

Annex 1: Project Design Matrix (PDM)

Project Design Matrix (PDM): Project for Strengthening of Solid Waste Management in Dhaka City (Clean Dhaka Project)

[Project Title]
[Target Groups]
[Project Period]

The Project for Strengthening of Solid Waste Management in Dhaka City of Bangladesh
1. Waste Management Department*, 2. Concerned Department 3. City residents,
February 2007-February 2011 (4 years)

[Date] 18 March 2010
[PDM Version] 3

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal The solid waste management services of Dhaka City Corporation are sustained and the sanitary environment of the city is improved.</p> <p>Project Purpose Capacity for management and coordination of solid waste management activities is improved.</p>	<p>1. More than 66% (or 3,054 ton/day) of wastes are transported to landfill sites and disposed properly by 2015. 2. The ratio of city residents in DCC who are satisfied with the collection services provided by DCC (or private companies in privatized zones) reaches 70% by the end of 2015 from the current level of 36% (Master Plan Study, 2005).</p> <p>1. More than 52.5% (or 2,053 ton/day) of wastes are transported to landfill sites and disposed properly by the end of Project. 2. The ratio of city residents in DCC who are satisfied with the collection services provided by DCC (or private companies in privatized zones) reaches 50% by the end of the Project from the current level of 36% (Master Plan Study, 2005).</p>	<p>1. Reports of WMD, Project Evaluation Report 2. Awareness Survey/Opinion Survey Report to be conducted by DCC/Baseline survey</p> <p>1. Reports of WMD, Project Evaluation Report 2. Awareness Survey/Opinion Survey Report to be conducted by DCC/Baseline survey</p>	<p>1. National policy to give priority to solid waste management is sustained.</p> <p>1. Commitment to attainment of Clean Dhaka Master Plan from Dhaka City Corporation and other stakeholders is sustained. 2. Financial capacity of Dhaka City Corporation is strengthened.</p>
<p>Outputs 1. Capacity for management and coordination of solid waste management activities is improved.</p>	<p>1.1 Managers of Waste Management Department (WMD) can formulate Annual Activity Plans and budget proposal by the end of the Project. 1.2 Percentage of Project's activities whose completion is delayed more than one month is reduced to 70% in the 5th JFY (April 2010 to March 2011). 1.3 Eight (8) good practices and cases are disseminated by the Project. 1.4 Clean Dhaka Master Plan is revised according to the change in social conditions and environmental consciousness of the citizens by the end of the Project. 1.5 Activities for Ward Based Approach are officially included in the job of WMD staff.</p>	<p>1.1 Project Progress Report 1.2 Project Progress Report 1.3 Leaflets, Newsletter and Newspaper Articles 1.4 Report of Revised Master Plan, Project Progress Report 1.5 Office Order of DCC, Project Progress Report 2.1 Project Progress Report, Site Observation 2.2 Issued Guidelines 2.3 Awareness Survey/Opinion Survey Report 2.4 Project Progress Report</p>	<p>1. Commitment to attainment of Clean Dhaka Master Plan from Dhaka City Corporation and other stakeholders is given. 2. Natural disaster, such as flood and political conditions, such as elections, do not greatly affect the implementation of the Project. 3. DCC allocates appropriate budget for solid waste management. 4. Central Government gives required support for solid waste management of DCC.</p>
<p>2. Capacity for participatory solid waste management program is improved.</p>	<p>2.1 More than 20 Conservancy Inspectors, Conservancy Supervising Inspectors and Conservancy Officers obtain enough knowledge and skills and are motivated to promote ward-level community solid waste management by the end of the Project. 2.2 Community-based SWM Guideline are prepared and ready for use by the end of 2007/08 financial year of Bangladesh. 2.3 Permission and monitoring system for primary collection service providers is improved and introduction of the improved system to whole Dhaka City starts. 2.4 Number of successful community initiatives reaches 20 by the end of the Project, through improved coordination among community, DCC and primary collection service providers.</p>	<p>3.1 Project Progress Report 3.2 Project Progress Report 3.3 Project Progress Report 3.4 Workshop Records, Project Progress Report</p>	
<p>3. Capacity for solid waste collection and transportation is improved.</p>	<p>3.1. New collection systems suitable to the conditions of Dhaka City are developed and introduced to more than 20 areas. 3.2. More than 50% of Conservancy Inspectors and Cleaners have become conscious on safety and sanitation. 3.3. More than 15 Conservancy Inspectors take initiatives for improvement of collection and transportation after they developed the capacity for the improvement. 3.4. Periodic maintenance for 127 vehicles is carried out.</p>	<p>3.1 Project Progress Report 3.2 Project Progress Report 3.3 Project Progress Report 3.4 Workshop Records, Project Progress Report</p>	

<p>4. Capacity for operation and management of final disposal is improved.</p>	<p>4.1 Required staff for O&M of landfill are allocated and work properly since July 2008 in Manual. 4.2 Environmental parameters are monitored as per Environmental Management Plan since July 2008 at Manual. 4.3 Waste placing, compaction, soil covering on waste and slope maintenance are operated adequately as per O&M manual. 4.4 Leachate is treated adequately as per O&M Manual. 4.5 Weighbridge is operated and data are provided regularly to WMD's Headquarters.</p>	<p>4.1 DCC budget for SWM 4.2 Project Progress Report 4.3 Project Progress Report 4.4 Project Progress Report 4.5 Project Progress Report</p>	
<p>5. Capacity for operation and management of final disposal is improved.</p>	<p>5.1 Annual financial report of each financial year is available in September next financial year by the end of the Project. 5.2 Reports for financial planning are prepared in each financial year by April by the end of the Project. 5.3 Monthly reports on actual revenue and expenditure are available by the second week of next month by the end of the Project. 5.4 Control of expenditure for solid waste management is improved.</p>	<p>5.1 Project Progress Report 5.2 Project Progress Report 5.3 Project Progress Report 5.4 Project Progress Report</p>	
<p>Activities</p> <p>1-1 To establish Waste Management Department (by DCC) 1-2 To strengthen human resources and institution of Waste Management Department *1 *2 1-3 To prepare Annual Activity Plans 1-4 To coordinate Project Activities 1-5 To raise awareness and to conduct public relations campaigns on solid waste management 1-6 To develop solid waste management network among city corporations 1-7 To review and modify Clean Dhaka Master Plan 2-1 To develop Ward SWM Guideline 2-2 To organize community people and support community level SWM activities *1 *3 2-3 To improve primary collection permission and monitoring system 2-4 To support primary collection service providers to improve their services *4 2-5 To organize awareness raising and environmental education programs in target wards *3 2-6 To coordinate among community people, primary collection service providers and DCC *2 *4 2-7 To conduct training programs for the counterparts on participatory SWM 3-1 To conduct surveys and data collection and analysis for improvement of collection efficiency *4 3-2 To improve efficiency of collection system *2 *4 3-3 To improve the system of repair and maintenance of equipments 3-4 To train technicians, repair mechanics, drivers, cleaners, and other workers *2 4-1 To develop sanitary landfill (by DCC) 4-2 To operate and manage sanitary landfill 4-3 To conduct environmental monitoring 4-4 To evaluate landfill operation improvement 5-1 To develop financial reports 5-2 To prepare proposal of financial plans 5-3 To improve procurement and payment processes</p>	<p>Input</p> <p>Japanese Side</p> <ol style="list-style-type: none"> 1. Dispatch of experts (1) Chief Advisor (2) Solid Waste Management (3) Community Mobilization/Communication (4) Optimization of Secondary Collection (5) Landfill Management (6) Waste Collection Vehicle and Equipment Maintenance Management (7) Financial management <ol style="list-style-type: none"> 2. Provision of equipment 3. Training of counterparts 4. Dispatch of study team when necessary 5. Allocation of operational costs for the Project <p>Bangladesh Side</p> <ol style="list-style-type: none"> 1. Assignment of counterpart personnel 2. Provision of land, building, and other necessary facilities 3. Allocation of operational costs for the Project 	<p>1. Frequent transfer of trained counterpart personnel does not occur. 2. Environmental Management Plan for Manual and Environmental Impact Assessment for Amin Bazar are approved by the Department of Environment, Ministry of Environment and Forest without any delay. 3. Japan Debt Cancellation Fund for Manual landfill expansion is disbursed by the Government of Bangladesh without any delay. 4. Amin Bazar landfill construction project is approved by the Government of Bangladesh without delay. 5. Staff whose capacity has been developed in the Project and the Development Study is properly assigned. 6. DCC transfers staff to WMD and employs new staff appropriately without delay. 7. DCC allocates appropriate budget to conduct the Project activities. 8. DCC transfers relevant assets to WMD properly without delay. 9. DCC prepares enough offices for WMD appropriately without delay.</p> <p>Pre-conditions</p> <ol style="list-style-type: none"> 1. Waste Management Department is approved by the Government of Bangladesh. 2. Project concept, and roles and responsibilities of project stakeholders is shared and clearly understood among them. 	

<<Note>>

*1 This activity includes parts of Ward-based Approach 1 (Construction/renovation of ward SWM offices and strengthening if their functions)

*2 This activity includes parts of Ward-based Approach 2 (Provision of safety gears and workers' manual to improve working environment)

*3 This activity includes parts of Ward-based Approach 3 (Promotion of participatory SWM)

*4 This activity includes parts of Ward-based Approach 4 (Introduction of new collection system/improvement of existing collection system)

Annex 2: Dispatch of Japanese Experts

As of July 23, 2010

Project 1st FY

(As of

Expert Name	Expertise		Duration	Man-Month (Dhaka)
Naoki Hara	Chief advisor / Institutional setup	Planned		3.40
		Actual	Feb, 23 2007 - Jun, 4 2007	3.40
Mahmoud Riad	Deputy chief advisor / Solid waste management	Planned		1.30
		Actual	Apr, 2 2007 - May, 10 2007	1.30
Junko Okamoto	Community participation/ Communication	Planned		2.23
		Actual	Feb, 23 2007 - April, 30 2007	2.23
Hiroshi Abe	Final disposal management	Planned		0.70
		Actual	Apr, 5 2007 - Apr, 25 2007	0.70
Masahiro Saito	Training for O&M of final disposal site	Planned		2.00
		Actual	Mar, 25 2007 - May, 23 2007	2.00
Masaharu Takasugi	Waste collection vehicle and equipment maintenance	Planned		0.30
		Actual	Apr, 5 2007 - Apr, 13 2007	0.30
Noboru Osakabe	Financial management	Planned		0.50
		Actual	May, 1 2007 - May, 15 2007	0.50
Total		Planned		10.43
		Actual		10.43

*Planned MM and Cost is based on the Contract in the beginning of FY

Project 2nd FY

Expert Name	Expertise		Duration	Man-Month (Dhaka)
Naoki Hara	Chief advisor / Institutional setup	Planned		2.50
		Actual	Jul, 15 2007 - Aug, 17 2007	1.10
			Dec, 14 2007 - Dec, 25 2007	0.40
Mahmoud Riad	Deputy chief advisor / Solid waste management	Actual	Feb, 6 2008 - Mar, 18 2008	1.30
			Sep, 6 2007 - Oct, 30 2007	1.80
		Planned	Jan, 6 2008 - Feb, 14 2008	1.20
Junko Okamoto	Community participation/ Communication	Actual	Jul, 19 2007 - Aug, 17 2007	1.00
			Oct, 20 2007 - Nov, 18 2007	1.00
			Dec, 30 2007 - Jan, 16 2008	0.60
			Feb, 17 2008 - Mar, 14 2008	0.90
Akio Ishii	Collection and Transport	Planned		2.70
		Actual	Jul, 25 2007 - Sep, 22 2007	2.00
Hiroshi Abe	Final disposal management	Actual	Jan, 6 2008 - Mar, 5 2008	2.00
			Jul, 17 2008 - Aug, 15 2007	1.00
		Planned	Nov, 12 2007 - Dec, 1 2007	0.70
Masahiro Saito	Training for O&M of final disposal site	Planned		1.80
		Actual	Sep, 13 2007 - Oct, 9 2007	0.90
Masaharu Takasugi	Waste collection vehicle and equipment maintenance	Actual	Feb, 18 2008 - Mar, 15 2008	0.90
			Aug, 5 2007 - Sep, 3 2007	1.00
		Planned	Dec, 31 2007 - Feb, 22 2008	1.80
Noboru Osakabe	Financial management	Planned		1.60
		Actual	Sep, 2 2007 - Sep, 22 2007	0.70
Total		Actual	Dec, 10 2007 - Jan, 5 2008	0.90
		Planned		19.60
		Actual		21.20

*Planned MM and Cost is based on the Contract in the beginning of FY

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Project 3rd FY

Expert Name	Expertise		Duration		Man-Month (Onaka)
Naoki Hara	Chief advisor / Institutional setup	Planned	Jul, 10 2008	Aug, 15 2008	2.8
		Actual	Nov, 4 2008	Dec, 20 2008	1.2
Mahmoud Riad	Deputy chief advisor / Solid waste management	Planned			6.5
		Actual	May, 18 2008	Jul, 1 2008	1.5
		Actual	Aug, 17 2008	Nov, 14 2008	3.0
Junko Okamoto	Community participation / Communication	Planned			2.1
		Actual	Jan, 13 2009	Mar, 15 2009	2.7
		Actual	Jul, 3 2008	Jul, 29 2008	0.9
Akio Ishii	Collection and Transport/ Public Relations I	Actual	Oct, 11 2008	Nov, 10 2008	1.0
		Planned			0.8
		Actual	Jan, 22 2009	Feb, 13 2009	4.0
Hiroshi Abe	Final disposal management	Planned	Jul, 3 2008	Aug, 11 2008	1.0
		Actual	Oct, 11 2008	Nov, 24 2008	1.5
Ko Takeuchi	Community participation II/ Public relations II	Planned			0.0
		Actual	Jan, 30 2008	Mar, 15 2009	0.0
		Planned			3.8
Masahiro Saito	Training for O&M of final disposal site	Actual	Jul, 18 2008	Sep, 15 2008	2.0
		Planned	Dec, 16 2009	Feb, 13 2009	1.6
		Planned			4.0
Masaharu Takasugi	Waste collection vehicle and equipment maintenance	Actual	May, 18 2008	Jul, 18 2008	1.0
		Actual	Aug, 1 2008	Sep, 14 2008	1.5
		Actual	Jan, 29 2009	Mar, 14 2009	1.5
Noboru Osakabe	Financial management	Planned			1.8
		Actual	Oct, 11 2008	Nov, 6 2008	0.9
Total		Planned	Dec, 10 2008	Jan, 5 2009	0.9
		Actual			1.7
		Actual	Aug, 19 2008	Sep, 2 2008	0.5
		Actual	Feb, 13 2009	Mar, 18 2009	1.1
		Planned			27.10
		Actual			27.10

*Planned MM and Cost is based on the Contract in the beginning of FY

Project 4th FY

Expert Name	Expertise		Duration		Man-Month (Onaka)
Naoki Hara	Chief advisor / Institutional setup	Planned			4.70
		Actual	Jun, 2 2009	Jul, 4 2009	1.10
		Actual	Aug, 14 2009	Sep, 19 2009	1.20
		Actual	Nov, 15 2009	Dec, 25 2009	1.40
Mahmoud Riad	Deputy chief advisor / Solid waste management	Actual	Feb, 20 2010	Mar, 21 2010	1.00
		Planned			4.00
		Actual	Jul, 14 2009	Aug, 28 2009	1.50
Junko Okamoto	Community participation / Communication	Actual	Dec, 14 2009	Jan, 12 2010	1.00
		Planned			3.67
		Actual	Jun, 2 2009	Jun, 30 2009	1.00
Akio Ishii	Collection and Transport/ Public Relations I	Actual	Oct, 18 2009	Dec, 1 2009	1.50
		Planned	Feb, 4 2010	Mar, 11 2010	1.20
		Planned			4.00
Hiroshi Abe	Final disposal management	Actual	Jun, 18 2009	Jul, 22 2009	1.20
		Actual	Sep, 25 2009	Nov, 13 2009	1.70
		Actual	Jan, 5 2010	Mar, 21 2010	2.50
Ko Takeuchi	Community participation II/ Public relations II	Planned			0.00
		Actual			0.00
Masahiro Saito	Training for O&M of final disposal site	Planned			2.53
		Actual	Oct, 18 2009	Nov, 27 2009	1.40
		Actual	Dec, 25 2009	Jan, 28 2010	1.10
Masaharu Takasugi	Waste collection vehicle and equipment maintenance	Planned			3.00
		Actual	Jun, 2 2009	Jun, 27 2009	0.90
		Actual	Oct, 1 2008	Oct, 30 2009	1.00
Noboru Osakabe	Financial management	Actual	Feb, 16 2010	Mar, 21 2010	1.10
		Planned			0.90
		Actual	Jul, 18 2009	Aug, 13 2009	0.90
Takatoshi Arai	Collection Vehicle Operation Planning	Planned			1.70
		Actual	Aug, 3 2009	Aug, 26 2009	0.80
Total		Actual	Jan, 16 2010	Feb, 13 2010	1.00
		Planned			3.00
		Actual	Aug, 8 2009	Sep, 24 2009	1.50
		Actual	Nov, 7 2010	Dec, 22 2010	1.50
		Planned			27.50
		Actual			27.50

