

付 属 資 料

1. ミニッツ（合同評価報告書）
2. 評価グリッド
3. 質問票及び集計結果
4. 環境社会配慮レポート
5. C/P によるフェーズ 2 提案（和訳）

1. ミニッツ（合同評価報告書）

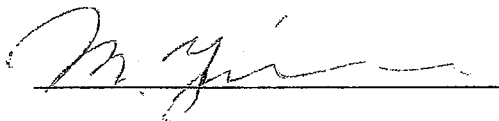
**Minutes of Meeting
between
The Palestinian Terminal Evaluation Team
and
The Japanese Terminal Evaluation Team
on
The Project for Capacity Development on
Solid Waste Management in
Jericho and Jordan River Rift Valley (JJRRV)**

The Japanese Terminal Evaluation Team (hereinafter referred to as 'the Japanese Team'), organized by Japan International Cooperation Agency (hereinafter referred to as 'JICA') and headed by Dr. Mitsuo Yoshida, visited Palestinian National Authority (hereinafter referred to as 'PNA') from June 11 to 26, for the purpose of conducting the joint terminal evaluation on the Technical Cooperation Project for Capacity Development on Solid Waste Management in JJRRV (hereinafter referred to as 'the Project') on the basis of the Record of Discussions signed on July 2, 2005.

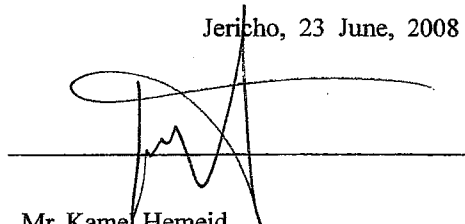
During the visit, the Japanese Team had a series of discussions and exchanged views with the Palestinian Terminal Evaluation Team (hereinafter referred to as 'the Palestinian Team') headed by Mr. Kamel Hemeid. The both teams worked as the Joint Terminal Evaluation Team, and discussed on the draft of the Joint Terminal Evaluation Report.

As a result of discussions, the Palestinian Team and the Japanese Team mutually agreed upon the attached document.

Jericho, 23 June, 2008

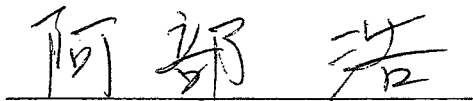


Dr. Mitsuo Yoshida
Leader
Japanese Terminal Evaluation Team,
Senior Advisor,
Japan International Cooperation Agency
(JICA)

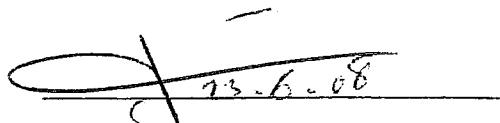


Mr. Kamel Hemeid
Leader
Palestinian Terminal Evaluation Team,
General Director, Department of Joint
Council for Services, Planning and
Development
Ministry of Local Government
Palestinian National Authority

(Witness)



Mr. Hiroshi Abe
Team Leader
JICA Expert Team on the Project for Capacity
Development on Solid Waste Management in
JJRRV



Mr. Hasan Saleh
President of Joint Council for services,
planning and development for Solid
Waste Management (JCspd) in JJRRV
Palestinian National Authority

1. Joint Terminal Evaluation Report

(1) The Joint Terminal Evaluation Team confirmed the Joint Terminal Evaluation Report attached as Appendix I (M/M).

(2) The chapters on "Conclusions" and "Recommendations" in the Joint Terminal Evaluation Report are prepared in two versions. The main version is prepared in English and the summary version is prepared in Arabic. In case of any divergence of interpretation, the English version shall prevail.

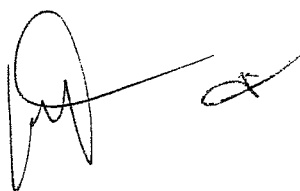
2. Needs for Technical Cooperation

Based on the result of the Joint Terminal Evaluation, a draft concept paper for 'the Project for Capacity Development on Solid Waste Management in Jericho and Jordan Rift Valley (Phase 2)' attached as Appendix II (M/M), was presented by the Palestinian Team. The Palestinian side requested. The Palestinian side requested a short extension of the Project period by the time of provision and deployment of the equipment through UNDP, and formulation of Phase 2 project. The Japanese Team would convey this idea to concerned officials in Japan.

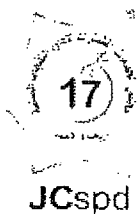
3. Appreciation for the Cooperation

The Palestinian side showed sincere appreciation to the technical cooperation project by the Government of Japan, and expressed strong intention to continue such technical cooperation after the termination of the Project.

Appendix I	Joint Terminal Evaluation Report
Appendix II	Draft Concept Paper for the Project for Capacity Development on Solid Waste Management in Jericho and Jordan Rift Valley (Phase 2)
Appendix II I	List of Attendants



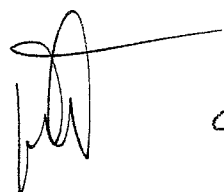
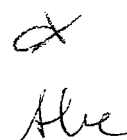

Joint Terminal Evaluation Report
for
the Project for Capacity Development on Solid Waste
Management in Jericho and the Jordan River Rift Valley



Joint Terminal Evaluation Team

23 June, 2008

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ANNEX 1: Project Design Matrix (PDM) version 3

ANNEX 2: Plan of Operation (PO) version 3



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ANNEX 3: Evaluation Grid

ANNEX 4: List of the Japanese experts

ANNEX 5: List of the Trainees in Japan and Jordan

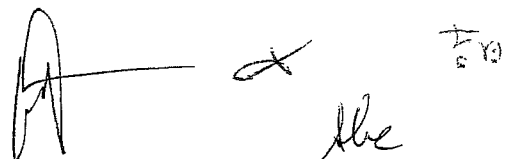
ANNEX 6: List of the Provided Equipment

ANNEX 7: List of the Public Relations Activities

ANNEX 8: Results of the Questionnaires Survey

ANNEX 9: Development Strategy of SWM-Comments by the Project Director

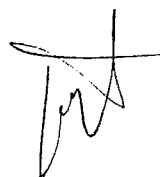
ANNEX10: Arabic version of the "Conclusions" and "Recommendations" of the
Joint Terminal Evaluation Report

Handwritten signature and initials. The signature is a large, stylized 'A' followed by a horizontal line. To the right of the signature are the initials 'x' and 'the'. Further to the right are the initials 'F.Y.'.

ABBREVIATIONS AND ACRONYMS

AB	Administrative Body
C/P	Palestinian Counterpart
CD	Capacity Development
CEP	Center for Engineering and Planning
DJCspd	Department of Joint Councils for Services, Planning and Development
EQA	Environment Quality Authority
GB	General Body
GTZ	German Technical Cooperation
JCC	Joint Coordination Committee
JCspd	Joint Councils for Services, Planning and Development
JET	JICA Expert Team
JFY	Japanese Fiscal Year
JRRV	Jericho and the Jordan River Rift Valley
JSC	Joint Service Council
LGU	Local Government Unit
M/M	Minutes of Meeting
MoH	Ministry of Health
MoLG	Ministry of Local Government
NIS	New Israeli Sheqalim
PCSWM	Palestinian Council for Solid Waste Management
PDM	Project Design Matrix
PNA	Palestinian National Authority
PO	Plan of Operation
R/D	Record of Discussion
SWM	Solid Waste Management
UNDP	United Nation Development Programme
WEDO	Water and Environmental Development Organization

1 NIS = Approx. ¥30



Chapter 1 OUTLINE OF THE EVALUATION STUDY

1.1. Background of the Evaluation Study

The Palestinian National Authority (PNA), which was established in 1994, is an interim legal and administrative organization that nominally governs parts of the West Bank and the Gaza. According to the Oslo Accords, PNA was designated to have control over both security-related and civilian issues in Palestinian urban areas (referred to as "Area A") and only civilian control over Palestinian rural areas (referred to as "Area B"). The remainder of the territories, including Israeli settlements, the major parts of Jordan Valley region and bypass roads between Palestinian communities were to remain under exclusive Israeli control (referred to as "Area C").

Under such political situations, many local government units (LGUs) in Palestine have faced great difficulties to provide public services such as solid waste collection, due to the burgeoning operational costs and political and financial constraints. Current waste management practices in the West Bank are characterized by poor quality and coverage of waste collection services and improper disposal at open dump sites, and hospital and household waste are mixed together at sites that are only marginally controlled and which practice open-air burning. Those mal practices pose a direct risk to public health and environment in Palestine.

The Ministry of Local Government (MoLG) supports LGUs, which are directly responsible for solid waste management (SWM) services. Article 15 of Palestinian Local Authorities Law (1997) allows small-scale LGUs to organize a regional entity, Joint Service Council (JSC), in order to provide community with service in a cost effective way.

In order to respond to the rising needs and requests of JSCs, the specialized department called the Department of Joint Councils for Services, Planning and Development of MoLG (DJCspd) was established on April 21, 2004. One of the duties of DJCspd is to lead and instruct a number of LGUs to form Joint Councils for Services, Planning and Development (JCspd). Based on this background, the JCspd for SWM in Jericho and the Jordan River Rift Valley (JJRRV) (hereinafter referred to as "JCspd JJRRV") was established on August 6, 2005.

Under such circumstances, in August 2004, PNA requested the Government of Japan to provide technical cooperation pertaining to the establishment of an appropriate system of SWM by LGUs in Jericho and Nablus governorates. In response to the request, JICA carried out a study to examine the background of the request in September 2004 and a project formulation study in February 2005.

The project formulation study concluded that the target area of project would be focused on solely Jericho Municipality. An implementation study team was also dispatched in July 2005 and both the Palestinian and the Japanese sides agreed to implement the technical cooperation titled "the Project for Capacity Development on SWM in Jericho and the Jordan River Rift Valley" (hereinafter referred to as "the Project") targeting 17 member LGUs of JCspd JJRRV and signed on a Record of Discussion (R/D) and a Minutes of Meeting (M/M) in July 2, 2005. Based on the R/D, the Project commenced in September 2005, with a group training course in Japan. On November 13, 2005, JICA sent an expert team to Palestine to carry out the Project.

In the occasion prior to the end of the Project in August 2008, a terminal evaluation is conducted to examine the degree of achievements on a comprehensive level in the Project. The specific objectives of the terminal evaluation are summarized in the next section.

1.2. Objectives of the Evaluation Study

The specific objectives of the terminal evaluation are outlined as follows:

- 1) To review the progress of the Project and evaluate the achievement in accordance with the five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact and Sustainability)
- 2) To draw the factors to promote/impe the effects
- 3) To consider the necessary actions to be taken before/after the end of the Project, and make recommendations for the Project
- 4) To summarize the result of the study in a joint evaluation report

1.3. Members of Evaluation Study Team

The joint terminal evaluation team (hereinafter referred to as "the Team") consists of the following members.

1.3.1. The Palestinian Side

- (1) Mr. Kamel Hemeid (Leader)

General Director, Department of Joint Council for Services, Planning and Development
Ministry of Local Government

- (2) Mr. Fawaz Rabaia (Member)

General Manager of Public Relations
Ministry of Local Government

- (3) Mr. Fayez Sweety (Member)

- Manager of Environment Department, Ministry of Local Government
- (4) Mr. Ghassan Daraghme (Member)
Director of Jericho Branch, Ministry of Local Government
- (5) Mr. Sleiman A. Abu Muferrah (Member)
Manager of Rural Development Department, Department of Joint Council for Services, Planning and Development, Ministry of Local Government
- (6) Mr. Abdel-Jabbar Abu-Halawa (Member)
Executive Director, Joint Service Council for Solid Waste Management in Jericho and Jordan River Rift Valley

1.3.2. The Japanese Side

- (1) Dr. Mitsuo Yoshida (Leader)
Senior Advisor (Water, Waste and Environment), JICA
- (2) Mr. Tetsuya Mizutani
Project Formulation Advisor, JICA
- (3) Mr. Abed Al-naser Makky,
Total Coordinator in JICA Jericho Field Office
- (4) Ms. Eriko Tamura (Cooperation Planning)
Senior Program Officer, Global Environment Department, JICA
- (5) Mr. Naoyuki Teshima (Evaluation Analysis)
Chief Economist/Director, Construction Project Consultants, Inc.(CPC)

1.4. Schedule of the Evaluation Study

Date		Activity
11	Wed	14:00 JET interview
12	Thu	9:30 E. Director of JCspd JJRRV (Abdel-Jabbar)
13	Fri	(Preparation of the Joint Evaluation Report)
14	Sat	9:30 JCspd JJRRV staff interview
		13:00 JCspd JJRRV drivers and workers
		11:00 Trainee in Japan (JCspd-Mr. Marwan, Jericho M.-Messers. Jalal and Zahi)
15	Sun	9:30 Mr. Hasan Jermi (Head of Zbidat, Vice President of JCspd JJRRV)
		10:30 Mr. Ibrahim De'abis (V-head of Aqrabanyyah, AB member of JCspd JJRRV)
		13:30 Mr. Anwar Foqaha (Head of Ein Al-Bidah, AB member of JCspd JJRRV)
16	Mon	10:00 Community meeting A (Peasant union),
		11:00 Mr. Ghassan (MoLG Jericho)

		16:00 Community meeting B (New'meh)
17	Tue	10:00 MoLG (Mr. Kamel) at Bethlehem 13:00 UNDP in Jerusalem
18	Wed	9:30 E. Director of JCspd JJRRV (Abdel-Jabbar), Site visit
19	Thu	10:00 MoH 12:00 GTZ in Ramalah
20	Fri	(Preparation of the Joint Evaluation Report)
21	Sat	President of JCspd JJRRV (Hasan Saleh), E. Director of JCspd JJRRV (Abdel-Jabbar)
22	Sun	10:00 JCC (Discussion) in JICA Jericho Field Office
23	Mon	10:00 JCC (M/M) in JICA Jericho Field Office
24	Tue	10:30 PCSWM preparatory meeting for foundation (at Ramalla)
25	Wed	Wrap up meeting with JCspd JJRRV and JET

1.5. Methodology of Evaluation

The Project was evaluated based on the Project Design Matrix (PDM), which is the summary table of this Project. The PDM was revised and approved by the JCC meeting in the mid-term evaluation study on June, 2007. The terminal evaluation was carried out based on this revised PDM.

1.5.1. Evaluation Procedure

For the data and information collection, the Team applied various methods such as questionnaire, interviews, focus group discussions and observation of the improved dumping site, the plastic recycling facility and the maintenance workshop of Jericho Municipality. The Team analyzed and evaluated the Project in terms of achievement level of the Project, implementation process, and five evaluation criteria such as Relevance, Effectiveness, Efficiency, Impact and Sustainability. Finally, the Team made the recommendations based on the results.

1.5.2. Points for the Evaluation

Achievement Level and Implementation Process of the Project

The achievement levels in terms of Inputs, Activities, Outputs, and Project Purposes were assessed in comparison with the revised PDM, Plan of Operation (PO) and the actual results of the Project. The implementation process of the Project was also confirmed from the various viewpoints such as monitoring and communication.

Evaluation Criteria

In addition to verification of achievement level and implementation process of the Project, the terminal evaluation study assesses the Project from the following five evaluation criteria.

- (1) Relevance: An overall assessment of whether the Project purpose and overall goal are in line with policy of both sides and with Palestinian needs.
- (2) Effectiveness: A measure of whether the project purpose has been achieved. This is then a question to the degree to which the outputs contribute towards achieving the intended Project purpose.
- (3) Efficiency: A measure of the production of outputs (results) of the Project in relation to the total resource inputs.
- (4) Impact: The positive and negative changes, produced directly and indirectly as the result of the Project.
- (5) Sustainability: An overall assessment of the extent to which the positive changes achieved by the Project can be expected to last after the completion of the Project.

Chapter 2 OUTLINE OF THE PROJECT

The Project has been implemented since September 2005. PDM and PO were revised twice, and the latest version of the PDM and PO were formulated in the Mid-Term Evaluation Study in June 2007. The expected Overall Goal, Project Purposes and Outputs manifested in the PDM are as follows:

Overall Goal:

- 1. In PNA, a basic policy and a concrete action plan on integrated SWM are formulated.
- 2. Effective system of SWM modeling JJRRV is diffused in PNA

Project Purposes:

- 1. Sustainable and sanitary system of SWM is introduced in JJRRV.
- 2. Experiences of improvement on SWM in JJRRV are shared as a model for other areas in PNA.

Outputs:

- 1. Organization for project operation is established.
- 2. System for SWM in JJRRV is established.
- 3. Present situation of SWM in JJRRV is grasped.
- 4. Action plan for improvement of SWM in JJRRV is formulated.
- 5. The action plan is put into practice and the improvement is made.
- 6. Seminars/ workshops are held and the Project experiences in JJRRV are diffused among Palestinian local authorities.

7. Those who are in charge of SWM in local authorities and related ministries acquire basic knowledge on integrated SWM and their basic knowledge is diffused.

Chapter 3 ACHIEVEMENT AND IMPLEMENTATION PROCESS

3.1. Inputs

3.1.1. Inputs from Japanese Side

In total, the Japanese side has allocated and appropriated necessary budget for the Project activities and management as shown in the following table.

Table 1: Total Cost for Project Implementation

Unit: 1,000Yen

	JFY2005	JFY2006	JFY2007	JFY2008	Total
Total Cost for Project Implementation	59,678	120,270	119,275	38,269	337,992

Below are the details regarding main inputs provided by JICA (all the numbers and figures below are as of June 2008).

(1) Dispatch of Japanese Experts

The following numbers of experts were dispatched and assigned. Detailed assignment can be found in ANNEX 4.

- Five (5) short-term experts from November 2005 to March 2006
- Six (6) short-term experts from July 2006 to March 2007
- Five (5) short-term experts from May 2007 to March 2008
- Five (5) short-term experts from May 2008 to August 2008

(2) Counterpart Training in Japan

“Country Focused Training Course on Capacity Building in Solid Waste Management for Palestine” in Japan was organized three times; the first course was from September 5 to October 7, 2005, the second one was from November 1 to December 1, 2006, and the third one was from October 10 to December 2 2007. 22 officers from different organizations participated in the trainings in total. In addition, the third country training in Jordan was carried out from 16 to 22 of September, 2006 with the cooperation of Amman Municipality and Jordanian Ministry of Environment. Detailed information about the participants in those training courses is shown in the ANNEX 5.

(3) Provision of equipment

The provided equipment by the Project, such as maintenance tools and spare parts for existing collection vehicles, is detailed in ANNEX 6.

3.1.2. Inputs from the Palestinian Side

The Palestinian side has allocated the C/Ps for the JET and the office space for the Project.

3.2. Achievement of the Project

3.2.1. Project Purposes

Project Purpose 1. "Sustainable and Sanitary system of SWM is introduced in JJRRV."

The Team evaluated that in spite of great efforts made by JCspd JJRRV and JET, the Project Purpose 1 is not completely achieved due to the financial vulnerability (though worth adding that the fee collection rate in 2007 marked more than 60% in spite of the political complexity in the region), and delay in the introduction of new collection and transportation system.

Before the inception of the Project, there used to be only three LGUs (such as Jericho Municipality, Al-New'meh & Edyuk Al-Foqa Local Council and Al-Ojah Local Council) with respectable waste collection and transportation system in the region, i.e. the inauguration of the JCspd JJRRV introduced the SWM service for the first time in the rest of fourteen member LGUs throughout the Project, thus the waste collection and transportation system in the region has been highly improved. However, envisaged provision of equipment by the collaborating UNDP project was being rescheduled, thus turned out that the expected activity of introducing new collection and transportation system was no longer achievable within the designated Project period.

With regard to the activity of improving Jericho's open dump, improvement and enlargement works were conducted from both January to March 2007 and October 2007 to March 2008, the improved dumping site is currently in operation with newly introduced sanitary landfill system. The improved dumping site employs a semi-aerobic system with liner sheet, leachate pond and gas ventilation, technically this is the only Palestinian controlled dumping site in JJRRV. As a result of interviews, some comments specified its contribution to the reduction of the "Jericho flies". In addition, the fact that the member LGUs stopped using four out of five previously identified uncontrolled dumping sites resulted in the reduction of illegal dumping activities. The other open dumping site is controlled

by JCspd JJRRV. This is a great achievement of the Project.

