system to become blocked and as a result polluted sewage water over flows from the manholes. Furthermore, the same report has also opined that "Drainage problems of the city have become severe caused by the failure to consider the environmental impact of the filling in of wetlands and by implementing different projects which have narrowed and in some cases stopped the free flow of canals by various developers". These have been intensifying urban flooding as well as water logging. DNCC & DSCC are responsible authorities for managing city's daily generated Solid Waste (SW) which about 4500 ton/day (http://ccap.org/assets/Success-Stories-in-the-Waste-Sector_CCAP.pdf). However, due to the limited manpower, scarcity of collection vehicle DNCC & DSCC cannot collect all of the SW every day. A significant portion of SW remains uncollected which then diverts to low lying areas, drains and canals, eventually triggering water logging in the city along with other environmental hazards, as shown in the following figure (as per RIC-UDDP baseline report). The RIC conducted baseline survey on "Public information, awareness raising, community participation and behavior change programme" survey shows according to majority of respondents from almost all social classes, that water logging is the most severe consequences of waste management failure compared to bad smells, insects, flies and mosquitoes and other unhealthy environment.

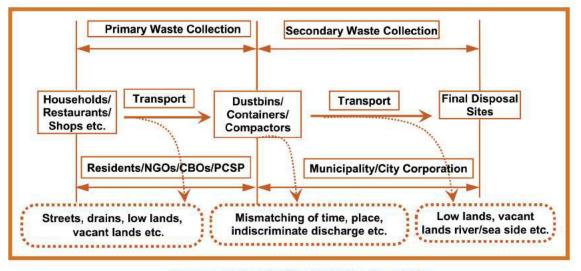


Figure 1: Typical SWM problem of Dhaka City (adapted from JICA, SWM Master Plan, 2005)

The RIC conducted same baseline survey which shows that there is a relation between SWM and Drainage Problem. It also indicated that the following factors are strongly related to the drainage problem according to the people's perception of Dhaka City and respondents think about the degree of influence the factors have on the issue;

- · Throwing waste here and there outside the house
- · Throwing solid waste into ditch/drain/canal
- · Throwing waste outside of the dumping container
- · Irregular waste management from secondary level

It has been seen that poor and ultra poor people in Kallyanpur have little orientation on proper waste disposal, even 14.8 % rich people of Segunbagicha dispose waste in nearby open places where miscellaneous waste is already existing. It has been seen that construction waste and solid waste are mixed together. However, neighborhood cleanliness or area beautification is pre-cursor to get better with improved SWM practices. It will reduce scattered littering and make people more conscious about unintentional behaviors. Therefore, beautification/clean-up activities are very important to sustain SWM management activities.

The Baseline Survey also recommended, "UDDP should actively engage with local committees (particularly housing committees/associations) to promote its community awareness raising, mobilization, and participation activities related to SWM, neighborhood cleanliness and beautification in both target area". According to the baseline survey the most popular ideas about beautification are for interventions to create a park (Segunbagicha), create a footpath for walking alongside the canal (Kallyanpur), plant saplings (both Kallyanpur and Segunbagicha).

The RIC conducted same baseline survey which shows that there is a relation between SWM and Drainage

In such situation, Vitens Evides International (VEI) entered a partnership with DWASA to improve its services through demonstrating improved, modern and effective methods in storm water drainage cleaning and management in selected areas of Dhaka as part of the Urban Dredging Demonstration Project (UDDP) that is subsidized by the Embassy of the Kingdom of the Netherlands (EKN). It was realized that SWM through community involvement and coordination building with concerned SWM department of DCC in selected areas would open the scope of sustainability of UDDP efforts. And RIC, the NGO likes to take this opportunity to implement the activities called "UDDP Solid Waste Management Programme" (hereinafter called the Project) and accordingly an agreement was signed between the both parties to implement the project. Vitens Evides International (VEI) entered a partnership with DWASA to improve its services through demonstrating improved, modern and effective methods in storm water drainage cleaning and management in selected areas of Dhaka as part of the Urban Dredging Demonstration Project (UDDP) that is subsidized by the Embassy of the Kingdom of the Netherlands (EKN).

1.2 Project Objectives

Improved SWM practices and neighborhood cleanliness in target areas that contribute to the achievement of the UDDP objectives that stakeholders' show will bring behavioral changes and contribute actively to facilitate DWASA's drainage and dredging services.

1.3 Project Outcomes

Aiming to contribute to achieving the specific objectives mentioned above, the following Outcomes/Result would be realized in the selected target areas through the implementation of the Project:

- 1. Households (HH) and small businesses in target areas demonstrate/ participate in improved SWM and neighborhood cleanliness practices/ activities.
- Civil society and DCC more involved in improving neighborhood cleanliness and SWM processes in target areas.

UDDP made fencing and sitting arrangement adjacent to Kallyanpur canal

5

- 24

Chapter 2

Project implementation strategies

2.1 Project implementation arrangements (staffing, office set up, logistics, working areas, target groups, stakeholder groups etc.)

All project staff includes 01 Project Coordinator, 01 Monitoring & Documentation Officer and 06 Community Liaison Officers recruited as per project provision. Additionally an experienced female Accounts Person deployed through RIC contribution for proper accounts maintenance. More than 50% female staffs were recruited based on gender perception.

Two office premises rented in the UDDP working area and necessary office furniture sent as per plan.

Address and specific location of the office premises:

a) Kallyanpur Office

(One room sublet from Sandhani Life Insurance Com.) Jahanara Manson House#15 (1st floor) Kallyanpur Main road Dhaka-1216.

b) Segunbagicha Office

(One room sublet, room # 01) Faynaz Apartment Flat # 01-03-D 37/2, PuranaPaltan Dhaka-1000.

Working Areas:

Target Areas of the Project

The Project had been implemented at the UDDP geographical target areas, which were Kallyanpur and Segunbagicha drainage catchment areas located in Dhaka North City Corporation (DNCC) and Dhaka South City Corporation (DSCC) respectively. The total vicinity of the target area were spread into 9 wards (Kallyanpur: DNCC, 5 wards and Segunbagicha: DSCC, 4 wards) as outlined below:

- A. Kallyanpur drain main canal (khal)
 - Starting point: Kallyanpur main canal (DWASA storm water pump house).
 - Ending point: Bhangha Bridge, West Agargaon.
 - Bench mark area along the canal: 200 meters on both sides of canal.

It was stated in baseline report that the Kallyanpur drainage area is situated in DNCC area; and the main canal passes through five wards which are 10,11,13, 28 and 30. The target area covers different locations including:

- Shapla Housing,
- Bamboo Market,
- Amtala slum,
- Alif Housing,

Mehedibagh,

- West Agargaon,
- Kazi Office Market,
- C & B Quarter,
 - r, Monsurabad, • Gachhertek,
- Khaja Market,
 Kallyanpur # 1 5 Road,
- Kallyanpur Commissioner Road,

- Comfort Housing,
- Sunibir Housing,
- Beribandh,
- Baitul Aman Housing,
 Darus Salam,
 - Kallyanpur # 11 Road,
 - SP Road, South Paikpara,
 - South Kallyanpur &
 - South Pirerbagh Amtola.

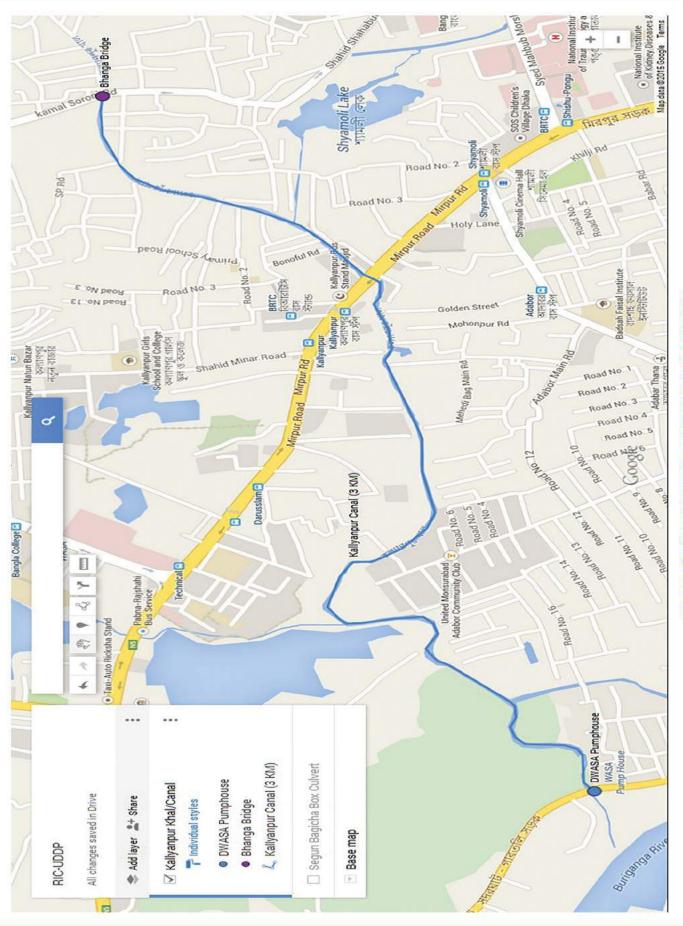


Figure 2: Google-map of Kallyanpur Canal

Except for some low-lying (water retention) areas in Gachhertek and around the DWASA Pumping Station, all the areas are mainly residential. The non-residential settlements include, medical college and hospitals, diagnostic center, commercial institutions like markets, shops, shopping complexes, commercial corporate offices; govt. and non-govt. offices, a bamboo market, rickshaw garages, car workshops, farms, mosques, schools, Madrashas, food shops, street shops, grocery shops, tea stalls, restaurants etc. There are total 495 such non-residential institutions in the Kallyanpur target area.