*Planned MM and Cost is based on the Contract in the beginning of FY

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Project 5th FY

Expert Name	Expenses		Duration	MM/Morath (Chaku)
Naoki Hara	Chief advisor / Institutional setup	Planned		4.93
		Actual	May, 18 2010 - Jun, 16 2010	1.00
Mahmoud Riad	Deputy chief advisor / Solid waste management	Planned		3.50
		Actual	Jun, 9 2010 - Jul, 7 2010	1.00
Junko Okamoto	Community participation / Communication	Planned		3.17
		Actual	May, 12 2010 - Jun, 20 2010	1.30
Akio Ishii	Collection and Transport/ Public Relations I	Planned		3.20
		Actual	May, 12 2010 - Jun, 19 2010	0.00
		Actual	Jul, 3 2010 - Jul, 20 2010	0.60
Hiroshi Abe	Final disposal management	Planned		0.00
		Actual		0.00
Ko Takeuchi	Community participation II/ Public relations II	Planned		2.97
		Actual	Jun, 15 2010 - Jun, 26 2010	0.40
Masahiro Saito	Training for O&M of final disposal site	Planned		3.10
		Actual	May, 21 2010 - Jun, 19 2010	1.00
Masaharu Takasugi	Waste collection vehicle and equipment maintenance	Planned		0.00
		Actual		0.00
Noboru Osakabe	Financial management	Planned		1.60
		Actual		0.00
Takatoshi Arai	Collection Vehicle Operation Planning	Planned		2.60
		Actual	Jun, 22 2010 - Aug, 4 2010	1.50
Total		Planned		25.07
		Actual		6.80

*Planned MM and Cost is based on the Contract in the beginning of FY

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Annex 3: Assignment of Bangladeshi Counterpart Personnel

1st FY

S. No.	Name	Designation	Remarks
Management and Coordination Group			
1	Commander Maksud Chowdhury	Chief Conservancy Officer, DCC	
2	Dr. Tariq Bin Yousuf	Executive Engineer, Engineering Division, Zone-5, DCC Deputed to Executive Engineer (Implementation & Monitoring), WMD, DCC	Also working for Landfill Group
3	Mohammad Towhid Siraj	Assistant Engineer, Environment Circle, DCC In Addition DUTP & WMD, DCC	Engaged in Landfill Group
4	Abul Hasnat Md. Ashrafal Alam	Assistant Engineer, Mechanical Division-1, DCC Deputed to Assistant Engineer, Waste Management Division, DCC	
5	Md. Faridul Islam	Sub-Assistant Engineer, Environment Circle, DCC In Addition DUTP & WMD, DCC	Engaged in Landfill Group
Community SWM Group			
1	Khandaker Milatul Islam	Manager (Transport), Transport Department, DCC	
2	Md. Mofzur Rahman Bhuyan	Conservancy Officer, Zone-6, DCC	
3	Md. Asaduzzman	Conservancy Supervising Inspector, Zone-9, Conservancy Dept., DCC	
4	Md. Asgar	Conservancy Supervising Inspector, Zone-3, Conservancy Dept., DCC	
5	Md. Mohsin	Conservancy Supervising Inspector, Zone-5, Conservancy Dept., DCC	
6	Md. Shahidul Islam	Conservancy Inspector, Zone-3, Conservancy Dept., DCC	
7	Md. Benazir Ahmed	Conservancy Inspector, Zone-8, Conservancy Dept., DCC	
8	Md. Shafiqul Islam	Conservancy Inspector, Zone-4, Conservancy Dept., DCC	
9	Abdul Moteleb	Conservancy Inspector, Zone-4, Conservancy Dept., DCC	
10	Md. Abu Taher	Conservancy Inspector, Zone-1, Conservancy Dept., DCC	
11	Md. Abu Zafar	Conservancy Inspector, Zone-5, Conservancy Dept., DCC	
12	Md. Abdul Awal Patowary	Conservancy Inspector, Zone-6, Conservancy Dept., DCC	
13	Md. Moniruzzaman Chowdhury	Conservancy Supervising Inspector, Zone-9, Conservancy Dept., DCC	
Collection and Transportation Group			
1	A S M Main Uddin	Executive Engineer, Environment Circle, DCC	
2	Rajib Khadem	Assistant Engineer, Zone-4, DCC In Addition Assistant Engineer WMD, DCC	Also working for Landfill Group
3	Md. Shafullah Siddique Bhuyan	Assistant Engineer, Zone-1 Deputed to Zone-5, DCC	
4	Md. Mahabub Alam	Assistant Manager, Saidabad Bus Terminal, DCC In Addition Assistant Engineer, WMD, DCC	Also working for Landfill Group
5	Maksud Alam	Asst. Manager, Mohakhali Bus Terminal, DCC	
6	A H M Abdulla Harun	Sub-Assistant Engineer, Environment Circle, DCC In Addition DUTP & WMD, DCC	Engaged in Landfill Group
7	Aminur Rahman Biswas	Conservancy Inspector, Zone-6, Conservancy Dept.,	

Sl. No.	Name	Description	
		DCC	
8	Golam Marshad	Asst. Transport Supervisor, Transport Department, DCC	
9	Faruque Ahmed	Account Assistant, Transport Supervisor In charge, Transport Dept. DCC.	
10	Mamun Uddin Ahmed	Asst. Transport Supervisor, Transport Department, DCC	
11	Siddiqur Rahman	Inspector, Mechanical Division-1, DCC	
12	Habib Mohammed Al-Ahasan	Conservancy Inspector, Zone-4, Conservancy Dept., DCC	
13	Dilbahar Ahmed	Research Officer, Urban Planning Department, DCC	
14	Kazi Hasiba Jahan	Geographer, Urban Planning Department, DCC	
15	Ekramul Haque Khandker	Forman, Mech.-1, DCC	
16	Md. Nuruzzaman	Forman, Mech.-2, DCC	
17	Rakib Ahmed	Sub-Asst. Engineer (Mech. & Elect.), Store & Purchase Department, DCC	
Landfill Management Group			
1	Dr. Tariq Bin Yousuf	Project Director, Landfill Improvement Project, Waste Management Division, DCC	
2	Md. Mahabub Alam	Assistant Manager, Saidabad Bus Terminal, DCC	
3	Rajib Khadem	Assistant Engineer, Zone-4, DCC In Addition Landfill Management	
4	Md. Abu Tahir	Conservancy Inspector, Zone-1, Conservancy Dept., DCC	
5	Sheik Aminul Basher	Conservancy Inspector, Zone-1, Conservancy Dept., DCC	
6	Md. Asadul Islam	Conservancy Inspector, Zone-3, Conservancy Dept., DCC	
7	Md. Rezaul Karim	Conservancy Inspector, Zone-4, Conservancy Dept., DCC	
8	Md. Gaddafee Hossain	Conservancy Inspector, Zone-9, Conservancy Dept., DCC	
9	Md. Masud Ahmed	Conservancy Inspector, Zone-9 Conservancy Dept., DCC	
10	Md. Asif Hossain	Conservancy Inspector, Zone-10 Conservancy Dept., DCC	
11	Md. Rafuquul Islam Chow	Conservancy Inspector, Nagar Bhaban, Conservancy Dept., DCC	
12	Md. Abdul Aziz	Computer Operator, DUTP, DCC	
13	Rokeya Akther	Computer Operator, DUTP, DCC	
14	Md. Azim Ali Khan	Computer Operator, DUTP, DCC	
15	Md. Rabiul Alam Chowdhury	Office Assistant, DUTP, DCC	
16	Md. Afzalul Azam Reza	Assistant Social Welfare Officer in Addition Administrative Officer, WMD, DCC	
17	Atiqur Rahman	Lineman, Electrical, Zone-5, DCC	
18	Md. Alamgir Hossain	Mechanics, Mechanical Division-2, DCC	
19	Motiuur Islam	Heavy Equipment Operator, Mech. Division-2, DCC	
20	Royal Ahmed	Heavy Equipment Operator, Mech. Division-2, DCC	
21	Salim Khan	Heavy Equipment Operator, Mech. Division-2, DCC	
22	Forhad Hossain	Heavy Equipment Operator, Mech. Division-2, DCC	
23	Rafiquul Islam-2	Heavy Equipment Operator, Mech. Division-2, DCC	
24	Ranu Miah	Pay-Loader-Driver, Mech. Division-2, DCC	

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Sl. No.	Name	Designation	Remarks
25	Abdur Rashid	Dumper Driver, Mech. Divi.-2, DCC	
26	Julfiquir Ali	Driver, Mech. Division-2, DCC	
27	Shamsur Rahman	Driver, Mech. Division-2, DCC	
28	Abul Khair	Machine Operator, Mech. Division-2, DCC	
29	Shafi Miah	Machine Operator, Mech. Division-2, DCC	
30	Dewan Nazrul Islam	Machine Operator, Mech. Division-2, DCC	
31	Julhas Uddin	Machine Operator, Mech. Division-2, DCC	
32	Delware Hossain	Machine Operator, Mech. Division-2, DCC	
33	Kazi Zafar Ahmed	Machine Operator, Mech. Division-2, DCC	
34	Kabir Ahmed	Machine Operator, Mech. Division-2, DCC	
35	Md. Rafiq-1	Machine Operator, Mech. Division-2, DCC	
36	Sultan Miah	Machine Operator, Mech. Division-2, DCC	
37	Chan Miah	Machine Operator, Mech. Division-2, DCC	
38	Jakir Hossain	Machine Operator, Mech. Division-2, DCC	
39	Jashim Uddin	Machine Operator, Mech. Division-2, DCC	
40	Md. Nur Shamim	Mechanics, Transport Department, DCC.	
41	Md. Shajahan	Asst. Mechanics, Transport Department, DCC.	
42	Md. Robin	Truck Kully, Conservancy Department, DCC	
43	A K Changis	Truck Kully, Conservancy Department, DCC	
44	Md. Abul Hossain	Truck Kully, Conservancy Department, DCC	
45	Gonesh Das	Truck Kully, Conservancy Department, DCC	
46	Probir Kumar Saha	Truck Kully, Conservancy Department, DCC	
47	MA Shahed	Truck Kully, Conservancy Department, DCC	
48	Din Mohammad	Guard (Ward), DCC	
49	Md. Sohel Rana	Guard (Ward), DCC	
50	Md. Sheik Farid	Guard (Ward), DCC	
51	Md. Aktaruzzaman	Guard (Ward), DCC	
52	Md. Golam Mostafa	Guard (Ward), DCC	
Financial Management Group			
1	Bellal Hossain Mia	Deputy Chief Accounts Officer, Accounts Department, DCC	
2	A.K.M. Mahfuzur Rahman	Assistant Secretary (Administration), DCC	
3	Md. Samir Uddin	UDA cum Accountant, Transport Dept., DCC	
4	Abdul Mallak	Assistant Store & Purchase Officer (Purchase), Store & Purchase Dept. DCC	
5	Md. Abul Kalam	UDA cum Accountant, Mechanical Division-2, DCC	
6	Md. Abdus Sattar Sharker	LDA cum Typist, CCO Office, Conservancy Dept. DCC	
7	Afzalul Azam Reza	Assistant Social Welfare Officer in Addition Administrative Officer, WMD, DCC	
8	Habib Mohammed AH-Hasan	Conservancy Inspector, Zone-4, Conservancy Dept, Ward-, DCC	

2nd FY

Sl. No.	Name	Designation	Remarks
Management and Coordination Group			
1	Commander Maksud R. Chowdhury	Chief Conservancy Officer	Project Manager and Group Leader, (part time, in parallel with conservancy control, beautification program, etc.)

Sl. No.	Name	Designation	Remarks
2	Shehab Ullah	Superintending Engineer, Waste Management Division, and Environmental Circle	Project Coordinator and Deputy Group Leader
3	Dr. Tariq Bin Yousuf	Executive Engineer, Engineering Division, Zone-5, Deputed to Executive Engineer (Implementation & Monitoring), Waste Management Division	Also working as Group Leader of Landfill Management Group (full time)
4	Abul Hasnat Md. Ashraful Alam	Assistant Engineer, Mechanical Division-1, Deputed to Assistant Engineer, Waste Management Division	Also working as Group Leader of Collection and Transportation Group (full time)
Community SWM Group			
1	Dewan Md. Shah Alam	Deputy Chief Conservancy Officer	Group Leader (part time, in parallel with conservancy control etc.)
2	Md. Asaduzzman	Conservancy Supervising Inspector, Zone-9	Deputy Group Leader Leader of sub-group (Public Awareness and Environmental Education)
3	Md. Shafiqul Islam	Conservancy Inspector (Ward 33), Zone-4	Leader of Sub-group (Primary Collection) (part time, in parallel with conservancy inspection)
4	Abdul Motalab	Conservancy Inspector (Ward 36), Zone-4	Leader of Sub-group (Ward SWM) (part time, in parallel with conservancy inspection)
C/P working continuously			
5	Md. Mofizur Rahman Bhuyan	Conservancy Officer, Zone-6	part time, in parallel with conservancy inspection and supervising
6	Md. Asgar	Conservancy Supervising Inspector, Zone-3	
7	Md. Mohashin	Conservancy Supervising Inspector, Zone-5	
8	Md. Shahidul Islam	Conservancy Inspector (Ward 65), Zone-3	
9	Md. Benazir Ahmed	Conservancy Inspector (Ward 6), Zone-8	
10	Md. Abu Taher	Conservancy Inspector (Ward 76), Zone-1	
Newly added upon the request by the Group in March 2007 and continuously working			
11	Mamunur Rahman	Conservancy Inspector (Ward 15), Zone-8, Conservancy Dept, DCC	part time, in parallel with conservancy inspection
12	Rakib Hasan	Conservancy Inspector (Ward 12), Zone-7	
13	Md. Rabiullah	Conservancy Inspector (Ward 86), Zone-1	
14	Mohammad Farhad Hossain	Conservancy Inspector (Ward 17), Zone-9	
15	Md. Shah Kamal	Conservancy Inspector (Ward 63), Zone-3	
16	Md. Nazib Khan	Conservancy Inspector (Ward 58), Zone-3	
17	Md. Kamrul Hassan	Conservancy Inspector (Ward 69), Zone-2	
Newly appointed by CCO (13 persons)			
18	Md. Iqbal Karim	Conservancy Supervising Inspector, Zone 6	part time, in parallel with conservancy supervising
19	Md. Monowar Hossain	Conservancy Supervising Inspector, Zone 1	
20	Shahab Uddin	Conservancy Supervising Inspector, Zone 10	
21	Md. Wahiduzzaman Chowdhury	Conservancy Inspector, Zone 5	part time, in parallel with conservancy inspection
22	Radha Gobindo Biswas	Conservancy Inspector, Zone 7	
23	Md. Abu Yunus	Conservancy Inspector, Zone 8	part time, in parallel with conservancy inspection
24	Bikash Chandro Das	Conservancy Inspector, Zone 1	
25	Md. Mowazzem Hossain	Conservancy Inspector, Zone 1	
26	Md. Anwer Hossain	Conservancy Inspector, Zone 1	