Many interviewees expressed their concerns over the vulnerability of JCspd JJRRV's financial sustainability. Monthly cash flow of 2007 and 2008 is shown in Table 2 below.

Table 2: Monthly cash flow of JCspd JJRRV 2007-2008(Jan.-Apr.)

		Jan.	Feb.	Mar.	Apr.
2007	Cash-in	107, 023	71, 939	95, 097	72, 229
	Cash-out	128, 198	72, 201	97, 338	81, 078
	Balance	-21, 175	-262	-2, 241	5, 438
2008	Cash-in	102, 159	88, 659	138, 461	96, 841
	Cash-out	98, 173	93, 406	144, 093	91, 403
	Balance	3, 986	-4, 747	-5, 632	5, 438

Although the cooperative relationship with LGUs has been built to a certain extent, further cooperation should be developed. In fact, the extent of cooperation differs from LGU to LGU, and it was clearly seen by the different payment level of their dues, ranging from 0% to 100%.

Table 3 shows LGU's monthly due totals NIS129,549¹, and two of 17 LGUs paid 100% of their dues in 2007.

¹ The LGU's monthly due was derived from the amount of Annual Budget for 2007 /2008 (Table 3) divided by 12.

Table 3: Contribution and Fee Paid by 17 LGUs²

Local Government Unit	Contribution 2006			Fee 2007			2008	Fee Jan. - Apr. 2008		
	Budget	Actual	Actual/Budget	Budget	Actual	Actual/Budget	Budget	Budget	Actual	Actual/Budget
	NIS	NIS	%	NIS	NIS	%	NIS	NIS	NIS	%
1 Jericho	96,224	65,000	68%	1,202,000	840,927	70%	1,202,000	400,667	245,754	61%
2 Al-New'meh & Edyuk Al-Foqa	8,906	4,957	56%	48,000	24,485	51%	48,000	16,000	3,575	22%
3 Al-Ojah	18,045	8,015	44%	70,880	21,171	30%	70,680	23,560	5,765	24%
4 Fasayel	4,050	2,500	62%	19,008	4,330	23%	19,008	6,336	1,165	18%
5 Al-Jiftlik	19,805	10,000	50%	44,740	0	0%	44,740	14,913	0	0%
6 Zbidat	6,030	6,030	100%	24,060	1,900	8%	24,060	8,020	1,275	16%
7 Marj Al-Ghazal	1,733	0	0%	5,400	620	11%	5,400	1,800	245	14%
8 Mari Na'ieh	3,452	0	0%	20,220	1,310	6%	20,220	6,740	450	7%
9 Ein Al-Bidah	4,865	2,500	51%	17,100	6,340	37%	17,100	5,700	0	0%
10 Kardalah	743	750	101%	5,160	2,660	52%	5,160	1,720	0	0%
11 Bardalah	7,097	0	0%	19,775	1,500	8%	19,775	6,592	0	0%
12 Froosh Beit Dajan	5,216	5,216	100%	11,760	0	0%	11,760	3,920	0	0%
13 Ein Shibli	891	891	100%	5,760	2,400	42%	5,760	1,920	1,920	100%
14 Nawaji	1,350	1,350	100%	1,740	1,740	100%	1,740	580	435	75%
15 Beit Hasan	5,364	5,364	100%	18,540	16,260	88%	18,540	6,180	4,065	66%
16 Al-Nassaryyah	6,093	6,093	100%	26,760	15,000	56%	26,760	8,920	4,500	50%
17 Al-Aqrabanyya	4,028	4,028	100%	13,800	13,800	100%	13,800	4,600	3,600	78%
Subtotal (without Jericho)	97,864	57,693	59%	352,503	113,516	32%	352,503	117,501	26,995	23%
Total	193,887	122,693	63%	1,554,503	954,443	61%	1,554,503	518,168	282,749	55%
Monthly Average	16,157	10,224	63%	129,542	79,537	61%	129,542	43,181	23,562	55%

Project Purpose 2. "Experiences of Improvement on SWM in JJRRV are shared as a model for other areas in PNA."

The Project Purpose 2 is being achieved by sharing experience of the JCspd JJRRV in the occasions such as JCC meetings, PCSWM meetings other seminars and workshops.

As for Output 6, the Project plans to hold national seminars in August 2008. This would invite major JSCs and JCspds to disseminate the experiences of JCspd JJRRV.

As for Output 7, "Country Focused Training Course on Capacity Building in Solid Waste Management for Palestine" in Japan was organized three times and participated by 22 officers from different organizations. As seen in the ANNEX 5, most of the participants for the first course were mainly from the JCspd JJRRV (officers of Jericho Municipality at that time). On the other, most of the participants for the second and third courses were from other municipalities and JCspds. This provided a valuable opportunity to share experiences and information of the JCspd JJRRV.

According to DJCspd/MoLG officials, the National Committee for Development of Solid Waste Management Sector is under preparation. It is expected that when it is activated, experiences including one from the JCspd JJRRV would be well shared in the committee, and all learning would

² The LGU of No.5 and 12 have partial service from June 2008.

The LGU of No.9 is not currently receiving collection services because of delay of distribution of containers.

The LGU of No. 10 is not currently receiving collection services due to economic points of view.

The LGU of No. 11 is not currently receiving collection services due to some internal disputes.

be incorporated into a future national plan on solid waste management. In addition to this initiative, DJCspd/MoLG plans to organize a platform of sharing experiences of SWM services by JCspds/JSCs in Palestine.

3.2.2. Outputs

Output 1. "Organization for project operation is established."

Output 1 has been achieved, and the organization for project operation was established.

As seen in the ANNEX 3, Evaluation Grid, eight JCC meetings have been held regularly by now. Although some consider that JCC should be held more often, JCC is functioning well in general. As for JCspd JJRRV's operation, both the General Body (GB) meetings and the Administrative Body (AB) meetings have been held regularly. So far, seven GB meetings and fourteen AB meetings were held, and these meetings function as major consultative platforms for the member LGUs.

Output 2. "System for SWM in JJRRV is established."

Output 2 has been generally achieved, since the system for SWM in JJRRV is being established. However there remain significant concerns in financial sustainability of the JCspd JJRRV. Despite the high participation rate in the related assemblies by the JCspd JJRRV shows certain level of cooperation by member LGUs, the fee collection rates are not necessarily high in most of the member LGUs. The degree of the cooperation needs to be questioned in terms of the financial contribution, which is the key element for sustainability of the JCspd JJRRV.

Output 3. "Present situation of SWM in JJRRV is grasped."

Output 3 has been achieved as seen in the following studies carried out to understand the current situation of SWM in the region.

- Solid Waste Amount and Composition Survey -Final Report-: Feb 2006 by Water and Environmental Development Organization (WEDO)
- Time and Motion Survey-Final Report-: Feb 2006 by WEDO
- Survey on topography, soil and groundwater for the Jericho landfill: Oct 2006 by Center for Engineering and Planning (CEP)
- Groundwater Analysis at Jericho and Al-Oja Dump Sites Report: Feb 2007, Oct-2007, Feb

2008 by CEP

- Result of the medical waste survey described in the Consolidation Survey Report, Jan 2007
- Consolidation Survey Report, Jan 2007 by the Project

Output 4. "Action Plan for improvement of SWM in JJRRV is formulated."

Output 4 has been achieved, since the draft Action Plan was presented and agreed by stakeholders in the workshop of "*Seminar on Solid Waste Survey Result*" December 2006.

The final version of the Action Plan includes the following components;

- 1) Raising public awareness
- 2) Improvement of collection and transportation system
- 3) Improvement of disposal system
- 4) Improvement of maintenance system
- 5) Strengthening organization and institution
- 6) Establishment of accounting system

Output 5. "The Action Plan is put into practice and the improvement is made."

6 action plans in the Project has been successfully implemented in general. However, one of the action plan items on the improvement of collection and transportation system has not completely been achieved, since the provision of equipment through UNDP, the collaborating project mentioned in PDM as the Important Assumption, was rescheduled and delayed to this date.

Output 6. "Seminars / workshops are held and the Project experiences in JJRRV are diffused among Palestinian local authorities."

Output 6 has been achieved, since planned activities were successfully conducted. As a consequence of such an achievement, the directors of 11 JCspds/JCs will hold a meeting for establishing new platform for exchanging various experiences and result of studies on SWMs.

Output 7. "Those who are in charge of SWM in local authorities and related ministries acquire basic knowledge on integrated SWM and their basic knowledge in diffused."

Output 7 has been achieved. *Country Focused Training Course on Capacity Building in Solid Waste*

Management for Palestine in Japan was organized three times; and 22 participants in total acquired basic knowledge on integrated SWM. As seen in the ANNEX 5, municipal officers and JCspd/JCs staff from other areas had opportunities to share experiences and information of JCspd JJRRV in these training courses, and presentations by the participants of the training courses in Japan were conducted 3 times.

Chapter 4 EVALUATION BY FIVE CRITERIA

4.1. Relevance

The Team concluded that the Project remains fairly relevant in terms of PNA policy in the related field and Japanese technical cooperation policy.

In relation to PNA's national development plan, the PRDP (Palestinian Reform and Development Plan 2008-2010) regards SWM as urgent and important arena to be developed.

The Palestinian Environmental Law emphasizes the importance of laying out efficient SWM system, including proper arrangement of landfill sites. MoLG's JSC bylaw of 2004 promotes managing municipal SW service on the collective and joint manner, therefore, the Project is highly relevant with the current Palestinian legal environment.

In addition, the Government of Japan declared the "Ecological Initiative for Sustainable Development (EcoISD)" as international technical cooperation policy in the environmental field, where SWM is mentioned as one of the priority issues. From the view point of Japan's aid policy, the Project matches its priority on the support to "Nation Building" and "the Reform Process of PNA".

4.2. Effectiveness

Outputs 2 and 5 are not completely achieved at this stage, due to the delay of provision of UNDP equipment. Therefore the Team cannot conclude that the Project Purposes quite as realized, thus, Effectiveness in the Project is not very high.

4.3. Efficiency

Despite some difficulties due to the political climates and severe financial states of the JCspd JJRRV, the efforts made by both the Palestinian side and the Japanese experts rendered the Project being

implemented efficiently at large.

Particularly in the maintenance of the machineries and equipment, the Project conducted special efforts by providing additional spare-parts and maintenance tools, which enabled the aging machineries in their full operations.

And the Project provided a patrolling car, which enhanced the mobility of the JCspd JJRRV to conduct more frequent monitoring activities in the service target areas.

4.4. Impact

The Team discovered the following positive impacts;

Activeness of the JCspd JJRRV and other JCspds/JSCs encourages DJCspd to activate the National Committee on SWM. In addition, MoLG expresses an intention to incorporate lessons learned from these activities into the national strategy on the subject.

The Working Group for the Capacity Development of SWM, initiated by GTZ includes the Executive Director of the JCspd JJRRV as one of permanent members, and this works as a platform for sharing experience of the JCspd JJRRV.

The Project improved and enlarged Jericho's open dump site as a first case of small scale landfill site in the West Bank. This is currently receiving numbers of visitors including practitioners from other LGUs/JCspds/JSCs and journalists, and is offering a good opportunity of presenting a model case for improvement of open dump site.

The Project is currently implementing the pilot project for the recycling of agricultural plastic waste. This has raised the awareness of the local people and particularly may enlighten people such as waste pickers in the landfill site to follow similar kind of recycling activities.

The Team identified that the Project was raising the awareness among the people, and this led the local communities to be more conscious of cooperation and working together in environmental education which reduce disposal of solid waste, or etc.

For member LGUs of the JCspd JJRRV, which were barely functional in public services, joining the JCspd JJRRV after its inception of SWM service was a significant opportunity to start/revitalize their

public services to the local communities.

The Team couldn't find the negative impact caused by the Project.

4.5. Sustainability

The JCspd JJRRV is the official local authority which is legally capacitated by MoLG. There is no doubt that the JCspd would continue to exist and operate as permanent public entity for SWM in JJRRV, unless fundamental changes occur in the current local administration system in PNA. Therefore, the Team concluded that the Project maintains certain level of sustainability from the legal aspect.

The staff members of the JCspd JJRRV have come to acquire certain skills and knowledge in respective field of SWM through working together with Japanese experts since the inception of JCspd service, which also indicates a good possibility for sustainable operation of the JCspd from the technical aspect.

However, most of its staff members are rather seconded from the Jericho Municipality, and their status has not been transferred to the JCspd JJRRV. Moreover, enormous amount of administrative responsibility and workload are accumulated on shoulders of the particular official, this leaves a big room for improvement in management as an organizational level.

The biggest concern lies in the financial state of the JCspd JJRRV. Only three member LGUs paid their dues in full amount in 2007, and the fee collection ratio in the rest of member LGUs varies in wide range, and some are close to nil. This is causing a constant financial predicament to the JCspd JJRRV. The financial situation is far from affluent enough to invest on additional human resources and machineries which would promise its sustainability in a fundamental sense.

Thus, the Team concluded that there is still a big room for improvement in sustainability of the JCspd JJRRV especially from financial and institutional aspects, and in particular, the current formation of 17 membership LGUs, of which unifies the entire Jordan Valley region on the basis of the PNA policy, needs to be examined from the view point of cost-benefit performance and economic scale in order to determine financial support needed.

Chapter 5 CONCLUSIONS AND RECOMMENDATIONS

5.1. Factors Promoting the Impact and Sustainability

5.1.1. Factors Concerning the Plan

- The C/Ps with insufficient ideas about SWM found it easier to comprehend technical issues, thanks to the approach of adopting visible effects and technology transfer by means of on-the-job-training methodology.
- The baseline of the Project was defined by the capacity assessment in the initial stage of the Project, which helped to plan appropriate activities in order to tackle priority subjects for the capacity development.
- Promotion of the reform process in local governance through organizing JCspd is basically MoLG's policy stance, which would serve as a spur to disseminate the experiences of JCspd JJRRV.

5.1.2. Factors concerning the Implementation Process

- Most staff of the JCspd JJRRV are seconded from Jericho Municipality with relative skills and experiences of SWM, this contributed to the smooth operation of SWM service by the JCspd JJRRV in an early stage.
- Exchange of experience among JCspds/JSCs has been active in the occasions such as site visits to the improved landfill site in Jericho, various workshops, and JCC meetings of the Project. This activity is being further accelerated by the PCSWM which has been organized by 11 JCspds/JSCs.

5.2. Factors inhibiting sustainability and impact

5.2.1. Factors Concerning to Planning

- SWM is often not highly prioritized in the region, especially for farmers in remote LGUs. Therefore, the JCspd JJRRV still faces some difficulties in gaining enough support from member LGUs to pay their shares.
- Most of the member LGUs are quite vulnerable local entities, since they do not have respectable administrative system nor solid financial base.
- The operational cost for SWM service is unavoidably high since the member LGUs are located far and wide in the region with low population density.
- Local economy has been battered since the second Intifada.
- It is difficult to establish rational SWM system owing to political constraints on transportation, land use, and infrastructure development such as landfill construction.

5.2.2. Factors Concerning the Implementation Process

- The improvement of new SWM system turned out to be unachievable within the Project's period, due to the delay in the procurement of the equipment through the UNDP's collaboration project.
- Dissemination of information and experience of the Project to other JCspds/JSCs in Palestine has not been efficient enough due to a lack of capacity and leadership of MoLG.

5.3. Conclusions

On the basis of the Five Evaluation Criteria, Relevancy and Efficiency of the Project reached quite satisfactory level, and the Team discovered various positive Impacts in the course of the Project, whereas Effectiveness is not very remarkable and Sustainability still remains insufficient.

Thus, in spite of various achievements in outputs, the Team conclude that the Project would not be able to fulfill its Purposes completely within the Project period.

In particular, the Team identified that one of the largest constraints for the proper deployment of SWM system in the region, is the delay in the provision of equipment through UNDP's grant aid project. Furthermore, financial vulnerability of the JCspd JJRRV left a big room for improvement.

However, the Team highly evaluated the elevation of ability in 17 member LGUs and main C/Ps, particularly in terms of their technical capability, ownership, and self-motivation, and eventually the level of capacity development in SWM.

5.4. Recommendations

(1) Implementation of Enhanced SWM Service

After the confirmation of the schedule of introduction of SWM equipment by the grant aid project through UNDP, it is recommended to plan and implement the activities for enhanced SWM service by the JCspd JJRRV. The nature of the capacity development is an long term process, and from this perspective, the Project still has some rooms to be developed, thus the Team concludes that seamless and continuous inputs to some aspects of the JCspd JJRRV are still vital at least for the coming years.

(2) Activities for Securing Sustainability

The JCspd JJRRV has not completely established independent financial base, which indicates the sustainability of the organization is not yet ensured.

Later in the current Project period, intensive activities are planned for strengthening the financial base of the JCspd JJRRV, but it is still in early development stage, thus it would need continuous and down-to-earth support in the long run.

At the same time, the Team recommends to examine the economic feasibility on the basis of the scale merit of the JCspd JJRRV with its current formation of 17 membership LGUs, of which unifies

the entire Jordan Valley region on the basis of the PNA policy, needs to be examined from the view point of cost-benefit performance and economic scale in order to determine financial support needed..

(3) Dissemination of the Experiences of the JCspd JJRRV

The Team recommends to accelerate the activities for diffusing experiences of the JCspd JJRRV, which are applicable in various types of regional SWM services by JCspds/JSCs in Palestine, in order to share a model example of practices, such as establishing a new organization, development of new accounting system, and public awareness activities.

The Team recommends to establish a self-reliance mechanism for sharing information among different JCspds/JSCs in Palestine in order to access the Overall Goal of the Project.

5.5 Lessons Learned

(1) Importance of combination of soft and hard components

At the designing stage, the technical cooperation project (soft component) is planned in cooperation with equipment grant aid project (hard component). It was expected to realize the capacity development in SWM in JJRRV from the both aspects of management and facility development. However, due to unexpected political situation, the hard component part didn't coincide with the implementation of the soft component part. This discordance of two components was mainly caused by the delay of the hard component part, and as a result, this left the Project Purpose 1 unachieved, in stead of these two components creating synergy effect.

The Team concludes that these changes are fairly foreseeable and furthermore unavoidable as depicted in the PDM as "Important Assumption", however, this experience suggests us on one hand that the combination of soft and hard component in SWM project is highly effective for capacity development, but on the other, this approach could serve as "double-edged sword" in some case of parallel-running projects.

(2) Sustainability Issue

The Team points out a weakness in assessment of the organization's sustainability at the planning stage of the Project. Especially with all the impediments and obstacles which are characterized in a quasi-state Palestine under the occupation of Israeli military regime, profound and deliberate approach is essential.

In the case of the JCspd JJRRV, the determining factors of its organizational sustainability are both financial and institutional aspects. Neither of these aspects is a plain issue to tackle with in the

short-term, the Team conceived these areas of tasks should be dealt in the long run.

(3) Capacity Development

Finally, the Team concludes this report with remark to the biggest achievement in this Project, that is the progress in the capacity development of all the stakeholders concerned. Especially, the collaborative practice by the Palestinian counterpart personnel with the Japanese Expert team under the extremely difficult circumstances hampered the capacities of the Palestinian side. It is also worthwhile mentioning that going through such difficulties by working together on the ground level induced the viable capacity development.

In addition to the characteristic political and security complexities in the region, which had already given the Project enormous difficulties in its implementation, the Project had to go through numerous challenges as mentioned previously, and the most of these raided the Project completely with no warnings. In order to create tangible results under such circumstances, day-to-day analysis of the changing situation and the flexibilities to correspond swiftly to such changes are the essential elements, all of which are quite recognizable throughout the operation of the Project, and moreover, this is a real proof that the capacity development can be achievable even under the extreme circumstances if the Project is managed properly.