B. Segunbagicha box culvert (2.8 km) area

- Starting point: Segunbagicha Mosque, Segunbagicha road.
- Ending point: Kamlapur rail line (Titipara).
- Bench mark area along the canal: 200 meters on both sides of box culvert.

According to baseline survey report, Segunbagicha drainage area is situated in DSCC and the culvert is underground beneath a road and passes through four wards: 8, 9, 13 and 20. The target area covers different locations, including:



Except for Motijheel, all the locations have both residential and non-residential settlements. Motijheel is typically a commercial area with different corporate offices, headquarters of different banks, insurances, govt. and non-govt. offices. The non-residential settlements includes hospitals, health centers, commercial institutions like markets, shops, shopping complexes, commercial corporate offices, government offices, sports clubs, garages, workshops, mosques, schools, colleges, street shops, printing press, grocery shops, tea stalls, restaurants etc. There are a total of 725 non-residential institutions in the Segunbagicha target area.

Target Group & Stakeholders of the Project

Stakeholders' inclusions/participations in planning or decision making level are the key factors for implementation of the Project. According to Baseline Survey report and ToR of the project, stakeholders' involvement, engagement and support are required to carry out the project in the target areas. This should include the following:

Communities/HH and small business entities especially women: Waste Generators need to know how they can contribute to improve SWM of their community areas and will be involved in improving SWM practices.

Existing private sector initiatives related SWM: In both areas, there are primary collecting service providers, locally called Rickshaw van service. They will be targeted as important stakeholder for primary collection service coverage expansion and service improvement.

Relevant existing development project at Dhaka city based: RIC conducted baseline survey (Public information, awareness raising, community participation and behaviour change programme) and identified various institutions -Waste Concern- a national NGO; Swiss Contact- an international NGO; and Japan International Cooperation Agency (JICA) of having different projects on SWM. We will identify their coverage over target area will try to work out a possible collaboration amongst ourselves.. It was also found that mainly community groups, apartment or housing committees, DNCC & DSCC's waste management departments are key SWM leading entities.



Existing Community Based Organizations: The RIC Baseline Survey identified that, there are many local committees that could take a role in SWM and neighbourhood cleaning activities, though most of them are currently neither aware nor active on the issue. Those with the most potential to promote community participation, awareness raising and social mobilization for UDDP supported SWM and neighbourhood cleanliness activities are:

In Kallyanpur:

- o Samaj Kallayan (Social Welfare) Committee, Shapla Housing.
- o Mosque Committee, Shyamoli.
- o Pashchim SP Road Malik Committee (House owners association).
- o Samaj Kallyan Parishad (Social Welfare Committee/Council), Kallyanpur Road # 1.
- o Kallyanpur Committee on Community Policing.

In Segunbagicha:

- o Titipara Udayan Jubo Club
- o South Kamlapur Rupali Jubo Unnayn Club
- o Kamlapur Samaj Unnayn Sangasta
- o Traders Association
- o Shadesh Unnayn Kendra, Arambag
- o Nagorik Adhikar
- o Abhijan Club, Segunbagicha

Existing Local Government Institutions:

o Dhaka North City Corporation (DNCC) o Dhaka South City Corporation (DSCC) o DWASA

Table 1: Population Information of Kallyanpur Canal Area (from baseline report)

Ward Coverage	Number of	Total Household					Total	
	Mahallas	Rich	Middle	Lower Middle	Poor	Ultra Poor	Total HH	Population
DNCC Wards 10, 11, 13, 28, 30	22	1559	4251	1560	2343	1384	11061	48,668

Table 2: Population Information of Segunbagicha Box Culvert Area (from baseline report)

Ward Coverage	Number of	Total Household					Total	
	Mahallas	Rich	Middle	Lower Middle	Poor	Ultra Poor	Total HH	Population
DSCC Wards 8, 9, 13, 20	10	2585	1105	982	531	566	5769	25,384

Apart from the HHs there are non-residential establishments (shop, office, market, other institution, etc.) in both areas which would be targeted in this project as specified in below:

- o Total 495 non-residential institutions in the Kallyanpur target area
- o Total of 725 non-residential institutions in the Segunbagicha target area.

2.2 Chain of SWM and identification of the gaps

A solid waste management chain to manage HHs and Non-residences solid waste in Dhaka City Corporation areas was developed with the following 10 steps;

i. Waste generation	vi. Waste disposed in Container
ii. Onsite storage	carrier/Truck
iii. Primary collection	vii. Transportation for secondary collection
iv. Transportation for Primary Collection	viii. Transfercentre
v. Disposal of waste in Dustbin/Container	ix. Treatment
	x. Recycling

The community is responsible for conducting first five steps, and then Dhaka City Corporation Authority is responsible for performing last five steps. In addition, DCC is responsible for cleanup of road sites on daily basis and DWASA manage sewerage systems.

To be managed in a proper manner, solid waste management, is dependent on the effective and accurate functioning of all above mentioned steps done by the entire stakeholder groups e.g. Community, DCC & DWASA as well. In reality the gaps are over there, performing roles and responsibilities by the parties through a harmonized way. So, changes in their behavior, or the way they are acting is the dominant factor of ensuring improved SWM in Dhaka City Corporation area. The project knocked at the right door in that sense.

2.3 Citizen engagement (cluster dividation, CEDC formation etc.)

Cluster divide: Entire catchment area divided into 12 small clusters (6 in Kallyanpur canal and 6 in Segunbagicha box culvert road) with a view to easy organizing and creating scopes for involving diversified community groups for their intensive participation in improving solid waste management situation in their own periphery. The task is conducted following a participatory process led by the Community Liaison Officers of RIC in participation with the representatives of different community groups and concern stakeholders. Cluster divide took place considering the following factors:

- Number of CLOs, thinking that each CLO able to manage 2 clusters;
- Each cluster consists of nearest mohollas/communities;
- Easy communication amongst the mohollas;
- Good rapport exists amongst the communities.

The name of the units/clusters stated below:

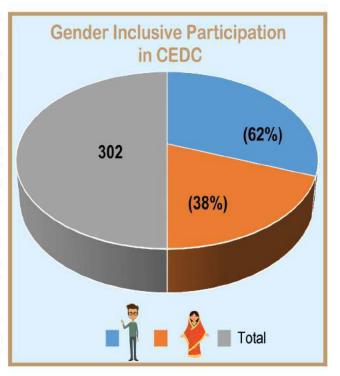
KPS:

- 1. Monsurabad (Monsurabad, Darus Salam, Gachher Tek & Baitul Aman Housing areas included)
- 2. Sunibir Housing (Sunibir Housing & Comfort Housing areas included)
- 3. Shapla Housing (South Pirerbag, Amtola, SP road & Shapla Housing areas included)
- Dhaka Housing (Mehedibag 1 to 6 Lane, Alif Housing, Golden Street, Pearl Street & Mohonpur areas included)
- West Agargaon (Shyamoli Road # 4, Kazi Office Bazar, Club Lane, Maa Vila Lane, West Agargaon Lane # 2 & Bhuyna Lane areas included)
- 6. Kallyanpur (Kallyanpur Lane 1-5 & 11, Commissioner Lane & Madrasha Road areas included)

SB:

- 1. Kamalapur (Box Culvert Road, Kamalapur Bazar Lane, Sarder Lane & South Kamalapur areas included)
- Titipara-Gopibag (Titipara Sweeper Colony, Gopibag 5-7 Lane, Gopibag Bazar Road & Railway Colony areas included)
- 3. Arambag (Tulip Lane, Box Culvert Road, 7 Arambag & Notre Dame College areas included)
- Fakirapul (Fakirapul Box Culvert Road, Fakirapul 1st Lane, Gorom Panir Goli, Water Tank Road & Aligar Road areas included)
- Paltan (Naya Paltan, Purana Paltan, DIT Extension Road, Bijoynagar, Purana Paltan Line & Box Culvert Road areas included)
- Segunbagicha (Chittagong Hotel, Muktijoddhya Jadu Ghar lane, Reporters Unity Lane, Topkhana Road, some parts of Purana Paltan & Box Culvert Road areas included) included)

CEDC Formation: A primarily list of potential CEDC members prepared through a community mapping process. sharing with the advance community personalities in the locality. Citizen Environment Development Committee (CEDC) formed through organizing meetings in all 12 clusters/units of Kallyanpur canal and Segunbagicha box culvert area ensuring the participation of above mentioned potential members along with the concern CIs (Conservancy Inspector of DCC) of the Wards under project area. Total number of 242 (Female 72 and Male 170) members primarily included in the CEDC and then the number increased finally in the total numbers of 302 (Female 116 and Male 186). It was planned to include at least 40% female members in the committees but sufficient number of female did not responded to include due to social and cultural barriers in both the areas. The number is comparatively poor in Segunbagicha box culvert area as the project catchment area is mostly commercially inhabited.







Photos 3 & 4. CEDC meeting in Segunbagicha (August 16, 2015) and Sunibir Housing (January 07, 2016)

of the CEDC (CAP formation and implementation, 2.4 Roles communication and advocacy with the key service providers etc.)

CEDC was like a vehicle of the SWM improvement efforts done by the RIC project. At the very start of the project CEDC developed Community Action Plan (CAP) for their respective clusters to improve SWM situation and developed social maps of Kallyanpur canal and Segunbagicha box culvert area through dividation of clusters, identification of unofficial dumping points, secondary collection points, and locations of bad and improved situation related to SWM.

CEDCs continued their efforts on communication with the DCC, DWASA on regular basis and carried out necessary measures to improve the SWM situation. They also arranged monthly meeting to discuss their achievement as per CAP, challenges and overcoming strategies, and follow up actions.