No.	Name	Designation	
27	Md. Hanif Uddin	Conservancy Inspector, Zone 1	
28	Rashedur Rahman Rassel	Conservancy Inspector, Zone 5	
29	Md. Masum Hossain	Conservancy Inspector, Zone 8	
30	Md. Kamrul Hasan	Conservancy Inspector, Zone 2	
Collection and Transportation Group			
1	Abul Hasnat Md. Ashrafal Alam	Assistant Engineer, Mechanical Division-1, Engineering Department, Deputed to Assistant Engineer, Waste Management Division	Group Leader (full time)
2	Maruf Hassan	Transport Manager, Transport Dept.	Deputy Group Leader (Vehicle Operation), part time
3	Md. Siddiqur Rahman	Assistant Engineer (in charge) Mechanical Div. Engineering Dept.	Deputy Group Leader (Vehicle Maintenance), part time
4	Rajib Khadem	Assistant Engineer, Zone-4, DCC In Addition Assistant Engineer, Waste Management Division	Also working for Landfill Group (limited time for Collection and Transportation Group)
5	Md. Shafiqullah Siddique Bhuyian	Assistant Engineer, Zone-1 Deputed to Zone-5	part time
6	Md. Mahaboob Alam	Assistant Manager, Saidabad Bus Terminal, In Addition Assistant Engineer, Waste Management Division	Also working for Landfill Group (limited time for Collection and Transportation Group)
7	Maksud Alam	Asst. Manager, Mohakhali Bus Terminal, Transport Department	
8	Md. Aminur Rahman Biswas	Conservancy Inspector, Zone-6	part time
9	Golam Marshad	Asst. Transport Supervisor, Transport Department	
10	Faruque Ahmed	Account Assistant, Transport Supervisor in charge, Transport Department	
11	Mamun Uddin Ahmed	Asst. Transport Supervisor, Transport Department	
12	Siddiqur Rahman	Inspector, Mechanical Division-1, Engineering Dept.	
11	Habib Mohammed Al-Ahasan	Conservancy Inspector, Zone-4	
12	Dilbahar Ahmed	Research Officer, Urban Planning Department	
13	Kazi Hasiba Jahan	Geographer, Urban Planning Department, Engineering Department	part time
14	Ekrumul Haque Khandker	Forman, Mech.-1, Engineering Department	
15	Md. Nuruzzaman	Forman, Mech.-2, Engineering Department	
16	Rakib Ahmed	Sub-Asst. Engineer (Mech. & Elect.), Store & Purchase Department	
Landfill Management Group			
1	Dr. Tariq Bin Yousuf	Executive Engineer, Engineering Division, Zone-5, Deputed to Executive Engineer (Implementation & Monitoring), Waste Management Division	Group Leader, full time, working as Deputy Group Leader for Management and Coordination Group
2	Md. Mahaboob Alam	Assistant Manager, Waste Management Division	Deputy Group Leader (Operation), full time, Also working for Collection/Transport Group
3	Mohammad Towhid Siraj	Assistant Engineer, Environment Circle, In Addition DUTP & Waste Management Division	full time
4	Rajib Khadem	Assistant Engineer, Zone-4, In Addition Landfill Management	Also working for Collection/Transport Group, full time
5	A H M Abdulla Harun	Sub-Assistant Engineer, Environment Circle, In Addition DUTP & Waste Management Division	full time

	Name	Designation	
6	Md. Faridul Islam	Sub-Assistant Engineer, Environment Circle, In Addition DUTP & Waste Management Division	full time
7	Md. Abu Tahir	Conservancy Inspector, Zone-1	full time (4hours for half shift)
8	Sheik Aminul Basher	Conservancy Inspector, Zone-1	
9	Md. Asadul Islam	Conservancy Inspector, Zone-3	
10	Md. Rezaul Karim	Conservancy Inspector, Zone-4	
11	Md. Gaddafee Hossain	Conservancy Inspector, Zone-9	
12	Md. Masud Ahmed	Conservancy Inspector, Zone-9	
13	Md. Asif Hossain	Conservancy Inspector, Zone-10	
14	Md. Rafuqul Islam Chow	Conservancy Inspector, Nagar Bhaban	
15	Md. Abdul Aziz	Computer Operator, DUTP	full time
16	Rokeya Akther	Computer Operator, DUTP	full time
17	Md. Rabiul Alam Chowdhury	Office Assistant, DUTP,	full time
18	Atiqur Rahman	Lineman, Electrical, Zone-5	part time
19	Md. Alamgir Hossain	Mechanics, Mechanical Division-2, Engineering Dept.	
20	Motiur Islam	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
21	Royal Ahmed	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
22	Salim Khan	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
23	Forhad Hossain	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
24	Rafiqul Islam-2	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
25	Ranu Miah	Pay-Loader-Driver, Mech. Division-2, Engineering Dept.	
26	Abdur Rashid	Dumper Driver, Mech. Division-2, Engineering Dept.	
27	Julfiquir Ali	Driver, Mech. Division-2, Engineering Dept.	
28	Shamsur Rahman	Driver, Mech. Division-2, Engineering Dept.	
29	Abul Khair	Machine Operator, Mech. Division-2, Engineering Dept.	full time
30	Shafi Miah	Machine Operator, Mech. Division-2, Engineering Dept.	
31	Dewan Nazrul Islam	Machine Operator, Mech. Division-2, Engineering Dept.	
32	Julhas Uddin	Machine Operator, Mech. Division-2, Engineering Dept.	
33	Delware Hossain	Machine Operator, Mech. Division-2, Engineering Dept.	
34	Kazi Zafar Ahmed	Machine Operator, Mech. Division-2, Engineering Dept.	
35	Kabir Ahmed	Machine Operator, Mech. Division-2, Engineering Dept.	
36	Md. Rafiq-1	Machine Operator, Mech. Division-2, Engineering Dept.	
37	Sultan Miah	Machine Operator, Mech. Division-2, Engineering Dept.	
30	Chan Miah	Machine Operator, Mech. Division-2, Engineering Dept.	
39	Jakir Hossain	Machine Operator, Mech. Division-2, Engineering Dept.	
40	Jashim Uddin	Machine Operator, Mech. Division-2, Engineering Dept.	
41	Md. Nur Shamim	Mechanics, Transport Department.	full time
42	Md. Shajahan	Asst. Mechanics, Transport Department	
43	Md. Robin	Truck Kully, Conservancy Department	full time (car wash 8-hours shift)
44	A K Changis	Truck Kully, Conservancy Department	full time (car wash 8-hour shift)

Sl. No.	Name	Designation	Remarks
45	Md. Abul Hossain	Truck Kully, Conservancy Department	
46	Gonesh Das	Truck Kully, Conservancy Department	
47	Probir Kumar Saha	Truck Kully, Conservancy Department	
48	MA Shahed	Truck Kully, Conservancy Department	
49	Din Mohammad	Guard (Ward)	
50	Md. Sohel Rana	Guard (Ward)	
51	Md. Sheikh Farid	Guard (Ward)	
52	Md. Aktaruzzaman	Guard (Ward)	
53	Md. Golam Mostafa	Guard (Ward)	full time (8-hours shift)
Financial Management Group			
1	Bellal Hossain Mia	Deputy Chief Accounts Officer, Accounts Department	Group Leader (part time)
2	Md. Mizanur Rahman	Internal Audit Department	Deputy Group Leader, almost full time
3	A.K.M. Mahfuzur Rahman	Assistant Secretary (Administration)	part time
4	Md. Samir Uddin	UDA cum Accountant, Transport Dept.	part time
5	Abdul Malak	Assistant Store & Purchase Officer (Purchase), Store & Purchase Dept.	part time
6	Md. Abul Kalam	UDA cum Accountant, Mechanical Division-2, Engineering Dept.	part time
7	Md. Abdus Sattar Sharker	LDA cum Typist, CCO Office, Conservancy Dept.	part time
8	Afzalul Azam Reza	Assistant Social Welfare Officer in Addition Administrative Officer, Waste Management Division	part time
9	Habib Mohammed Al-Ahasan	Conservancy Inspector, Zone-4	part time

3rd FY

Sl. No.	Name	Designation	Remarks
Management and Coordination Group			
1	Commander Maksud R. Chowdhury	Chief Conservancy Officer	Project Manager and Group Leader, (part time, in parallel with conservancy control, beautification program, etc.)
2	Dr. Tariq Bin Yousuf	Executive Engineer, Engineering Division, Zone-5, Deputed to Executive Engineer (Implementation & Monitoring), Waste Management Division	Deputy Group Leader Also working as Group Leader of Landfill Management Group (full time)
3	Abul Hasnat Md. Ashrafal Alam	Assistant Engineer, Mechanical Division-1, Deputed to Assistant Engineer, Waste Management Division	Also working as Group Leader of Collection and Transportation Group (full time)
Community SWM Group			
1	Dewan Md. Shah Alam	Deputy Chief Conservancy Officer	Group Leader (part time, in parallel with conservancy control etc.)
2	Md. Asaduzzman	Conservancy Supervising Inspector, Zone-9	Deputy Group Leader Leader of sub-group (Public Awareness and Environmental Education)
3	Md. Shafiqul Islam	Conservancy Inspector (Ward 33), Zone-4	Leader of Sub-group (Primary Collection) (part time, in parallel with conservancy inspection)
4	Abdul Motaleb	Conservancy Inspector (Ward 36), Zone-4	Leader of Sub-group (Ward SWM) (part time, in parallel with conservancy inspection)
C/P working continuously			
5	Md. Mofizur Rahman Bhuyan	Conservancy Officer, Zone-6	part time, in parallel with conservancy inspection and supervising
6	Md. Asgar	Conservancy Supervising Inspector, Zone-3	

Sl. No.	Name	Designation	
7	Md. Mohashin	Conservancy Supervising Inspector, Zone-5	
8	Md. Shahidul Islam	Conservancy Inspector (Ward 65), Zone-3	
9	Md. Benazir Ahmed	Conservancy Inspector (Ward 6), Zone-8	
10	Md. Abu Taher	Conservancy Inspector (Ward 76), Zone-1	
Newly added upon the request by the Group in March 2007 and continuously working			
11	Mamunur Rahman	Conservancy Inspector (Ward 15), Zone-8, Conservancy Dept., DCC	part time, in parallel with conservancy inspection
12	Rakib Hasan	Conservancy Inspector (Ward 12), Zone-7	
13	Md. Rabiullah	Conservancy Inspector (Ward 86), Zone-1	
14	Mohammad Farhad Hossain	Conservancy Inspector (Ward 17), Zone-9	part time, in parallel with conservancy inspection
15	Md. Shah Kamal	Conservancy Inspector (Ward 63), Zone-3	
16	Md. Nazib Khan	Conservancy Inspector (Ward 58), Zone-3	
17	Md. Kamrul Hassan	Conservancy Inspector (Ward 69), Zone-2	
Newly appointed by CCO (19 persons)			
18	Md. Iqbal Karim	Conservancy Supervising Inspector, Zone 6	part time, in parallel with conservancy supervising
19	Md. Monwer Hossain	Conservancy Supervising Inspector, Zone 1	
20	Shahab Uddin	Conservancy Supervising Inspector, Zone 10	
21	Md. Wahiduzzaman Chowdhury	Conservancy Inspector, Zone 5	part time, in parallel with conservancy inspection
22	Radha Gobindo Biswas	Conservancy Inspector, Zone 7	
23	Md. Abu Yusuf	Conservancy Inspector, Zone 8	
24	Bikash Chandro Das	Conservancy Inspector, Zone 1	
25	Md. Mowazzem Hossain	Conservancy Inspector, Zone 1	
26	Md. Anwer Hossain	Conservancy Inspector, Zone 1	
27	Md. Hanif Uddin	Conservancy Inspector, Zone 1	
28	Rashedur Rahman Rassel	Conservancy Inspector, Zone 5	
29	Md. Masum Hossain	Conservancy Inspector, Zone 8	
30	Md. Kamrul Hasan	Conservancy Inspector, Zone 2	
31	Mohammad Shahjahan	Conservancy Inspector, Ward 50, Zone 5 (letter 115/CD, dated 28 th Feb., 2008)	part time, in parallel with conservancy inspection
32	Md. Mofizur Rahman Patwary	Conservancy Inspector, Ward 75, Zone 1 (letter 36/CD, dated 7 th July, 2008)	
33	M. A. Kuddus	Asst. CWMO, WMD (letter 125/CD, dated 17 th July, 2008)	
34	Abdul Hassan Chowdhury	Asst. CWMO, WMD (letter 125/CD, dated 17 th July, 2008)	
35	Md. Anisul Huq	Conservancy Officer (in charge), Zone 7 (letter 125/CD, dated 17 th July, 2008)	
36	Bashudeb Sarkar	Conservancy Supervising Inspector, Zone 7 (letter 125/CD, dated 17 th July, 2008)	
Collection and Transportation Group			
1	Abul Hasnat Md. Ashrafal Alam	Assistant Engineer, Mechanical Division-1, Engineering Department, Deputed to Assistant Engineer, Waste Management Division	Group Leader (full time)
2	Maruf Hassan	Transport Manager, Transport Dept.	Deputy Group Leader (Vehicle Operation), part time

No.	Name	Description	
3	Md. Siddiqur Rahman	Assistant Engineer (in charge) Mechanical Div. Engineering Dept.	Deputy Group Leader (Vehicle Maintenance), part time
4	Rajib Khadem	Assistant Engineer, Zone-4, DCC In Addition Assistant Engineer, Waste Management Division	Also working for Landfill Group (limited time for Collection and Transportation Group)
5	Md. Shafiullah Siddique Bhuyan	Assistant Engineer, Zone-1 Deputed to Zone-5	part time
6	Md. Mahaboob Alam	Assistant Manager, Saidabad Bus Terminal, In Addition Assistant Engineer, Waste Management Division	Also working for Landfill Group (limited time for Collection and Transportation Group)
7	Maksud Alam	Asst. Manager, Mohakhali Bus Terminal, Transport Department	part time
8	Md. Aminur Rahman Biswas	Conservancy Inspector, Zone-6	
9	Golam Marshad	Asst. Transport Supervisor, Transport Department	
10	Faruque Ahmed	Account Assistant, Transport Supervisor in charge, Transport Department	
11	Mamun Uddin Ahmed	Asst. Transport Supervisor, Transport Department	part time
12	Siddiqur Rahman	Inspector, Mechanical Division-1, Engineering Dept.	
11	Habib Mohammed Al-Ahasan	Conservancy Inspector, Zone-4	
12	Dilbahar Ahmed	Research Officer, Urban Planning Department	
13	Kazi Hasiba Jahan	Geographer, Urban Planning Department, Engineering Department	
14	Ekramul Haque Khandker	Forman, Mech.-1, Engineering Department	
15	Md. Nuruzzaman	Forman, Mech.-2, Engineering Department	
16	Rakib Ahmed	Sub-Asst. Engineer (Mech. & Elect.), Store & Purchase Department	
Landfill Management Group			
1	Dr. Tariq Bin Yousuf	Executive Engineer, Engineering Division, Zone-5, Deputed to Executive Engineer (Implementation & Monitoring), Waste Management Division	Group Leader, full time, working as Deputy Group Leader for Management and Coordination Group
2	Md. Mahaboob Alam	Assistant Manager, Waste Management Division	Deputy Group Leader (Operation), full time, Also working for Collection/Transport Group
3	Mohammad Towhid Siraj	Assistant Engineer, Environment Circle, In Addition DUTP & Waste Management Division	full time
4	Rajib Khadem	Assistant Engineer, Zone-4, In Addition Landfill Management	Also working for Collection/Transport Group, full time
5	A H M Abdulla Harun	Sub-Assistant Engineer, Environment Circle, In Addition DUTP & Waste Management Division	full time
6	Md. Faridul Islam	Sub-Assistant Engineer, Environment Circle, In Addition DUTP & Waste Management Division	
7	Md. Abu Tahir	Conservancy Inspector, Zone-1	full time (4 hours for half shift)
8	Sheik Aminul Basher	Conservancy Inspector, Zone-1	full time (4 hours for half shift)
9	Md. Asadul Islam	Conservancy Inspector, Zone-3	
10	Md. Rezaul Karim	Conservancy Inspector, Zone-4	
11	Md. Gaddafee Hossain	Conservancy Inspector, Zone-9	

Sl. No.	Name		
12	Md. Masud Ahmed	Conservancy Inspector, Zone-9	
13	Md. Asif Hossain	Conservancy Inspector, Zone-10	
14	Md. Rafuqul Islam Chow	Conservancy Inspector, Nagar Bhaban	
15	Md. Abdul Aziz	Computer Operator, DUTP	full time
16	Rokeya Akther	Computer Operator, DUTP	
17	Md. Rabiul Alam Chowdhury	Office Assistant, DUTP,	
18	Atiqur Rahman	Lineman, Electrical, Zone-5	part time
19	Md. Alamgir Hossain	Mechanics, Mechanical Division-2, Engineering Dept.	part time
20	Motiur Islam	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	full time
21	Royal Ahmed	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
22	Salim Khan	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
23	Forhad Hossain	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
24	Rafiqul Islam-2	Heavy Equipment Operator, Mech. Division-2, Engineering Dept.	
25	Ranu Miah	Pay-Loader-Driver, Mech. Division-2, Engineering Dept.	
26	Abdur Rashid	Dumper Driver, Mech. Division-2, Engineering Dept.	
27	Julfiquir Ali	Driver, Mech. Division-2, Engineering Dept.	
28	Shamsur Rahman	Driver, Mech. Division-2, Engineering Dept.	
29	Abul Khair	Machine Operator, Mech. Division-2, Engineering Dept.	
30	Shafi Miah	Machine Operator, Mech. Division-2, Engineering Dept.	
31	Dewan Nazrul Islam	Machine Operator, Mech. Division-2, Engineering Dept.	
32	Julhas Uddin	Machine Operator, Mech. Division-2, Engineering Dept.	
33	Delware Hossain	Machine Operator, Mech. Division-2, Engineering Dept.	
34	Kazi Zafar Ahmed	Machine Operator, Mech. Division-2, Engineering Dept.	
35	Kabir Ahmed	Machine Operator, Mech. Division-2, Engineering Dept.	
36	Md. Rafiq-1	Machine Operator, Mech. Division-2, Engineering Dept.	
37	Sultan Miah	Machine Operator, Mech. Division-2, Engineering Dept.	
30	Chan Miah	Machine Operator, Mech. Division-2, Engineering Dept.	
39	Jakir Hossain	Machine Operator, Mech. Division-2, Engineering Dept.	
40	Jashim Uddin	Machine Operator, Mech. Division-2, Engineering Dept.	