ANNEXES

ANNEX1: Project Design Matrix (PDM) version 3

ANNEX2: Plan of Operation (PO) version 3

ANNEX3: Evaluation Grid of Terminal Evaluation

ANNEX4: List of the Japanese Experts

ANNEX5: List of the Trainees in Japan and Jordan

ANNEX6: List of the Provided Equipment

ANNEX7: List of the Public Relations Activities

ANNEX 8: Results of Questionnaires Survey

ANNEX9: Development Strategy of SWM-Comments by the Project Director

ANNEX10: Arabic version of the "Conclusions" and "Recommendations" of the
Joint Terminal Evaluation Report



Project Design Matrix (PDM) (Ver.3)

Project Title: The project for Capacity Development on Solid Waste Management (SWM) in Jericho and the Jordan River Rift Valley (JJRRV)

Implementing Agencies: JCspd for SWM in JJRRV and Ministry of Local Government

Target Group: Staff of JCspd for SWM in JJRRV and other JCspds for SWM

Target Area: (Project Purpose 1) JJRRV, (Project Purpose 2) Palestine

Duration: 3 Years (From September 1, 2005 to August 31, 2008)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal: 1. In Palestinian National Authority (PNA), a basic policy and a concrete action plan on integrated SWM are formulated. 2. Effective system of SWM modeling JJRRV is diffused in PNA.	1.1 Policy paper on SWM of the JCspd 1.2 Concrete action plans (such as medium term plan) based on policy above. 2.1 Holding seminars and workshops regularly in JJRRV. 2.2 Realization of SWM modeling JJRRV among local authorities in PNA.	1.1&1.2 Policy paper and concrete action plan made by PNA. 2.1 Information on seminars and workshop in JJRRV. 2.2 Information provided by PNA.	The system on SWM in JJRRV will be authorized by PNA as a model among local authorities and its diffusion will be encouraged by PNA.
Project Purpose: 1. Sustainable and sanitary system of SWM is introduced in JJRRV. 2. Experiences of improvement on SWM in JJRRV are shared as a model for other areas in PNA.	1. Waste collection and transportation system is improved so that illegal dumping is reduced. Segregated collection and proper treatment of medical waste is put into practice. Controlled dumping site which is suited to the situation of JJRRV is realized. 2. The Organization to provide SWM service improves its financial base. 3. Experiences in JJRRV for improvement on SWM are well shared among other local authorities in PNA.	1. Interview to those who are in charge of SWM and the Project records 2. Record of the Organization 3. Inquiry to areas other than JJRRV.	PNA's policy for JCspd/JSC will not be drastically changed.
Project Output: 1. Organization for Project operation is established. 2. System for SWM in JJRRV is established. 3. Present situation of SWM in JJRRV is grasped	1.1 The Joint Coordinating Committee (JCC) is established and held regularly 1.2 Project implementation schedule and monitoring and feedback system are established. 2.1 Basic plan of SWM service by JCspd is prepared. 2.2 Duties in organization for SWM are clarified. 2.3 Establishment of financing and accounting system on SWM. 2.4 Public awareness of the Project. 2.5 Collaboration with local authorities. 2.6 Repair and Maintenance of vehicles/equipment for SWM is conducted. 3.1 Survey report on characteristics and volume of wastes	1.1 Minutes of the JCC meetings 1.2 Plan of Operation, Minutes of the JCC meetings 2.1 Basic plan of SWM service 2.2 Organization chart and personnel positioning paper of SWM. 2.3 Statement of budget and settlement 2.4 Activity log of public awareness 2.5 Memorandum of meetings and communications. 2.6 Record of repair and procurement. 3.1-3.4 Each investigation reports.	The new Jericho Hospital properly treats the medical waste under the supervision of Ministry of Health. Equipment provided by the Japanese/UNDP Grant Aid Project is delivered.

ANNEX1: Project Design Matrix (PDM) version 3

<p>4. Action plan for improvement of SWM in JJRRV is formulated.</p> <p>5. The action plan is put into practice and the improvement is made</p> <p>6. Seminars/workshops are held and Project experiences in JJRRV are diffused among Palestinian local authorities.</p> <p>7. Those who are in charge of SWM in local authorities and related ministries acquire basic knowledge on integrated SWM and their basic knowledge are diffused.</p>	<p>3.2 Survey report on conditions of waste collection and transportation (including of illegal waste disposal)</p> <p>3.3 Survey report on conditions of final disposal site (including pollution of soil and underground water)</p> <p>3.4 Survey report on conditions of medical waste management.</p> <p>3.5 Consolidation survey report</p> <p>3.6 Holding workshops on baseline survey</p> <p>4.1 Formulation of draft action plan based on the baseline survey</p> <p>4.2 Based on the draft action plan, workshops are hold.</p> <p>4.3 Action plan is finalized.</p> <p>5.1 Improvement of collection rate, reduction of illegal disposal.</p> <p>5.2 Improvement of final disposal site.</p> <p>5.3 Consolidation improvement report (including recommendation to PNA)</p> <p>6.1 Holding seminars/Workshops for those who are in charge of the SWM in local authorities (include site visit)</p> <p>7.1 Implementation of training courses in Japan for those who are in charge of SWM in local authorities and PNA.</p>	<p>3.5 Consolidation report</p> <p>3.6 Record of workshops</p> <p>4.1 Draft action plan</p> <p>4.2 Record of workshops</p> <p>4.3 Action plan report</p> <p>5.1 Survey of collection rate</p> <p>5.2 Monitoring the reduction of pollution by improvement of final disposal site.</p> <p>5.3 Consolidation improvement report</p> <p>6.1 Record of seminars/Workshops</p> <p>7.1 Record of training courses (including each participant's action plan reports)</p>	
<p>Project Activities</p> <p>1. Project Operation</p> <p>1.1 Joint Coordinating Committee (JCC) is established and committee meetings are held regularly.</p> <p>1.2 Project implementation schedule and monitoring and feedback system are established.</p> <p>2. System for SWM</p> <p>2.1 Survey on present situation of organization and institutional structure on SWM.</p> <p>2.2 Capacity assessment & improvement needs analysis.</p> <p>2.3 Preparation for start-up SWM Services by JCspd</p> <p>2.4 Organizational & institutional arrangement for SWM.</p> <p>2.5 Introduction of financing and accounting system on SWM.</p> <p>2.6 Public awareness on the Project</p> <p>2.7 Consultative meeting with the local authorities, members of the JCspd for SWM in JJRRV.</p> <p>2.8 Repair and maintenance of vehicle/equipment</p> <p>2.9 Training of JCspd Staff</p>	<p>Inputs from JICA (Dispatch of experts)</p> <p>The short-term experts in the following fields may be dispatched depending on needs as specified in the plan of operation.</p> <p>1) Team leader and capacity development</p> <p>2) SWM planning for urban area</p> <p>3) SWM planning for rural area</p> <p>4) Medical waste management</p> <p>5) Environmental and social impact mitigation</p> <p>6) Disposal site management.</p> <p>7) Seminars/workshop</p> <p>(Contract out with local NGOs, consultants and contractors)</p> <ul style="list-style-type: none"> • Baseline survey on SWM and pollution • Pilot project for improvement of SWM <p>(Provision of machinery and equipment)</p> <ul style="list-style-type: none"> • Equipment for disposal site improvement • Equipment for training <p>(Training in Japan)</p> <ul style="list-style-type: none"> • 5 persons for 2005 Japanese 	<p>Inputs from Palestinian side:</p> <ul style="list-style-type: none"> • Assignment of counterparts and administrative personnel. • Provision of office space with furniture for the Japanese experts and their supporting staff, room(s) for seminars/work shops and land necessary for the implementation of the project. • Provision of information and documents • Acquisition of permission for making on-site 	<p>Status of JCspd for SWM in JJRRV is not changed.</p> <p>Pre-Condition</p> <ul style="list-style-type: none"> • Political stability of JJRRV is kept and the ownerships by the counterparts is unchanged. • <u>Article of Local Administration Law which defines SWM as the LGU's responsibilities remains unchanged.</u> • Condition of safety is not deteriorated

ANNEX1: Project Design Matrix (PDM) version 3

<p>3. Investigation of present situation of SWM</p> <p>3.1 Examination of existing report, documents and planning for baseline survey.</p> <p>3.2 Implementation of baseline survey (volume and composition of waste)</p> <p>3.3 Survey on conditions of waste collection and transportation (including illegal waste disposal) and report making.</p> <p>3.4 Survey on conditions of final disposal site (including pollution of underground water) and report making.</p> <p>3.5 Survey on conditions of medical waste management and report making.</p> <p>3.6 Making consolidation report on baseline survey.</p> <p>3.7 Seminars/Workshop on baseline survey</p> <p>4. Formulation of action plan</p> <p>4.1 Formulation of draft action plan for Improvement of SWM based on baseline survey result.</p> <p>4.2 Workshop open to public is held to elaborate draft action plan and report making.</p> <p>4.3 Finalization of action plan and report making</p> <p>4.4 Preliminary environmental survey on improvement of existing disposal site.</p> <p>5. Implementation of action plan</p> <p>5.1 Improvement of waste collection and transportation, and their manuals & report making.</p> <p>5.2 Improvement of final disposal site, and its operation manual & report making.</p> <p>5.3 Making consolidation report on the implementation of action plan (including recommendations to PNA)</p> <p>5.4 Study on candidate for disposal sites</p> <p>6. Holding of seminars</p> <p>6.1 Holding seminars for personnel in charge of SWM in local authorities</p> <p>6.2 Making textbooks for seminars.</p> <p>7. Implementation of training course in Japan.</p> <p>7.1 Preparation of training in Japan</p> <p>7.2 Implementation of training course in Japan</p> <p>7.3 Training of SWM in Jordan</p> <p>7.4 Monitoring and follow-up of the action plan of each training participant.</p> <p>7.5 Conduct of lectures by ex-participants in seminars mentioned above.</p>	<p>fiscal year(JFY)</p> <ul style="list-style-type: none"> • Around 10 persons for 2006 and 2007 JFY <p>(Training in Jordan)</p> <p>10 persons from counterparts and JCspd in September 2006</p>	<p>survey in Jericho hospital</p> <ul style="list-style-type: none"> • Operation and maintenance of provided equipment. 	<p>and the freedom of movement is kept.</p> <ul style="list-style-type: none"> • Local resources for contracting out of survey and pilot project etc. are available • The system of waste collection in the refugee camp is maintained.
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ANNEX 2

Plan of Operation

Project Title: The Project for Capacity Development on Solid Waste Management (SWM) in Jericho and Jordan River Rift Valley (JRRV)
 Target Group: Staff of JCspd for SWM in JRRV and other JCspds for SWM
 Target Area: (Project Purpose 1) JRRV, (Project Purpose 2) Palestine
 Duration: 3 Years (from September 1, 2005 to August 31, 2008)

Original
 Revised in July 2006 and June 2007
 Actual until March 2008

Outputs	Activities	JFY2005			JFY2006			JFY2007			JFY2008		
		Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
1. Organization for Project operation is established.	1.1 Joint Coordinating Committee(JCC) is established and committee meetings are held regularly.												
	1.2 Project implementation schedule and monitoring and feedback system are established.												
2. System for SWM in JRRV is established.	2.1 Survey on present situation of organizational and institutional structure on SWM												
	2.2 Capacity assessment and improvement needs analysis												
	2.3 Preparation for start-up JCspd SWM service (Addition)												
	2.4 Organizational and institutional arrangement for SWM												
	2.5 Introduction of financing and accounting system on SWM												
	2.6 Public awareness on the Project												
	2.7 Consultative meeting with the local authorities, members of the JCspd for SWM in JRRV												
	2.8 Repair and maintenance of vehicle/equipment (Addition)												
	2.9 Training of JCspd Staff (Addition)												
	3.1 Examination of existing reports, documents and planning for baseline survey												
3. Present situation of SWM in JRRV is grasped.	3.2 Implementation of baseline survey (volume and composition of waste)												
	3.3 Survey on conditions of waste collection and transportation (including illegal waste disposal) and report making												
	3.4 Survey on conditions of final disposal site (including pollution of underground water) and report												

ANNEX 3: Evaluation Grid of Terminal Evaluation
Country: Palestinian National Authority

Project Name: The Project for Capacity Development on Solid Waste Management in Jericho and the Jordan River Rift Valley

June 23, 2008

Item	Evaluation Questions		Results
	Questions	Sub-questions (indicators)	
Verification of Performance	Verification of performance		
	Achievement of Project Purposes	The Team evaluated that in spite of great efforts made by JCspd JJRRV and JET, the Project Purpose 1 is not completely achieved due to the financial vulnerability (though worth adding that the fee collection rate in 2007 marked more than 60% in spite of the political complexity in the region), and delay in the introduction of new collection and transportation system.	
	Project Purpose 1 Sustainable and sanitary system of SWM is introduced in JJRRV.	On the Questionnaire Survey on general evaluation of the achievement level of Project Purpose 1, 26 respondents answered as follows: Bad (2), Fair (9), Good (10), Very Good (5); and the average score indicates Fair –Good (3.7).	
		• Waste collection and transportation system is improved so that illegal dumping is reduced.	Only three (LGUs such as Jericho Municipality, Al-New'meh & Edyuk Al-Foqa Local Council and Al-Ojah Local Council) have had solid waste management system before the Project; thus the remaining LGUs started receiving the solid waste collection service after the inauguration of JCspd JJRRV's operation. The waste collection and transportation system is improved in these areas. However, the provision of equipment through UNDP was rescheduled, and could not be deployed the activities regarding the introduction of new collection system. The fact that the participating LGUs stopped using four of five open dumping sites contributes to the reduction of illegal dumping. These four sites are Fasayel dumping site, Almalake Bridge dumping site, Bardalah dumping site and Marj Na'jeh site. Now JCspd JJRRV uses Jericho, Al-Ojah and Tubas dumping sites only.
		• Segregated collection and proper treatment of medical waste is put into practice.	It is ideal to gather all medical wastes in the region to the New Jericho Hospital and incinerate them at the incinerator in the hospital. However, the incinerator is not always utilized now since the hospital can not afford USD200 per month just to operate the incinerator. At present, a container of Jericho Municipality is placed in the premises of the hospital, and collected by the Municipality. The medical waste is dumped in the improved dumping site of Jericho, a medical waste treatment yard was constructed, and the collected medical waste was landfilled separately. Therefore, segregated collection and proper disposal of medical waste is put into practice. Note: The Project assumed that medical institutions would handle their wastes properly based on the result of the medical waste survey done in the second year of the Project.
		• Controlled dumping site	In regard to dumping sites improvement activities of Jericho dumping site was implemented twice from January to March 2007

ANNEX3-1

	which is suited to the situation of JJRRV is realized.	<p>and from October 2007 to March 2008, the improved dumping site is currently in operation. This dumping site which employs a semi-aerobic system with liner sheet, leachate pond and gas ventilation, technically this is the only Palestinian controlled dumping site in JJRRV and some interviewees commented that it reduces Jericho fires. Many interviewees pointed that the realization of important of Jericho dumping site is a great achievement of the Project.</p>																																					
	<ul style="list-style-type: none">The organization to provide SWM service improves its financial base.	<p>Many interviewees expressed their concerns over the vulnerability of JCspd JJRRV's financial sustainability. Monthly cash flow of 2007 and 2008 (Jan., Feb., Mar., Apr.) is shown in Table 1 below.</p> <p>Table 1: Monthly cash flow of JCspd JJRRV 2007-2008</p> <table><tr><th></th><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th></tr><tr><td rowspan="3">2007</td><td>Cash-in</td><td>107, 023</td><td>71, 939</td><td>95, 097</td><td>72, 229</td></tr><tr><td>Cash-out</td><td>128, 198</td><td>72, 201</td><td>97, 338</td><td>81, 078</td></tr><tr><td>Balance</td><td>-21, 175</td><td>-262</td><td>-2, 241</td><td>5, 438</td></tr><tr><td rowspan="3">2008</td><td>Cash-in</td><td>102, 159</td><td>88, 659</td><td>138, 461</td><td>96, 841</td></tr><tr><td>Cash-out</td><td>98, 173</td><td>93, 406</td><td>144, 093</td><td>91, 403</td></tr><tr><td>Balance</td><td>3, 986</td><td>-4, 747</td><td>-5, 632</td><td>5, 438</td></tr></table> <p>Although the cooperative relationship with LGUs has been built to a certain extent, further cooperation should be developed. In fact, the extent of cooperation differs from LGU to LGU, and it was clearly seen by the different payment level of their dues, ranging from 0% to 100%.</p> <p>As shown in Table 2 the contribution for establishing JCspd JJRRV has been paid by 8 of 17 LGUs. And only two of 17 LGUs paid 100% of their monthly dues in fiscal 2007.</p>		Jan	Feb	Mar	Apr	2007	Cash-in	107, 023	71, 939	95, 097	72, 229	Cash-out	128, 198	72, 201	97, 338	81, 078	Balance	-21, 175	-262	-2, 241	5, 438	2008	Cash-in	102, 159	88, 659	138, 461	96, 841	Cash-out	98, 173	93, 406	144, 093	91, 403	Balance	3, 986	-4, 747	-5, 632	5, 438
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ANNEX3-2

Table 2: Contribution and Fee paid by 17 LGUs

Local Government Unit	Contribution 2006				Fee 2007				2008				Fee Jan. - Apr. 2008					
	Budget		Actual		Actual/Budget %		Budget		Actual		Actual/Budget %		Budget		Actual		Actual/Budget %	
	NIS	NIS	NIS				NIS	NIS	NIS		%	NIS	NIS	NIS		NIS		%
1 Jericho	96,224	65,000	68%	1,202,000	840,927	70%	1,202,000	400,667	245,754	61%								
2 Al-New'meh & Edyuk Al-Foqa	8,906	4,957	56%	48,000	24,485	51%	48,000	16,000	3,575	22%								
3 Al-Ojah	18,045	8,015	44%	70,680	21,171	30%	70,680	23,560	5,765	24%								
4 Fasayel	4,050	2,500	62%	19,008	4,330	23%	19,008	6,336	1,165	18%								
5 Al-Jiflik	19,805	10,000	50%	44,740	0	0%	44,740	14,913	0	0%								
6 Zbidat	6,030	6,030	100%	24,060	1,900	8%	24,060	8,020	1,275	16%								
7 Mari Al-Ghazal	1,733	0	0%	5,400	620	11%	5,400	1,800	245	14%								
8 Mari Na'ieh	3,452	0	0%	20,220	1,310	6%	20,220	6,740	450	7%								
9 Ein Al-Bidah	4,865	2,500	51%	17,100	6,340	37%	17,100	5,700	0	0%								
10 Kardalah	743	750	101%	5,160	2,660	52%	5,160	1,720	0	0%								
11 Bardalah	7,097	0	0%	19,775	1,500	8%	19,775	6,592	0	0%								
12 Froosh Beit Dajan	5,216	5,216	100%	11,760	0	0%	11,760	3,920	0	0%								
13 Ein Shibli	891	891	100%	5,760	2,400	42%	5,760	1,920	1,920	100%								
14 Nawaji	1,350	1,350	100%	1,740	1,740	100%	1,740	580	435	75%								
15 Beit Hasan	5,364	5,364	100%	18,540	16,260	88%	18,540	6,180	4,065	66%								
16 Al-Nassaryyah	6,093	6,093	100%	26,760	15,000	56%	26,760	8,920	4,500	50%								
17 Al-Agrabanyya	4,028	4,028	100%	13,800	13,800	100%	13,800	4,600	3,600	78%								
Subtotal (without Jericho)	97,664	57,693	59%	352,503	113,516	32%	352,503	117,501	26,995	23%								
Total	193,887	122,693	63%	1,554,503	954,443	61%	1,554,503	518,168	282,749	55%								
Monthly Average	16,157	10,224	63%	129,542	79,537	61%	129,542	43,181	23,562	55%								

Project Purpose 2

Experiences of Improvement on SWM in JRRV are shared as a model for other areas in PNA.

The Project Purpose 2 is being achieved by showing experience of the JCspd JRRV in the occasion such as ICC meeting, PCSWM meeting, seminars and workshops.

On the Questionnaire Survey on general evaluation of the achievement level of Project Purpose 2, 23 respondents answered as follows: Very Bad (1), Bad (1), Fair (8), Good (10), Very Good (3); and the average score indicates Fair - Good (3.6).

Experiences in JRRV for

improvement on SWM are well shared among other local authorities in PNA.

As for Output 7, *Country Focused Training Course on Capacity Building in Solid Waste Management for Palestine* in Japan was organized three times. 16 officials from other municipalities/JCspd/ISCs and MoLG officers joined in the training courses in total, and the course provided a valuable opportunity to share experiences and information of JCspd JRRV with other level of authorities in PNA.