Most of the actions by the CEDC were in cooperation with the elected Ward Counselors, Ward level Conservancy Inspectors (CI) and Zone level waste Plan (CAP) of a CEDC

	বর্জ্য ব্যবস্থাপনা উন্নয়নের লক্ষ্যে কর্মগরি	করনা
ĸ.,	*/6	vee
14.	nie spor effite not annine .	1006.00-14-14 BPG
4	मुल्लम स्ट्रांस लग, प्राणी अन्तर हेंद्रा ८, २, ५ ५ ९ म, ज्यान समयही पहिल्लभ तथा पात काम साथ साथ र प्राल स्ट्रीप नेट्र स्ट्रिस स्ट्र	pres
rð.	পারে চালে বাবে ৬ মার্চ মার্চিত চিত্রে বিদ্রু কারে মুক্তর ব্যাচে করা কার্টী সাম্পন্থ টুবা ১, ৬, ৫ ৫ ৫ শত কার্য হোচাল ও মার্চা বর্তিটাটো পারে বিচরিত্রসংঘলন	NTER
4.	most failure seat summary	and argent tests
R.	from upon you and the second	015408
ah.	wass anfiberger sun ferbin (quigari	9767
12.	- माम, अप्रतम, खन्नन अविदेशन निवार्गन विकास	0/064
a.	44441 220c 21	9797
6	এয়ার্থ দাইন্দিয়ের সহব নিয়মিক বেশাযোগ	\$600 P. 16 C 19 P.
a.	गणा दिसाः निर्दे अध्येत्वरूप-दाः कार्यं नवीकाः अर्थन्त्वो क रतित्वनुः अन्द्रियनः नवतं वित्तवित्व दाववाद्यानं सः अवस्थित्वयः कतं अदल्वतनः	648 74- 64 FOTH
£.	्वितिक राज्यन, वाली ज्यावक दुविश तह २ वर्ष तरल, १७९६, स्वल्या, ३५ ज ३२ वि व्युटन गरिए प्रवर्ष स्वतः	AC INCOMPANY
a,	कर्मी अल्पन कुंडा भई तरहा प्रकों तला पंचन प्रवेश प्रतिसतन महत्र कार्यप्रिया का	equal 14-reality con
α,	গর্যা ব্যবহু গদ উন্নয়ন কৃতিয়া চানারে শরিলে নিচে পরা ব্যয়ার্থন	STRIP.
e.	মানাম চারার কেন করা মানী মানামা ইনার ১৯ ত ২৪ লেনে নিশেন পরিমন্ত্রের পরিমান পরিমানা মন্ত্র	and form so
i¢.	বলে মানা নেতা সম কাৰ্যত ব্যাপ নামিন প্ৰশাসকাৰিমত নামে নিয়মিত কেন্দ্ৰনামত কাল	व्याहे ३१-व्या २०३७

management officials. They also made their dialogues with the PCSPs to increase van service coverage in different gap areas and sat down for dialogues with the DCC concerns to improve the status of secondary collection and optimum level cleanliness of container and its surroundings. CEDC also played significant roles of implementing social mobilization activities and SWM campaigns in the area according to project plan. CEDC took initiatives of identifying and cleaning of the illegal dumping points of their areas and orient public for appropriate onsite storage of HH and NR produced waste and preventing waste disposal in the open places or in the canal sites.

2.5 Stakeholders involvement

Effective involvement of all stakeholder groups considered a key strategy for achieving objectives and resulting outcomes of the project. RIC set different activities for different stakeholder groups, for involving them in the project efforts.

Kickoff meeting: RIC organized project introductory meetings in both the project areas for the multi-stakeholder groups to inform them about project just before starting activities. Representatives from multiple community groups, local influential, CBO leaders, different service providing agencies etc. were enthusiastically participated in both the meeting. RIC Project Coordinator and UDDP Community Expert conducted a multimedia presentation on the project objectives and activities. DWASA (O & M, Drainage dept.) Divission-01 & 02 Engineers, 1 Conservancy Officer from DSCC, 5 Conservancy Inspectors from DSCC, 6 Conservancy Inspectors from DNCC, Project Director-UDDP, RIC Director and Residential Programme Manager of VEI attended. Participants took part in open discussion and gave their valuable suggestions. The suggestions were taken



Photos 5 & 6. Kickoff meeting in Kallyan -pur & Segunbagicha (April, 2015)

positively and follow up measures planned later considering those suggestions. The meeting opened the scopes of start working with different community groups, Central and Zone level Waste Management Officers, Ward level Conservancy Inspectors of DNCC and DSCC for initiating further actions relating to SWM improvement along with building coordination amongst all the parties.

Lobbying and advocacy: Total number of 40 lobbying and sharing meetings arranged with DNCC, DSCC, PCSPs and CBOs to pursue them about initiating satisfactory measures of increasing coverage of primary waste collection, regular secondary collection and cleanliness of secondary collection point sites. DSCC and DNCC concerns especially elected Ward Counselors and Ward level Conservancy Inspectors continued their all-out supports to improve solid waste management situation in the project areas. High Officials of both the city corporation e.g. Chief Waste Management Officer of DNCC & DSCC, Asst. Waste Management Officer of DNCC Zone # 4 & DSCC Zone # 2 also positively responded and suggested to their subordinates to assist for project efforts of RIC.

Special events arranged and government high officials invited:

World Environment Day 2015 Observed: A rally in participation with at least 225 numbers of CEDC and community members organized on June 5, 2015 in Segunbagicha box culvert area under World Environment Day-2015 observation. The honorable Minister for Civil Aviation and Tourism Mr. Rashed Khan Menon, MP inaugurated the rally. 2 Ward Counselors, DCC Conservancy Officer, 5 Cls from different Wards and at least 225 CEDC members and community people participated the rally with an enthusiastic manner. The honorable Minister delivered valuable speech and called upon the people to change their traditional practice to throw waste here and there.



Photo 7. The honourable Minister Mr. Rashed Khan Menon, MP delivers his speech in the WED rally. (June 05, 2015)

Another rally was organized on the same issue in participation of at least 200 CEDC and community members on June 7, 2015 in Kallyanpur area. DNCC Chief Waste Management Officer attended as Chief Guest in the rally. He ordered Ward level CIs and waste handlers to assist RIC in improving solid waste situation in the areas.

World Toilet Day 2015 Observed: A rally was organized in Kallyanpur canal area from Sunibir Housing Mosque (Lutfor Rahman Lane) to Monsurabad Alhaz Ali Ahmed Jame Mosque on November 19, 2015 to observe the World Toilet Day 2015 in participation of the CEDC and community members of Sunibir Housing, Monsurabad and Dhaka housing. The DNCC Chief Waste Management Officer inaugurated the rally. Total number of 178 participants attended, including 30 school students from Decent Grammar School.



Photos 8 & 9. DNCC Chief Waste MGT. Officer & VEI representative delivers speech during rally (November 19, 2015)

Training/workshop for stakeholders: RIC organized training courses for Imams and mosque committee members, aiming to involve them in SWM improvement. Separate training workshop for the DNCC and DSCC Ward level Waste handlers & Rickshaw van workers of PCSPs was also arranged to involve them in the process of improving waste management situation in the project area. DWASA officials attended the training program and shared their views.

CEDC facilitation: Local community was the main stakeholder group as the project was a community led solid waste management project. CEDC formation in participation of the selected community group leaders was a key activity to ensure stakeholder participation. Formation, capacity building and operation of CEDC through day to day follow up by the RIC CLOs has worked effectively and resulted in a sustainable trend in the project lifetime. Actually RIC staffs played the role of facilitation and CEDC members took the leadership in communication with the DNCC, DSCC, PCSP and motivating community people through all means.

Results produced through effective stakeholder's involvement: All those above mentioned efforts have significant outcomes in terms of participation and improvements related to SWM in the project area. DNCC and DSCC Ward level concerns and waste handlers enthusiastically participated in the events of SWM campaigns, and demonstration cleaning programs organized by CEDCs. Greater results were produced through advocating and communicating with DNCC, DSCC and PCSPs. The Rickshaw van service coverage for primary collection increased by 21% of HHs (total 71%) in Kallyanpur, by 25% (total 95%) in Segunbagicha), by 26% (total 76%) shops/restaurants in Kallyanpur and by 25% (total 95%) in Segunbagicha. Following 17 illegal dumping points (9 of them stated in the Inception report and 8 additional) were cleaned and remains clean up.

Following unofficial dumping points are cleaned:

Kallyanpur:

Previously Identified (according to inception report)

- i. 4th Lane (Ali Akber Bhuyan Lane), (Ward # 30), Sunibir Housing, near garments factory (Balur Matth)
- ii. Road # 11 (Next to the Flat # 59), (Ward # 11), Kallyanpur
- iii. Sufia Mension, 409/13/2B, SP Road, South Paikpara (Ward # 11)

Segunbagicha:

Previously Identified (according to inception report)

- i. Titipara (in front of Sweeper colony), Gopibag (Ward # 8),
- ii. Fakirapul Main Goli (Next to Shapla Restaurant iii. Next to Sidu School, Purana Paltan Line Box Culvert Road. (Ward #9)
- iii. Kamalapur (Behid Jugantar Office) (Ward #9), v. Behind camel farm, South Kamalapur
- iv. In front of Kamalapur Bazar Goli (Ward # 8),
- v. In front of Segunbagicha School Gate, Topkhana Road, (Ward # 20),
- vi. In front of RupayarTower Noya Paltan (Ward # 13),

Additionally Identified (during project implementation)

- i. Commissioner Lane nearby Preparatory School, Kallyanpur
- ii. Bhuyian Lane, West Agargaon
- iii. End of SP Road, Shapla Housing near Zahura Mension

Additionally Identified (during project implementation)

- i. Adjacent Rahima School Gate
- ii. Near Paramount Buidling
- iv. In front of Eastern Housing, Topkhana Road

Collection from secondary points were regularized in all 8 secondary points under the catchment area along with clean-up of container and secondary point sites.