Sl. No.	Name	Designation	Remarks
41	Md. Nur Shamim	Mechanics, Transport Department.	full time
42	Md. Shajahan	Asst. Mechanics, Transport Department	
43	Md. Robin	Truck Kully, Conservancy Department	full time (car wash 8-hours shift)
44	A K Changis	Truck Kully, Conservancy Department	
45	Md. Abul Hossain	Truck Kully, Conservancy Department	
46	Gonesh Das	Truck Kully, Conservancy Department	
47	Probir Kumar Saha	Truck Kully, Conservancy Department	
48	MA Shahed	Truck Kully, Conservancy Department	
49	Din Mohammad	Guard (Ward)	full time (8-hours shift)
50	Md. Sohel Rana	Guard (Ward)	
51	Md. Sheik Farid	Guard (Ward)	
52	Md. Aktaruzzaman	Guard (Ward)	
53	Md. Golam Mostafa	Guard (Ward)	
Financial Management Group			
1	Bellal Hossain Mia	Deputy Chief Accounts Officer, Accounts Department	Group Leader (part time)
2	Md. Mizanur Rahman	Internal Audit Department	Deputy Group Leader, almost full time
3	A.K.M. Mahfuzur Rahman	Assistant Secretary (Administration)	part time
4	Md. Samir Uddin	UDA cum Accountant, Transport Dept.	
5	Abdul Malak	Assistant Store & Purchase Officer (Purchase), Store & Purchase Dept.	
6	Md. Abul Kalam	UDA cum Accountant, Mechanical Division-2, Engineering Dept.	
7	Md. Abdus Sattar Sharker	LDA cum Typist, CCO Office, Conservancy Dept.	
8	Afzalul Azam Reza	Assistant Social Welfare Officer in Addition Administrative Officer, Waste Management Division	
9	Habib Mohammed Al-Ahasan	Conservancy Inspector, Zone-4	

4th FY

Sl. No.	Name	Designation	Remarks
Management and Coordination Group			
1	Captain Bipon Kumar Saha	Chief Waste Management Officer (CWMO), WMD	Project Manager and Group Leader, (part time, in parallel with conservancy control, beautification program, etc.)
2	Dr. Tariq Bin Yousuf	Executive Engineer, Engineering Division, Zone-5, Deputed to Project Director of Landfill Improvement Project, WMD	Deputy Group Leader Also working as Group Leader of Landfill Management Group (full time)
3	Abul Hasnat Md. Ashrafal Alam	Executive Engineer (Collection and Transport), WMD	Also working as Group Leader of Collection and Transportation Group (full time)
Community SWM Group			
1	Dewan Md. Shah Alam	Additional CWMO, WMD	Group Leader (part time, in parallel with conservancy control etc.)
2	Md. Asaduzzman	Assistant CWMO (Planning), WMD	Deputy Group Leader Leader of sub-group (Public Awareness and Environmental Education)
3	Md. Shafiqul Islam	Waste Management Officer (Community), WMD	Leader of Sub-group (Primary Collection) (part time, in parallel with conservancy inspection)

Sl. No.	Name	Designation	
4	Abdul Motalab	Conservancy Inspector (Ward 36), Zone-4	Leader of Sub-group (Ward SWM) (part time, in parallel with conservancy inspection)
C/P working continuously			
5	Md. Mofizur Rahman Bhuyan	Conservancy Officer, Zone-6	part time, in parallel with conservancy inspection and supervising
6	Md. Asgar	Conservancy Supervising Inspector, Zone-3	
7	Md. Mohashin	Conservancy Supervising Inspector, Zone-5	
8	Md. Shahidul Islam	Conservancy Inspector (Ward 65), Zone-3	
9	Md. Benazir Ahmed	Conservancy Inspector (Ward 6), Zone-8	
10	Md. Abu Taher	Conservancy Inspector (Ward 76), Zone-1	
Newly added upon the request by the Group in March 2007 and continuously working			
11	Mamunur Rahman	Conservancy Inspector (Ward 15), Zone-8, Conservancy Dept., DCC	part time, in parallel with conservancy inspection
12	Rakib Hasan	Conservancy Inspector (Ward 12), Zone-7	part time, in parallel with conservancy inspection
13	Md. Rabiullah	Conservancy Inspector (Ward 86), Zone-1	
14	Mohammad Farhad Hossain	Conservancy Inspector (Ward 17), Zone-9	
15	Md. Shah Kamal	Conservancy Inspector (Ward 63), Zone-3	
16	Md. Nazib Khan	Conservancy Inspector (Ward 58), Zone-3	
17	Md. Kamrul Hassan	Conservancy Inspector (Ward 69), Zone-2	
Newly appointed by CCO (19 persons)			
18	Md. Iqbal Karim	Conservancy Supervising Inspector, Zone 6	part time, in parallel with conservancy supervising
19	Md. Monwer Hossain	Conservancy Supervising Inspector, Zone 1	
20	Shahab Uddin	Conservancy Supervising Inspector, Zone 10	
21	Md. Wahiduzzaman Chowdhury	Conservancy Inspector, Zone 5	part time, in parallel with conservancy inspection
22	Radha Gobindo Biswas	Conservancy Inspector, Zone 7	part time, in parallel with conservancy inspection
23	Md. Abu Yusuf	Conservancy Inspector, Zone 8	
24	Bikash Chandro Das	Conservancy Inspector, Zone 1	
25	Md. Mowazzem Hossain	Conservancy Inspector, Zone 1	
26	Md. Anwer Hossain	Conservancy Inspector, Zone 1	
27	Md. Hanif Uddin	Conservancy Inspector, Zone 1	
28	Rashedur Rahman Rassel	Conservancy Inspector, Zone 5	
29	Md. Masum Hossain	Conservancy Inspector, Zone 8	
30	Md. Kamrul Hasan	Conservancy Inspector, Zone 2	
31	Mohammad Shahjahan	Conservancy Inspector, Ward 50, Zone 5 (letter 115/CD, dated 28 th Feb., 2008)	
32	Md. Mofizur Rahman Patwary	Conservancy Inspector, Ward 75, Zone 1 (letter 36/CD, dated 7 th July, 2008)	
33	M. A. Kuddus	Asst. CWMO, WMD (letter 125/CD, dated 17 th July, 2008)	
34	Abdul Hassan Chowdhury	Asst. CWMO, WMD (letter 125/CD, dated 17 th July, 2008)	
35	Md. Anisul Huq	Conservancy Officer (in charge), Zone 7 (letter 125/CD, dated 17 th July, 2008)	
36	Bashudeb Sarkar	Conservancy Supervising Inspector, Zone 7	

Sl. No.	Name		
		(letter 125/CD, dated 17 th July, 2008)	
CI newly transferred to WBA target ward (Replacement of previous CI) (1 person)			
37	Jahirul Islam	Conservancy Supervising Inspector, Zone 6	part time, in parallel with conservancy supervising
Collection and Transportation Group			
1	Abul Hasnat Md. Ashrafal Alam	Executive Engineer (Collection and Transportation, Mechanical Division-1, Engineering Department, Deputed to Assistant Engineer, Waste Management Division)	Group Leader (full time)
2	Maruf Hassan	Transport Manager, Transport Dept.	Deputy Group Leader (Vehicle Operation), part time
3	Md. Siddiqur Rahman	Assistant Engineer (in charge) Mechanical Div. Engineering Dept.	Deputy Group Leader (Vehicle Maintenance), part time
4	Rajib Khadem	Assistant Engineer, Zone-4, DCC In Addition Assistant Engineer, Waste Management Division	Also working for Landfill Group (limited time for Collection and Transportation Group)
5	Md. Shafiqullah Siddique Bhuyian	Assistant Engineer, Zone-1 Deputed to Zone-5	part time
6	Md. Mahaboob Alam	Assistant Manager, Saidabad Bus Terminal, In Addition Assistant Engineer, Waste Management Division	Also working for Landfill Group (limited time for Collection and Transportation Group)
7	Maksud Alam	Asst. Manager, Mohakhali Bus Terminal, Transport Department	part time
8	Md. Aminur Rahman Biswas	Conservancy Inspector, Zone-6	
9	Golam Marshad	Asst. Transport Supervisor, Transport Department	
10	Faruque Ahmed	Account Assistant, Transport Supervisor In charge, Transport Department	part time
11	Mamun Uddin Ahmed	Asst. Transport Supervisor, Transport Department	
12	Siddiqur Rahman	Inspector, Mechanical Division-1, Engineering Dept.	
11	Habib Mohammed Al-Ahasan	Conservancy Inspector, Zone-4	
12	Dilbahar Ahmed	Research Officer, Urban Planning Department	
13	Kazi Hasiba Jahan	Geographer, Urban Planning Department, Engineering Department	
14	Ekrumul Haque Khandker	Forman, Mech.-1, Engineering Department	
15	Md. Nuruzzaman	Forman, Mech.-2, Engineering Department	
16	Rakib Ahmed	Sub-Asst. Engineer (Mech. & Elect.), Store & Purchase Department	
Landfill Management Group			
1	Dr. Tariq Bin Yousuf	Executive Engineer, Engineering Division, Zone-5, Deputed to Project Director of Landfill Improvement Project, WMD	Group Leader, full time, working as Deputy Group Leader for Management and Coordination Group
2	Md. Mahaboob Alam	Assistant Manager, WMD	Deputy Group Leader (Operation), full time, Also working for Collection/Transport Group
3	AHM Abdulla Harun	Assistant Engineer, WMD	full time
4	Monoranjan Shala	Assistant Engineer, WMD	full time

Sl. No.	Name	Designation	Remarks
5	Sanjib Ray	Truck Kully, Conservancy Department, Zone-4, DCC	Conservancy Inspector (In Charge)
6	Md. Sheik Farid	Guard (Ward), DCC	Acting Conservancy Inspector
7	Din Mohammad	Guard (Ward), DCC	Acting Conservancy Inspector
8	Sohel Rana	Guard (Ward), DCC	Landfill Instructor (Security Guard)
9	Dilkhosh Ahmed	Assistant Mechanic, Mech. Division, DCC	Landfill Instructor (Assis. Mechanical)
10	M. A. Shahed	Truck Kully, Conservancy Department, Zone-5, DCC	Landfill Instructor (Truck Kully)
11	Md. Abul Hossain	Truck Kully, Conservancy Department, Zone-5, DCC	Landfill Instructor (Truck Kully)
12	Gonesh Das	Truck Kully, Conservancy Department, Zone-5, DCC	Landfill Instructor (Truck Kully)
13	A.K.Chengish	Truck Kully, Conservancy Department, Zone-5, DCC	Landfill Instructor (Truck Kully)
14	Rajesh Chandra Das	Cleaner	Weigh Bridge Operator
15	Ranto Chandra Das	Cleaner	Weigh Bridge Operator
16	Probir Kumar Saha	Truck Kully, Conservancy Department, Zone-5, DCC	Weigh Bridge Operator
17	Md. Kaium Mondal	Truck Kully, Conservancy Department, Zone-5, DCC	Weigh Bridge Operator
18	Md. Mahmud Jahan Shaon	Cleaner	Weigh Bridge Operator
19	Shojib Kumar	Cleaner	Weigh Bridge Operator
20	Md. Jufiker Ali	Driver, Mech. Division-2, DCC	Tire Dozer Operator
21	Md. Rafiqul Islam	Heavy Equipment Operator, Mech. Division-2, DCC	Tire Dozer Operator
22	Abul Khayer	Machine Operator, Mech. Division-2 DCC	Tire Dozer Operator
23	Md. Alim	Assistant Machine Operator, Mech. Division-2, DCC	Tire Dozer Operator
24	Kazi Jafar Ahmed	Machine Operator, Mech. Division-2, DCC	Buldozer Operator
25	Sultan Ahmed	Machine Operator, Mech. Division-2, DCC	Buldozer Operator
26	Kabir Ahmed	Machine Operator, Mech. Division-2, DCC	Buldozer Operator
27	Md. Babul	Assistant Machine Operator, Mech. Division-2, DCC	Buldozer Operator
28	Md. Selim	Heavy Equipment Operator, Mech. Division-2, DCC	Buldozer Operator
29	Julhas Uddin	Machine Operator, Mech. Division-2, DCC	Buldozer Operator
30	Dewan Nazrul Islam	Machine Operator, Mech. Division-2, DCC	Buldozer Operator
31	Jasim Uddin	Machine Operator, Mech. Division-2, DCC	Buldozer Operator
32	Abdur Rashid	Dumper Driver, Mech. Division-2, DCC	Excavator Operator
33	Md. Delwar Hossain	Machine Operator, Mech. Division-2, DCC	Excavator Operator
34	Md. Zakir Hossain	Machine Operator, Mech. Division-2, DCC	Excavator Operator
35	Md. Shafi	Machine Operator, Mech. Division-2, DCC	Excavator Operator
36	Md. Rafique	Machine Operator, Mech. Division-2, DCC	Excavator Operator
37	Mongol Shikder	Skilled Cleaner	Electrical Works and Leachate Pond Operation
38	Md. Monir Hossain	Cleaner	Electrical Works and Leachate Pond Operation
39	Md. Atiqul Islam	Cleaner	Office & Environment Monitoring Helper

S. No.	Name		
40	Gobindo Das	Cleaner	Cleaner (Control Building & Security Barrack)
41	Sudama Das	Cleaner	Car Wash Pool
42	Joton Das	Cleaner	Car Wash Pool
43	Bekey Das	Cleaner	Cleaner (Landfill Area)
44	Anando Das	Cleaner	Cleaner (Landfill Area)
45	Bijoy Das	Cleaner	Cleaner (Landfill Area)
46	Ratan Das	Cleaner	Cleaner (Landfill Area)
47	Biplob Das	Cleaner	Cleaner (Landfill Area)
48	Jewel Das	Cleaner	Cleaner (Landfill Area)
49	Gonga Raju	Cleaner	Cleaner (Landfill Area)
Financial Management Group			
1	Bellal Hossain Mia	Chief Accounts Officer, Accounts Department	Group Leader (part time)
2	Md. Mizanur Rahman	Internal Audit Department	Deputy Group Leader, almost full time

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Annex 4: Training of Bangladeshi Counterpart Personnel