According to DJCspd/MoLG, the National Committee for Development of Solid Waste Management Sector is under preparation. It is expected that when it is activated, experiences including one from the JCspd JRRV would be well shared in the committee, and all learning would be incorporated into a future national strategy on solid waste management. In

ANNEX3-3

<p>Achievement of the Outputs</p> <p>1. Organization for project operation is established.</p>	<p>The organization for project operation was established.</p> <p>On the Questionnaire Survey on general evaluation of the achievement level of Output 1, 25 respondents answered as follows: Bad (3), Fair (8), Good (9), Very Good (5); and the average score indicates Fair-Good (3.6). Selected comment in the answer sheets describes as follows:</p> <p>"The organization was established, what rest is the issue of sustainability which need more support." (Questionnaire A-4-1)</p> <p>1.1 The Joint Coordinating Committee (JCC) is established and held regularly.</p>	<p>addition to this initiative, JICspd/MoLG plans to organize PCSWM as a platform for sharing experience of JCspds/JSCs in Palestine.</p> <p>As shown in Table 3, Nine JCC meetings have been held regularly by now. Generally speaking, JCC is functioning well. In addition to JCC meetings, as for JCspd JIRRV's operation, both the General Body (GB) meetings and the Administrative Body (AB) meetings are held regularly. So far, seven GB meetings and fourteen AB meetings were held, and those meetings function as a major consultative platform for the member LGUs.</p> <p>Table 3: Records of JCC meetings</p> <table border="1"> <thead> <tr> <th></th> <th>Date</th> <th>Major issues discussed</th> <th>No. of participants</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>13/12/2005</td> <td>i) Explanation of inception report, ii) Roles and responsibilities of JCspd JIRRV</td> <td>26</td> </tr> <tr> <td>2</td> <td>02/03/2006</td> <td>i) Progress of the Project, ii) Plan of 2006</td> <td>20</td> </tr> <tr> <td>3</td> <td>26/07/2006</td> <td>i) Progress of the Project, ii) JCspd JIRRV Regulation, iii) Revision of PDM and PO</td> <td>31</td> </tr> <tr> <td>4</td> <td>16/10/2006</td> <td>i) Progress of the Project, ii) Budgetary plan of 2007</td> <td>50</td> </tr> <tr> <td>5</td> <td>14/03/2007</td> <td>i) Progress of the Project, ii) Action plan (draft)</td> <td>28</td> </tr> <tr> <td>6</td> <td>2007/6/19, 20</td> <td>i) Mid-term Evaluation, ii) M/M</td> <td>50</td> </tr> <tr> <td>7</td> <td>2007/10/17</td> <td>i) Progress of the Project, ii) National Waste Strategy, iii) Public relations of JCspd</td> <td>32</td> </tr> <tr> <td>8</td> <td>2008/3/13</td> <td>i) JCspd JIRRV Annual report, Pilot projects, ii) National SolidWaste Committee, Subsidy, UNDP equipments, iii) JCspd Hebron Activity</td> <td>37</td> </tr> <tr> <td>9</td> <td>2008/6/22, 23</td> <td>i) Terminal Evaluation, ii) M/M</td> <td></td> </tr> </tbody> </table> <p>As for JCspd JIRRV, a key organization of the Project, both GB meetings and AB meetings are held regularly, as shown below:</p> <p>JCspd JIRRV General Body(GB) Meeting*:</p> <p>First: 13/09/2005 Election of the administrative body member</p> <p>Second: 02/09/2006 Regulations of JCspd JIRRV</p>		Date	Major issues discussed	No. of participants	1	13/12/2005	i) Explanation of inception report, ii) Roles and responsibilities of JCspd JIRRV	26	2	02/03/2006	i) Progress of the Project, ii) Plan of 2006	20	3	26/07/2006	i) Progress of the Project, ii) JCspd JIRRV Regulation, iii) Revision of PDM and PO	31	4	16/10/2006	i) Progress of the Project, ii) Budgetary plan of 2007	50	5	14/03/2007	i) Progress of the Project, ii) Action plan (draft)	28	6	2007/6/19, 20	i) Mid-term Evaluation, ii) M/M	50	7	2007/10/17	i) Progress of the Project, ii) National Waste Strategy, iii) Public relations of JCspd	32	8	2008/3/13	i) JCspd JIRRV Annual report, Pilot projects, ii) National SolidWaste Committee, Subsidy, UNDP equipments, iii) JCspd Hebron Activity	37	9	2008/6/22, 23	i) Terminal Evaluation, ii) M/M	
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9	2008/6/22, 23	i) Terminal Evaluation, ii) M/M																																								

ANNEX3-4

04

		<p>Third: 06/08/2006 Approval of Basic Plan</p> <p>Fourth: 16/10/2006 Approval of Budgetary Plan</p> <p>Fifth: 07/11/2007 Approval of Budgetary Plan 2008</p> <p>Sixth: 09/12/2007 Annual report 2007, Budgetary Plan 2008</p> <p>Seventh: 24/03/2008 Election of AB member</p> <p>JCspd JRRV Administrative Body(AB) Meeting**:</p> <p>First: 21/02/2006 Approval of PO (Plan of Operations)</p> <p>Second: 03/08/2006 Regulations of JCspd JRRV, Planning of Basic Plan</p> <p>Third: 19/08/2006 Approval of organizational framework, Planning of Action Plan</p> <p>Fourth: 02/10/2006 Preparation of the office space, employment of staff, transferring equipment</p> <p>Fifth: 12/10/2006 Selection of primary staff, approval of budgetary plan</p> <p>Sixth: 10/12/2006 Starting date of JCspd JRRV's services, renting the office</p> <p>Seventh: 17/12/2006 Operational plan of 2007, Contracting for the office space</p> <p>Eighth: 03/02/2007 Progress and problem of the started service by JCspd JRRV</p> <p>Ninth: 06/03/2007 Measures to collect monthly service fees</p> <p>Tenth: 06/05/2007 Measures to collect monthly service fees</p> <p>Eleventh: 12/06/2007 Measures to collect monthly service fees, Selection of AB member</p> <p>Twelfth: 25/08/2007 Measures to collect monthly service fees, Selection of AB member</p> <p>Thirteenth: 03/11/2007 Approval of Budgetary Plan 2008</p> <p>Fourteenth: 04/06/2008 Subsidy from PNA, UNDP equipments</p> <p>*GB meeting is the meeting participated by all 17 LGUs, and according to the by-law on JCspd issued by MoLG, the GB meeting shall be held at least once per year.</p> <p>**According to the same by-law, the AB consists of total five members, the president, the deputy president and three other elected members, and they shall hold meetings at least once per month.</p>
	1.2 Project implementation schedule and monitoring & feedback system are established.	<p>In the JCC meetings, GB meetings and AB meetings, annual plans, progress report, action plan, and evaluations of the Project activities have been discussed, where the Project implementation such as monitoring & feedback have been successfully carried out.</p>
	2. System for SWM in JRRV is established.	<p>According to the indicators below, System for SWM in JRRV is being established. However there remain significant concerns in financial sustainability of the JCspd JRRV. Despite the high participation rate in the related assemblies by the JCspd JRRV shows certain level of cooperation by member LGUs, the fee collection rates are not necessarily high in most of the member LGUs. The degree of the cooperation needs to be questioned in terms of the financial contribution, which is the key element for sustainability of the JCspd JRRV.</p>

ANNEX3-5

On the Questionnaire Survey on general evaluation of the achievement level of Output 2, 25 respondents answered as follows: Bad (4), Fair (4), Good (15), Very Good (2); and the average score indicates Fair –Good (3.6). Some selected comments in the answer sheets describe as follows: “The system was established, but there is a need to improve the technical capacity through the provision of the equipments.” “Needs more commitment of the Palestinian side.” (Questionnaire A-4-2)	
2.1 Basic Plan of SWM service by JCspd is prepared.	Basic Plan (English/Arabic) prepared jointly by Japanese experts and C/Ps in 2006. This Basic Plan explained about the principles of JCspd JRRV, the scope of SWM services and assets to be transferred from member LGUs to the JCspd JRRV, kinds of wastes to be collected by JCspd JRRV, and frequency of such services, which gave the framework of SWM service by JCspd JRRV. The booklet on this Basic Plan was produced and distributed among all member LGUs and other relevant organizations. The job descriptions of JCspd staff were finalized in November 2006 and approved by the president of JCspd JRRV on January 16, 2007. These job descriptions were prepared also in Arabic and distributed among staff. An appropriate computerized accounting system was introduced in July 2007 and has entered into operation since August 2007.
2.2 Duties in organization for SWM are clarified.	
2.3 Establishment of financing and accounting system on SWM	
2.4 Public awareness of the Project	As seen in the ANNEX 7, Public relations activities have been carried out intensively from the first year of the Project. In addition to the regular production of newsletters and leaflets, the website was established also in the first year. (http://www.jcspd-jericho.org/) JCspd JRRV staff was sometimes televised and explained about the Project and JCspd JRRV to the wider public. The important events and activities of JCspd JRRV and JICA Expert Team were covered by newspapers and TV 12 times from May 2007 to February 2008. The Project also organized 173 community meetings until March 2008 at 17 LGUs in order to raise people's awareness on waste issues and explain about functions of JCspd JRRV, its SWM services and the monthly service fee. Environmental education lectures were held in schools 36 times until March 2008.
2.5 Collaboration with local authorities	Launching SWM services by JCspd JRRV could not be materialized without cooperation of member LGUs, and in fact, the Project collaborates with them to a certain extent. LGUs have participated in a series of discussions both at GB meetings and AB meetings, made a series of decisions on the SWM services by JCspd JRRV. In addition, supports from head of LGUs enable the Project to organize such a large number of community meetings (173 times by May 2008) . Although the collaborating relationship with LGUs has been built to a certain extent, further cooperation and collaboration should be developed. In fact, the extent of collaboration differs from LGU to LGU, and it was clearly seen by the different payment level of their dues, ranging from 0% to 100%. The current situations on waste collection vehicles and heavy machineries were reviewed during the first year of the Project. Then, some of the existing vehicles were repaired, and maintenance equipment was also provided in 2006 and 2007. For
2.6 Repair and maintenance of vehicles / equipment for	

ANNEX3-6

	SWM is conducted.	<p>details, see the ANNEX 6. JCspd JRRV does not have a maintenance workshop for its collection vehicles, and thus the vehicles of JCspd JRRV are serviced currently in the maintenance workshop of Jericho Municipality based on the contract of December 2006. The maintenance workshop of Jericho Municipality, that received the above mentioned maintenance equipment, now keeps records of maintenance regularly. Many interviewees are satisfied with the maintenance activities.</p> <p>*At the inauguration of waste collection service in 2007, nine collection vehicles and one truck shovel were supposed to be transferred from LGUs to JCspd JRRV. Nine collection vehicles were transferred as planned, but the truck shovel is not yet transferred, and JCspd JRRV is still paying NIS150 per hour for its rental fee.</p>
3. Present situation of SWM in JRRV is grasped.	<p>As seen below, the present situation of SWM in JRRV is grasped.</p> <p>On the Questionnaire Survey on general evaluation of the achievement level of Output 3, 24 respondents answered as follows: Bad (3), Fair (5), Good (10), Very Good (6); and the average score indicates Fair-Good (3.8). The selected comment in the answer sheets describes as follows:</p> <p>"Many studies have been conducted in this regard, I think that the current situation has been grasped very well." (Questionnaire A-4-3)</p>	
	3.1 Survey report on characteristics and volume of waste	<ul style="list-style-type: none"> • <i>Solid Waste Amount and Composition Survey -Final Report-</i>: Feb 2006 by Water and Environmental Development Organization (WEDO)
	3.2 Survey report on conditions of waste collection and transportation (incl. illegal waste disposal)	<ul style="list-style-type: none"> • <i>Time and Motion Survey-Final Report-</i>: Feb 2006 by WEDO
	3.3 Survey report on conditions of final dumping site (incl. pollution of soil and underground water)	<ul style="list-style-type: none"> • <i>Survey on topography, soil and groundwater for the Jericho landfill</i>: Oct 2006 by Center for Engineering and Planning (CEP) • <i>Groundwater Analysis at Jericho and Al-Oja Dump Sites Report</i>: Feb 2007, Oct 2007, Feb 2008 by CEP
	3.4 Survey report on conditions of medical waste management	<ul style="list-style-type: none"> • Result of the medical waste survey described in the <i>Consolidation Survey Report</i>, Jan 2007
	3.5 Consolidation survey report	<ul style="list-style-type: none"> • <i>Consolidation Survey Report</i>, Jan 2007 by the Project

ANNEX3-7

	3.6 Holding workshop on baseline survey	<p>"Seminar on Solid Waste Survey Result" was held on 20 December, 2006, and participated by approximately 80 participants such as officers of 17 LGUs and MoLG, other JCspds/JSCs members and health personnel. It is worth mentioning that JCspd JRRV staff was actively involved in this seminar by presenting some of the survey results, as seen below.</p> <ul style="list-style-type: none"> • Solid waste amount and composition survey: Presented by WEDO Engineer • Time and motion survey: Presented by WEDO Engineer • Solid waste budget in Jericho Municipality: Presented by Ms. Manal Romaneen, Accountant, JCspd JRRV • Tourism waste: Presented by Mr. Adel-Jabbar Abu-Halawa, Executive Director, JCspd JRRV • Agricultural waste: Presented by Mr. Adel-Jabbar Abu-Halawa, Executive Director, JCspd JRRV • Jericho and Ojah landfill site survey: Presented by CEP Engineer • Public relations and public awareness activities: Presented by Mr. Majdi Shomali, JICA expert team • Jericho waste collection: Presented by Mr. Wadee Abu Hilal, Engineer, JCspd JRRV • Medical waste: Presented by Mr. Mustafa Hmidat, New Jericho Hospital
4. Action plan for improvement of SWM in JRRV is formulated.		<p>The Action Plan was also presented to the wider public at the same workshop as Seminar on Solid Waste Survey Result", discussed and finalized.</p> <p>On the Questionnaire Survey on general evaluation of the achievement level of Output 4, 25 respondents answered as follows: Bad (3), Fair (4), Good (17), Very Good (1); and the average score indicates Fair –Good (3.6). Selected comment in the answer sheets describes as follows:</p> <p>"Action plan was prepared in a complete and good way." (Questionnaire A-4-4)</p>
	4.1 Formation of draft action plan based on the baseline survey	The Palestinian counterparts, the AB members and the JICA Expert Team firstly formulated a draft Action Plan based on the surveys and through the frequent discussions from April to October 2006.
	4.2 Based on the draft action plan, workshops are held	The workshop on the Action Plan was held on 20 th of December 2006. The contents of the Plan were presented by the Palestinian counterparts who are responsible for the respective categories. About 60 persons participated in the workshop.
	4.3 Action plan is finalized.	<p>The final version of the Action Plan was agreed in the workshop held on 20th of December 2006. It includes the following components.</p> <ul style="list-style-type: none"> • Raising public awareness • Improvement of collection and transportation system • Improvement of disposal system • Improvement of maintenance system • Strengthening organization and institution • Establishment of accounting system
5. The action plan is put into practice and the improvement is made.		At present, the Action Plan is being implemented and the improvement of SWM service is being made partially.
		On the Questionnaire Survey on general evaluation of the achievement level of Output 5, 24 respondents answered as follows: Bad (1), Fair (11), Good (11), Very

ANNEX3-8

	<p>Good (1); and the average score indicates Fair –Good (3.5). Selected comment in the answer sheets of Questionnaire describes as follows: “Many enhancements has been implemented which included the extension of Jericho landfill site and raising community awareness in the area.” (Questionnaire A-4-5)</p> <p>5.1 Improvement of collection rate, reduction of illegal disposal</p> <p>Commencement of waste collection service by JCspd JRRV in January 2007 contributes to the improvement of collection and transportation. In addition, the fact that the participating LGUs stopped using four open dumping sites, contributed to the reduction of illegal dumping.</p> <p>However the delay of provision of equipment through UNDP, a collaborating project, JCspd JRRV has not completely introduced a new collection and transportation system so far.</p> <p>5.2 Improvement of final dumping site</p> <p>Improving work of Jericho Dumping site was completed March 2007 and operated as a controlled dumping site in JRRV. In order to continue trainings on landfill management, an extension work was made from January to March 2008.</p> <p>5.3 Consolidation improvement report (incl. recommendation to PNA)</p> <p>The Project will be prepared a consolidation report on the implementation of the Action Plan which includes recommendations to PNA by August 2008.</p>
<p>6. Seminar/ workshops are held and the Project experiences in JRRV are diffused among Palestinian local authorities.</p>	<p>Planned activities of Seminars/Workshops were successfully conducted.</p> <p>On the Questionnaire Survey on general evaluation of the achievement level of Output 6, 25 respondents answered as follows: Very Bad (1), Bad (2), Fair (5), Good (9), Very Good (8); and the average score indicates Fair –Good (3.8). Some selected comments in the answer sheets describe as follows: “Workshops were weak and the citizens did not receive well the concepts. the words of the presentations were pure scientific going beyond the normal understanding of the citizens.” “Many activities have been made, transferring the experience through workshops, JCC, and there are many activities within this period.” (Questionnaire A-4-6)</p> <p>6.1 Holding seminars/ workshops for those who are in charge of the SWM in local authorities (incl. site visit)</p> <p>Seminars/ workshops for those who are in charge of the SWM in local authorities (incl. site visit) were held as follows.</p> <ul style="list-style-type: none"> • 3 October, 2006: Visit to Jericho dumping site (before improvement) and Tovlan dumping site. • 20 October, 2006: SWM Seminar on Baseline survey in JRRV • 20 December, 2006: SWM Seminar on Action Plan • 1 March, 2007: Visit to the Jenin landfill site financed by World Bank • 21 March, 2007: Visit to the improved Jericho dumping site • 7 July, 2007: Visit to the Bethlehem landfill site • 17 October, 2007: SWM Seminar on Progress of Action Plan • 11 November, 2007: Visit to the Hebron landfill site • 12 December, 2007: Visit to the Jenin and Nabulus landfill site • 4 February, 2008: Meeting with 11 JCspd • 3 March, 2008: Visit to the Jenin and Nabulus landfill site • 19 May, 2008: Kick off Meeting of “Palestinian SWM Council”

ANNEX3-9

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		<ul style="list-style-type: none"> • 29 May, 2008: Preparatory Meeting of "Palestinian SWM Council" • 24 June, 2008: General Director Meeting of 11 JCspd on "Palestinian SWM Council" <p>The Project prepared the following Manuals:</p> <ul style="list-style-type: none"> • Operation and Maintenance Manual of Jericho Dumping Site • Handbook of Medical Waste Management for Waste Collection and Landfill Site Workers • Collection and Transportation Manual (under consideration) <p>In order to share the experiences of JCspd JJRRV, other municipalities and JCspds/JCs participated in the workshop held by the JCspd JJRRV in December 2006 and October 2007. National seminars will be held in August 2008. Journalists, teachers, and municipal officers participated in the above site visits and learned about the importance of the proper management of dumping sites.</p>
7. Those who are in charge of SWM in local authorities and related ministries acquire basic knowledge on integrated SWM and their basic knowledge is diffused.	<p>Output 7 has been achieved. Municipal officers and JCspd/JCs staff from other areas had opportunities to share experiences and information of JCspd JJRRV in these training courses, and presentations by the participants of the training courses in Japan were conducted 3 times.</p> <p>On the Questionnaire Survey on general evaluation of the achievement level of Output 7, 25 respondents answered as follows: Bad (2), Fair (10), Good (11), Very Good (2); and the average score indicates Fair-Good (3.5). Selected comment described in the answer sheets of Questionnaire is as follows:</p> <p>"Yes, the project idea started to disseminate around the country." (Questionnaire A-4-7)</p>	<p><u>Country Focused Training Course on Capacity Building in Solid Waste Management for Palestine in Japan was organized three times by now; and the participants acquired basic knowledge on integrated SWM.</u></p> <p>In the first course: from September 5 to October 7, 2005, five officers from MoLG and JCspd JJRRV participated.</p> <p>In the second course: from November 1 to December 1, 2006, eight officers from MoLG, JCspd JJRRV, Jericho Hospital, and other 4 LGUs/JCspds participated.</p> <p>In the third course from October 10 to December 2, 2007, nine officers from MoLG, MoH, JCspd JJRRV and other 4 LGUs/JCspds participated.</p> <p>In these training courses, the experience of JCspd JJRRV was used as a case study.</p> <p>The training courses in Jordan, the third-country training course (study tour to Jordan) was carried out with support of Ministry of Environment and Amman Municipality in Jordan. Nine participants such as AB members and staff of JCspd JJRRV visited the landfill site operated by Amman Municipality, a biogas plant, a plastic recycling factory and so on. List of participants are shown in the ANNEX 5.</p>
Verification of Implementation Process		

ANNEX3-10

Verification of Implementation Process		Activities were generally implemented as planned with some exceptions.	
Implementation status of activities	Were activities implemented as planned?	<p>During the Project period, two factors occurred and influenced to the Project. First was Political change. Second was Delay of provision of equipment through UNDP.</p> <p>Regarding political factor, the dispatch of JICA experts was delayed. However, thanks to the efforts made by the relevant authorities, JICA experts and C/Ps, a negative effect to the Project, including a plan to start the SWM from January 2007, had been minimized.</p> <p>In addition, delay of provision of equipment through UNDP, which is the Important Assumption of the Project, has made influence on the Project. According to interview and questionnaire survey, C/P complained about the delay as follows;</p> <ul style="list-style-type: none"> • There is a hard work to develop the service, but new equipments have to be provided in order to get more success and development. • It was supposed to provide equipment and new machines in the middle of the project, but there had been delays in the procurement process due to several reasons, thus affecting the development of the current system. <p>Because of this, implementation of some parts of the action plans were suspended.</p> <p>The overall progress of the Project has been formally monitored by JCC meetings, and the operation of JCspd JRRV has been discussed and monitored at both GB meetings and AB meetings.</p> <p>< Overall monitoring of the Project ></p> <p>Monitoring system of the Project has been well functioned. At Mid-Term Evaluation in June 2007, it was recommended that JCC should be held more often to support the Project and exchange information among JCC member organizations. Following it, JCC were held twice in October 2007 and March 2008, and this frequency enables the Project members to monitor the progress of the Project more precisely.</p> <p>According to the interview with JICA experts, the Project has intended to have regular meetings with JICA experts of the Project for Improvement of Local Governance System in Palestine. Because of this, information regarding both projects was exchanged effectively to prevent unnecessary conflicts and inconvenience between two projects.</p> <p>< Monitoring of the JCspd JRRV's Operations ></p> <p>Monitoring system is functioning well. According to the questionnaires survey, all JCC members answered that the current monitoring system of the JCspd JRRV's operations is appropriate. A comment said, "The service is running smoothly despite the obstacles which can be caused anytime by the malfunction of vehicles. Continuous maintenance system is</p>	
Implementation status of monitoring	Has monitoring been carried out?		