Bin use for onsite storage increased by 12% of HHs in Kallyanpur (total coverage 62%) by 23% in Segunbagicha (total coverage 83%), by 15% shops/restaurants (total coverage 65%) in Kallyanpur and

by 21% (total coverage 81%) in Segunbagicha. CEDC motivated the inhabitants to stop dumping waste in the canal sites. They also help selecting 20 beautification spots sharing with the local community UDDP established fencing, pocket gate, sitting arrangement and plantation in 16 spots.

Some instances of CEDC achievements stated below:

- CEDC organized 27 special cleaning demonstration (16 in KPS and 11 in SB) with the community contribution;
- CEDC made communication with PCSP, organized meetings and took initiatives to reduce gaps between waste generation and primary collection; in effect, 376 HHs of Comfort Housing and 475 HHs of Sweeper Colony & adjacent Mohollas of Titipara came under Rickshaw van coverage;
- CEDC of West Agargaon issued a notice from Ward Counsellor of DNCC Ward # 28 and served amongst the HHs of Bhuyan Lane and shops/restaurants of Kazi Office Bazar in effect at least 376 HHs and 71 Shops stopped dumping waste in the canal site and disposed through van services;
- 17 illegal dumping points cleaned through CEDC initiatives (9 of them stated in the Inception report and 8 additional).

2.6 Female group involvement

Females are the dominant actor of waste generation and disposal at HH level. So, ensuring increased number of female participation in the project efforts is considered a key strategy for successful implementation of the project activities and sustainability of solid waste management system. RIC undertook following measures to increase female participation in terms of number and in terms of participation as usual:

- Special Female Groups formed and individual meeting/workshop organized;
- CEDC guideline has been developed with a clause of mandatory inclusion of 40% female member's with a view to fix an ambitious target for female members increase;
- Special SWM campaign arranged in participation with Female groups to aware female members of the households;





Photos 10 & 11. A female group workshop in Sunibir Housing Female Group Meeting in Titipara under Segunbagicha box culvert area

As a result, CEDC were formed with total number of 116 Female (38%) members out of total 302 members and 72% female members participated in the CEDC meeting where male member's participation was 68% (Source: Monthly Report, attendance in CEDC meeting). The female group members participated in the Moholla based workshops, actively joined in the awareness raising campaigns, regular events organized under the project and conducted door to door visit in their respective areas. Female participation has a greater impact in increased bin usage for onsite storage especially at HH level as female members are responsible for manage kitchen waste.

2.7 Coordination and Monitoring of the project

RIC ensured appropriate and qualitative implementation of the project through effective monitoring and coordination as per project plan. Coordination of the project carried out through filed visit, regular communicating between the central and filed level staff members, arranging monthly and periodical staff coordination meetings through discussing progress, challenges and overcoming strategies, Monitoring of the project took place using monitoring tools based on the 4 set indicators that tailored to see the status of bin use and disposal of waste by the inhabitants, primary collection by the secondary collection PCSPs, and by the DNCC/DSCC concern departments, clean-up of illegal dumping points, dredging and aftermath of dredging sites, spot beautification status etc. Monitoring was also carried out through verifying of data collected from the reports and field visits. Findings from the field visit shared and then given directions to the frontline staffs and CEDC members to take effective measures.

A quarterly basis monitoring report also prepared and submitted to UDDP for getting feedback from them for further improvement. Regular feedback from the donor side also had positive impact on maintaining quality of the targets.



Photos 12 & 13, Bin use by their own and by RIC, distributed bin respectively in 9/M, South Kamalapur (20 September 2015) & Golden Street (14 December 2015)

The monitoring and coordination efforts have positive impacts on the targets achievement and ensuring quality of the SWM activities through identifying gap areas and then taking appropriate actions.



Chapter 3

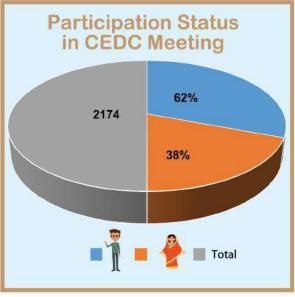
Target & achievement of the project

3.1 Target & achievement (Quantitaive)

Project activities were implemented according to UDDP approved activity plan. CEDC had the lead role in the entire implementation process, where RIC played the role of facilitation. Description of regular basis activities and achievements of SWM improvement are stated below:

CEDC formation: CEDC was like a vehicle for the community mobilization of the project. 12 CEDCs, each in every cluster was formed with the total number of 302 members consisting of 116 female and 186 male community personals. CEDC had the greater role of improving SWM in the project catchment areas.

CEDC meeting: A total number of 124 monthly basis CEDC meetings were organized. CEDC members took part in CAP development, discussion & follow up of day to day functions of the committee with an aim to develop an improved solid waste practices of the communities in the respective cluster area. Cumulatitative numbers of total 2174 members among them 833 female and 1341 male members attended in 124 numbers of CEDC meetings.



Moholla/Location wise small community meetings: Moholla meetings were organized to solve ongoing local issues related to

SWM. Total number of 70 moholla/small community meetings arranged under the project those had been significant effect on organizing special events of project including numbers of cleaning demonstration at the respective localities.

Door to door & shops/restaurants visit by CEDC members: Door to door & Non-residences visit carried out by the CEDC members to orient HHs and Non-residences on bin usage for onsite storage and appropriate waste disposal (use van or dump direct in the secondary point). Leaflets were distributed and sticker affixed on the walls and doors of the HHs and Non-residences. All 11061 HHs & 495 Non-residences in Kallyanpur and 5769 HHs & 725 Non-residences in Segunbagicha box culvert area were visited under this activity.



Photos 14 & 15, Household and shops visited by Female Ward Counselor

Facilitate and motivate waste bin use: Different motivational activities e.g. door to door visit, distribution of leaflets, stickers, awareness campaigns etc. were carried out and 1825 waste bins were distributed by the project to increase coverage of bin usage. In effect of motivational and materials support activities coverage of bin usage increased by 62% of HHs and 65% of shops/restaurants in Kallyanpur canal and 83% of HHs and 81% of shops/restaurants in Segunbagicha box culvert area.

Facilitate and motivate efficient SW transportation to DCCs collection point: PCSPs were communicated and motivated by the CEDCs, and 14 new rickshaw vans & 6 hand trolleys were provided by the project to increase coverage of primary collection. In effect of motivational and support services activities, advocacy with PCSPs primary collection status increased by 21% of HHs and by 26% of shops/restaurants in Kallyanpur and by 95% of HHs and 95% of shops/restaurants in Segunbagicha.

Effort to explore appropriate and sufficient DCCs collection points & facilitation for more regular collection: A total of 8 DCC secondary points were identified in the project catchment area. Regular monitoring of primary collection, DCC transportation and cleaning status of secondary

Coverage of bin usage increased by 62% of HHs and 65% of shops/restaurants in Kallyanpur canal and 83% of HHs and 81% of shops/restaurants in Segunbagicha box culvert area.

Primary collection status increased by 21% of HHs and by 26% of shops/restaurants in Kallyanpur and by 95% of HHs and 95% of shops/restaurants in Segunbagicha.

points have taken place with a view to harmonize the entire waste management system through advocating PCSPs and DCC concerns. 27 meetings were arranged with DCC concerns and 40 meetings with PCSPs were carried out, resulting in collection from secondary points regularized & improved clean up situation of the secondary point sites. There has also been significant change that is 71% HHs and 76% shops/restaurants in Kallyanpur and 95% HHs and 95% shops/restaurants in Segunbagicha are now disposing waste through van services.

Meeting with school teachers and MGT. committee: 8 School Management Committee meetings and 6 Environmental Education for Students arranged to increase awareness amongst the students as they can carry the message in families and community.



Photos 16 & 17, Meetings with School teachers & Management Committee members in Segunbagicha High School & Arambag Girls School and College

Environmental education in schools: A total of 6 sessions organized in participation with school students of Decent Grammar School, 16, Comfort Housing, Segunbagicha High School, Arambag Girl's High School, BRAC School (8,9,10,11 branches), Mehedibag 6th Lane, Kamalapur Govt. Primary School, and Beguam Rahima High School. In effect the school students are aware of the SWM and environmental factors. They participated in awareness rallies, cleaning demonstrations at the respective localities, and watched street drama performances.

Miking: 24 events were arranged under Miking to aware inhabitants about appropriate solid waste management and not to throw waste in the open spaces or in the canal sites. Ward Counselors, Ward level Conservancy Inspectors and local community participated in the awareness campaign programme in the HHs and in the market places during miking. Miking had tremendous impact in raising mass awareness on SWM under this project. All 11061 HHs and 495 shops/restaurants in Kallyanpur canal and 5769 HHs and 725 shops/restaurants of Segunbagicha box culvert road were reached under these miking events. DNCC and DSCC authority are now replicating this activity in other areas to aware people on SWM.



Photo 18. Miking going on in Road # 10, Monsurabad (July 27, 2015)

Awareness raising rallies: 3 awareness raising rally events were organized under the project, 2 during the World Environment Day 2015 observation and 1 during the World Toilet Day 2015 observation on the internationally defined days. In total 603 participants, including different community groups, local influentials, school students, DCC and DWASA concern officials attended the rallies. The rallies had great impact on raising mass awareness in the community on proper SWM.

Billboard/signboard/signposts installation: Total number of 20 i.e. 2 Billboards, 6 Notice boards and 12 Message boards were installed in the important public locations with a view to aware inhabitants of the project catchments area on proper SWM.



Photo 19 Beautification beside ACME building, Kallyanpur the public.