1. Group Training Courses in Japan and their Participants

	Name of the Training	Duration	Number of Participants	Participants Name/Post/Organization
1	Seminar on Comprehensive Solid Waste Management	May to July 2007	1	Mr. Md. Towhid Siraj, Asst. Engr, DCC
2	Comprehensive Waste Management Technique II	May 8, 2007 to August 05, 2007	1	Mr. Mohammad Bengir Ahmed, CI, DCC
3	Promotion of Enabling Environment for Civil Society and Community Development	Oct 14 to Nov 18, 2007	2	1) Mr. Md. Asaduzzaman, CSI, DCC 2) Mr. Md. Shefikul Islam, CI, DCC
4	Solid Waste Management for South West Asia- Discussion for relating the Improving Measures	October - December, 2007	1	Md. Shafiqul Islam, Asst. Engr, DCC
5	Combat Global Warming Through Achievement of Environment	Feb 24 to Mar 06, 2008	2	1) Mr. Md. Farukh Aziz, Superintending Engr, DCC 2) Ms. Kazi Hasiba Jahan, Geographer, DCC
6	Comprehensive Waste Management Technique	May 13 to Aug 10, 2008	2	1) Mr. Md. Wahiduzzaman Chowdhary, CI, DCC 2) Mr. Md. Rokib Hasan, CI, DCC
7	Seminar on comprehensive SWM System	May 13 to Jul 02, 2008	2	1) Mr. A.H.M. Abdullah Harun, SAE, DCC 2) Mr. Aminur Rahman Blawas, CI, DCC
8	Occupational and Environmental Health Management		2	1) Dr. Sanjida Islam, Assistant Health Officer, DCC 2) Dr. Md. Emdadul Haque, Assistant Health Officer, DCC
9	Young Leaders	Feb 25 to Mar 13, 2008	2	1) Mr. Md. Monwar Hossain, Assistant Secretary, DCC 2) Ms. Sazeda Sultana Sima, Research Officer DCC
10	Environmental Management and Pollution Control for South west Asia	Sep. 25 to Dec. 23, 2008	1	Mr. Maksud Alam, Assistant Engineer, Dhaka City Corporation
11	Solid Waste Management for Southwest Asia-Discussion for Realizing the Improvement Measures-	Oct. 13 2008 to Dec. 5 2008	1	Ms. Afsana Akhter, Assistant Chief, Dhaka City Corporation
12	Waste Management and 3Rs Policy	Nov10-Dec06, 2008	2	1) Mr. Md. Monwar Hossain, CO, DCC 2) Mr. Md. Oliullah, Senior Assistant Secretary
13	Seminar on Comprehensive Solid Waste Management	May 12 to July 01, 09		Cancelled for late submission
14	Waste Management Technique and Environmental Education	June 22 - Sept 11, 2009	1	Mr. Md. Shah kamal, Conservancy Inspector, Dhaka City Corporation
15	Comprehensive Waste Management Technique	Aug 11 to Nov 08, 2009	1	Mr. Mohammed Shahidul Islam, Conservancy Inspector, Dhaka City Corporation
16	Combat Global Warming through the Achievement of Environment	Sep 07 to Sep 15, 09	2	1) Mr. Tariq Bin Yousof, Project Director, Dhaka City Corporation 2) Mr. Mir Mustafizur Rahman, Health officer, Dhaka City Corporation
17	Environmental Administration with Community Participation	Sep 27 to Nov 07, 09	1	Dr. Nishat Parveen, Deputy Director, Assistant Health Officer, Dhaka City Corporation
18	Solid Waste Management for Southwest Asia-Discussion for Realizing the Improvement Measure	Oct 04 to Nov 27, 2009	2	1) Mr. Md. Mizanur Rahman, Waste Management Officer, Dhaka City Corporation 2) Mr. Md. Abu Jafar, Conservancy Inspector, Dhaka City Corporation
19	Solid Waste Management by Local Government(A)	Aug 22 to Oct 16, 10	1	Mr. Bikas Chandra Das, Conservancy Inspector, Dhaka City Corporation
20	Comprehensive Waste Management Technique	25 Aug to 21 Nov, 10		Pipeline
21	Waste management Technique and Environmental Education(B)	30 Jan to 30 Apr, 10		Upcoming
	Total		27	

2. Participants who participated the individual counterparts training in Japan

No.	Name	Designation
1	Md. Alauddin	Chief Executive Officer, DCC
2	M. R. Chowdhury I	Chief Conservancy Officer, DCC
3	Ashfakul Md. Islam	Chief Engineer, DCC

3. The third country training and their participants

3.1 Study Tour in India

No.	Name	Designation
1	Md. Shehab Ullah	Superintending Engineer, Waste Management Division
2	Md. Shah Kamal	Conservancy Inspector of Zone 3
3	Maksud Alam	Assistant Manager, Mohakhali Bus Terminal
4	Md. Ekramul Hoque Khondoker	Forman, Mech-1, Engineering Dept.
5	Golam Morshed	Assistant Transport Supervisor, Transport Dept.
6	Abu Tahir	Conservancy Inspector of Zone 1
7	Md. Gaddafee Hossain	Conservancy Inspector of Zone 9
8	Md. Mizanur Rahman	Internal Audit Dept.

3.1 Study Tour in Vietnam

No.	Name	Designation
1	Md. Alauddin	Chief Executive Officer, Dhaka City Corporation
2	Md. Abdus Satter	Manager of Transport, Transport Department
3	Md. Mofizur Rahman Bhuiyan	Conservancy Officer Zone 6, Waste Management Department
4	Md. Siddiqur Rahman	Assistant Engineer, Mechanical Division 2, Engineering Department
5	Mr. Mozibor Rahman	Assistant Secretary, Establishment Department
6	Mr. Ko Takeuchi	JICA Expert Team in charge of Project Administration/Community Participation/Public Relations

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Annex 5: Provision of Equipment

No.	Equipment Name	JFY	Quantity	Price(BDT)	Price(¥)	Status
1	(1) Desktop Computer	JFY 2006	5	BDT 317,000	¥559,188	5 in use
	(2) Application software		6	BDT 156,000	¥275,184	6 in use
	(3) Printer		1	BDT 34,000	¥59,976	In use
	(4) Fax/Phone		1	BDT 8,000	¥14,112	In use
	(5) Multimedia projector		1	BDT 84,500	¥149,058	Broken
	(6) Laptop computer		1	BDT 92,500	¥163,170	In use
	(7) Digital DVD camera		1	BDT 52,990	¥93,474	In use
	(8) Printer		1	BDT 20,000	¥35,280	In use
	(9) Scanner		1	BDT 34,500	¥60,858	In use
	(10) Anti-virus software		6	BDT 28,200	¥49,744	In use
	(11) Digital camera		1	BDT 29,340	¥51,755	Broken
	(12) Memory card		1	BDT 1,100	¥1,940	In use
	(13) UPS		1	BDT 5,500	¥9,702	In use
Sub-total				BDT 863,630	¥1,523,443	
2	(1) GIS software	JFY 2007	1	BDT 214,000	¥383,702.	In use
	(2) GPS unit		2		¥40,191	2 in use
	(3) Accounting software		1	BDT 128,637	¥230,646	In use
	(4) Gas measure (O2, HsS)		1		¥265,345	In use
	(5) Gas measure equipment (Methane)		1		¥103,500	In use
	(6) Water quality measure equipment (electric conductivity)		1		¥22,500	In use
	(7) Water quality measure equipment (pH)		1		¥32,900	In use
Sub-total				BDT 342,637	¥1,078,784	
3	(1) Steel plate	JFY 2008	50	BDT 50,600	¥3,569,464	In use
	(2) Speed bump		1	BDT 25,300	¥36,113	In use
	(3) Warning sign billboard		1	BDT 20,800	¥30,555	In use
	(4) Steel bar		2	BDT 2,710	¥3,980.99	In use
Sub-total				BDT 99,391	¥3,648,047	
4	(1) Steel plate	JFY 2009	75	BDT 50,600	¥2,726,708	In use
	(2) Laser Printer		2	BDT 144,500	¥207,647	In use
	(3) Desktop Computer		1	BDT 75,000	¥107,775	In use
	(4) Laptop Computer		2	BDT 177,000	¥254,350	In use
	(5) Multimedia Projector		1	BDT 74,000	¥106,338	In use
	(6) Digital Camera		1	BDT 13,500	¥19,400	In use
	(7) Copy Machine		1	BDT 169,500	¥243,572	
Sub-total				BDT 704,100	¥3,665,787	
Total					¥9,916,061	

JFY2006 1BDT = 1.764 Yen 1.764
 JFY2007 1BDT = 1.793 Yen 1.793
 JFY2008 1BDT = 1.469 Yen 1.469
 JFY2009 1BDT = 1.437 Yen 1.437

Annex 6: New Collection System

NEW COLLECTION SYSTEM (WBA4A)

Ward No.	Area characteristics	Process	Picture	Station No.	Comp. capacity	Total time (min)	Weight (ton)	Loading Time (min/ton)	Previous Loading Time (min/ton)
45	High Income Residents	Bowl + Mat	2	3	5	79	3.5	23	*45
22	Newly developed	Bowl + Mat	2	1	5	88	6.3	14	*45
49	High Income Residents	Bin	1	3	5	120	4.6	26	*45
36	Commercial and residential	Bin	1	11	2	69	1.86	37	*45
33	Gov. Housing	Bowl + Mat	2	1	2	45	1.5	30	*45
76	Temple	Bin	1	2	2	60	1	60	No collection
53 (1)	Shop+ Appartment	Bin	1	3	2	65	1.9	34	*45
53 (2)	Gov. Housing	Combined	1+2	5	2	65	1.1	59	No data
57	Students' Dormitory	Bin	1	6	2	66	1.2	55	No collection
5	Shop+ Low Income Residents	Bowl + Mat	2	3	2	75	1.8	42	No collection



IMPROVEMENT OF CONVENTIONAL COLLECTION SYSTEM (WBA4B)

- 1. Improvement of convention container:** Project designed a proto type container and DCC is following the design. In practical, this container has high capacity. (Picture 3)
- 2. Improvement of Rickshaw Van:** Project designed some environment friendly more sanitary RV. This RV are mainly consist of the big bins. So the bad smell cannot comes out and make the surroundings dirty. Another reason of not accepting the RV to PCSP due to high cost. (Picture 4).
- 3. Improvement of Handtrolley:** Project designed some handtrolleys and gave to DCC for road sweeping waste collection. DCC use this handtrolley and the design is very much accepted by some CI's. In case of high volume road sweeping wastes and far container distance high capacity handtrolley is very useful. (Picture 5)



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Annex 7: Evaluation Grid

Evaluation Grid: Terminal Evaluation of the Project for Strengthening of Solid Waste Management in Dhaka City of Bangladesh

26/07/2010

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the results	Overall Goal is expected to be realized as planned?	More than 66% (or 3054 ton/day) of wastes is transported to landfill sites and disposed properly by 2015?	<ul style="list-style-type: none"> Volume of waste transported to land fill sites before and during the project (change in time series) 	<ul style="list-style-type: none"> Reports of WMD Project Annual Reports Development Study Report 	<ul style="list-style-type: none"> Literature Survey
		The ratio of city residents in DCC who are satisfied with the collection services provided by DCC (or private companies in privatized zoned) reaches 70% by the end of 2015 from the current level of 36%?	<ul style="list-style-type: none"> Ratio of satisfaction before and during the project (change in time series) 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports Development Study Report 	<ul style="list-style-type: none"> Literature Survey
		More than 52.5% (or 2053ton/day) of wastes is transported to landfill sites and disposed properly by the end of Project?	<ul style="list-style-type: none"> Volume of waste transported to land fill sites before and during the project (change in time series) 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports Development Study Report 	<ul style="list-style-type: none"> Literature Survey
Verification of the results	Project Purpose is expected to be realized as planned?	The ratio of city residents in DCC who are satisfied with the collection services provided by DCC (or private companies in privatized zoned) reaches 50% by the end of the Project from the current level of 36%?	<ul style="list-style-type: none"> Ratio of satisfaction before and during the project (change in time series) 	<ul style="list-style-type: none"> Attitude Survey/Opinion Survey Report to be conducted by DCC/ Baseline survey Project Progress Report Project Annual Reports Development Study Report 	<ul style="list-style-type: none"> Literature Survey
		1-1 Managers of WMD can formulate Annual Activity Plans and budget proposal by the end of the project?	<ul style="list-style-type: none"> Annual Activity Plans and budget proposal prepared by the WMD managers Quality of Annual Activity Plans and budget proposal 	<ul style="list-style-type: none"> Minutes of the Project Team meeting Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
Verification of the results	Outputs were/are expected to be realized as planned?				

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the results (contd.)	Outputs were/are expected to be realized as planned? (contd.)	1-2 Percentage of Project's activities whose completion delayed more than one month is reduced to 70% in the 5th JFY (April 2010 to March 2011)?	Percentage of Project's activities whose completion delayed more than one month in the 5th JFY (April 2010 to March 2011)	Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview
		1-3 Eight (8) good practices and cases are disseminated by the Project?	Number of good practices and cases and the situation how they are disseminated Definition of the good practice	Case study reports/ leaflets Newsletters/ newspaper articles/etc. C/P, JET and other stakeholders	Literature Survey Interview
		1-4 Clean Dhaka Mater plan is revised according to the change in social conditions and environmental consciousness of the citizens by the end of the Project?	Revision of Clean Dhaka Mater plan	Project Progress Reports from other organizations Revised Clean Dhaka Master plan Project Progress Report C/P, JET and other stakeholders	Literature Survey Interview
		1-5 Ward Based Approach (WBA) is officially institutionalized as DCC/ WMD's mandate.	Official institutionalization of WBA	Official letter issued by DCC C/P, JET and other stakeholders	Literature Survey Interview
		2-1 More than 20 Conservancy Inspectors (CI), Conservancy Supervising Inspectors (CSI) and Conservancy Officers (CO) obtained enough knowledge and skills and are motivated to promote ward level community solid waste management by the end of the Project?	Knowledge, skills and motivation of CI, CSI and CO Measurement method for knowledge, skills and motivation	Project Progress Report C/P, JET and other stakeholders	Literature Survey Interview
	2-2 A community-based SWM Guideline is prepared and ready for use by the end of 2007/08 financial year of Bangladesh?	Community-based SWM Guideline Quality of Guideline Is it ready for use?	Community-based SWM Guideline C/P, JET and other stakeholders	Literature Survey Interview	