ANNEX3-11

		necessary to avoid such failure."	
	Is monitoring mechanism appropriate?	<p>< Overall monitoring of the Project > The Team concluded that overall monitoring mechanism of the Project is considered as appropriate from the interviews and answers of the questionnaire survey.</p> <p>< Monitoring of the JCspd JJRRV's Operations > According to progress reports and interview with JICA experts, JCspd JJRRV has been developing the information system. After starting SWM service January 2007, financial and operational data has been accumulated in the PC database. The database will be useful for the management. A software for accounting started to work in August 2007.</p>	
	Are responsibilities shared clearly among relevant organizations?	The Team now recognized that JCspd JJRRV is exercising the responsibility, and Activities of JCspd JJRRV are monitored by AB meetings and GB meetings, and the Project as a whole including the Project Purpose 2 is monitored by JCC. However, requests for more support from MoLG are found from the answers of the questionnaires.	
Relationship between Palestinian C/Ps and Japanese experts	Relationship between Palestinian C/Ps and JET is constructive.		
	Status of communication	<p>The answers to the questionnaire indicated that the good relationship between Palestinian C/P and JICA experts is established. Some comments are evidence as follows:</p> <ul style="list-style-type: none"> • Experts were very cooperative, and they cared a lot to give success to the project and JCspd JJRRV • The relation supposed to be good especially with organizations helping the Palestinian people. • Full cooperation, consultation, advice and guidance by the JET regarding the issues concerning JCspd JJRRV was good. 	
	Appropriateness of selected C/Ps	It is recognized that JCspd JJRRV doesn't have sufficient numbers of engineers with high level technical knowledge. However, C/Ps have generally achieved capacity development during the course of the Project implementation.	
	Ways to handle challenges and problems	Problems and concerns faced by JCspd JJRRV are formally discussed both at AB and GB meetings, and decided officially and transparently. JCspd JJRRV has capability to handle accident or problem independently. For example, when fire occurred in Jericho dumping site on June 12, 2008, necessary actions were taken by C/Ps immediately and properly.	
	Change in C/Ps' attitude (Independence and activeness)	From interviews and questionnaire survey with managers of JCspd JJRRV, the following answers show the change in C/P's attitude to more proactive direction. <ul style="list-style-type: none"> • I appreciate this system and working program. • I have learnt about SWM and how to do waste source separation. 	
Involvement of beneficiaries	The level of beneficiaries' involvement is satisfactory.		
	Change in attitude and awareness of D/Cspd/MoLG officers	D/Cspd/MoLG is the organization to promote JCspd. Although the officers there acknowledge the importance of JCspd, a strategy of JCspd has not been developed yet by them.	

ANNEX3-12

		Change in attitude and awareness of JCspd staff	In the focus group discussion with JCspd JRRV workers and drivers, they indicated they raised awareness on safety, However many workers have complaints on their working conditions such as salaries and working hours.
		Change in attitude and awareness of citizens in JRRV	<p>From interviews and questionnaire survey, the following positive examples were indicated;</p> <ul style="list-style-type: none"> • After SWM service started people had three benefits: cleanness, partnership and punctuality. • We stopped burning waste. • Illegal dumping sites were closed • Community meeting effected on awareness of people <p>However, most of C/Ps recognize that awareness of the people is not very high and people are not cooperative enough, and the fee collection rate is still low.</p>
Ownership of C/P organizations	The level of ownership of JCspd JRRV		The level of ownership of JCspd JRRV is satisfactory. However, more leadership of DJCspd/MoLG is expected.
	Appropriateness of allocation and assignment of C/Ps		<p>According to interview with C/P and JICA experts, minimum number of the staff has been appointed to start the SWM services. Due to the financial constraints, it is difficult to increase the number of staff.</p> <p>The planned number of staff in JCspd JRRV is 30 in Basic Plan 2006, However, there are only 22 staff as of January 2008, which is rather insufficient for full implementation of the SWM service by JCspd JRRV.</p>
	Budget allocation		<p>Interview with DJCspd and the answers for questionnaire indicates that it is difficult to foresee budget allocation from Central Government to JCspd JRRV.</p> <ul style="list-style-type: none"> • Currently we cannot rely on the PNA allocations because it depends on the political change in the region. • It is difficult. Because of the continuous deficit in the budget of the PNA, and no law controlling it. • Subsidy from Government was decided but not yet received by JCspd JRRV.
	Degree of participation of C/P organization		According to Progress Report V, "Capacity Development of JCspd JRRV", C/P in JCspd JRRV developed participation in the all management aspects. However, more cooperation from MoLG is required.

Evaluation by Five Evaluation Criteria

Criteria	Evaluation Questions		Results
	Questions	Sub-questions	
Relevance	The relevance of the Project remains high since the Project is consistent with the national development plan and environment policy and Japan's aid policy for PNA. According to the Questionnaire Survey, general evaluation of the achievement level of comprehensive approach of the Project is Bad (3), Fair (5), Good (12), Very Good (5); and the average score indicates Fair – Good (3.8). (Questionnaire A-3-1)		
	Is the Project (Overall Goals and Project Purposes) consistent with the national development plan and environmental policy?	Consistency of the Overall Goals with the national development plan and environmental policy	In relation to PNA's national development plan, the PRDP (Palestinian Reform and Development Plan 2008-2010) regards SWM as urgent and important arena to be developed.
		Consistency of the Project Purposes with various policies such as environmental policies and local government policies	The Palestinian Environmental Law emphasizes the importance of laying out efficient SWM system, including proper arrangement of landfill sites. MoLG's JSC bylaw of 2004 promotes managing municipal SWM service on the collective and joint manner, therefore, the Project is highly relevant with the current Palestinian legal environment.
		Priority of SWM in environmental policy	Article 7, 8 and 9 of Palestinian Environmental Law (1999) clarify the importance and responsibilities regarding SWM planning, waste minimization and recycling and landfill site management.
		Consistency with support from other donor countries	GTZ has been implementing the program on solid waste management which has both the national component and the local component. The national component supports activating the National Committee for Development of Solid Waste Sector that will formulate the National Strategy on Solid Waste Management. Once it is activated, experiences including one from the JCspd JRRV will be shared at this committee, and all learning will be incorporated into the envisaged National Strategy.
			UNDP has the related project called "Improvement of Medical Waste Management in Ramallah District". According to JET, there has been numbers of coordination meeting with relevant donors in the field of SWM.
	Was the selection of the target group appropriate?	Are the Project's components highly needed by JCspd in JRRV?	According to interviews and questionnaires survey, the SWM service has been relatively appreciated, on the other hand, some comments does not regard the SWM service as not priority.
		Does JCspd in JRRV play an important role in SWM?	JCspd JRRV runs waste collection services in the areas where such services did not exist before. This raises people's awareness on environment and sanitary situations in the area.
		Is the size of the target group appropriate?	The Team concluded that the size of target group (17 LGUs) is generally appropriate. However, the current formation of 17 membership LGUs, of which unifies the entire Jordan Valley region on the basis of the PNA policy, needs to be examined from the view point of cost-benefit performance and economic scale in order to determine financial support needed.

ANNEX3-14

	Is the Project consistent with Japan's foreign aid policy?	Is the Project related with any prioritized areas of ODA strategy?	<p>The Project is consistent with Japan's foreign aid policy.</p> <p>Environmental protection including the prevention of solid waste problems has been an important area to support in the framework of Japan's international environmental cooperation. And Japanese government declared the "Environmental Conservation Initiative for Sustainable Development (EcoSD)" as international technical cooperation policy in the environmental field, where SWM is mentioned as one of the priority issues. From the view point of Japan's aid policy for Palestine, the Project matches its priority on the support to "Nation Building" and "the Reform Process of PNA".</p>
Effectiveness	<p>As for the Project Purpose 1, the effectiveness is not maximized; as for the Project Purpose 2, the effectiveness is being secured.</p> <p>The result of the Questionnaire Survey on general evaluation of the achievement level indicates as follows:</p> <p>Project Purpose 1: the average score indicates Fair –Good (3.7)</p> <p>Project Purpose 2: the average score indicates Fair –Good (3.6).</p>		
	Is the achievement level of the Project Purpose 1 adequate at this stage? Note: Project purpose 1 is "Sustainable and sanitary system of SWM is introduced in JIRRV."		<p>The Team evaluated that in spite of great efforts made by JCspd JIRRV and JET, the Project Purpose 1 is not completely achieved due to the financial vulnerability (though worth adding that the fee collection rate in 2007 marked more than 60% in spite of the political complexity in the region), and delay in the introduction of new collection and transportation system.</p>
	Is the achievement level of the Project Purpose 2 adequate at this stage? Note: Project purpose 2 is "Experiences of improvement on SWM in JIRRV are shared as a model for other areas in PNA."		<p>The Project Purpose 2 is being achieved by sharing experience of the JCspd JIRRV in the occasions such as JCC meetings, PCSWM meetings other seminars and workshops.</p> <p>The Project plans to hold national seminars which invite all the major joint councils to disseminate the experiences of JCspd JIRRV in August 2008.</p> <p>"Country Focused Training Course on Capacity Building in Solid Waste Management for Palestine" in Japan was organized three times and participated by 22 officers from different organizations. Most of the participants for the second and third courses were from other municipalities and JCspds. This provided a valuable opportunity to share experiences and information of the JCspd JIRRV, which was used as a case study in these two courses.</p>
	Were the outputs sufficient to achieve the Project Purposes? What are the inhibiting factors for the achievement	<p>Numbers, contents and qualities of the outputs</p> <p>Any changes in external factors</p>	<p>According to the interview and answers from the questionnaires, numbers, contents and qualities of the outputs are considered somewhat sufficient and satisfactory.</p> <p>In regard to the Project Purpose 1, the followings are considered as factors for inhibition;</p> <ul style="list-style-type: none"> • Delay in the provision of the equipment through UNDP, which is currently halting the new service of SWM from being

ANNEX3-15

Efficiency	of the Project Purposes?		<p>realized.</p> <ul style="list-style-type: none"> Financial vulnerability of the JCspd JRRRV mainly due to a lack of support from the central government and a low rate of the fee collection. <p>National Strategy on SWM is being formulated by PNA under the support from GTZ and this would promote the fulfillment of Project Purpose 2.</p>
	What are the promoting factors for the achievement of the Project Purposes?	Any changes in external factors	
	<p>The efficiency concerning production of outputs, is well secured for Output 1, 3, 4, 6 and 7, and not completely secured for Output 2 and 5. The efforts made by both the Palestinian side and the Japanese experts rendered the Project being implemented efficiently at large.</p> <p>The result of the Questionnaire Survey on general evaluation of the achievement level indicates as follows:</p> <p>Output 1: the average score indicate Fair –Good (3.6)</p> <p>Output 2: the average score indicate Fair –Good (3.6)</p> <p>Output 3: the average score indicate Fair –Good (3.8)</p> <p>Output 4: the average score indicate Fair –Good (3.6)</p> <p>Output 5: the average score indicate Fair –Good (3.5)</p> <p>Output 6: the average score indicate Fair –Good (3.8)</p> <p>Output 7: the average score indicate Fair –Good (3.5)</p>		
	Is the achievement level of the outputs adequate at this stage?	Adequacy of the achievement level of outputs	According to the interview and answers from the questionnaires, the achievement level of the Output 1, 3, 4, 6, 7 are adequate and Output 2 is almost achieved, whereas Output 5 are not adequate at this stage.
	Are the activities adequate and enough to produce the outputs?	Numbers, contents and qualities of the activities	Please refer "the verification of performance" for details.
	According to interview and answers from the questionnaires, contents and qualities of the activities are somewhat adequate so far.		
	Is the output production adequate compared to the inputs?	Adequacy of human resources, trainings and equipment invested	The Team concluded that the output production is adequate compared to the inputs.
	The results of questionnaire survey and interviews revealed that they are generally satisfied and appreciated with the inputs by the Project such as Japanese experts and training courses, however not quite satisfied with the provided equipment.		
			Inputs from the Palestinian side are not necessarily adequate according to the questionnaire survey.
			The results of questionnaire survey and interviews revealed that in general, they are satisfied with and appreciated the inputs by the Project such as the patrolling car, the maintenance equipment, computer system and training, and utilize them fully.
			According to the results from questionnaires, interviewees are generally satisfied, thus timing is considered to be adequate. However the timing of provision of equipment through UNDP, which is a different project, is not adequate.

ANNEX3-16

	What are the inhibiting and promoting factors?	Severe financial state of the JCspd JRRV is considered to be the inhibiting factor. As for the promoting factors, following factors such as respectable maintenance of machineries in the workshop of Jericho Municipality, provisions of additional spare-parts, introduction of the patrolling vehicle, are worth mentioning.
Impact	Numbers of positive impacts are discovered, whereas no negative impacts are considered to be emerging.	<p>Activeness of the JCspd JRRV and other JCspds/JSCs encourages DJCspd to activate the National Committee for Development of Solid Waste Management Sector. In addition, MoLG expresses an intention to incorporate lessons learned from these activities into the national strategy on the subject.</p> <p>On the Questionnaire Survey on general evaluation of the achievement level of Overall Goal 1, 24 respondents answered as follows: Bad (1), Fair (15), Good (8), Very Good (0); and the average score indicates Fair –Good (3.3). Selected comment in the answer sheets describes as follows: “Basic policies are under preparation and it can be implemented during the next 3 years, if support continues to the project.” (Questionnaire A-6-1)</p> <p>According to the degree of achievement in Output 6 and 7, it is highly likely that the Overall Goal 2 will be achieved as an effect of the Project. However it is still premature to conclude the prospect at this stage, it would be much clearer after the implementation of planned national seminar in August 2008.</p> <p>On the Questionnaire Survey on general evaluation of the achievement level of Overall Goal 2, 26 respondents answered as follows: Bad (1), Fair (15), Good (8), Very Good (0); and the average score indicates Fair –Good (3.3). Selected comments in the answer sheets described as follows: “It is possible in a better cooperation circumstances with the other LAs.” (Questionnaire A-6-2)</p> <p>Nothing particular</p>
	<p>Are there prospects that the Overall Goal 1 will be achieved as an effect of the Project?</p> <p>Note: The Overall Goal 1 is “In PNA, a basic policy and a concrete action plan on integrated SWM are formulated.”</p>	<ul style="list-style-type: none"> Policy paper on SWM of the JCspd Concrete action plans (such as medium term plan) based on the policy above.
	<p>Are there prospects that the Overall Goal 2 will be achieved as an effect of the Project?</p> <p>Note: The Overall Goal 2 is “Effective system of SWM modeling JRRV is diffused in PNA”</p>	<ul style="list-style-type: none"> Holding seminars and workshops regularly in JRRV Realization of SWM modeling JRRV among local authorities in PNA
	Are there any ripple effects to people or organizations other than the target groups?	Are effects towards environment (SWM) policy making process realized?
	Any other impacts, either positive or negative?	<p>Activeness of JCspd JRRV and other JCspds encourages DJCspd to activate the National Committee for Development of Solid Waste Management Sector, and to incorporate lessons learned from activities of these active joint councils into a national plan on solid waste management.</p> <p>The Working Group for the Capacity Development of SWM, initiated by GTZ includes the Executive Director of the JCspd JRRV as one of permanent members, and this works as a platform for sharing experience of the JCspd JRRV.</p> <p>The Project improved and enlarged Jericho's open dump site as a first case of small scale landfill site in the JRRV. This is</p>

ANNEX3-17

		currently receiving numbers of visitors including practitioners from other LGUs/JCspds/ISCs and journalists, and is offering a good opportunity of presenting a model case for improvement of open dump site.	
		The Project is currently implementing the pilot project for the recycling of agricultural plastic waste. This has raised the awareness of the local people and particularly may enlighten people such as waste pickers in the landfill site to follow similar kind of recycling activities.	
		The Team identified that the Project was raising the awareness among the people, and this led the local communities to be more conscious of cooperation and working together in environmental education which reduce disposal of solid waste, or etc.	
		Selected comments from the questionnaire survey showed some examples of good impacts by the Project as follows: <ul style="list-style-type: none"> • "The idea of JCspds is possible, and we have the current experience of our JCspd. If we established other JCspd other than the current, I am sure that it will be successful." (Questionnaire A-6-3) • "The possibility to develop the structure and fact of the LAs" (Questionnaire A-6-3) • "A workgroup was established for the development of strategies of JCspds and dissemination of experience between JCspds." (Questionnaire A-6-3) • "Yes, the village became cleaner." (Questionnaire A-6-3) • "Hiring local work force, increasing experience in SWM." (Questionnaire A-6-3) • "Making a kind of integrity in waste management." (Questionnaire A-6-3) • "Special cell for medical waste in the landfill" (Questionnaire A-6-3) 	
		The sustainability in terms of financial and institutional aspect is not secured, although the technical and legal sustainability is well secured.	
		Will JCspd be the organization to implement SWM even in the future?	
		Has JCspd JRRV been acquiring organizational capacity to continue SWM services?	
		By considering organizational and institutional aspects, are there prospects that the sustainability is secured?	
		From organizational and institutional aspects, the sustainability is unlikely to be secured soon on the ground that most of the staff of the JCspd JRRV are rather seconded from the Jericho Municipality, and their status has not been transferred to the JCspd JRRV. Moreover, enormous amount of administrative responsibility and workload are accumulated on shoulders of the particular official, this leaves a big room for improvement in management as an organizational level.	
		On the Questionnaire Survey on general evaluation of the sustainability level of JCspd JRRV, 24 respondents answered as follows: Very Bad (1), Bad (2), Fair (6), Good (13), Very Good (4); and the average score indicates Fair –Good (3.6). Some selected comments in the answer sheets described as follows: <ul style="list-style-type: none"> • "There is now a body that can manage itself, but what rest is the issue of financial sustainability because of no commitment of paying the dues." 	