Identification of spot beautification: RIC identified 20 beautification spots (18 in KPS+ 2 in SB) through a process of sharing with the community. Beautification of 16 (14 in KPS+ 2 in SB) spots with fencing, plantation and sitting arrangements were completed by UDDP. Community took measures to continue the maintenance of these beatification spots.

Mosque announcement: 34 mosque announcements were carried out during prayer time to aware devotees on the

improved SWM as they spread the messages to

Electronic and print media coverage: Event wise news coverage were printed through involving media personnel to make SWM messages in the mass community. 23 of them were news papers and 2 were by electronic media.

Special cleaning programme/demonstration: Special cleaning demonstrations were organized, 1 in Kallyanpur and other in Segunbagicha with a view to promote community efforts for cleaning the public places (Road and canal sites, illegal dumping points etc.) with the participation of different stakeholder representatives including DCC and DWASA concern officials.



Photo 20. News Coverage

Print and use of IEC/BCC materials: 45,000 leaflets, 40,000 sticker, 2 billboards, 6 notice boards & 12 message boards were developed and printed with effective SWM messages. Leaflets were distributed, stickers were affixed and all 20 boards were installed near canal sites and box culvert road to aware mass people on the SWM and maintenance of canal after dredging/cleaning.

Support for primary collection: Total of 14 rickshaw vans, 6 trolleys and 1825 waste bins were distributed to promote bin usage for onsite storage and increase Rickshaw van usage for waste disposal.



Photo 22. Waste collection through project provided Ricksaw Van at 26 Topkhana road.



Photo 21. IEC/BCC Materials.



Photo 23. Ricksaw Van provided to CEDC from project.

Support CBOs/Community groups: Total of 44 meetings and events were organized jointly with CBOs including different PCSPs and NASaF to involve them into SWM improvement efforts under the project.

Involve DCC for regular secondary collection: 29 meetings/dialogues were carried out with the DNCC/DSCC concern officials/elected bodies to ensure regular secondary collection and optimum level clean-up of the secondary point sites after the waste has been transported. In effect regular collection enhanced and clean-up situation improved.

Involve DWASA for sustainable O&M of drainage activities: DWASA officials participated in the project kickoff meetings, rallies during day observation and trainings organized under the project. They interacted with the community representatives in some open discussion sessions but did not carry out recommendations of the community to free DWASA lands form the occupiers that are continuously create barriers for SWM in some of the sites of Kallyanpur canal.

Involve community for O&M of beautification/Clean-up Activities: Community involved maintenance of beautification spots and carried out clean-up of illegal dumping points by the CEDC leadership.



Photo 24. A community person watering the plantation of Shapla Housing 213/4/D (16 November 2015)

Female group community consultation meeting: Total of 27 female group meeting/workshop, 20 with project cost and 7 with community contribution were organized to effectively engage female groups in the SWM process at the respective localities. In effect HH level bin usage increased tremendously in the project area.

Sharing, lobbying, persuading, advocating with service providers and stakeholders: Total of 40 meetings were arranged with DNCC/DSCC concern officials and PCSPs to increase primary collection and regular secondary collection including optimum level cleaning of the secondary point sites. In effect van service increased and regular secondary collection enhanced.

Monitor waste collection from HH/shops/restaurants and report: HHs and shops/restaurants were visited on regular basis to monitor the situation of waste collection. The situation was also shared with the concerned authorities of DNCC/DSCC along with the local PCSPs through organizing advocacy meetings. In effect PCSPs took initiatives to increase van service coverage. Waste bins distributed among the low income group HHs for improving onsite storage and additional rickshaw vans & hand trolleys provided by RIC for increase primary collection coverage in gap locations.

Street Drama: 14 street drama events were performed in the cluster areas to raise mass awareness in the community. Grand Father and grandson's interesting conversation with song and music performed in all the selected spots, where hundreds of adult, children, women, older people and persons with disability crowded to enjoy the show.



Photos 25 & 26. Street drama performing in Mehedibag, November 15, 2015 & DWASA/UDDP representatives attended in Comfort Housing street drama performance (January 10, 2016)

Table 3: Activities and achievements (detail)

SL #	Name of Activity	Target	Achievement
1.1	Staff Recruitment	8	8
1.2	Staff planning and sharing meeting	12	12
1.3	Staff Foundation training	1	1
2	Offices Setup	2	2
3.1	Formation of Citizen Environment Development Committee (CEDC)	12	12
3.2	Kickoff meeting (KPS 1+ SB 1)	2	2
3.3	Develop Community SWM Guidelines/ Manuals	1	1 (English & Bangla version developed)
3.4	Develop Training Manuals/Modules	1	1
3.5	Training workshop of CEDC (KPS 6 + SB 6)	12 batch	12
3.6	,		
	1. CEDC meetings	124	124
	2. Moholla / Location wise small community meetings	36	70
	 Training workshop for Waste handlers/Cleaners working in catchment area (DNCC: 5 wards, DSCC:4 wards) 	4 batch	4 batches
	4. Training Workshop of Imam	2 batch	2 batches
		HH: KPS 11061+SB 5769	HH visit: 11370 (KPS) + 6572 (SB).
		HH. KPS 11001+38 5709	HH VISIL 11370 (KF3) + 0372 (SD).
	 Shops/restaurants/business visits and leaflet distribution (Non Residential: NR) 	NR 495 (KPS) + 725(SB)	495 in KPS + 725 in SB.
	 Facilitate and motivate waste bin use within HHs, shops, small businesses etc: (HH+NR) 	HH: KPS 5530 SB 2885 NR: KPS 248 + SB 363	Bin use increased (HHs: KPS 6817 + SB 4788 NR: KPS 321 + SB 587)
	 Facilitate and motivate efficient SW transportation to DCCs collection points 	Existing system should not drop	Van services coverage increased HHs: KPS 236 + SB1419 and NR: KPS 127 + SB 181
	 Effort to explore appropriate and sufficient DCCs collection points & facilitation for more regular collection: 	As required	27 meetings
	10. Meeting with School Teachers and Management Committee:	6	Total # of 8 meetings
	 Environmental Education (E/E) in Schools on SWM & Community Cleanliness by the students: 	4	6 sessions
	12. Awareness raising rally:	4	3 (1 World Toilet Day rally in Segunbagicha are dropped in consultation with UDDP)
	13. Miking: (12 units @ 2 times, DNCC 5 units, DSCC 5 units	24	24 events organized
	14. Street drama/folk musical programme	14	14 events
	15. Billboard/Signboard/Signposts installation	12	20 (2 Billboards, 6 Notice boards and 12 Message boards)
	16. Mosque Announcement:	Community decides	34 # of mosque announcement
	17. Electronic and print media covera	2	23 in newspapers and 2 in electronic media
	18. Special Cleaning Programme/ Demonstration	2	2
		and the second sec	20
	 Identification of Spot Beautification / Clean-up Areas Identification of roof top gardening sites 	15 sites 2 sites	20 2 (KPS 1+ SB 1) rooftops identified but plan of gardening dropped by UDDP.
1.1	Identification of Existing Communication Materials &	1	1 (Existing communication materials identified)
1.2	Channels Considering Gender Issues: Design of Awareness Campaign Activities Including Communication Channels, Messages and Gender Focused IEC Materials / IEC Plan	1	5 (Design for leaflet, sticker, billboard, notice board and message board completed)
1.3	IEC/BCC Materials (Leaflet, Banners etc.,) Print and Distribution	4 types	5 types (Leaflet,Sticker, Billboard, Message board, Notice board)
5.1	Support for Primary Collection of SWM:	14 rickshaw vans, 6 Hand trolley & 1825 waste bins	14 rickshaw vans, 6 trolleys and 1825 waste bins distributed.
i.2	Special Coordination Meeting with Stakeholders	2	The activity was dropped by UDDP
5.3	Female Group Community Consultation Meeting / Workshops	20 batch	27
5.4	Sharing, lobbying and advocacy with service providers	Routine work	40
3	Monitoring system/frame-work development:	1	1
.1	Inception Report	1	1
.2	Monthly Activity Progress Report:	12	12
.3	Bi-monthly Financial Report:	6	6
.0 7.4	Quarterly Monitoring Report	4	4
7.5	Project Completion Report:	1	1