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Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the results (contd.)	Outputs were/are expected to be realized as planned? (contd.)	<p>2-3 Permission and monitoring system for primary collection service providers (PCSPs) is improved and introduction of the improved system to whole Dhaka City starts?</p> <p>2-4 Number of successful community initiatives reaches 20 by the end of the Project, through improved coordination among community, DCC and primary collection service providers?</p>	<ul style="list-style-type: none"> Improvement and introduction of permission and monitoring system for PCSPs Situation of coordination among community, DCC and PCSPs Number of successful community initiatives Criteria of successful community initiatives Cause and effect relationships between the coordination and the success of community initiatives 	<ul style="list-style-type: none"> Report of customer satisfaction survey/interview C/P, JET and other stakeholders Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview Literature Survey Interview
		<p>3-1 New collection systems suitable to the conditions of Dhaka City are developed and introduced to more than 20 areas?</p> <p>3-2 More than 50% of CIs and Cleaners have become conscious on safety and sanitation?</p>	<ul style="list-style-type: none"> New collection systems developed Number of areas to which the new collection system introduced Number of CIs who are safety and sanitation conscious Measurement method for safety and sanitation conscious 	<ul style="list-style-type: none"> MIS data base Project Progress Report Project Annual Reports C/P, JET and other stakeholders MIS data base Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview Literature Survey Interview
		<p>3-3 More than 15 CIs take initiatives for improvement of collection and transportation after they developed the capacity for the improvement?</p>	<ul style="list-style-type: none"> CIs' capacity for the improvement Measurement method for the capacity for the improvement CIs' initiatives for improvement Measurement method for the initiatives for the improvement 	<ul style="list-style-type: none"> MIS data base Project Progress Report Project Annual Reports Interview with CIs C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the results (contd.)	Outputs were/are expected to be realized as planned? (contd.)	<p>3-4 Periodic maintenance for 127 vehicles is carried out?</p> <p>4-1 Required staff for O&M of landfill are allocated and work properly since July 2008?</p> <p>4-2 Environmental parameters are monitored as per Environmental Management Plan since July 2008 at Matuail?</p> <p>4-3 Waste placing, compaction, soil covering on waste and slope maintenance are operated adequately as per O&M manual?</p> <p>4-4 Leachate is treated adequately as per O&M Manual?</p>	<p>Situation of periodic maintenance for vehicles</p> <p>Quality of maintenance</p> <p>Allocation of staff for O&M of landfill</p> <p>Situation of the work of O&M staff</p> <p>Situation of environmental parameters monitoring</p> <p>Quality of monitoring</p> <p>Operation of waste placing, compaction, soil covering on waste and slope maintenance</p> <p>Treatment of leachate</p>	<p>MIS data base</p> <p>Record of workshops</p> <p>Project Progress Report</p> <p>C/P, JET and other stakeholders</p> <p>Organization chart of landfill</p> <p>DCC budget for SWM</p> <p>C/P, JET and other stakeholders</p> <p>Project Progress Report</p> <p>Laboratory test reports</p> <p>Project Annual Reports</p> <p>C/P, JET and other stakeholders</p> <p>Project Progress Report</p> <p>Project Annual Reports</p> <p>C/P, JET and other stakeholders</p> <p>Laboratory test report</p> <p>Project Progress Report</p> <p>Project Annual Reports</p> <p>C/P, JET and other stakeholders</p> <p>Weight bridge operations reports</p> <p>MIS data base</p> <p>Project Progress Report</p> <p>Project Annual Reports</p> <p>C/P, JET and other stakeholders</p>	<p>Literature Survey</p> <p>Interview</p>
		4-5 Weight bridge is operated and data are provided regularly to WMD's Headquarters?	<p>Operation of weight bridge</p> <p>Provision of data</p> <p>Quality of data</p>		

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Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the results (contd.)		5-1 Annual financial report of each financial year is available in September next financial year by the end of the Project?	<ul style="list-style-type: none"> Ratio of annual financial report available in September next year Quality of annual financial report 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
		5-2 Reports for financial planning are prepared in each financial year by April by the end of the Project?	<ul style="list-style-type: none"> Ratio of financial plan prepared by April Quality of financial plan 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Outputs were/are expected to be realized as planned? (contd.)	5-3 Monthly reports on actual revenue and expenditure are available by the second week of next month by the end of the Project?	<ul style="list-style-type: none"> Ratio of monthly reports on R&E available by the second week of next month Quality of monthly reports on R&E 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
		5-4 Control of expenditure for solid waste management is improved?	<ul style="list-style-type: none"> Improvement of the expenditure for solid waste management 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Inputs (human, physical, financial) were provided as planned?	Inputs from Japan side Quality, number and timing of JET dispatched	<ul style="list-style-type: none"> Input list Opinions of C/Ps 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
		Inputs from Japan side Quality, number and timing of equipment provided	<ul style="list-style-type: none"> Input list Opinions of C/Ps 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
		Inputs from Japan side Quality, number and timing of training in Japan/ third country	<ul style="list-style-type: none"> Input list Opinions of C/Ps 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
		Inputs from Japan side Quality, number and timing of missions such as advisory mission and/or midterm evaluation mission	<ul style="list-style-type: none"> Input list Opinions of C/Ps 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview

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Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the results (contd.)	Inputs (human, physical, financial) were provided as planned? (contd.)	Inputs from Bangladesh side Quality, number and timing of C/Ps assigned	Input list Opinions of JETs	Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview
		Inputs from Bangladesh side Quality, number and timing of land, building and other necessary facilities provided	Input list Opinions of JETs	Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview
Verification of the process	Activities were implemented as planned?	Inputs from Bangladesh side Amount and timing of operational cost provided	Input list Opinions of JETs	Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview
		Were there any obstacles in the process of technology transfer? If any, what were the causes, and what are the solutions overcoming those obstacles?	Progress of activities compared with the plan	Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview
		Were there any obstacles in the process of technology transfer? If any, what were the causes, and what are the solutions overcoming those obstacles?	Progress of technology transfer Understanding and learning of C/Ps	Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview
	Project management was properly performed?	Monitoring of the project achievements and progress was implemented in the project management?	Ways of monitoring and frequency	Monitoring System Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview
		Internal communication of the project was smoothly realized?	Communication channels and system such as regular meeting Topics discussed in those meetings	MM of regular meetings Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Interview Literature Survey Interview
		Communication and collaboration with JICA HQs and JICA Bangladesh office was smooth and adequate?	Communication and collaboration with JICA HQs and JICA Bangladesh office	MM of meetings Project Progress Report Project Annual Reports C/P, JET and other stakeholders	Literature Survey Interview

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Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the process (cont.)	Communication and collaboration with DCC and WMD was smooth and adequate?	Communication and collaboration with DCC and WMD had a high ownership on the project?	<ul style="list-style-type: none"> Communication and collaboration with DCC and WMD 	<ul style="list-style-type: none"> MM of meetings Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Bangladesh government and parties concerned highly recognize the project?	DCC and WMD had a high ownership on the project?	<ul style="list-style-type: none"> DCC budget for the project (change in time series) Implementation of project activities Communication and collaboration Opinions of DCC and WMD staff 	<ul style="list-style-type: none"> Budget report of DCC Project Progress Report Project Annual Reports C/P, JET and other stakeholders Managers and staff of DCC and WMD 	<ul style="list-style-type: none"> Literature Survey Interview
	Bangladesh organizations and parties concerned highly recognized and participated in the project?	Stakeholders such as CIs, COs, CSIs, CUWGs, PCSPs, drivers and cleaners highly recognized the project and participated in the project activities?	<ul style="list-style-type: none"> Opinions of parties concerned Recognition of CIs, COs, CSIs, CUWGs, PCSPs, drivers and cleaners 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders CIs, COs, CSIs, CUWGs, PCSPs, drivers and cleaners 	<ul style="list-style-type: none"> Literature Survey Interview
Relevance	What were the hindering and promoting factors affected the progress of the project?	What were the hindering and promoting factors affected the progress of the project? If any, what were the causes, and what are the solutions overcoming those obstacles?	Progress of activities compared with the plan	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Communication and collaboration with other projects and programs were adequate?	Communication and collaboration with the development study, JDCE, JOCV, grass roots grant aid and environmental program grant aid were effective and efficient?	Communication and collaboration	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Development effects targeted by the project are aligned with the Bangladesh	What are targeted by the SWM in the Bangladesh national environment policies and strategies?	Target of the SWM in the Bangladesh national environment policies and strategies	<ul style="list-style-type: none"> Bangladesh national environment policies and strategies Dhaka city development plan 	<ul style="list-style-type: none"> Literature Survey

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
	national policies?		<ul style="list-style-type: none"> Target of the SWM in the Dhaka city development plan DCC budget for the SWM (change in time series) 	<ul style="list-style-type: none"> Budget report of DCC 	
	Development effects targeted by the project are aligned with the Japanese international cooperation policies?	What were targeted by the JICA's country-specific aid implementation policy for Bangladesh?	<ul style="list-style-type: none"> Japan's aid implementation policy for SWM in Bangladesh? 	<ul style="list-style-type: none"> JICA's country-specific aid implementation policy for Bangladesh 	<ul style="list-style-type: none"> Literature Survey
	Development effects targeted by the project met the needs of the target groups?	Strengthening of SWM is required by the DCC?	<ul style="list-style-type: none"> Social, managerial and technical problems and issues relating to SWM 	<ul style="list-style-type: none"> DCC documents C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Approach adopted by the project was relevant for achieving the Project Purpose and the Overall Goal?	Improvement of SWM is required by the residents in Dhaka city?	<ul style="list-style-type: none"> Requirement of residents in Dhaka city for SWM 	<ul style="list-style-type: none"> DCC documents C/P, JET and other stakeholders residents in Dhaka city 	<ul style="list-style-type: none"> Literature Survey Interview
Japan has a predominant SWM technology and experiences?	Combination of four outputs, i.e. capacity building of management, participatory SWM, improvement of collection and transportation, improvement of landfill and financial management, was relevant for achieving the Project Purpose and the Overall Goal?	Japan's SWM technology and experiences were properly employed in the project?	<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Development Study Report Ex-post evaluation report C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
		Experiences of the development study were effectively employed in the project?	<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Development Study Report Ex-post evaluation report C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Collaboration with the development study, JDCF, JOCV, grass roots grant	<ul style="list-style-type: none"> Collaboration and its effects on the project 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports 	<ul style="list-style-type: none"> Literature Survey 	

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Effectiveness		aid and environmental program grant aid were effective and efficient? Indicators of Project Purpose were achieved? (See "Verification of the results.")	<ul style="list-style-type: none"> Opinions of parties concerned (See "Verification of the results.") 	<ul style="list-style-type: none"> C/P, JET and other stakeholders (See "Verification of the results.") 	<ul style="list-style-type: none"> Interview (See "Verification of the results.")
	Project Purpose was achieved by the attribution of the Outputs?	<ul style="list-style-type: none"> Achievements of indicators of Project Purpose were realized by the achievements of Outputs? 	<ul style="list-style-type: none"> Achievements of indicators of Project Purpose (See "Verification of the results.") Achievements of indicators of Outputs (See "Verification of the results.") Opinions of parties concerned (See "Relevance.") 	<ul style="list-style-type: none"> C/P, JET and other stakeholders (See "Verification of the results.") 	<ul style="list-style-type: none"> Interview (See "Verification of the results.")
Effectiveness (contd.)		Cause and effect relationships between Outputs and Project Purpose were logical and relevant? (See "Relevance.")	(See "Relevance.")	(See "Relevance.")	(See "Relevance.")
	What were the factors hindered and/or promoted the achievement of the Project Purpose?	<ul style="list-style-type: none"> Commitment to attainment of Clean Dhaka Master Plan from DCC and other stakeholders was sustained? (Important Assumption) 	<ul style="list-style-type: none"> Ratio of the budget for Clean Dhaka Master Plan out of the total of DCC budget (change in time serious) Commitment of other stakeholders (See "Relevance.") 	<ul style="list-style-type: none"> Budget report of DCC C/P, JET and other stakeholders (See "Relevance.") 	<ul style="list-style-type: none"> Literature Survey Interview
		<ul style="list-style-type: none"> Natural disaster such as flood and political conditions, such as elections, did affect the implementation of the Project? (Important Assumption) DCC allocated appropriate budget for solid waste management? (Important Assumption) 	<ul style="list-style-type: none"> Occurrence of Natural disaster and its effects Influence of the general election (See "Relevance.") 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders (See "Relevance.") 	<ul style="list-style-type: none"> Literature Survey Interview

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Efficiency		<p>Central Government gave required support for SWM of DCC? (Important Assumption)</p> <p>Were there any other promoting and hindering factors?</p>	<p>Support from the central government such as the Ministry of Environment</p> <p>Opinions of parties concerned</p>	<p>Project Progress Report</p> <p>Project Annual Reports</p> <p>C/P, JET and other stakeholders</p> <p>Project Progress Report</p> <p>Project Annual Reports</p> <p>C/P, JET and other stakeholders</p>	<p>Literature Survey</p> <p>Interview</p> <p>Literature Survey</p> <p>Interview</p>
	<p>Quality, quantity and timing of the Inputs were appropriate for achieving Outputs?</p>	<p>The number, fields, capacity, timing and duration of dispatch of Japanese experts were relevant and appropriate? (See "Verification of the results.")</p> <p>The number, specifications, timing and quality of equipment granted were relevant and appropriate? (See "Verification of the results.")</p> <p>The number of participants, contents, duration and timing of trainings in Japan were relevant and appropriate? (See "Verification of the results.")</p> <p>The number, capacity and assignment timing of the counterparts were relevant and appropriate? (See "Verification of the results.")</p> <p>Buildings and facilities provided by the Bangladesh side were relevant and appropriate? (See "Verification of the results.")</p>	<p>(See "Verification of the results.")</p>	<p>(See "Verification of the results.")</p>	<p>(See "Verification of the results.")</p>
	<p>Scale of the project cost is appropriate?</p>	<p>Project cost is appropriate compared with projects alike?</p>	<p>Total cost of the project</p> <p>Total cost, contents and the volume of beneficiaries of similar projects</p>	<p>Project Progress Report</p> <p>Project Annual Reports</p> <p>Terminal evaluation report of similar projects</p> <p>C/P, JET and other stakeholders</p>	<p>Literature Survey</p> <p>Interview</p>
	<p>What were the hindering and/or promoting factors</p>	<p>Communication and collaboration with the development study, JDCF, JOCV, grass roots grant aid and</p>	<p>(See "Relevance.")</p>	<p>(See "Relevance.")</p>	<p>(See "Relevance.")</p>

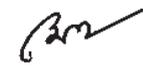
Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Impact	affecting efficiency of the project?	environmental program grant aid were effective and efficient? (See "Relevance.")			
	Project management such as regular meeting and Steering Committee contributed the efficiency of the project?	Were there any other promoting and hindering factors?	Opinions of parties concerned	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports CP, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Were there any other promoting and hindering factors?	Indicators of Overall Goals are expected to be realized? (See "Verification of the results.")	(See "Verification of the results.")	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports CP, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
Impact	Overall Goal is expected to be realized as planned?	Indicators of Overall Goals are expected to be realized? (See "Verification of the results.")	(See "Verification of the results.")	(See "Verification of the results.")	(See "Verification of the results.")
	What are the factors hindered and/or promoted the achievement of the Project Purpose?	Commitment to attainment of Clean Dhaka Master Plan from DCC and other stakeholders is sustained? (Important Assumption)	Ratio of the budget for Clean Dhaka Master Plan out of the total of DCC budget (change in time serious)	<ul style="list-style-type: none"> Budget report of DCC CP, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Financial capacity of DCC is strengthened? (Important Assumption)	Were there any other promoting and hindering factors?	Opinions of parties concerned	<ul style="list-style-type: none"> Financial report of DCC CP, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
Impact	Were there any other promoting and hindering factors?	Were there any other promoting and hindering factors?		<ul style="list-style-type: none"> Project Progress Report Project Annual Reports CP, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Achievements of Overall Goal would be realized by the achievements of the Project Purpose?	Cause and effect relationships between Overall Goal and Project Purpose are logical and relevant?	Opinions of parties concerned	<ul style="list-style-type: none"> Ex-ante Evaluation Report CP, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview

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Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Impact (contd.)	Were/are there any other impacts and influences of the project?	Introduction of WBA has given any impact on the communities?	• Opinions of parties concerned	• Project Progress Report • Project Annual Reports • C/P, JET and other stakeholders	• Literature Survey • Interview
		Introduction of the new collection and transportation system has given any impact on PCSPs, drivers, cleaners, etc.?	• Opinions of parties concerned	• Project Progress Report • Project Annual Reports • C/P, JET and other stakeholders	• Literature Survey • Interview
	Were/are there any other impacts and influences of the project?	Improvement of O&M of landfill has given any impact on the surrounding environment?	• Opinions of parties concerned	• Project Progress Report • Project Annual Reports • C/P, JET and other stakeholders	• Literature Survey • Interview
		Improvement of financial management of SWM has given any impact on the stakeholders concerned?	• Opinions of parties concerned	• Project Progress Report • Project Annual Reports • C/P, JET and other stakeholders	• Literature Survey • Interview
Sustainability	The government will support DCC to sustain its activities, outputs and outcomes? WMD is capable of continuing implementation of the SWM effectively and efficiently?	Are there any other positive/negative impacts?	• Opinions of parties concerned	• Project Progress Report • Project Annual Reports • C/P, JET and other stakeholders	• Literature Survey • Interview
		Commitment to attainment of Clean Dhaka Master Plan from DCC and other stakeholders is sustained? (See "Impact.")	(See "Impact.")	(See "Impact.")	(See "Impact.")
		Management capacity of WMD is high enough to sustain its activities, outputs and outcomes?	• Budget of WMD (change in time serious) • Manpower supply and retention in WMD (change in time serious) • Management capacity of WMD	• Project Progress Report • Project Annual Reports • C/P, JET and other stakeholders	• Literature Survey • Interview