ANNEX3-18

		<ul style="list-style-type: none"> • "No commitment from the citizens side to pay the fees because of the bad economic situation." • "Yes, in the future but it needs more experience." (Questionnaire A-7-1)
	Are supports from PNA or DJCspd/MoLG expected?	<p>In spite of severe financial situations of PNA, DJCspd has been planning to financially support the major JCspds/JSCs with subsidies, but this has not yet realized at present. On the other hand, DJCspd identifies that JCspd is a good mechanism for many small scale LGUs to provide and receive public services, and DJCspd is willing to collaborate with the Project in order to develop capacities of JCspds as much as possible. However, DJCspd is on the way to formulate a firm strategy on JCspds.</p> <p>On the Questionnaire Survey on general evaluation of the PNA Government support, 26 respondents answered as follows: Very Bad (1), Bad (5), Fair (5), Good (11), Very Good (4); and the average score indicates Fair –Good (3.5). Selected comments described in the answer sheets of Questionnaire are as follows:</p> <p>"Currently we cannot rely on the PNA allocations because it depends on the political changes in the region." (Questionnaire A-7-2)</p>
By considering financial aspects, are there prospects that the sustainability is secured?	Are financial situations of the JCspd and the participating local authorities sound?	<p>From financial aspect, the sustainability is unlikely to be secured soon, since only two member LGUs paid their dues in full amount in 2007, and the fee collection ratio in the rest of member LGUs varies in wide range, and some are close to nil. This is causing a constant financial predicament to the JCspd JRRV. The financial situation is far from affluent enough to invest on additional human resources and machineries which would promise its sustainability in a fundamental sense</p> <p>JCspd JRRV has been constantly in the financial distress although it has been just barely avoiding from being bankrupt. In order to secure its budget soundly, there needs to be much more firm commitments from member LGUs' in their financial contribution.</p>
By considering technical aspects, are there prospects that the sustainability is secured?	Are appropriate technologies developed and transferred, in consideration of the JCspd's technical level?	<p>From technical aspects, there are prospects that the sustainability is secured, since the staff members of the JCspd JRRV have come to acquire certain skills and knowledge in respective field of SWM through working together with JICA experts since the inception of JCspd JRRV service, which indicates a good possibility for sustainable operation of the JCspd JRRV. The technology of semi-aerobic landfill system has been transferred as an appropriate technology in Palestine, which is completely accepted by the C/Ps. It means this appropriate technology suits the conditions in Palestine and the level of C/Ps.</p>
	Have C/Ps acquired knowledge and the transferred technology enough?	The interview and answers of the questionnaires reveals that their knowledge and skill are improved through working together with JET.
	Will the transferred technology and equipment be used widely?	Technology on SWM service including semi-aerobic landfill operation is currently being used properly.
		<p>On the Questionnaire Survey on general evaluation of the technology sustainability, 25 respondents answered as follows: Bad (3), Fair (10), Good (11), Very Good (1); and the average score indicates Fair –Good (3.4). Selected comment in the answer sheets described as follows:</p> <p>"In management yes, but in the field it did not reach to 60% from the required capacity" (Questionnaire A-7-3)</p>

ANNEX3-19

ANNEX 4: List of the Japanese experts

Japanese Fiscal Year 2005

	Expert Name	Expertize	Duration	Man-Month	
1	Hiroshi Abe	Team Leader/Solid Waste Management	Nov. 12, 2005 - Dec. 10, 2005 Feb. 23, 2006 - Mar. 10, 2006	0.97 0.53	
2	Yoshihiro Asano	Deputy Teak Leader/ Capacity Development	Nov. 12, 2005 - Dec. 21, 2005 Jan 20, 2006 - Mar. 10, 2006	1.33 1.67	
3	Takashi Ikeguchi	Medical waste/ Environmental consideration	Nov. 19, 2005 - Dec. 17, 2005	0.97	
4	Koumei Kawauchi	Landfill Improvement	Nov. 19, 2005 - Dec. 19, 2005	1.03	
5	Kiyoshi Shimizu	Equipment Maintenance	Feb. 24, 2006 - Mar. 16, 2006	0.70	
	Takatoshi Arai	Coordinator	Nov. 12, 2005 - Nov. 26, 2006	0.50	*
	Total*		(including Yachiyo own budget	7.70	
	Total			7.20	

Japanese Fiscal year 2006

	Expert Name	Expertize	Duration	Man-Month	
1	Hiroshi Abe	Team Leader/Solid Waste Management	Jul. 22, 2006 - Sept. 5, 2006 Sept. 26, 2006 - Oct. 25, 2006 Nov. 21, 2006 - Jan. 20, 2007 Mar. 1, 2007 - Mar. 25, 2006	1.50 1.00 2.03 0.83	
2	Yoshihiro Asano	Deputy Team Leader/ Capacity Development	Sept. 13, 2006 - Oct. 12, 2006	1.00	
3	Noboru Osakabe	Deputy Team Leader/ Capacity Development (Financial)	Nov. 28, 2006 - Dec. 27, 2006 Mar. 1, 2007 - Mar. 25, 2007	1.00 0.83	
4	Akio Ishii	Capacity Development (Institutional/ Orgaizational)	July 22, 2006 - Aug. 20, 2006 Sept 28, 2006 - Oct. 25, 2006 Nov. 21, 2006 - Dec. 31, 2006 Feb. 1, 2007 - Feb. 23, 2006	1.00 0.93 1.37 0.77	
5	Takashi Ikeguchi	Medical waste/ Environmental consideration	Aug. 31 - Sept 14, 2006 Feb. 22, 2007 - Mar. 13, 2006	0.50 0.67	
6	Masahiro Saito	Landfill Improvement	Jan. 16- Feb. 17, 2007	1.00	
	Noboru Osakabe	Coordinator (Financial)	July 22, 2006 - Sept. 1, 2006 Sept 28, 2006 - Oct. 25, 2006	1.40 0.93	*
	Akio Ishii	Coordinator (Institutional)	Feb. 24, 2007 - Mar. 25, 2006	1.00	*
	Total*		(including Yachiyo own budget	17.76	
	Total			14.43	

Japanese Fiscal year 2007

	Expert Name	Expertize	Duration	Man-Month	
1	Hiroshi Abe	Team Leader/Solid Waste Management	May 15, 2007 - June 28, 2007 Sept. 14, 2007 - Oct. 23, 2007 Oct 24, 2007 - Oct. 25, 2007 Feb. 12, 2008 - Mar. 17, 2008	1.50 1.33 0.07 1.17	*
2	Noboru Osakabe	Deputy Team Leader/Capacity Development (Financial)	July 15, 2007 - Aug. 28, 2007 Sept. 9, 2007 - Oct. 25, 2007 Jan. 27, 2008 - Mar. 17, 2008	1.50 1.00 1.70	
3	Akio Ishii	Capacity Development (Institutional/ Orgaizational)	June 9, 2007 - July 23, 2007 Dec. 1, 2007 - Dec. 30, 2007	1.50 1.00	
4	Takashi Ikeguchi	Medical waste/ Environmental consideration	July 10, 2007 - July 30, 2007	0.70	
5	Masahiro Saito	Landfill Improvement	June 26, 2007 - July 25, 2007 Dec. 1, 2007 - Jan. 14, 2008	1.00 1.50	
	Total*		(including Yachiyo own budget	13.97	
	Total			13.90	

Fiscal Year 2008

	Expert Name	Expertize	Duration	Man-Month	
1	Hiroshi Abe	Team Leader/Solid Waste Management	June 15, 2008 - July 16, 2008 July 17, 2008 - Aug. 15, 2008	1.07 1.00	*
2	Noboru Osakabe	Deputy Team Leader/Capacity Development	May 27, 2008 - July 10, 2008	1.50	
3	Akio Ishii	Capacity Development (Institutional/ Orgaizational)	May 9, 2008 - May 23, 2008	0.50	
4	Takashi Ikeguchi	Medical waste/ Environmental consideration	Aug. 2, 2008 - Aug. 10, 2008	0.30	
5	Masahiro Saito	Landfill Improvement	July 1, 2008 - July 15, 2008	0.50	
	Hiromi Matsubara	Coordinator	May 10, 2008 - June 8, 2008	1.00	*
	Total*		(including Yachiyo own budget	5.87	
	Total			3.80	

*: Financed by the own budget by Yachiyo Engineering Co. Ltd.

ANNEX 5: List of the trainees in Japan and Jordan

Table 1: Country Focused Training Course on Capacity Building in Solid Waste Management for Palestine

No.	Name	Job title	Organization
1	Abd Aljabbar Abu halaweh	Executive Manager	JCspd
2	Mousa H.A Shaer	Director General of water supply & sewage authority	MoLG - Bethlehem
3	Sultan Khalil Roma	Head of Technical Section	JCspd
4	Wadee Z.M Abu Helal	Civil Engineer	Joint Council, Middle Jordan Valley
5	Younis M.O Qawasmeh	Minister Advisor for Environment	MoLG
1	Mustafa Al-hmidat	Chief/ Engineering & Maintenance Dep.	Jericho Hospital
2	Mohammad Al-Njoom	General Manager - Jericho Dep.	MoLG
3	Sami K.M Mrowwa	Mayor	Doha Municipality
4	Nidal M.K Shun	Deputy Executive Director	Tulkarem Municipality
5	Ahmed Bouzia	Mayor	Kefel Hares Municipality /Head of Salfeet Joint Service
6	Raed Sharabati	Administrative Director	DJCspd / MoLG
7	Raed Samara	Executive Manager	JCspd / Bethlehem
8	Khaled Hamdan	Head of JCspd	JCspd for Mid Jordan Valley
1	Ismail H.I. Rabbaa	Urban Planning Manager, DJCspd	MoLG
2	Basel M.A. Baniowda	Coordinator	JCspd for SWM, Tubas
3	Mohammed G.M. Alsadi	Supervisor Engineer	JCspd, Jenin
4	Marwan A.J. Samarat	Head of Customer and External Relations	JCspd JJRRV
5	Zahi M.D. Barahma	Head of General Services Department	Jericho Municipality
6	Jalal M.S. Bsharat	Head of Maintenance Department	Jericho Municipality
7	Mahmoud M.A. Othman	Manager of Waste Disposal Unit	Ministry of Health
8	Adnan M.Y. Sbailh	Mayor	Al-Khader
9	Raed M.F. Ashhab	Civil Engineer	Hebron Municipality

Note: First Batch: Sep. 5 to Oct. 7, 2005 / Second Batch: Nov. 1 to Dec. 1, 2006 / Third Batch: Oct. 10 to Dec. 2, 2007

Table 2: Participants of the study tour in Jordan (Sept. 16 to Sept. 22, 2006)

No.	Name	Job title	Organization
1.	AbdalQader K A Abukhashan	In place of president of JCspd	Council Member, Jericho Municipality
2	Hasan A H Jirmi	Vice president, JCspd	Head of Zbidat Council/The chairman of JSC for Middle
3	Mahmoud K M Abuhattab	Administrative body member	Head of Ein Shibli Council
4	Turkey D A Eshibat	Administrative body member	Vice Head of Al-Ojah Council

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ANNEX 5: List of the trainees in Japan and Jordan

5	Mr. Abdel-Jabbar Al-Halawa	Study Tour Leader, Executive director	Head of Health Section, Jericho Municipality
6	Sultan K A Roma	Counterpart	Health Section, Jericho Municipality
7	Wadee Z M Abubhelal	Counterpart	Engineer, Middle Jordan JSC
8	Ahmed S S Driaat	Counterpart	Accountant, Nweima & Duyuk
9	Manal Romaneen	Counterpart	Accountant, Jericho Municipality

ANNEX5-1

ANNEX 6: List of the provided equipment

			(Unit/Yen)
No.	Equipment Name	JFY	Quantity
1	Office equipment-1	JFY 2005	
	(1) Desktop Computer		1 unit
	(2) Laptop Computer		1 unit
	(3) Laser Printer		1 unit
	(4) Inkjet Printer		1 unit
	Sub-total		234,000
2	Spare Parts for existing equipment, etc	JFY 2005	
	See the page ANNEX6-2		13,560,000
	Sub-total		13,560,000
3	Office Furniture	JFY 2006	
	(1) Desk and drawer		6 unit
	(2) Chair		6 unit
	(3) Cabinet		2 unit
	(4) Book shell		1 unit
	Sub-total		148,000
4	Office Equipment-2	JFY 2006	
	(1) Desktop Computer		7 unit
	(2) Color Laser Printer		1 unit
	(3) Laser Printer		1 unit
	(4) Copy Machine		2 unit
	(5) Telephone/Fax		2 unit
	(6) Cooler for 3 rooms		1 unit
	(7) Cooler		3 unit
	Sub-total		1,635,000
5	Facility of Jericho Dumping site (improvement)	JFY 2006	
	(1) Liner facility		1 lot
	(2) Leachate collection system		1 lot
	(3) Gas removal facility		1 lot
	(4) Leachate pond		1 lot
	(5) Guard house		1 lot
	(6) Fence and gate (North, East, West)		1 lot
	(7) Planting		1 lot
	Sub-total		13,300,000
6	Facility of Jericho Dumping site (Extension)	JFY 2007	
	(1) Liner facility		1 lot
	(2) Leachate collection system		1 lot
	(3) Gas removal facility		1 lot
	(4) Fence and gate (Medical waste, South)		1 lot
	(5) Sewerage reception		1 lot
	(6) Garage		1 lot
	Sub total		35,428,000
7	Equipment and software	JFY 2007	
	(1) Accounting system		1 lot
	(2) Cooler in guard house		1 lot
	(3) Patrol Car		1 lot
	Sub total		2,465,000

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8	Agriculture plastic waste recycle facility	JFY 2007	
	(1) Recycle line		1 lot
	(2) Electrical equipment		1 lot
	Sub total		2,948,000
9	Recycle house	JFY 2008	
	(1) Recycle house		1 lot
	(2) Electrial equipment		1 lot
	Sub total		1,534,000
Total			71,252,000

ANNEX6-2

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ANNEX 7: List of the public relations activities

	Information Dissemination		Date	Place	(Unit)
First year (Nov. 2005 to Mar. 2006)	1	Newsletter "The Joint"			
		The Joint No.1	Feb, 2006		1000 Arb/300Eng
		The Joint No.2	March, 2006		1000 Arb/300Eng
	2	The Sematic Leaflets			
		Leaflet No1. "Proper Discharge of Solid Waste in and outside Households"	Feb,2006		2,000
	3	Others			
		Website (www.jcspd-jericho.org)	Mar,2006		
	Awareness Raising				
	1	Environmental Education			(Persons)
	1	For students at Jericho Girl's School	Feb. 25, 2006	Jericho	40
Second year (April. 2006 to Mar. 2007)	2	For students at Al-Bohtore School	Feb. 26, 2006	Jericho	50
	2	Community Meetings			
	3	For members of social clubs and women's clubs	Feb. 27, 2006	Jericho	30
	4	For members of sport and youth societies	Mar. 1, 2006	Jericho	30
	5	For residents in Al-Jiftlik and Froosh Beit Dajan villages	Mar.2,2006	Al-Jiftlik	15
	6	For residents in Al-Ojah and Fasayel villages	Mar.3,2006	Al-Ojah	40
	7	For residents in Bardalah, Kardarah and Ein Al-Bidah villages	Mar.4,2006	Bardalah	40
	Information Dissemination				
	1	Newsletter "The Joint"			(Unit)
		The Joint No.3	Aug, 2006		1000 Arb/300Eng
		The Joint No.4	Oct, 2006		1000 Arb/300Eng
		The Joint No.5	Jan, 2007		1000 Arb/300Eng
		The Joint No.6	Mar, 2007		1000 Arb/300Eng
	2	The Sematic Leaflets			
		Leaflet No2. "Together for a better Environment"	Aug,2006		2,000
		Leaflet No3. "where waste fees are expended?"	Oct,2006		2,000
		Leaflet No4. "Comptation of Waste waste amount reduction"	Dec,2006		2,000
		Leaflet No5. "For a Sustainable Development "	Feb,2006		2,000
	3	Posters			
		Poster No1. "Partners for a better life"	Sep,2006		300
		Poster No2. "The citizen, the LA and JCspd, as partners for sustainable service"	Oct,2006		300
		Poster No3. "Municipality and villages... Joint future.. One joint council"	Oct,2006		300
		Poster No4. "Comptation of Waste waste amount reduction"	Dec.6,2006		300
		Poster No5. "The service start - January, 2007"	Jan.7,2007		300
	4	Booklets			
		Booklet No1. "Basic Plan for SWM in JJRRV"	Aug,2006		1,000
		Booklet No2. "SWM guideline"	Feb,2007		1,000
		Booklet No2. "Introduction of 17 LAs"	Mar,2007		1,000
		Booklet No4. "Result of waste reduction Idea cometition"	Mar,2007		1,000
	5	Others			
	1	Voluntary Work			
		Students No1. Clean Environment	Feb.21,2007		25
		Students No2. Clean Environment	Feb.21,2007		25
		Students No3. Clean Environment	Feb.21,2007		25
	2	Planting Trees - Students	Mar.5,2007		15
	3	Schools Ceremony - Result of waste reduction Idea cometition	Mar.11,2007		200
	Awareness Raising				
	1	Environmental Education			(Persons)
	8	For members of Jericho Women Soc. School	Sep.24,2006	Jericho	50
	9	For students at Terra Santa Boys Shcool	Sep.25,2006	Jericho	25
	10	For students at Franciscan Girls Shcool	Sep.26,2006	Jericho	120
	11	For students at Fatima Zahraa Shcool	Oct.7,2006	Jericho	37
	12	For students at Bardalah Girls Shcool	Oct.9,2006	Bardalah	23
	13	For students at Ein Beida Shcool	Oct.9,2006	Ein Beida	25
	14	For students at Jericho Girls Shcool	Oct.10,2006	Jericho	22
	15	For students at Jiftlik Shcool	Oct.11,2006	Jiftlik	5
	16	For students at Oaja UNRWA Shcool	Oct.12,2006	Al-Oaja	25
	17	For students at Aqrabanyyah UNRWA Shcool	Oct.12,2006	Aqrabanyyah	140
	18	For students at Aqbat Jaber Shcool	Oct.15,2006	Camo - Jericho	45
	19	For students at Ein Sultan Camp School	Feb.10,2007	Camp - Jericho	48
	20	For students at Aqbat Jaber Camp School	Feb.11,2007	Camp - Jericho	35