3.2 Indicator wise target & achievement

Table 4: Indicators and achievements

Indicators	Total target	Total achievement	Means of Verification		
1.1 Improved services for	1106 HH in Kallyanpur	2364 HH in Kallyanpur	 Monthly report 		
transportation of SW from premise to DCC approved collection points	577 HH in Segunbagicha	1419 HH in Segunbagicha	Project Completion		
increased by 10% over the baseline % established before NGO	50 shops and small businesses in Kallyanpur	127 shops and small businesses in Kallyanpur	Photographs		
activities start.	73 shops and small businesses in Segunbagicha	181 shops and small businesses in Segunbagicha	 Field inspection Sites list received by 		
	5530 HHs at Kallyanpur, 2885 HHs in SB	6817 HHs at Kallyanpur, 4788 HHs in SB	UDDP		
1.2 50% of HHs and small business in target areas use bin for SW disposal	248 shops and small businesses in Kallyanpur and 363 shops and small businesses in Segunbagicha	321 shops and small businesses in Kallyanpur and 587 shops and small businesses in Segunbagicha			
1.35% of HH in target areas make some form of contribution to area beautification/neighbourhood clean-up initiatives (only site identification) of the Programme (of which 50% of participants are female).	15 sites (10 in Kallyanpur and 5 in Segunbagicha)	20 sites (18 in Kallyanpur and 2 in Segunbagicha) when beautification (Fencing. Sitting arrangement in some spots & plantation0 completed in 16 spots (14 in Kallyanpur and 2 in Segunbagicha).			
2. 5% of HH in target areas get some form of direct benefit from	553 HH in Kallyanpur target area make contribution	712 HH in Kallyanpur target area make contribution	Monthly report Project Completion		
spot or area beautification / neighbourhood clean-up initiatives of the Programme (of which >50%	1219 girls, women, disabled/elderly people benefitted in Kallyanpur areas	1410 girls, women, disabled/elderly people benefitted in Kallyanpur areas	 Photographs Field inspection 		
of beneficiaries are girls, women and disabled/elderly people).	289 HH in Segunbagicha target area make contribution	350 HH in Segunbagicha target area make contribution			
	634 girls, women, disabled/elderly people benefitted in Segunbagicha target area	740 girls, women, disabled/elderly people benefitted in Segunbagicha target area			
3. Areas of unofficial waste disposal (spot location) identified for neighborhood clean-up remain clean after the initial clean-up as part of the Programme.	All the cleaned areas of unofficial waste disposal (spot location) remain clean after the initial clean- up	All the cleaned areas of 9 unofficial waste disposal (spot location) remain cleaned after the initial clean-up	 Monthly report Project Completion report Photographs Field inspection 		
4. Inspections of the drainage structures (Kallyanpur canal and Segubagicha box culvert) that have been dredged and cleared of SW by UDDP/DWASA remain free from accumulation of floating SW.	Dredged and clean areas remain free from accumulation of floating solid waste	Dredged and cleaned areas remain free from accumulation of floating solid waste but waste comes from upstream level and side canals again darted in some locations of Kallyanpur canal	 Field inspection report Photograph 		
Existing container (based on UDDP baseline survey report 2014) of secondary collection points for SW regularly used by the intended beneficiary communities and SW collection	Existing 1 container (location based on social map of secondary collection points) is used by 100% targeted HH (1106 HH in Kallyanpur area) and by 100% SW collectors	Existing 2 container (location based on social map of secondary collection points) is used by 100% targeted HH (2364 HH in Kallyanpur area) and by 100% SW collectors	 Monthly report Project Completion report Photographs Field inspection Meeting minutes 		
services	Existing 6 container (locations based on social map of secondary collection points) is used by 100% targeted HH (577 HH in Segunbagicha area) and by 100% SW collectors	Existing 6 container (locations based on social map of secondary collection points) is used by 100% targeted HH (1419 HH in Segunbagicha area) and by 100% SW collectors	Note: Here we calculated the HHs those HHs are under indicator-1		
	Existing 1 container (location based on social map of secondary collection points) is used by 100% targeted non-residential establishments (50 shops, small businesses and others in Kallyanpur area) and by 100% SW collectors	Existing 2 container (location based on social map of secondary collection points) is used by 100% targeted non-residential establishments (376 shops, small businesses and others in Kallyanpur area) and by 100% SW collectors			
	Existing 6 container (locations based on social map of secondary collection points) is used by 100% targeted non-residential	Existing 6 container (locations based on social map of secondary collection points) is used by 100% targeted non-residential			

Table 4: Indicators and achievements (cont.)

Indicators	Total target	Total achievement	Means of Verification
	establishments (73 shops, small businesses and others in Segunbagicha area) and by 100% SW collectors	establishments (688 shops, small businesses and others in Segunbagicha area) and by 100% SW collectors	
100% secondary collection points (existing container based on UDDP baseline survey report 2014) for SW are emptied by DCC on a more regular and timely basis (as assessed by HHs at the start)	100% secondary collection points for SW are emptied by DCC on a more regular and timely basis	100% secondary collection points for SW are emptied by DCC on a more regular and timely basis	 Monthly report Project Completion report Photographs Field inspection Meeting minutes

3.3 Documents (guideline, manual, report produced)

Following documents were produced under the project:

- Inception report
- Monthly progress report, Quarterly Monitoring report and Reports of trainings & events
- Citizen Environment Development Committee (CEDC) Guideline
- Community Solid Waste Management (CWSG) Guideline
- SWM Training Guideline/Manual

Guidelines & Manuals

সংগঠন পরিচালনার নির্দেশিকা

Viters Evides

LOOF

ce Integration Contra (RIC) ed No. 11 (Nex), 52 (ON) Sharmond R/A, Diska-1205, Sectorization

IDDD Colid Works Mana

Viters Evide

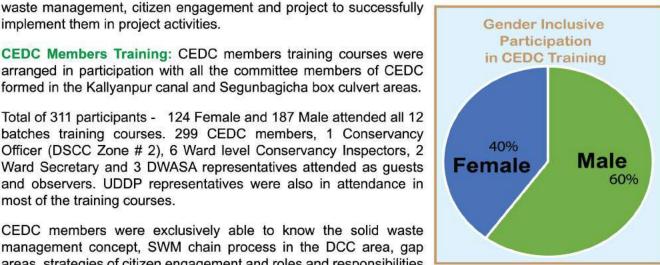


and observers. UDDP representatives were also in attendance in most of the training courses.

monitoring strategies etc. to increase the knowledge base of the staff members.

staff members have sufficiently improved knowledge on the solid

CEDC members were exclusively able to know the solid waste management concept, SWM chain process in the DCC area, gap areas, strategies of citizen engagement and roles and responsibilities of the CEDC members will help in improving the situation.



Waste Handlers: Training:4 batches of Waste Handlers training courses were arranged where 100(8 Female and 92 male) DNCC and DSCC Ward level Waste Handlers including PCSP cleaners attended. Waste

RIC organized most of the training courses for building capacity of the community and stakeholder groups aiming to increase knowledge level on the concept of solid waste management, project objectives, strategies and activities and roles and responsibilities of different groups for improving solid waste management

Staff Foundation Training: 3-day duration Staff Foundation Training was arranged on 07 to 09 April 2015. A hired resource person of SWM facilitated the training courses and discussed solid waste management concept, SWM chains and gap areas. Citizen engagement strategies when UDDP Concern person, Project Coordinator and M&D Officer shared the project details including project objectives, indicators, activities,

At the ending session evaluation of the training took place through a developed format. It was seen that the

handlers were oriented on the basic concept of solid waste management, social and environmental impact of improper solid waste management along with health hazards of waste handling and precaution measures through the training courses. The training courses were very interactive as waste handlers shared their views on the gaps and laps of the SWM and overcoming strategies to improve the situation.

3.4 Training

implement them in project activities.

situation.

Imams Training: Imams are the most effective community group in terms of guiding the community towards good practices. Aiming to raise awareness and lead the community on improved SWM was the main objective of the training courses. 2 batches of (1 in Kallyanpur canal area and other in Segunbagicha box culvert area) Imam training courses were arranged under the project where

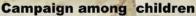


Photo 28. DSCC Asst. Chief Waste Management Officer watching Waste Handlers group work, in a training session on August 22, at Food Safari Mini Chinese, **Topkhana Road**

41 Imams and Mosque Committee members attended. SWM concept and UDDP project details discussed with the participants in a very cordial and interactive manner. They very much abided by the SWM concept and project strategies and played a key role in the community to improve the situation as they fluently delivered the SWM message after the prayer and took part in campaign activities to raise the community awareness.



Photo 29. Imam of Habibi Mosque, West Agargaon, Road # 2, motivating shop owners of nearest market places on appropriate SWM (18 October 2015)

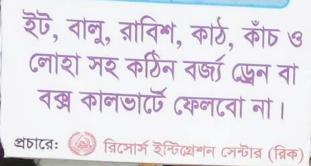




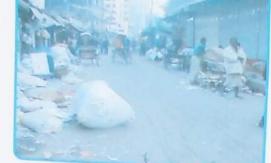


LIDDP

Vitens Evides



In El





ার্স ইন্টিগ্রেশন সেন্টার (রিক)



Chapter 4

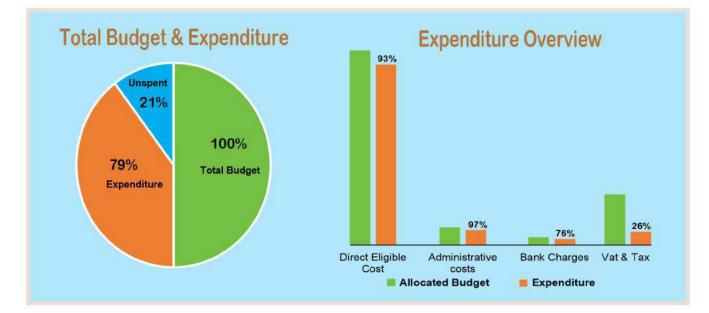
Project Budget and Expenditure

Table 5: Budget and expenditures

SL #	Expenses	Total Approved Budget	Expenditure
1	Staff Salary	2,366,000.00	2,362,000.00
2	Staff planning and sharing meeting	39,600.00	39,560.00
3	Foundation training	66,400.00	60,251.00
4	Office setup	308,000.00	282,580.00
5	Mobilize / Organization of Communities to improve SWM	689,600.00	561,358.00
6	Implementation of CAPs	2,218,600.00	2,070,421.00
7	Regular Support, Coordination and Collaboration to Sustain the Activities	238,000.00	83,510.00
8	Reporting & Documentation	372,250.00	373,499.00
9	Communication	114,000.00	113,798.00
10	Equipment and Supplies	91,450.00	83,037.00
11	Travel & Transport Costs	358,000.00	329,417.00
12 Subtotal of direct Eligible Cost of the Action (1-11)		6,861,900.00	6,359,431.00
13	Administrative costs (10% of Subtotal 1, Staff Salaries)	236,600.00	229,112.00
14	Total Eligible Cost of the Action (12+13)	7,098,500.00	6,588,543.00
15	Bank Charges	57,200.00	43,222.00
16	Total Eligible Cost of the Action (14+15)	7,155,700.00	6,631,765.00
Vat & Tax cost for this Period		1,788,925.00	469,405.00
Grand Total		8,944,625.00	7,101,170.00

Some estimated cost of Vat & Tax and Bank Charge remain unspent as it was not applicable.