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Sustainability (contd.)		Maintenance and operation of equipment provided will be properly carried out by WMD in future?	<ul style="list-style-type: none"> Budget of WMD (change in time serious) Manpower supply and retention in WMD (change in time serious) Technical capability of WMD staff 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
		Budget for WMD including recurrent budget will be adequately prepared?	<ul style="list-style-type: none"> Budget plan of WMD 	<ul style="list-style-type: none"> WMD's budget plan document Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview
	Cooperation of other stakeholders will be sustainable?	CIs, COs, CSIs, CUWGs, PCSPs, drivers and cleaners will continue to implement adequate SWM in collaboration with WMD?	<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Project Progress Report Project Annual Reports C/P, JET and other stakeholders 	<ul style="list-style-type: none"> Literature Survey Interview






Annex 8: Interviewees List

No.	Name	
1	Captain Bipan Kumar Saha	CWMO, DCC
2	Mr. Shah Alam	Additional CWMO, DCC
3	Dr. Tariq Bin Yousuf	Executive Engineer (Disposal), WMD, DCC
4	Mr. Abul Hasnat	Executive Engineer (Collection and Transport), WMD, DCC
5	Mr. A H M Abdula Harun	Assistant Engineer (Disposal-1), WMD, DCC
6	Mr. Mahabub Alam	Assistant Engineer (Waste Vehicles and Equipment), WMD, DCC
7	Mr. Mizanur Rahman	Waste Management Officer (Budget), WMD, DCC
8	Mr. Abdul Motalib	CI in charge of WBA1
9	Md. Shafekul Islam	CI in charge of WBA2
10	Md. Bengir Ahmed	CI in charge of WBA3
11	Mr. Aminur Biswas	CI in charge of WBA4
12	Mr. Mofizur Buiyan	CO
13	Md. Shar Kamel	CI in charge of Ward 63
14	Mr. Bikash Chandra Das	CI
15	Mr. Md. Abu Tahe	CI
16	Mr. Md. Aminur Rahman Biswas	CI
17	Mr. Md. Shak Hawat	CI
18	Mr. Humayon Kabir (Liton)	CI
19	Mr. Abdul Motaleb	Senior Water and Sanitation Specialist, WSP, WB
20	Mr. Mark Ellery	Water and Sanitation Specialist, WSP, WB
21	Dr. Sekhar Bonu	Principal Urban Development Specialist, ADB Manila
22	Mr. Dhiraj Kumar Nath	Urban Health Expert, ADB Dhaka
23	Mr. Naoki Hara	Japanese Expert, Chief advisor / Institutional setup
24	Ms. Junko Okamoto	Japanese Expert, Community participation/ Communication
25	Mr. Akio Ishii	Japanese Expert, Collection and Transport
26	Mr. Masahiro Saito	Japanese Expert, Training for O&M of final disposal site
27	Mr. Noboru Osakabe	Japanese Expert, Financial management
28	Ms. Kubota	JOCV

Project Design Matrix (PDM)

[Project Title] The Project for Strengthening of Solid Waste Management in Dhaka City of Bangladesh
[Project Period] February 2007-January 2011(4 years)

[Target Groups] 1Waste Management Department* 2Concerned Department 3City residents *Its approval process is in progress by upgrading Conservancy Department and Waste Management Division.
[Target Area] Under the jurisdiction of Dhaka City Corporation

[Date]March 2010
[PDM Version]3

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal The solid waste management services of Dhaka City Corporation are sustained and the sanitary environment of the city is improved.</p>	<p>1 More than 66% (or 3054 ton/day) of wastes is transported to landfill sites and disposed properly by 2015. 2 The ratio of city residents in DCC who are satisfied with the collection services provided by DCC (or private companies in privatized zoned) reaches 70% by the end of 2015 from the current level of 36%.</p>	<p>1 Reports of WMD Project Evaluation Report 2 Attitude Survey/Opinion Survey Report to be conducted by DCC/Baseline survey</p>	<p>1 National policy to give priority to solid waste management is sustained</p>
<p>Project Purpose The solid waste management services of Dhaka City Corporation are improved</p>	<p>1 More than 52.5%(or 2053ton/day) of wastes is transported to landfill sites and disposed properly by the end of Project. 2 The ratio of city residents in DCC who are satisfied with the collection services provided by DCC (or private companies in privatized zoned) reaches 50% by the end of the Project from the current level of 36%.</p>	<p>1 Reports of WMD Project Evaluation Report 2 Attitude Survey/Opinion Survey Report to be conducted by DCC/Baseline survey</p>	<p>1 Commitment to attainment of Clean Dhaka Master Plan from Dhaka City Corporation and other stakeholders is sustained. 2 Financial capacity of Dhaka City Corporation is strengthened.</p>
<p>Outputs 1 Capacity for management and coordination of solid waste management activities is improved.</p>	<p>1.1 Managers of Waste Management Department (WMD) can formulate Annual Activity Plans and budget proposal by the end of the Project. 1.2 Percentage of Project's activities whose completion is delayed more than one month is reduced to 70% in the 5th JFY (April 2010 to March 2011) 1.3 Eight (8) good practices and cases are disseminated by the Project. 1.4 Clean Dhaka Mater plan is revised according to the change in social conditions and environmental consciousness of the citizens by the end of the Project. 1.5 Ward Based Approach (WBA) is officially institutionalized as DCC/WMD's mandate.</p>	<p>1.1 Minutes of the Project Team meeting 1.2 Project Progress Reports Project Annual Reports 1.3 Case study reports/leaflets Newsletters/newspaper articles/etc. 1.4 Project Progress Reports from other organizations 1.5 DCC/WMD document</p>	<p>1 Commitment to attainment of Clean Dhaka Master Plan from Dhaka City Corporation and other stakeholders is given 2 Natural disaster such as flood and political conditions, such as elections, do not greatly affect the implementation of the Project 3 DCC allocates appropriate budget for solid waste management.</p>
<p>2 Capacity for participatory solid waste management program is improved.</p> <p>3 Capacity for solid waste collection and transportation is improved.</p>	<p>2.1 More than 20 Conservancy Inspectors, Conservancy Supervising Inspectors and Conservancy Officers obtain enough knowledge and skills and are motivated to promote ward-level community solid waste management by the end of the Project. 2.2 A community-based SWM Guideline is prepared and ready for use by the end of 2007/08 financial year of Bangladesh. 2.3 Permission and monitoring system for primary collection service providers is improved and introduction of the improved system to whole Dhaka City starts. 2.4 Number of successful community initiatives reaches 20 by the end of the Project, through improved coordination among community, DCC and primary collection service 3.1 New collection systems suitable to the conditions of Dhaka City are developed and introduced to more than 20 areas. 3.2 More than 50% of Conservancy Inspectors and Cleaners have become conscious on safety and sanitation. 3.3 More than 15 Conservancy Inspectors take initiatives for improvement of collection and transportation after they developed the capacity for the improvement. 3.4 Periodic maintenance for 127 vehicles is carried out.</p>	<p>2.1 Project Progress Reports Physical observations 2.2 Guideline publication 2.3 Customer satisfaction survey/Interview 2.4 Project Progress Reports 3.1 MIS data base Project Progress Reports 3.2 MIS data base Project Progress Reports 3.3 MIS data base Project Progress Reports 3.4 MIS data base Project Progress Reports</p>	<p>4 Central Government gives required support for solid waste management of DCC.</p>

Project Design Matrix (PDM)

<p>4 Capacity for operation and management of landfill is improved.</p>	<p>4.1 Required staff for O&M of landfill are allocated and work properly since July 2008.</p> <p>4.2 Environmental parameters are monitored as per Environmental Management Plan since July 2008 at Mutuail.</p> <p>4.3 Waste placing, compaction, soil covering on waste and slope maintenance are operated adequately as per O&M manual.</p> <p>4.4 Leachate is treated adequately as per O&M Manual.</p> <p>4.5 Weight bridge is operated and data are provided regularly to WMD's Headquarters.</p>	<p>4.1 DCC budget for SWM</p> <p>4.2 Project Progress Reports Laboratory test reports</p> <p>4.3 Project Progress Reports Physical observations Laboratory test report</p> <p>4.4 Project Progress Reports Laboratory test report</p> <p>4.5 Weight bridge operations reports MIS data base</p>	
<p>5 Capacity for financial management in solid waste management is improved.</p>	<p>5.1 Annual financial report of each financial year is available in September next financial year by the end of the Project.</p> <p>5.2 Reports for financial planning are prepared in each financial year by April by the end of the Project.</p> <p>5.3 Monthly reports on actual revenue and expenditure are available by the second week of next month by the end of the Project.</p> <p>5.4 Control of expenditure for solid waste management is improved.</p>	<p>5.1 Project Progress Reports</p> <p>5.2 Project Progress Reports</p> <p>5.3 Project Progress Reports</p> <p>5.4 Project Progress Reports</p>	
<p>Activities</p> <p>1-1 To establish Waste Management Department (by DCC)</p> <p>1-2 To strengthen Waste Management Department Human Resources and Institution *1 *2</p> <p>1-3 To prepare Annual Activity Plans</p> <p>1-4 To coordinating Project Activities</p> <p>1-5 To raise awareness and to conduct public relations campaigns on solid waste management among city corporations</p> <p>1-6 To develop solid waste management network among city corporations</p> <p>1-7 To review and modify Clean Dhaka Master Plan</p> <p>2-1 To develop Ward SWM Guideline</p> <p>2-2 To organise community people and support community level SWM activities *2</p> <p>2-3 To improve primary collection permission and monitoring system</p> <p>2-4 To support primary collection service providers to improve their services *3</p> <p>2-5 To organize awareness raising programs and environmental education programs in target wards</p> <p>2-6 To coordinate among community people, primary collection service providers and DCC *2 *3</p> <p>2-7 To conduct training programs for the counterparts</p> <p>3-1 To conduct surveys and data collection and analysis for improvement of collection efficiency *3</p> <p>3-2 To improve efficiency of collection system *1 *3</p> <p>3-3 To improve the system of repair and maintenance of equipments</p> <p>3-4 To train technicians, repair mechanics, drivers, cleaners, and other workers *1</p> <p>4-1 To develop sanitary landfill (by DCC)</p> <p>4-2 To operate and manage sanitary landfill *1</p> <p>4-3 To conduct environmental monitoring</p> <p>4-4 To evaluate landfill operation improvement</p> <p>5-1 To develop financial reports</p> <p>5-2 To prepare proposal of financial plans</p> <p>5-3 To improve procurement and payment processes</p>	<p>Inputs</p> <p>Japanese Side</p> <p>1 Dispatch of experts</p> <p>(1) Chief Adviser</p> <p>(2) Solid Waste Management</p> <p>(3) Community Mobilization/Communication</p> <p>(4) Optimization of Secondary Collection</p> <p>(5) Landfill Management</p> <p>(6) Waste Collection Vehicle and Equipment Maintenance Management</p> <p>(7) Financial management</p> <p>2 Provision of equipment</p> <p>3 Training of counterparts</p> <p>4 Dispatch of study team when necessary</p> <p>5 Allocation of operational costs for the Project</p> <p>Bangladesh Side</p> <p>1 Assignment of counterpart personnel</p> <p>2 Provision of land, building, and other necessary facilities</p> <p>3 Allocation of operational costs for the Project</p>		<p>1 Frequent transfer of trained counterpart personnel does not occur</p> <p>2 Environmental Management Plan for Mutuail and Environmental Impact Assessment for Amin Bazar are approved by the Department of Environment, Ministry of Environment and Forest without any delay.</p> <p>3 Japan Debt Cancellation Fund for Mutuail landfill expansion is disbursed by the Government of Bangladesh without any delay.</p> <p>4 Amin Bazar landfill construction project is approved by the Government of Bangladesh without delay.</p> <p>5 Staff whose capacity has been developed in the Project and the Development Study are properly DCC transfers staff to WMD and employs new staff appropriately without delay.</p> <p>6 DCC allocates appropriate budget to conduct the Project activities.</p> <p>7 DCC transfers relevant assets to WMD properly without delay.</p> <p>8 DCC prepares enough offices for WMD appropriately without delay.</p>
<p><<Note>></p> <p>1) For the activities accompanied with "(by DCC)" as well as for activities that are added in the PDM workshop and subsequent group meeting, including budget allocation, will be taken by DCC. (Abbreviation) DCC (Dhaka City Corporation), MOEF (Ministry of Environment and Forest), SWM (Solid Waste Management), WMD (Waste Management Department)</p> <p>*1 This activity includes Sub-Project 1 (Provision of safety gears and workers' manual to improve working environment)</p> <p>*2 This activity includes Sub-Project 2 (Establishment of ward-level solid waste management offices and strengthening the function of ward offices)</p> <p>*3 This activity includes Sub-Project 3 (New collection system)</p>	<p>Pre-conditions</p> <p>1 Waste Management Department is approved by the Government of Bangladesh</p> <p>2 Project concept, and roles and responsibilities of project stakeholders is shared and clearly understood among them.</p>		