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21	For students at Brinary Bohtary & Girls High School	Feb.11,2007	Jericho	100
22	For students at Hisham High School	Feb.12,2007	Jericho	22
23	For students at Bohtari & Jericho Secondary School for Girls	Feb.15,2007	Jericho	80
24	For students at Duke School	Feb.16,2007	Duke	60
25	For students at Ojah Girls High School	Feb.18,2007	Al- Ojah	45
26	For students at Ojah Boys High School	Feb.18,2007	Al- Ojah	40
27	For students at Fasayel School	Feb.19,2007	Fasayel	35
28	For students at Jiftlik High School for boys & girls	Feb.20,2007	Al-Jiftlik	90
29	For students at Frosh Biet Dajan School	Feb.21,2007	Frosh Biet Dajan	40
30	For students at Aqrabanyyah High & Brinary School	Feb.21,2007	Al-Aqrabanyyah	45
31	For students at Ein Al-Bidah School	Feb.24,2007	Ein Al-Bidah	45
32	For students at Zbidat School	Feb.24,2007	Zbidat	60
33	For students at Biet Hasan School	Feb.25,2007	Biet Hasan	40
34	For students at Ein Sheble School	Feb.25,2007	Ein Shibly	35
35	For students at Nasareiah School	Feb.26,2007	Nassareiah	32
36	For students at Aqrabanyyah School	Feb.26,2007	Aqrabanyyah	60
2 Community Meetings				
37	For members of Medical Plants Association	Aug.26,2006	Jericho	16
38	For members of Hilal Sports Club	Aug.26,2006	Jericho	15
39	For members of Israa Society	Aug.27,2006	Jericho	30
40	For members of Labour Union	Aug.27,2006	Jericho	11
41	For members of PR of Gov. Inst	Aug.29,2006	Jericho	16
42	For members of New'ma Council	Aug.30,2006	New'ma	35
43	For members of Lower Duyok	Aug.30,2006	Lower Duyok	25
44	For members of Ein Sultan Service Committee	Sep.2,2006	Camp - Jericho	12
45	For members of Aqbat Jaber Service Committee	Sep.3,2006	Camp - Jericho	15
46	For members of Fasayel LA & citizens	Sep.4,2006	Sasayel	30
47	For members of Oaja LA & citizens	Sep.4,2006	Oaja	40
48	For members of Zbeidat LA & citizens	Sep.5,2006	Zbeidat	8
49	For members of Marj Na'jah LA & citizens	Sep.5,2006	Marj Na'jah	10
50	For members of Marj Ghazal LA & citizens	Sep.6,2006	Marj Ghazal	21
51	For members of Ihsan Society	Sep.6,2006	Jericho	25
52	For members of Jiftlik LA & citizens	Sep.9,2006	Jiftlik	23
53	For members of Frosh Beit Dajan LA & citizens	Sep.9,2006	Frosh Beit Dajan	33
54	For members of Ein Shibly LA & citizens	Sep.10,2006	Ein Shibly	24
55	For members of Biet Hasan LA & citizens	Sep.10,2006	Biet Hasan	40
56	For members of Aqrانيا LA & citizens	Sep.11,2006	Aqrabanyyah	30
57	For members of Bardalah LA & citizens	Sep.12,2006	Bardalah	25
58	For members of Kardalah LA & citizens	Sep.13,2006	Kardalah	23
59	For members of Ein Beida LA & citizens	Sep.13,2006	Ein Beida	26
60	For members of Agricultural Societies Union	Sep.16,2006	Jericho	12
61	For members of Jericho Youth Club	Sep.17,2006	Jericho	15
62	For members of Engineering Association	Sep.17,2006	Jericho	18
63	For members of Farmers Union	Sep.18,2006	Jericho	15
64	For members of Municipal Children Council	Sep.19,2006	Jericho	17
65	For members of Democratic Youth Union	Sep.19,2006	Camp - Jericho	24
66	For members of Nassaria LA & citizens	Sep.20,2006	Nassaria	10
67	For members of YMCA	Sep.26,2006	Camp - Jericho	23
68	For members of Jericho Scouts Groups	Sep.28,2006	Jericho	45
69	General JICA Office	Oct.10,2006	Jericho	5
70	For members of Baladna Club	Oct.11,2006	Jericho	40
71	For members of Women Center - Aqbat Jaber UNRWA	Oct.12,2006	Camp - Jericho	14
72	Journalists JICA	Oct.14,2006	Jericho	10
73	For Women gathering of Beit Hasan	Oct.15,2006	Beit Hasan	35
74	For members of Ein Beida, Kardalah, Bardalah LA & citizens	Dec.24,2006	Ein Beida	14
75	For members of Fasayel & Jiftlik LA & citizens	Dec.26,2006	Fasayel	8
76	For Supervisors of Jericho schools	Jan.24,2007	Jericho	24
77	For Women of Duke LA	Jan.28,2007	Duke	45
78	For residents of Lower Duyok	Jan.28,2007	Lower Duke	35
79	For members of Oaja LA & citizens	Jan.6,2007	Ojah	10
80	For Women of Zbeidat LA & University students	Mar.4,2007	Zbeidat	10
81	For members of Beit Hasan LA & citizens	Jan.30,2007	Beit Hasan	15
82	For members of Aqrانيا LA & citizens	Jan.30,2007	Aqrabanyyah	35
83	For Women of Beit Hasan LA	Feb.6,2007	Beit Hasan	25

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Third year (April 2007 to March 2008)	84	For Women of Ein Shibly LA	Feb.6,2007	Ein Shibly	22
	85	For members of Fasayel LA & citizens	Feb.18,2007	Fasayel	13
	86	For members of Oaja LA & citizens	Feb.18,2007	Oaja	11
	87	For members of Ein Beida, Kardalah, Bardalah LA & citizens	Feb.20,2007	Ein Beida	18
	88	For members of Beit Hasan & Nawaji LA & citizens	Feb.20,2007	Beit Hasan	25
	89	For members of Ein Shibly LA & citizens	Feb.20,2007	Ein Shibly	25
	90	For members of Nassaria LA & citizens	Feb.20,2007	Nassareiah	10
	91	For members of Aqranania LA & citizens	Feb.20,2007	Aqrabanyyah	25
	92	For members of Jiftlik LA & citizens	Feb.22,2007	Jiftlik	6
	93	For members of Frosh Beit Dajan LA & citizens	Feb.22,2007	Frosh Beit Dajan	20
	94	For Women of Fasayel LA	Mar.17,2007	Fasayel	20
Information Dissemination					
1 Newsletter "The Joint"					(Unit)
		The Joint No.7	Jul, 2007		1000 Arb/300Eng
		The Joint No.8	Oct, 2007		1000 Arb/300Eng
		The Joint No.9	Dec, 2007		1000 Arb/300Eng
		The Joint No.10	Mar, 2008		1000 Arb/300Eng
2 The Sematic Leaflets					
		Leaflet No6 "Clean City Contest "	Sep, 2007		2,000
		Leaflet No7. "Medical Waste"	Oct, 2007		2,000
		Leaflet No8. "Jericho Landfill Site/Eng. & Arabic "	Feb, 2008		2,000
		Leaflet No9. "Home Compost "	Mar, 2008		2,000
3 Posters					
		Poster No6. "Announcement of Clean City Competition"	Sep, 2007		300
		Poster No7. "My Bag Campaign"	Feb, 2008		300
		Poster No8. "Function of Landfill Site"	Feb, 2007		300
		Poster No9. "Guide of Medical Waste Treatment"	Mar, 2008		300
		Poster No10. "Map of JJRRV and Location of Landfill Site"	Mar, 2008		300
4 Booklets					
		Booklet No5. "100 community meetings organized"	Aug, 2007		1,000
		Booklet No6. "Environmental Laws"	Oct, 2007		1,000
5 Documentary Film					
		Histroy of JCspd	June,2007		1
6 Others					
		Media Coverage in TV and Newspaper	many		
		DVD: Fukuoka Method	June,2007		1
		Commercial Film in TV SWM and Fee	Feb. and Mar. of 2008 Palestine		1
		Jericho Japan Freindship Fwstival	Nov. 2007	Jericho	1
Awareness Raising					
1 Community Meetings -					(Persons)
	95	Zahrat Madaen School /Environmental Club	May 16,2007	Jericho	30
	96	Jiftlik Sons Soc./ citizens	May 22,2007	Jiftlik	10
	97	Jiftlik Sons Soc./ women	June 10,2007	Jiftlik	13
	98	Farmers / Amman Str.	June 10,2007	Jericho	5
	99	Farmers / Hisham Str.	June 11,2007	Jericho	6
	100	Farmers / Papay Str.	June 12,2007	Jericho	6
	101	3 sessions with citizens from Bardala, Kardala & Ein Beida	June 16,2007	Ein Beida	30
	102	Farmers	June 17,2007	Jericho	8
	103	Farmers	June 20,2007	Oja	7
	104	Jiftlik Sons Soc./citizens /women	June 25,2007	Jiftlik	13
	105	Zbeidat Youth Club/ citizens and farmers	June 26,2007	Zbeidat	17
	106	Citizens	July 3,2007	Aqrabaniya	
	107	women	July 11,2007	Nwe'ma	27
	108	women	July 12,2007	Duke	25
	109	Summer camps leaders	July 12,2007	Jericho	40
	110	UNRWA Employees	July 19,2007	Aqbat jabber	25
	111	Summer camp, Women center	July 25,2007	Aqbat Jaber Camp	33
	112	Summer camp RC	July 30,2007	Girls school	30
	113	M.o. Agriculture	July 31,2007	Jericho	13
	114	Summer camp Baladna club	Aug. 4,2007	Jericho	55
	115	Summer camp Nwe'ma	Aug. 5,2007	Nwe'ma	35
	116	Summer camp Oja	Aug. 6,2007	Oja	40
	117	Bardala citizens	Aug. 6,2007	Bardala	15
	118	Tour at Hamrah area	Aug. 11,2007	Hamrah	

ANNEX7-3

119	Library members	Aug. 12,2007	Jericho	50
120	YMCA + voluntary work	Aug. 14,2007	Jericho	22
121	Jiftlik citizens	Aug. 14,2007	Jiftlik	50
122	Bardala LA	Aug. 15,2007	Bardala	10
123	Oja LA	Aug. 15,2007	Oja	9
124	Zbiedat , m.naajh, m. gazal	Aug. 15,2007	Marj naajh	8
125	LAs	Aug. 15,2007	Nwe'ma	7
126	LA	Sep.5.2007	Ein Baida	9
127	MoEd	Sep.10.2007	JERICHO	4
128	women	Sep.11.2007	Oja	15
129	Mo LA	Sep.12.2007	Jericho	1
130	Almotallath citizens	Sep.12.2007	Jiftlik	50
131	CCC LA ,s	Sep.25.2007	Bardala - kardala , Ein al	10
132	CCC LAs	Sep.25.2007	Zbeidat Marj Na'jah , Marj Al Gazal	10
133	LAs	Sep.27.2007	Hamra	8
			Froush beit dajan , Fasail	
134	CCC School meeting	Nov.13.2007	Oja	45
135	CCC School meeting	Nov.13.2007	Fasayel	40
136	CCC School meeting	Nov.13.2007	Jiftlik	45
137	CCC School meeting	Nov.13.2007	Marj Na'jah	35
138	CCC School meeting	Nov.13.2007	Marj Al Gazal	50
138	CCC School meeting	Nov.13.2007	Zbeidat	70
139	CCC C.M- Salam Street	Nov.14.2007	Ein Sultan Camp	8
140	CCC meeting- Zahrat Al Madaen School	Nov.14.2007	Jericho	40
141	CCC meeting- Hisham School	Nov.14.2007	Jericho	33
142	CCC meeting- Fatemah Al Zahraa School	Nov.14.2007	Jericho	50
143	CCC meeting- Bohtori School	Nov.14.2007	Jericho	45
145	CCC meeting Nwe'mah School	Nov.14.2007	New'mah	40
146	CCC C.M - UNRWA	Nov.14.2007	Aqabat Jaber Camp	10
147	CCC committee meeting	Nov.29.2007	JCspd office	10
148	LAs Kardalh , Bardalah ,Ein Albaida	Dec.2.2007	Ein Albaida	10
149	CCC coordinators meeting at schools	Dec.4.2007	JCspd office	13
150	Trial Collection Project - Daheya Quarter	Dec.16.2007	Jericho	50
151	Trial Collection Project - Dorra Str.	Dec.17.2007	Jericho	50
152	Trial Collection Project - Keff El Wad North.	Dec.17.2007	Jericho	50
153	Trial Collection Project - Keff El Wad South	Dec.17.2007	Jericho	50
154	CCC meeting at MoEd office	Jan.9.2008	Jericho	8
155	CM Oja women	Jan.16.2008	Oja	15
156	CM Ein Al Baida	Jan.20.2008	Ein Al Baida	45
157	CM Fasail	Jan.22.2008	Fasail	
158	Fasail men	Feb.10.2008	Fasayel	20
159	Fasail women	Feb.11.2008	Fasayel	13
160	Shop keepers/My Bag Campaign	Feb.22.2008	Jericho	9
161	Jericho Women Society/ My Bag Campaign	Feb.25.2008	Jericho	20
162	YWCA/ My Bag Campaign	Feb.25.2008	Jericho	10
163	Israe Charitable Society/ My Bag Campaign	Feb.27.2008	Jericho	22
Information Dissemination				
Fourth year (April 2008 to August 2008)	1 Newsletter "The Joint"			(Unit)
	The Joint No.11	Jun, 2008		1000 Arb/300Eng
	2 Posters Poster No11. "Compostion of SWM Fees"	Apr, 2008		300
	3 Others Signboard: Jericho Landfill Site	Jun, 2008		1
	Commercial Film in TV: Necessity of Citizen Partnership for SWM	Jul. 2008		1
	DVD: Lanfill Operation Manual	Jul. 2008		1
Awareness Raising				(Persons)
164	YWCA	Apr.2.2008	Jericho	3
165	YMCA	Apr.2.2008	Jericho	4
166	MoA Directorate	Apr.5.2008	Jericho	3
167	MoH Directorate	Apr.5.2008	Jericho	3
168	Jericho Municipality	Apr.5.2008	Jericho	5
169	Jericho Women Association	Apr.7.2008	Jericho	4
170	Al-Quds Open University	Apr.7.2008	Jericho	7
171	Al-Jahaleen Tribe School	May.15.2008	AL aizariah	40
172	Jiftlik Women Gathering	May.31.2008	Jeftlik	24
173	Head of JIFTLIK meeting	May.21.2008	Jeftlik	13

ANNEX7-4

Annex 8: Results of the Questionnaire Survey [Type A](JCC Member ----5 AB Member of JCspd JURRV----5 Head of JCspd Member Council---13) Others---3

The following findings are observed from the questionnaire survey.
 (1) Difficulties to achieve Outputs concerning Project Purpose 1 are found. There are some reasons; 1) Low awareness and cooperation of the people, 2) Delay of the delivery of equipment from UNDP, 3) Insufficient input and support from the Palestinian side.
 (2) Project Purpose 2 are considered to be generally achieved.
 (3) Cooperation and relationship among key stakeholders including the respondents of the questionnaire and JET are satisfied.
 (4) Positive impacts are found in the two direction, one is toward the improvement of public service delivery, and the other is toward central governmental policy concerning JCspds. However, current absence of the national strategy on SWM may be giving a negative impact on ground level operation.

Question	N					Average	N comment	Selected Comments			
	Total	Valid	Missing	Very Bad	1				2	3	4
1-1-1 Is the Achievement level of the Project Purpose 1	26	26	0	0	2	9	10	5	3.69	5	It was supposed to provide necessary equipments to enhance the collection & Transport system, but a delay occurred on the provision of equipment through UNDP that affected the system efficiency.
1-2 Is the Achievement level of the Project Purpose 2	26	23	3	1	1	8	10	3	3.57	4	There was a group of activities in this regard, but the concentration was on the dissemination of experience during this period of the Project.
2-1 As for activities you were engaged in, do you think that planned activities were carried out smoothly after mid-term evaluation ?	26	26	0	1	2	8	13	2	3.50	4	<ul style="list-style-type: none">• There was a delay in the provision of vehicles & equipments where it was to arrive in the last March 2007• Yes, on ground the service reached to most of the people and the number of beneficiaries increased
2-2 Do you think that the current monitoring system is appropriate?	26	25	1	0	1	6	15	3	3.80	3	Yes, needs to follow up the workers more.
2-3 Are you satisfied with the technical transfer/advise from Japanese experts	26	26	0	1	4	2	13	6	3.73	6	<ul style="list-style-type: none">• Yes, we benefit from it, where it affected our production.• The Japanese offered the best they have.
2-4 Do you think that you have had a good relationship with Japanese experts	26	26	0	1	1	3	12	9	4.04	7	Experts were very cooperative, and they cared a lot to give success to the Project and JCspd
2-5 As a member of JCC/JCspd/Council, have you found it difficult to carry out the specific project activity?	26	25	1	2	3	8	5	7	3.48	5	<ul style="list-style-type: none">• Because of the wide range of the area, low capacity of inhabitants in these areas, and the delay in the provision of the vehicles and equipments, lead to many work burdens that we have to deal with• No cooperation from some LAs
2-6 If you have observed any other issues / problems in the process of implementation, please describe.										8	<ul style="list-style-type: none">• Till now no containers were distributed to all the area because of the delayed provision of equipment through UNDP.• Necessity of raising cooperation level and information exchange• Medical Waste Management has to be included within the Project as a main part
3-1 Is the Project's approach appropriate?	26	25	1	0	3	5	12	5	3.76	6	<ul style="list-style-type: none">• Lack of awareness and participation of the people (3)• The method of the Project was suitable, but there were many obstacles faced the implementation of the action plan• the vision was not clear at the beginning• Includes all the problems and goals
4-1 Do you think that Output 1 [Organization for Project operation is established] has been achieved?	26	25	1	0	3	8	9	5	3.64	5	<ul style="list-style-type: none">• Till now no containers were distributed to all the area(4)• Necessity of raising cooperation level and information exchange(2)• The organization was established, what rest is the issue of sustainability which need more support• There is the matter of sustainability and it depends on the Palestinian side
4-2 Do you think that Output 2 [System for SWM in JURRV is established] has been achieved?	26	25	1	0	4	4	15	2	3.60	5	<ul style="list-style-type: none">• The system was established, but there is a need to improve the technical capacity through the provision of the equipments• Needs the commitment of the Palestinian side

4-3 Do you think that Output 3 [Present situation of SWM in JRRV is grasped] has been achieved?	26	24	2	0	3	5	10	6	3.79	4	Many studies have been conducted in this regard. I think that the current situation has been grasped very well
4-4 Do you think that Output 4 [Action plan for improvement of SWM in JRRV is formulated] has been achieved?	26	25	1	0	3	4	17	1	3.64	3	Action plan was prepared in a complete and good way
4-5 Do you think that Output 5 [The action plan is put into practice and the improvement is made] has been achieved?	26	24	2	0	1	11	11	1	3.50	2	Many enhancements have been implemented which included the extension of Jericho landfill site and raising community awareness in the area.
4-6 Do you think that Output 6 [Seminars/workshops are held and Project experiences in JRRV are diffused among Palestinian local authorities] has been achieved?	26	25	1	1	2	5	9	8	3.84	4	<ul style="list-style-type: none"> • Workshops were weak and the citizens did not receive well the concepts, the words of the presentations were pure scientific going beyond the normal understanding of the citizens • Many activities have been made, transferring the experience through workshops, JCC, and there are many activities within this period.
4-7 Do you think that Output 7 [Those who are in charge of SWM in local authorities and related ministries acquire basic knowledge are diffused] has been achieved?	26	25	1	0	2	10	11	2	3.52	3	Yes, the project idea started to disseminate around the country.
5-1 Has the Japanese input in terms of Japanese experts been appropriate? Number of Experts	26	26	0	1	1	6	9	9	3.92	0	(No comments)
5-1 Has the Japanese input in terms of Japanese experts been appropriate? Timeliness of dispatching Experts	26	26	0	1	2	9	9	5	3.58	2	Evaluating the situation
5-1 Has the Japanese input in terms of Japanese experts been appropriate? Field of Experts	26	25	1	2	1	3	12	7	3.84	2	There were a variety in the team experiences
5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Number of Trainee	26	24	2	2	0	7	10	5	3.67	2	The number is low and we need more experiences in this field
5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Timeliness	26	21	5	1	1	4	13	2	3.67	0	(No comments)
5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Field of Training	26	23	3	0	1	5	11	6	3.96	3	It was better to train trainers, and the contents have to be in this direction
5-3 Has the Japanese input in terms of Equipment been appropriate? Quantity	26	23	3	0	5	9	4	5	3.39	3	Because the equipment provision item was not achieved(2)
5-3 Has the Japanese input in terms of Equipment been appropriate? Quality	26	23	3	0	2	10	7	4	3.57	0	(No comments)
5-3 Has the Japanese input in terms of Equipment been appropriate? Timeliness of provision	26	22	4	0	5	10	4	3	3.23	1	No container used till now
5-3 Has the Japanese input in terms of Equipment been appropriate? Cost	26	0	26	0	0	0	0	0	-	1	(No comments)
5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Allocation of C/P	26	25	1	4	3	11	5	2	2.92	2	Jericho municipality was the only one that has the human capacities, where it was difficult for it to second all the staff from its own employees
5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Facilities/ Equipments	26	23	3	4	5	9	4	1	2.70	4	We as MoH did not receive ant equipments needed to raise the work efficiency
5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Operational Cost	26	23	3	0	6	8	8	1	3.17	4	<ul style="list-style-type: none"> • Un-commitment form LAs to pay their dues, and no sufficient support from PNA • Weakness and lack of contribution from some of them