Some budgets of eligible cost remain unspent due to the activities of one rally on World Toilet Day and two Special Coordination Meeting with DCC dropped in consultation with UDDP.



After Intervention

A.M.

AL.

Previous Situation

View of Kallyanpur Canal adjacent to Acme Laboratories

1

27777

117 111 1

- 5

ALC: NO

四 田 田 田 田 田

Chapter 5 Gender inclusiveness

Special focus was given to develop a gender inclusive waste management system in the project catchment area as women are the driving force for effective and proper waste management at HH level and responsible for managing it at the point of generation e.g. on site storage and disposing to the primary collector.

RIC strategies to ensure gender inclusiveness SWM were as follows:

- At the very beginning more than 50% female staffs were recruited with a view to emphasize gender inclusiveness in all perspectives;
- A half day gender session was conducted in staff foundation training to sensitize project team about gender mainstreaming at the project activity level. Other than that, a gender session planned and conducted in all training courses including CEDC training, Imam's training, Waste handlers training etc. to sensitize all project participants for developing a gender balance situation in terms of solid waste management in the catchment areas;
- 38% female members were included in the CEDC to increase gender inclusiveness;
- Special attention given (selection of venue, fixing time, closely follow up) for ensuring gender inclusive participation IN PROJECT ACTIVITES.



Photo 30. Female group participated in a SWM campaign in Mehedibag on December 27, 2015

- 27 special female group's meeting organized to ensure a gender focus SWM system in all cluster areas;
- Gender focused messages and photographs used in leaflet, sticker, message board and notice board development;
- Scopes were created and opportunities were given to the female, elderly people and persons with disability at the time of expressing their views on SWM and making decisions in the training/workshop, CEDC meeting and Moholla meeting;
- RIC developed gender friendly guidelines for the project e.g. guideline of CEDC, SWM guidelines, training manuals. All reports of the project also generated by gender aggregated data;
- Project staffs were also given specific direction to increase female participation in all meetings and training workshops under the project through time setting, creating

convenient environment etc. They were also suggested to engage woman to disseminate SWM messages at community level where applicable;

The staff foundation training was appropriately a gender inclusive training as per the previous plan. 50% participants were female (4 female and 4 male project staff), More than 50% trainers were also female (4 female and 3 male) as per plan. A half day gender session was really enthusiastic and fruitful to understand the gender concept and gender inclusiveness in the UDDP Solid Waste Management Programme by the participants.

In effect, a gender inclusive environment was ensured for an improved SWM in the project area. Female groups, persons with disability and older people got equal scopes for participating in project activities. In effect bin usage for onsite storage and waste disposal through van services increased especially, by the direct initiatives of the female members at HHs level.

Positive impact of female participation/short time outcomes: The effective roles played by the female members for the improvement of SWM did not create any burden for them, rather they took it positively and enthusiastically, participating in the campaigning events organized under the project. Female group members of Mehedibag and Titipara area made regular visits in the HHs of their own area to motivate HH related members to use bin for onsite waste storage. In some slum areas of Bhuiyan Lane, West Agargaon we came to observe that some very low income group female housewives invented small income scope through pilling and selling recycle able plastic waste e.g. broken glasses/ plastic bottles/ wastage papers etc. separately and not disposing them in the van services. They are helping their school going children for buying pencils/pens etc. through this small income.

38% female members were included in the CEDC to increase gender inclusiveness;

27 no. of special female group's meeting organized to ensure a gender focus SWM system in all cluster areas;

In effect bin usage for onsite storage and waste disposal through van services increased especially, by the direct initiatives of the female members at HHs level.



Chapter 6

Challenges and Overcoming Strategies

Challenges faced and how to overcome

Challenges

- Community reaction towards UDDP work, as there was no progress observed in Segunbagicha box culvert area related to dredging/clean-up activities, as per commitment given through Kickoff meeting, UDDP fact sheet; leaflet, community meeting, CEDC training, etc.
- Negative community beliefs towards DWASA as no effective measures were taken by them to eradicate DWASA land occupiers (Cow farms of 16 Comfort Housing, constructing narrow footpath at the two sides of canal) from the canal sites, who are still generating and dumping waste in the canal;
- Pursuing DWASA officers for participating in the CEDC meeting and cleaning demonstration activities as per community expectation;
- Changing life-long practices/mind set of the community about waste disposal, through a short duration project and without creating enough alternative scopes.

Overcoming strategies

The challenges were overcome through building effective rapports with the positive and influential community personalities & local social activists including Ward Counselors and DCC officials. The whole process helped to ensure close communication with the local community groups resulting in fruitful community participation



Chapter 7 Sustainability of the Project

The project itself was a community led approach, and was developed in context of sustainability of SWM and drainage management in the project area. It was found (based on the baseline survey report) that a solid waste management chain and drainage management system exists in both the project areas, but absence of harmonized actions by all stakeholder groups lacks the system. The following strategies are required to improve the situation:

Promote community lead approaches from the very beginning: It was assumed that CEDC would continue functioning after the project activities ended. So, RIC concentrated on capacity building of CEDC through involved potential community members in the committees, orienting them on improved SWM concept, inspiring them to work independently in communicating, advocating, persuading and lobbying with the service providing agencies to improve SWM situation in the respective localities, where RIC staffs facilited the works as per project plan. CEDC conducted household visits, organized clean-up activities etc. by their own leadership. That would help them continue the works.

Align Community Action Plan (CAP) to scale up the community ownership: Orientations were given to the CEDC members on developing Community Action Plan (CAP) by their own for SWM improvement in their own locality, and RIC staffs facilitated then the development of individual CAP for each and every cluster by the respective CEDC in align with project plan. Follow up actions were continued by RIC to implement CAP activities by the respective CEDC.

Bottom-up approach in place of Top down approach followed to realize the real problem of SWM, clean-up activities, planning and implementation process etc.: The process of formation and implementation of CAP completely followed the bottom-up approach. CEDC members



Photo 31, CEDC managing primary collection by project provided van service and on the way to sustainability, 16, Comfort Housing (culvert), February 15, 2016

enthusiastically participated to develop cluster wise map consisting of existing SWM supports, gaps, local resources. Then they developed individual CAP based on the mapping. CEDC carried out activities in their own cluster according to CAP. CEDC carried out following exemplary activities:

- At least 43 clean-up demonstrations along with road and canal sites clean-up events were organized by the CEDC in cooperation with DNCC, DSCC and CBOs of the respective cluster areas.
- 9 17 illegal dumping points were cleaned by the stakeholder's contribution.
- 2 beautification locations were cleaned (Ali Akber Bhuyan 1st Lane and Monsurabad Road # 11) before beautification.
- DNCC Ward Counselor (Ward # 11) took initiatives of cleaning canal sites behind ACME Laboratory and ACME Laboratory/ Highway adjacent dumped waste. He also pursued ACME authority to beautify the boundary wall behind the Laboratory (canal site) and set up a vigilance light aiming to stop waste dumping by the nearest inhabitants in the UDDP beautified locations.

Practice of local resources mobilization process encouraged to sustain the primary collection: CEDC members were encouraged to invent and mobilize local resources to enhance primary collection in the gap

areas. They continued their efforts to increase van service coverage in the grassroots level and form the HHs of low income groups by the local PCSPs through bilateral meeting and arranging dialogue amongst PCSP owners, Ward Counsellors and CIs. In effect van coverage increased in 376 HHs of Comfort Housing, 355 HHs and 71 Shops in Kazi Office Bazar and adjacent area. Segunbagicha CEDC provided a van by their own cost to increase coverage in Topkhana Road HHs.

Promote multi-stakeholders participation and relationship: All our efforts were given to promote multi-stakeholders participation through arranging bilateral meetings and dialogues with the concerns of DNCC, DSCC & PCSP owners and CBO leaders. They also invited in the events organized under the project plan and by the CEDC initiatives.

Promote Community Owned System: RIC mainly promoted CEDC through all our assistances by the project. CEDC was formed, capacitated, and operated through arranging regular meetings. CEDC made cluster wise CAP in line with the project plan and carried out door to door visit, clean-up activities, and dialogue with the service providing agencies of DNCC, DSCC and PCSPs to increase SWM situation. In effect, waste bin usage status improved in HHs (57% in Kallyanpur and 75% in Segunbagicha area) and NRs (56% in Kallyanpur and 78% in Segunbagicha area). Van service coverage increased and the present status in HHs (70% in Kallyanpur and 93% in Segunbagicha area) and NRs (76% in Kallyanpur and 95% in Segunbagicha area). CEDC is now developed as an independent organization and had started to organize activities on their own.

Inclusion of NASaF and Stakeholders Participation: Nagorik Adhiker Sangrakkhan Forum(NASaF), a citizen

organization with more than 10 years experienced in improvement of governance situation related to basic services (water, electricity, waste management, health service, prevent adulterated food, etc.) of GO andNGO service providing agencies in urban context have earned a level of reputation. NASaF have fully functional committees at central and most of the Ward level of Dhaka City Corporation area. RIC organized a coordination meeting between NASaF central committee and selective CEDC members at RIC Office on last February 6, 2016 to establish a relation between two parties.

NASaF and CEDC now can move jointly with continued efforts of SWM improvement, even after the end of the project. Some CEDC members also proposed to form NASaF committees in their Wards. Following meetings were organized to form NASaF committee in different DNCC/DSCC Wards:



Photo 32, Meeting between CEDC and NASaF, RIC confrence room, Dhanmondi February 6, 2016

- A meeting was arranged between NASaF & Mobnsurabad, Sunibir Housing and Dhaka Housing CEDCs on February 25, 2016 and a NASaF convening committee was formed in DNCC Ward # 30.
- A meeting was arranged between NASaF and Kallyanpur & Shapla Housing CEDC on March 5, 2016 and a NASaF convening committee was formed in DNCC Ward # 11.
- A meeting was arranged between NASaF and Fakirapul & Arambag CEDCs on February 29, 2016 and a NASaF convening committee was formed in DSCC Ward # 9.
- A meeting was arranged between NASaF & Titipar-Gopibag CEDC on March 5, 2016. It was decided to form a NASaF convening committee in DSCC Ward # 8 in another meeting with more members' participation.