3. 評価グリッド

ハンガラデシユ人民共和国 ダッカ市廃棄物管理能力強化プロジェクト終了時評価調査 評価グリッド

2010/08

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
実績の 検証	上位目標は達成 される見込みか	2015年までに66%以上(3,054t/日)が埋立地に運搬され適切に処理される。	プロジェクト開始前、実施中、現在の埋立て地搬入量(時系列変化)	<ul style="list-style-type: none"> 廃棄物管理局の報告書 プロジェクト年次報告書 開発調査報告書 	<ul style="list-style-type: none"> 文献調査 	
		ダッカ市(または民間委託地域での民間業者)の収集サービスに対する住民の満足度が36%から2015年以内に70%に上がる	プロジェクト開始前、実施中、現在の住民の満足度(時系列変化)	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 開発調査報告書 	<ul style="list-style-type: none"> 文献調査 	
	プロジェクト目標は達成される見込みか	プロジェクト終了時までに52.5%(2,053t/日)が埋立地に運搬され、適切に処理される。	プロジェクト開始前、実施中、現在の埋立て地搬入量(時系列変化)	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 開発調査報告書 	<ul style="list-style-type: none"> 文献調査 	
		ダッカ市(または民間委託地域での民間業者)の収集サービスに対する住民の満足度が36%からプロジェクト終了時までに50%に上がる。	プロジェクト開始前、実施中、現在の住民の満足度(時系列変化)	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 開発調査報告書 	<ul style="list-style-type: none"> 文献調査 	
アウトプットは計画どおり産出されたか見込みか	1-1 廃棄物管理局(WMD)のマネジャーがプロジェクト終了までに年間活動計画と予算提案を作成できるようになる。	WMD マネジャーによる年間活動計画と予算提案書の作成状況	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
		1-2 5年次(2010年4月～2011年3月)のプロジェクト活動で完了が1カ月以上遅れる活動の割合が70%に減る。	5年次(2010年4月～2011年3月)のプロジェクト活動で完了が1カ月以上遅れる活動の割合	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
	1-3 プロジェクトにより8つのグッドプラクティスやケースが広められる。	グッドプラクティスやケースの普及状況	グッドプラクティスの定義	<ul style="list-style-type: none"> リーフレット、ニューズレター、新聞記事ほか C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		1-4 プロジェクト終了までに、市民の環境意識と社会状況の変化に合わせ、「クリーンダッカ・マスタープラン」が改訂される。	「クリーンダッカ・マスタープラン」の改訂状況	<ul style="list-style-type: none"> 改訂マスタープラン報告書 プロジェクト進捗報告書 C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果	
	大項目	小項目					
実績の検証(つづき)	アウトプットは計画どおり産出されたか(つづき)	1-5 ワードベース・アプローチ(Ward Based Approach: WBA)の活動が廃棄物管理局職員の業務として公式に認定される。	<ul style="list-style-type: none"> WBAの公式認定状況 	<ul style="list-style-type: none"> 廃棄物管理局の通知文書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
		2-1 プロジェクト終了までに、20名以上の清掃検査官(CI)、清掃監督検査官(CSI)及び清掃官(CO)がワードレベルの住民廃棄物管理を推進するため十分な知識、技能を修得し、意欲をもつ。	<ul style="list-style-type: none"> CI、CSI、COの知識、技能、意欲 知識、技能、意欲の測定方法 	<ul style="list-style-type: none"> プロジェクト進捗報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
		2-2 ワード廃棄物管理ガイドラインが作成され、バンダグラデシユ会社年度2007/08終了までには使用できる状態になる。	<ul style="list-style-type: none"> ワード廃棄物管理ガイドライン ガイドラインの質 それが使用できる状態になっているか 	<ul style="list-style-type: none"> ガイドライン発行の確認 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
		2-3 一次収集サービス業者の許認可及びモニタリングシステムが改善され、全市への導入が開始される。	<ul style="list-style-type: none"> 一次収集サービス業者の許認可及びモニタリングシステムの改善状況 その全市への導入状況 	<ul style="list-style-type: none"> 顧客満足調査結果 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
		2-4 住民・ダッカ市・一次収集サービス業者間が調整され、成功した住民廃棄物管理活動の数が「成功」のクライテリア	<ul style="list-style-type: none"> 住民・ダッカ市・一次収集サービス業者間の調整状況 成功した住民廃棄物管理活動の数 「成功」のクライテリア 調整と活動の成功の因果関係 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
		3-1 ダッカ市に適した新収集システムが開発され、開発したシステムが20カ所以上に導入される。	<ul style="list-style-type: none"> 開発された新収集システム その導入状況 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
実績の検証(つづき)	ア)グットは計画どおり産出されたか(つづき)	3-2 WBA2 対象ワード (46 ワードが対象) の 50%以上の CI 及び清掃員が安全衛生に対する認識をもつようになる。	<ul style="list-style-type: none"> 安全衛生に対する認識をもっている CI 及び清掃員の割合 安全衛生に対する認識の測定方法 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		3-3 プロジェクト終了時まで15名以上の CI のワードレベルでの収集運搬の管理能力が向上し、CI 自ら改善のイニシアティブをとるようになる。	<ul style="list-style-type: none"> CI のワードレベルでの収集運搬の管理能力 管理能力の測定方法 CI のイニシアティブ イニシアティブの測定方法 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 CI への聞き取り C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		3-4 127 台の収集車の定期メンテナンスが行われる。	<ul style="list-style-type: none"> 収集車の定期メンテナンス状況 メンテナンスの質 	<ul style="list-style-type: none"> ワークシヨップ記録 プロジェクト進捗報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		4-1 2008 年 7 月までにマトワイル処分場運用管理のための職員が配置され、適正な運用管理を行う。	<ul style="list-style-type: none"> マトワイル処分場運用管理職員の配置状況 運用管理状況 	<ul style="list-style-type: none"> マトワイル処分場組織図 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		4-2 マトワイル処分場で 2008 年 7 月から環境管理計画のとおり、環境パラメーターについてのモニタリングが実施される。	<ul style="list-style-type: none"> 環境パラメーターについてのモニタリングの実施状況 モニタリングの質 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
	4-3 運用管理マニュアルのとおり、ごみ投棄、転圧、覆土、法面維持が適切に行われる。	<ul style="list-style-type: none"> 運用管理マニュアルのとおり、ごみ投棄、転圧、覆土、法面維持が適切に行われる。 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
	4-4 運用管理マニュアルのとおり、浸出水が適切に処理される。	<ul style="list-style-type: none"> 運用管理マニュアルのとおり、浸出水が適切に処理される。 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
	4-5 計量台が運用され、データが定期的に廃棄物管理局の本部に提出される。	<ul style="list-style-type: none"> 計量台の運用状況 データの提出状況 データの質 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
実績の検証(つづき)	ア) プットは計画どおり産出されたか(つづき)	5-1 プロジェクト終了までに、次年度の9月以前に会計年度毎の財務報告書が作成されるようになる。	<ul style="list-style-type: none"> 次年度の9月以前に作成される財務報告書の割合 財務報告書の質 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		5-2 プロジェクト終了までに、4月以前に次年度の会計年度についての財政計画報告書が作成されるようになる。	<ul style="list-style-type: none"> 4月以前に作成される次年度の財政計画書の割合 財政計画書の質 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		5-3 プロジェクト終了までに、翌月第2週以前に実際の収入・支出についての月間報告書が作成されるようになる。	<ul style="list-style-type: none"> 翌月第2週以前に作成される月間収支報告書の割合 月間収支報告書の質 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		5-4 廃棄物管理のための支出が改善される。	<ul style="list-style-type: none"> 廃棄物管理のための支出の改善状況 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
投入の質、量、タイミングは適切だったか	日本側投入	長・短期専門家の質、量、タイミング	<ul style="list-style-type: none"> 投入実績データ C/Pの意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		日本側投入 供与機材の質、量、タイミング	<ul style="list-style-type: none"> 投入実績データ C/Pの意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		日本側投入 本邦研修・第三国研修の質、量、タイミング	<ul style="list-style-type: none"> 投入実績データ C/Pの意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		日本側投入 調査団の質、量、タイミング	<ul style="list-style-type: none"> 投入実績データ C/Pの意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
実績の 検証 (つづ き)	投入の質、量、 タイミン グは適 切だっ たか(つ づき)	バン グ ラ デ シ ュ 側 投 入 C/P の 質、 量、 タイ ミン グ	<ul style="list-style-type: none"> 投入実績データ 日本人専門家の意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		バン グ ラ デ シ ュ 側 投 入 土 地、 建 物、 付 帯 施 設 の 質、 量、 タイ ミン グ	<ul style="list-style-type: none"> 投入実績データ 日本人専門家の意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		バン グ ラ デ シ ュ 側 投 入 現 地 業 務 費 の 質、 量、 タイ ミン グ	<ul style="list-style-type: none"> 投入実績データ 日本人専門家の意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
実施プロセスの検証	活動は計画どおりに実施されたか	活動の進捗に問題（遅れ・中断等）はなかったか。あった場合、それは何で、その原因は何か。その解決方法。	・活動の進捗状況	・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者	・文献調査 ・インタビュー	
	技術移転は順調に進んだか	技術移転の進捗に問題はなかったか。あった場合、それは何で、その原因は何か。その解決方法。	・技術移転の進捗状況 ・C/Pの理解度、習得度	・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者	・文献調査 ・インタビュー	
	プロジェクトのマネジメント体制の問題はなかったか	モニタリングの仕組みが構築されていたか プロジェクト内のコミュニケーションは円滑に行われたか	・モニタリングの方法、頻度 ・定例会議等、会議・打合せの実施方法、その内容	・モニタリングシステム ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者 ・定例会議議事録他 ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者	・文献調査 ・インタビュー ・文献調査 ・インタビュー	
		JICA 本部、JICA バングラदेश事務所との連絡・協力は円滑だったか	・連絡・協力状況	・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者	・文献調査 ・インタビュー	
		DCC 及び WMD との連絡・協力は円滑だったか	・連絡・協力状況	・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者	・文献調査 ・インタビュー	

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
実施プロセスの検証(つづき)	実施機関やパートナー間の関係性の高さは高いか	DCC 及び WMD は高いオーナーシップをもって取り組んでいるか	<ul style="list-style-type: none"> ・バングラフィデシユ側プロジェクト予算 (時系列データ) ・活動実施状況 ・連絡・協力状況 ・DCC、WMD スタッフの認識 	<ul style="list-style-type: none"> ・DCC 及び WMD 予算書 ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者 ・DCC 及び WMD のマネージャー、スタッフ 	<ul style="list-style-type: none"> ・文献調査 ・インタビュー 	
	関係者のプロジェクトへの参加度やプロジェクトに対する認識は高いか	CI、CO、CSI、CUWG、一次収集サービス業者 (PCSPs)、収集車運転手、清掃人などの関係者は本プロジェクトの活動を認識し、協力的であったか	<ul style="list-style-type: none"> ・関係者の意見 ・CI、CO、CSI、CUWG、PCSPs、収集車運転手、清掃人などの認識 	<ul style="list-style-type: none"> ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者 ・CI、CO、CSI、CUWG、一次収集サービス業者 (PCSPs)、収集車運転手、清掃人など 	<ul style="list-style-type: none"> ・文献調査 ・インタビュー 	
	プロジェクトの実施過程で生じた問題や、効果発現に影響を与えた要因は何か	プロジェクトの阻害要因、促進要因は何か。阻害要因に対する対応はどのようなものであったか	<ul style="list-style-type: none"> ・プロジェクト活動記録 	<ul style="list-style-type: none"> ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> ・文献調査 ・インタビュー 	
	他プロジェクトとの協力・連携は適切だったか	開発調査、JDCF、JOCV、草の根無償、環境無償との連携は効果的・効率的だったか	<ul style="list-style-type: none"> ・協力・連携状況 ・プロジェクト活動記録 	<ul style="list-style-type: none"> ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> ・文献調査 ・インタビュー 	

5 項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
有効性	プロジェクト目標は本プロジェクトの貢献によって達成されたか	プロジェクト目標は達成されたか (前出：実績の検証) プロジェクト目標指標の達成は本プロジェクトのアウトプット達成によるものか アウトプットによってプロジェクト目標が達成されるという論理は適切だったか (前出：妥当性)	(前出：実績の検証) ・プロジェクト目標達成度 (前出：実績の検証) ・アウトプット達成度 (前出：実績の検証) ・関係者の認識 (前出：妥当性)	(前出：実績の検証) (前出：実績の検証) ・CP、日本人専門家、その他の関係者 (前出：妥当性)	(前出：実績の検証) (前出：実績の検証) ・インタビュー (前出：妥当性)	
	プロジェクト目標達成を促進するものは阻害した要因は何か	「クリンダツカ・マスタープラン」の実現に向けてのコミットメントはダツカ市や他の関係者の間で維持されたか (外部条件) 洪水など自然災害はプロジェクトの実施に大きな影響を及ぼしたか (外部条件) ダツカ市は廃棄物管理に適切な予算を配分したか (外部条件) 中央政府はダツカ市の廃棄物管理に必要な支援を行ったか (外部条件) その他の促進・阻害要因はあったか	・DCC 予算における「クリンダツカ・マスタープラン」予算の割合 (時系列データ) ・ダツカ市や他の関係者のコミットメント ・自然災害の発生状況 ・その影響 ・DCC 予算における廃棄物管理予算の割合 (時系列データ) (前出：妥当性) ・バングラデシユ環境省その他、中央政府の支援状況 ・関係者の認識	・DCC 予算書 ・CP、日本人専門家、その他の関係者 ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・CP、日本人専門家、その他の関係者 (前出：妥当性) ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・CP、日本人専門家、その他の関係者 ・プロジェクト進捗報告書 ・プロジェクト年次報告書 ・CP、日本人専門家、その他の関係者	・文献調査 ・インタビュー ・文献調査 ・インタビュー (前出：妥当性) ・文献調査 ・インタビュー ・文献調査 ・インタビュー ・文献調査 ・インタビュー	

5 項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
効率性	達成されたアウトプットからみて、投入の質・量・タイミングは適切か	専門家派遣人数、専門分野・能力、派遣時期・期間は適切か (前出：実績の検証)	(前出：実績の検証)	(前出：実績の検証)	(前出：実績の検証)	
		供与機材の種類、量、設置時期は適切か (前出：実績の検証) 研修員受け入れ人数、研修内容、研修期間、受け入れ時期は適切か (前出：実績の検証) カウンターパートの人数、配置時期、能力は適切か (前出：実績の検証) 建物・施設の質、規模、利便性は適切か (前出：実績の検証)	(前出：実績の検証)	(前出：実績の検証)	(前出：実績の検証)	
	プロジェクトの予算は適正規模か	類似プロジェクトと比較して妥当なコストか	<ul style="list-style-type: none"> 本プロジェクトの総投入コスト 類似プロジェクトのアウトプットの内容、受益人口等 類似プロジェクトの総投入コスト 	<ul style="list-style-type: none"> プロジェクト年次報告書 類似プロジェクト終了時評価報告書 C/P、日本人専門家、その他関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
	効率性を促進・阻害した要因は何か	開発調査、JDCF、JOCV、草の根無償、環境無償との連携は有効か (前出：妥当性) 定例会議、JCC など、プロジェクト運営管理体制はプロジェクトの効率的運営に貢献したか その他の促進・阻害要因はあったか	(前出：妥当性) ・関係者の認識	(前出：妥当性) <ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他関係者 	(前出：妥当性) <ul style="list-style-type: none"> 文献調査 インタビュー 文献調査 インタビュー 	

5 項目	評価設問		必要なデータ (前出：実績の検証)	情報源 (前出：実績の検証)	データ収集方法 (前出：実績の検証)	調査結果
	大項目	小項目				
インパクト	上位目標は達成される見込みか 上位目標の達成を阻害する要因はあるか	上位目標は達成される見込みか (前出：実績の検証)	(前出：実績の検証)	(前出：実績の検証)	(前出：実績の検証)	
		「クリンダッカ・マスタープラン」の実現に向けてのコミットメントが、ダッカ市や他の関係者の間で維持される (外部条件)	<ul style="list-style-type: none"> • DCC 予算における「クリンダッカ・マスタープラン」予算の割合 (時系列データ) • ダッカ市や他の関係者のコミットメント 	<ul style="list-style-type: none"> • DCC 予算書 • C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> • 文献調査 • インタビュー 	
	上位目標の達成は本プロジェクトの貢献によるものか その他の波及効果はあるか	ダッカ市の財政能力が強化される (外部条件)	<ul style="list-style-type: none"> • ダッカ市財政状況 • 関係者の認識 	<ul style="list-style-type: none"> • ダッカ市財務報告書 • C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> • 文献調査 • インタビュー 	
		そのほかの促進・阻害要因はあるか		<ul style="list-style-type: none"> • プロジェクト進捗報告書 • プロジェクト年次報告書 • C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> • 文献調査 • インタビュー 	
	上位目標の達成は本プロジェクトの貢献によるものか その他の波及効果はあるか	上位目標とプロジェクト目標の論理的関係は適切か	<ul style="list-style-type: none"> • 関係者の認識 	<ul style="list-style-type: none"> • 事前評価調査報告書 • C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> • 文献調査 • インタビュー 	
		WBA の導入はコミュニティの運営に何らかの影響を与えたか 新廃棄物収集システムは一次収集サービス業者 (PCSPs)、収集車運転手、清掃人などの関係者に何らかの影響を与えたか 最終処分場の運転・維持管理の改善は、周辺環境に何らかの影響を与えたか 会計システムの改善は、関係者に何らかの影響を与えたか その他の影響 (正負) はあるか	<ul style="list-style-type: none"> • 関係者の認識 	<ul style="list-style-type: none"> • プロジェクト進捗報告書 • プロジェクト年次報告書 • C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> • 文献調査 • インタビュー 	<ul style="list-style-type: none"> • 文献調査 • インタビュー
		同上	同上	同上	同上	
		同上	同上	同上	同上	
		同上	同上	同上	同上	
		同上	同上	同上	同上	

5 項目	評価設問		必要なデータ (前出：インパクト)	情報源 (前出：インパクト)	データ収集方法 (前出：インパクト)	調査結果
	大項目	小項目				
自立発展性	政策面での支援は継続するか	「クリーナーダッカ・マスタープラン」の実現に向けてのコミットメントが、環境省、DCC、その他の関係者の間で維持されるか (前出：インパクト)	(前出：インパクト)	(前出：インパクト)	(前出：インパクト)	
		WMD には、協力終了後も活動を継続するに足る運営管理能力があるか	<ul style="list-style-type: none"> WMD 予算 WMD スタッフの配置、定着状況 WMD スタッフの運営管理能力 WMD スタッフの技術力 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
	WMD には、協力終了後も、収集車、計量機など、機材の維持管理を適切に行っていく見通しはあるか	<ul style="list-style-type: none"> WMD 予算 WMD スタッフの配置、定着状況 WMD スタッフの技術力 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 		
	その他の関係者の協力体制は継続するか	WMD には、協力終了後も活動を継続するに足る財政力 (経常経費を含む) があるか	<ul style="list-style-type: none"> WMD 予算 	<ul style="list-style-type: none"> WMD 予算計画書 プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	
		CI、CO、CSI、CUWG、一次収集サービス業者 (PCSPs)、収集車運転手、清掃人などの関係者は、職場に定着し、継続して適切な廃棄物管理を実行していくか	<ul style="list-style-type: none"> 関係者の意見 	<ul style="list-style-type: none"> プロジェクト進捗報告書 プロジェクト年次報告書 C/P、日本人専門家、その他の関係者 	<ul style="list-style-type: none"> 文献調査 インタビュー 	