Each of the above mentioned convening committee will confirm a full committee formation by 6 months from now, through an election process ensuring participation of at least 150 potential community persons in their respective areas.

The above mentioned entire process produced many community initiatives and community organized events towards a sustainability context as follows:

Cleaning demonstration: 27 # of cleaning demonstration organized by the community. CEDC took the lead and ensured participation of local DNCC and DSCC Ward Counselors, CIs.

During the cleaning demonstration organized in the Titipara-Gopibag area on 29 October 2015, DSCC Ward Counsellor (Ward #8) served a notice amongst the Inhabitants to stop open dumping resulted in the cessation of

475 HHs of the area dumping in the open and starting them on disposing their waste through the van service. In November 2015 DNCC Ward Counsellor served notice to the shops, restaurant of Kazi Office bazar and adjacent area



to put a stop of throwing Photos 33 & 34, Unofficial dumping adjacent Rahima School, Topkhana Road, Segunbagicha waste into the canal, in previous (August 11, 2015) and situation after being cleaned on August 23, 2015 effect 355 HHs and 71 shops started disposing waste through van services.

Ward Counsellor of DSCC Ward #8, Mr. Sultan Ahmed arranged a huge cleaning demonstration to clean Gopibag

Lane # 5 on 14 January 2016. He ensured participation of the DSCC Waste Handlers in the event and served lunch to them after end of the cleaning activity: He also visited HHs and requested the inhabitants to use van service for waste disposal;



Photo 35 & 36, Cleaning demonstration led by DNCC Ward Counselor, Ward#11 in Kallyanpur main road (August 22, 2015) and DNCC Female Ward Counselor, Ward# 9,10,11 in Darus Salam area on DNCC Ward Counselor, February 15, 2016

Ward#11 Mr. Dewan Abdul Mannan took initiative and involved CI and Waste Handlers to clean the both sites of the canal behind ACME laboratory on 23rd January 2016; the same Counselor also carried out the cleaning near ACME/Highway canal face. 3 trucks carried the dumped waste from the place. He also pursued ACME authority to color their boundary wall and setting up a vigilance light at the UDDP beautified location.

More Community involvement initiatives: Community took initiatives and continued maintenance of all the 16 beautification spots of UDDP beautified areas. They water the plants and clean the spots as per requirement. CEDC members supervise the maintenance activities. In the beautification spot of Kallyanpur Road # 1, Mr. Kader Hawlader, CEDC member made additional fence with iron rod in one part and Mr. Monir Khan, a laundry owner planted more small trees in other part.

Mr. Din Islam, a CEDC member extended garden in adjacent open lands near UDDP fencing of Amtola Bridge Railway Culvert (Titipara) by his own effort;

Community organized 5 more female group workshops by their own contribution to increase female participation in their own peripheries;



Photo 37, Cleaned up situation of unofficial dumping point near ACME building and setting up a Vigilance Light on February 22, 2016



DHAKA WASA

RIC

কম্যুনিটি এনভায়ারনমেন্ট ডেভেলপ্রয়েন্ট কমিটি-সিইডিসি'র সভা

Vitens Evides

LODP

CEDC MEETING UDDP- Solid Waste Management Programme সেঙনবাগিচা বন্ধ কালভাই এলাকা

বান্তবায়নে, নিসোর্স ইন্টিক্রেশন সেন্টার (রিক)

Community Meeting

Chapter 8

Lessons Learned, Conclusions and Recommendations

The project achieved all the targets as per project plan and created scopes for a sustainable behavioural change of multi-stakeholders in terms of SWM and drainage system development but the time duration of the project was a challenge for keeping the results in the pocket. UDDP can play a supportive role by continuing to cooperate and communicate with the CEDC, even after the project ending. It may produce a dependable sustainable condition in terms of SWM and sewerage system in the project area and create more scopes to replicate the experiences/model in other circumstances.

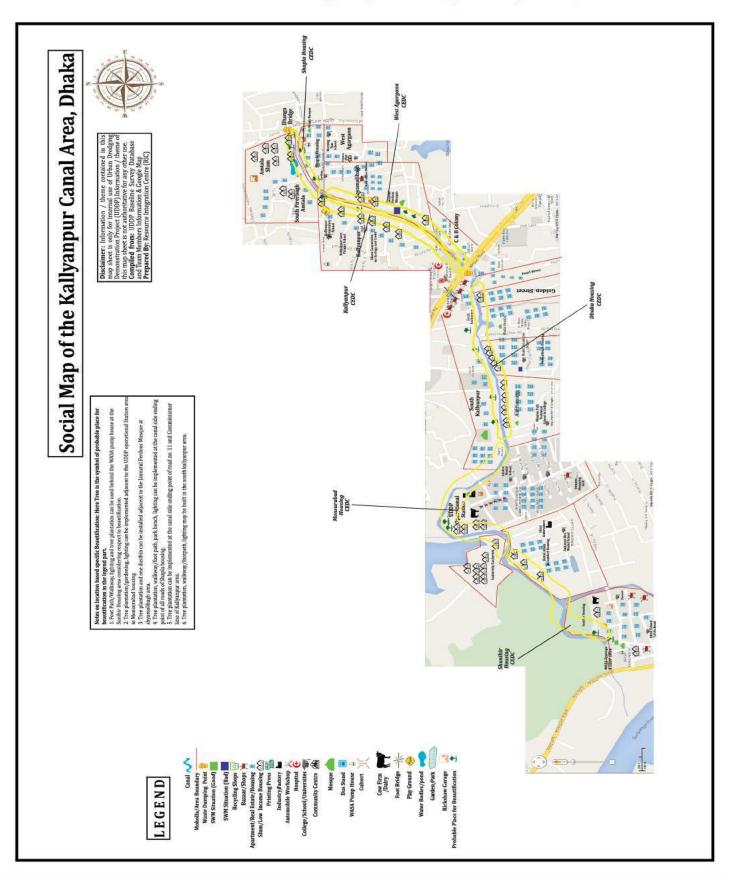
- The project efforts indicate that if citizen groups react properly, service providing agencies are bound to act positively. So, efforts need to increase for appropriate reactions of the demand side to ensure appropriate actions by the supply side policy initiatives. CEDC had a great role of facilitation of raising community demand and making service providing actors behave with positive actions;
- Lack of coordination betwwen DWASA & DCC is one of the main factors for lack of improvement in the SWM and drainage system in the project area; DCC can play the role of establishing effective coordination amongst the service providing agencies according to the DCC Act 2009;
- Sustainable change of mindset of the communiy along with volunteerism development, in a short duration efforts were highly ambitious concept and it required comparatively long duration project.
- UDDP could play a facilitative role for some additional months under its existing framework to continue CEDC activity in Kallyanpur canal and Segunbagicha box culvert area. It could have a positive impact on the sustainability of SWM and effective drainage system in the area.

UDDP Dredging works.

IJ

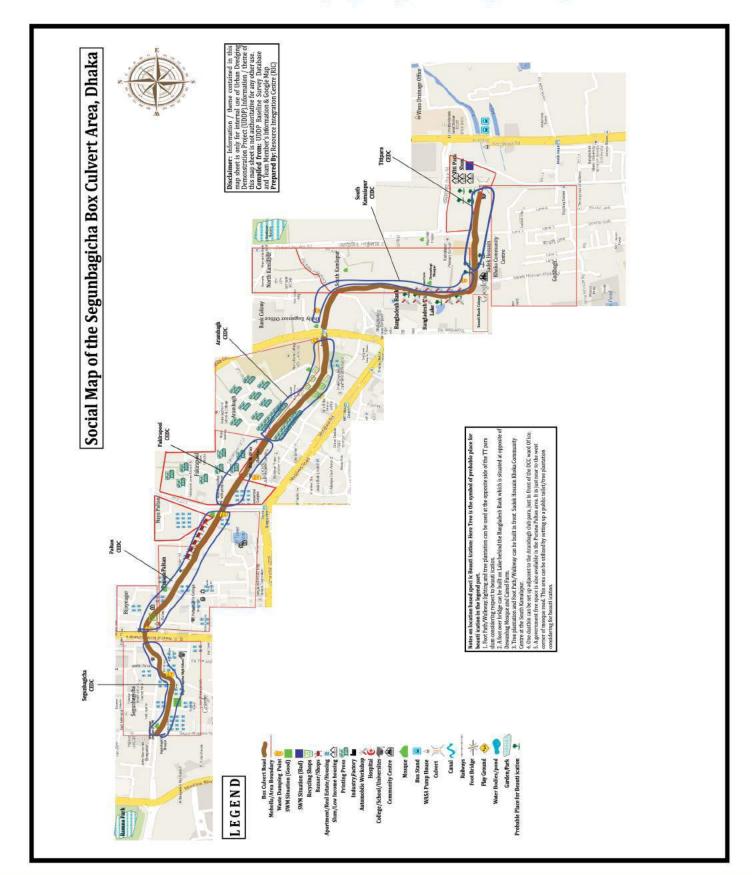
:





Social Map (Kallyanpur)

Social Map (Segunbagicha)





....

Female group participation in UDDP SWM programme









Resource Integration Centre (RIC) Address: House # 20, Road # 11 (New) 32 (Old)

Address: House # 20, Road # 11 (New) 32 (Old) Telphone: +88-02-8118475, Fax: +88-02-8142803 E-mail: ricdirector@yahoo.com Web: www.ric-bd.org