5-5 Has the project support system (project management) functioned well? The JCC functioned well	26	26	0	0	0	1	13	10	2	3.50	1	• Replacement of some members from the ministry
5-5 Has the project support system (project management) functioned well? The project Management	26	26	0	0	0	1	11	9	5	3.69	0	(No comments)
5-6 If you have any suggestions / request to further improve the project management, please explain.											8	• Collecting fees on monthly basis, asking people for not delaying in paying • Hope to follow up the waste vehicle on ground • Continuous inform to the JCC about the project development
6-1 Do you think that the Overall Goal 1 will be achieved in 3-5 years after the Project is terminated?	26	24	2	0	0	1	15	8	0	3.29	5	Basic policies are under preparation and it can be implemented during the next 3 years, if support continues to the project
6-2 Do you think that the Overall Goal 2 will be achieved in 3-5 years after the Project is terminated?	26	26	0	1	2	10	11	2	3.42	4	4	It is possible in a better cooperation circumstances with the other LAs
6-3 Is there any unintended positive situation produced by the project, such as in terms of evaluation policy and strategy, living condition for the community people, etc.?											10	<ul style="list-style-type: none"> • Yes, the idea of JCspds is possible, and we have the current experience of our JCspd. If we established other JCspd other than the current, I am sure that it will be successful • The possibility to develop the structure and fact of the LAs • Yes, a workgroup was established for the development of strategies of JCspds and dissemination of experience between JCspds • Yes, the village became cleaner • Hiring local work force, increasing experience in SWMM • Making a kind of integrity in waste management. • Special cell for medical waste in the landfill • Weakness in community participation that will destroy any future project for cooperation • Intended negative situation: not including medical waste management within the project
6-4 Is there any unintended negative situation produced by the project, such as in terms of evaluation policy and strategy, living condition for the community people?											7	<ul style="list-style-type: none"> • There is now a body that can manage itself, but what rest is the issue of financial sustainability because of no commitment of paying the dues • No commitment from the citizens side to pay the fees because of the bad economic situation • Because of the continuous deficit in the budget of the PNA, and no law controlling it • In management yes, but in the field it did not reach to 60% from the required capacity
7-1 Do you think that JCspd can independently manage by themselves?	26	26	0	1	2	6	13	4	3.65	8	8	<ul style="list-style-type: none"> • Following up the citizens to pay their dues. • Changing work mechanism from time to time. • Field Training to the responsible people. • Commitment from LAs to pay their dues. • regular support from PNA • The commitment of citizens to strengthen the acquired experiences • Hope that it will continue working by the experience and efforts of the Palestinian experts and employees.
7-2 Is the Palestinian government likely to continue supporting JCspd to allocate the sufficient operational budget?	26	26	0	1	5	5	11	4	3.46	7	7	<ul style="list-style-type: none"> 1- To consecrate the cooperative work in JCspd and activating its members roles. 2- communication of JCspd members through periodical meetings 3- Condensation of community awareness about the project role and its advantages and disadvantages. • Providing the necessary equipments.
7-3 Is the transferred technology properly maintained and utilized?	26	26	1	0	3	10	11	1	3.40	4	4	<ul style="list-style-type: none"> • Following up the citizens to pay their dues. • Changing work mechanism from time to time. • Field Training to the responsible people. • Commitment from LAs to pay their dues. • regular support from PNA • The commitment of citizens to strengthen the acquired experiences • Hope that it will continue working by the experience and efforts of the Palestinian experts and employees. 1- To consecrate the cooperative work in JCspd and activating its members roles. 2- communication of JCspd members through periodical meetings 3- Condensation of community awareness about the project role and its advantages and disadvantages. • Providing the necessary equipments.
7-4 What will be the promoting factors to sustain the project impact after the termination of the project?											30	

Annex B-2: Questionnaire Survey [Type B] (JCspd staff/C/P--5 JCspd worker--15)

The survey found the following result.

- (1) Workers are generally satisfied with the improvement of their work and environment.
(2) However there are some complaints of working conditions such as working hour and salary. New equipment are required to improve their work.

Question	N					Average					Selected Comments
	Total	Valid	Missing	Very Bad	Bad	Fair	Good	Very Good	Average	Comment	
1. Do you think this JCspd mechanism function adequately to improve SWM services?	20	20	0	0	0	2	16	2	4.00	14	<ul style="list-style-type: none"> The required minimum number has been appointed to start the work. Efforts made constantly to increase that number as possible. Improvements and new equipments has to be introduced to the dumping process, and using a suitable compactor for the compaction process Due to raise the level of service of solid waste management, whether at the level of operations of collection, transportation and waste treatment through the presence of a sanitary landfill site created on engineering basis.
2. Does the Project adequately meet your needs? In other words, do you recognize any improvement in your daily work?	20	20	0	3	3	3	7	4	3.30	20	<ul style="list-style-type: none"> Administrative referential and work assignments are clear. There is intense pressure at work because of lack of crew and the disruption of the equipments because of its oldness. We have problem in salaries; it was not increased although the work increased as well. In addition we have a problem with vacations Have the knowledge about a new system (Al-Assel) which is a developed accrual basis accounting system software, where in the past I worked on cash basis. Yes, there are improvements in the daily work through organizing the of PR activities to suite the service nature, and give it success. The project is an urgent need for every citizen, through the application of a good management that reflects on the individual in particular and society in general, taking into account the continuous efforts that has to be made in order to achieve the better. Suitable, improvement in the work of the vehicles, containers, and the landfill.
3. As for activities you were engaged in, do you think that planned activities were carried out smoothly after mid-term evaluation ?	20	20	0	1	1	7	9	2	3.50	12	<ul style="list-style-type: none"> It has been worked on the development of Jericho landfill site (expansion of the landfill) as the recommendations of the Evaluation Committee. Coordination, cooperation and dissemination of experience after a period of evaluation. Regarding my work, I have been recently amended to the project, but according to the time I spent in JCspd, I see that there is a follow up and implementation to what have been planned during 2008 for the financial & administrative department. Activities have been implemented smoothly and in the right way, this was due to the good management and continuous follow-up by the JCspd.
4. Are technical suggestions and technologies used in the Project useful?	20	20	0	0	2	4	7	6	3.70	12	<ul style="list-style-type: none"> The number and variety of experts in the field of competence between the team members was well, where there was a transfer of these experiences to the Palestinians partners in all fields. Full cooperation, consultation, advice and guidance by the expert team regarding the issues concerning JCspd were good. Convincing so far. But actions have to be continuous in order to achieve the best way to preserve the environment and taking into account the social and economic conditions of the citizen It is good for the collection and dumping process, which stopped many negative aspects such as the random dumping sites.

5. Did you learn something new and useful from technical suggestions from Japanese experts?	20	20	0	2	0	5	3	9	3.70	15	<ul style="list-style-type: none"> • Building and management of landfill sites, including design and requirements. • Financial management and preparation of annual financial reports. • Proper planning and proper management. • I have learnt about SWM and how to do waste source separation. I have also taught my wife about separation and asked her to start to separate waste at home. • get more knowledge about the accrual basis accounting system. • In the beginning of the project, all the 17 LAs inhabitants did not want the service, but now they ask for it, and discuss in issues that can improve the service. • Japan is one of the very advanced countries in all fields, especially in the field of waste management, so the suggestions made by the experts comes from a profound experience that we can always benefit from.
6 Has provision of equipment such as repair parts of compactor collection vehicle, computers and printers been adequate in terms of variety, quantity and timing?	20	20	0	2	5	7	4	2	2.95	17	<ul style="list-style-type: none"> • Many of spare parts have been provided for equipment and machinery, but there are some pieces are not available locally, which originally was difficult to provide. • Sufficient number of computers has been provided depending on the needs of the staff, but server was not provided. • If the vehicle went out of order there is no sufficient spare parts to do the required repairment. • The vehicle that I work on does not have breaks since two months, and we have so many problems in maintenance. • New equipment has to be provided especially for the night shift (1m2 containers collector) • Spare parts have to be provided quickly in order to avoid any failure or delay. • Regarding the PCs and the overhead projector that is used in the PR activities are more or less suitable • Provision with spare parts extended the vehicles life. However, the delay in the provision of the new vehicles affected the collection process because the assumed life of the old vehicles has already expired.
7 If you have observed any other issues / problems in the process of implementation, please describe.										18	<ul style="list-style-type: none"> • It was supposed to provide equipment and new machines in the middle of the project, but there had been delays in the procurement process due to several reasons, thus affecting the development of the current system. • Please put a correct mechanism for the maintenance process. • To make 2 shifts at night. • To divide the areas • To distinguish the work of each employee. (job description)

Date: 17 June, 2008

Dear JICA Organization

Subject: Development strategy of SWM

The Ministry of Local Government through DJCspd has done many actions and steps for the development of this sector to be part of the national strategy to develop this sector with the participation of all stakeholders, whether government or local or some programs and international donors, as follows:

First: The ministry has established one JCspd in each governorate where it reached to 13 JCspds in west bank and Gaza Strip till now, still one JCspd at the south of Gaza. These JCspds includes all the LAs in each governorate, where internal regulations have been established to them, and the minister of local government approved a big amount of those regulations.

Second: The ministry seeks through these councils to transfer the SWM service affairs to them in order to develop this sector by preparing to receive gradually the equipments, machinery, and staff from the LAs as the experience of JJRRV & Jenin JCspds. In addition, to receive these JCspds all projects concerning this sector at the level of governorate, as well as coordination to raise the capabilities of workers in these councils.

Third: It was agreed to establish Palestine high council including all JCspds for SWM representatives in the entire governorate, aiming to coordination, draw up joint plan for the development of this sector, and raising the level of these JCspds.

Forth: The ministry has participated in all the meetings in presence of the concerned ministries, some JCspds, and donors concerned in the development of SWM sector at the national level in order to create a national strategy for the development of SWM and Sewage sector that the Palestinian Government established it in 2005 for this purpose by the chairmanship of the minister of MoLG.

Fifth: The current aim of PNA and its organizations is limited on closing all random landfills, reducing sanitary landfills to for in west bank (north, center, south, JJRRV) and 3 in Gaza as maximum, which is now being applied

Sixth: MoLG is seeking through the cooperation with the Japanese project supported by JICA in JJRRV to give success to JCspd for SWM in JJRRV in order to disseminate this experience to all governorates. In addition, to the establishment of the higher Palestinian council for the development of SWM in the country and contributing in the development of SWM strategy in Palestine.

Seventh: It is an urgent need to give success, continue JCspd in JJRRV, and develop the service like: extending the current service, separation and recycling of waste, creating a real participation between the public and private sectors, training of existing staff in order to be able to disseminate the experience, and raising the social and local awareness level about this project which is a requirement to success the



experience dissemination, and supporting the Palestinian higher council in Palestine to play its role in the development of this sector on the national level.

Eighth: According to the JCspds meeting and the issued recommendations, the Palestinian Higher Council assumed as the top player participating in the development of the national strategy for solid waste sector. Thus, it urgently needs organization, equipments, training, administrative and technical capacity raising, office, staff, activities, meetings, and brochures, a minimum for two years.

The Palestinian Government has recently encouraged and approved many policies and activities in order to encourage the private sector role as an introduction to privatization and domestic investment, develop the partnership between the public and private sectors that meet the international guidelines especially the developing countries because of the need to create a global and sustainable local development. We do need to develop this partnership in our local community, and we like that JICA support this orientation.

With Respect and Thanking

Kame Hemed

General Director of DJCspd



3-5. الاستنتاجات

بناء على خمسة معايير التقييم ، صلة المشروع وكفاءته وصلت إلى مستوى مرض جدا ، واكتشف الفريق تأثيرات إيجابية مختلفة في سير المشروع ، في حين أن الفعالية ليست ملحوظ جدا والاستدامة لا تزال غير كافية.

وهكذا ، على الرغم من مختلف الانجازات التي تحققت في المخرجات ، فإن الفريق استنتج بأن المشروع لن يكون قادرا على تحقيق أهدافه بالكامل ضمن مدة المشروع.

وبوجه خاص ، حدد الفريق أن واحدا من أكبر المعوقات أمام النشر الكافي لنظام إدارة النفايات الصلبة في المنطقة هو التأخير في توفير المعدات من خلال مشروع منحة معونة برنامج الأمم المتحدة الإنمائي. وعلاوة على ذلك، الضعف المالي لمجلس الخدمات المشترك في أريحا والأغوار ترك فجوة كبيرة أمام التحسين.

ومع ذلك ، فإن الفريق قيم عاليا التطور من في قدرة والمجالس المحلية ال 17 الأعضاء والشركاء الرئيسيين ، ولا سيما من حيث القدرة الفنية ، والملكية ، والدافع الذاتي ، وفي نهاية المطاف مستوى تنمية القدرات في إدارة النفايات الصلبة.

4-5. التوصيات

(1) تنفيذ خدمة إدارة النفايات الصلبة المحسنة

بعد إقرار الجدول الزمني لإدخال معدات إدارة النفايات الصلبة من خلال مشروع منح المساعدات لبرنامج الأمم المتحدة الإنمائي ، من الموصى به التخطيط والتنفيذ لأنشطة خدمة إدارة النفايات الصلبة المحسنة من قبل مجلس الخدمات المشترك في أريحا والأغوار. أن طبيعة تنمية القدرات هي عملية طويلة الأجل ، وانطلاقا من هذا المنظور ، فإن المشروع ما زال لديه بعض المتسع لتطويره ، ومن هنا يخلص الفريق إلى أن السلسلة واستمرارية المدخلات في بعض جوانب مجلس الخدمات المشترك في أريحا والأغوار لا تزال حيوية على الأقل بالنسبة للسنوات المقبلة.

(2) أنشطة لتأمين الاستدامة

إن مجلس الخدمات المشترك في أريحا والأغوار لم يرق تماما على قاعدة مالية مستقلة ، مما يدل على أن استمرارية المؤسسة لم تؤمن بعد.

لاحقا من خلال الفترة الحالية للمشروع ، خطط للقيام بأنشطة مكثفة من اجل تعزيز القاعدة المالية لمجلس الخدمات المشترك في أريحا والأغوار ، إلا أنها لا تزال في مرحلة التطور المبكر ، وبالتالي سوف تحتاج إلى الدعم المستمر على المدى البعيد.

وفي الوقت ذاته ، يوصي الفريق لاختبار الجدوى الاقتصادية على أساس حجم الاستحقاق لمجلس الخدمات المشترك في أريحا والأغوار الحالي مع المجالس المحلية ال 17 الأعضاء، الواقعة على نطاق واسع في منطقة أريحا والأغوار بأسرها على ثلاثة محافظات المختلفة ، وسياسة السلطة الوطنية الفلسطينية.

(3) نشر الخبرات مجلس الخدمات المشترك في أريحا والأغوار

ويوصي الفريق للتعجيل في أنشطة نشر خبرات مجلس الخدمات المشترك في أريحا والأغوار ، والتي يمكن تطبيقها في مختلف أنواع خدمات إدارة النفايات الصلبة الإقليمية بواسطة مجالس الخدمات المشتركة/ المجالس المشتركة في فلسطين ، من اجل تقاسم مثال نموذجي من الممارسات ، مثل إنشاء منظمة جديدة ، والتطور لنظام المحاسبة الجديد ، وأنشطة التوعية العامة.

ويوصي الفريق بإنشاء آلية الاعتماد على الذات لتبادل المعلومات بين مختلف مجالس الخدمات المشتركة/ المجالس المشتركة في فلسطين ومن أجل الوصول إلى الهدف الشامل للمشروع.

5-5 الدروس المستفادة

(1) أهمية الجمع بين المكونات المادية وغير المادية

في مرحلة التصميم ، فإن مشروع للتعاون التقني (المكون غير المادي) المخطط بالتعاون مع مشروع منح معونة المعدات (المكون المادي). ولقد كان من المتوقع تحقيق تنمية القدرات في إدارة النفايات الصلبة في أريحا والأغوار من كلا جوانب التنمية الإدارية والمرافق. ومع ذلك ، وبسبب الوضع السياسي غير متوقع ، فإن جزء المكون المادي لم يتطابق مع تنفيذ جزء المكون غير المادي. وهذا التعارض بين المكونين حدث بشكل عام بسبب التأخير في جانب المكون المادي ، ونتيجة لذلك ، ترك غرض المشروع الأول غير منجز الفريق يخلص إلى أن هذه التغييرات يمكن التنبؤ بها إلى حد ما لا مفر منه وفضلاً وكما هو مبين في منظومة تكوين المشروع بأنها " افتراض مهم" ، بيد أن هذه التجربة توحى لنا من ناحية أن الجمع بين العناصر المادية وغير المادية في مشروع إدارة النفايات الصلبة فعالة للغاية لتنمية القدرات ، ولكن من ناحية أخرى ، فإن هذا النهج يمكن أن يكون بمثابة " سيف ذو حدين" في بعض حالات المشاريع الموازية.

(2) قضية الاستدامة

يشير الفريق إلى وجود ضعف في تقييم استدامة المؤسسة في مرحلة التخطيط للمشروع. ولا سيما مع جميع العوائق والعقبات التي تنسم في شبه دولة فلسطين في ظل نظام الاحتلال العسكري الإسرائيلي ، فإن نهج عميق ومدرّس هو أمر أساسي. في حالة مجلس الخدمات المشترك في أريحا والأغوار ، فإن العوامل المحددة للاستدامة المؤسساتية هي على حد سواء الجوانب المؤسساتية والمالية. أي من هذه الجوانب هو سهل للتصدي لهذه المسألة في المدى القصير ، فإن الفريق يعتقد أن هذه المناطق هي من المهام التي ينبغي أن تعالج في الأجل الطويل.

(3) تطوير القدرات

وأخيراً ، فإن الفريق ينهي هذا التقرير مع ملاحظته أن اكبر انجاز في هذا المشروع ، هو التقدم المحرز في تطوير قدرات جميع أصحاب المصلحة المعنيين. لا سيما ، عن طريق الممارسة التعاونية من جانب أفراد الشركاء الفلسطينيين مع أفراد فريق الخبراء اليابانيين في إطار الظروف الصعبة للغاية التي أعاققت قدرات الجانب الفلسطيني. كما أنه تجدر الإشارة إلى أن الصعوبات التي يُمر بها من خلال العمل معا على أرض الواقع هي دافع حيوي لتنمية القدرات.

وبالإضافة إلى خاصية التعقيدات السياسية والأمنية في المنطقة ، والتي قدمت للمشروع صعوبات جمة في تنفيذه ، هذا المشروع كان عليه أن يخوض العديد من التحديات من خلال ما ذكر سابقاً ، ومعظمها داهمت المشروع بدون تحذيرات. من أجل إيجاد نتائج ملموسة في ظل هذه الظروف ، فإن التحليل اليومي للوضع المتغير والمرونة لتقابل على وجه السرعة لمثل هذه التغييرات هي العناصر الأساسية ، والتي يمكن التعرف عليها تماماً في جميع أنحاء تشغيل المشروع ، وعلاوة على ذلك ، هذا دليل حقيقي على أن تنمية القدرات يمكن أن يكون تحقيقه ممكناً حتى في ظل ظروف غير عادية إذا كان هناك إدارة سليمة للمشروع.

Draft Concept Paper

The Project for Capacity Development on Solid waste Management in Jericho and JJRRV (Phase 2)

Introduction:

Palestinian National Authority represented by Ministry of Local Government (MoLG) and Ministry of Planning (MoP), and the Japan International Cooperation Agency (JICA), signed a record of discussion and minutes of meeting to implement the Project for Capacity Development on Solid waste Management in Jericho and JJRRV on July, 2, 2005 in Ramallah.

The project purposes were:

1. Sustainable and sanitary system for solid waste management (SWM) is introduced in JJRRV.
2. Experiences of improvements on SWM in JJRRV are shared as a model for other areas in PNA.

This project is about to finish mainly by the end of August this year. Until now the sustainability of SWM in JJRRV is not completely achieved, and sharing as a model for other areas is at its beginning stage.

It is also necessary to develop the present SWM system to ISWM (Integrated Solid Waste Management) based on the 3Rs concept in order to protect the environment. Also there is a need to find out the proper measures on mitigation of GHGs (Green House Gas) on the climate change. For these reasons we still need to have another phase of this project.

Project Purpose:

1. Sustainable system and organization for ISWM is introduced in JJRRV.
2. Successful model for ISWM is shared as a model for other areas in PNA.

Project Description:

1. Goals and Objectives:

a. Goal:

The main goal of this project is to introduce a sustainable system and organization for ISWM in JJRRV.

b. objectives:

The main objectives of this project are:

1. A sustainable system for ISWM is introduced in JJRRV.
2. A successful model for ISWM is shared in other areas in PNA.

2. Methodology and Timeline:

a. Methodology:

This methodology of this project includes the followings:

1. Financial Issues.
2. Management Issues.
3. ISWM Issues.
4. Landfill Operation Issues.

5. New Solid Waste Collection Issues.
6. Public Relations Issues.
7. Modelling Issues.

1. Financial Issues:

There is a need to enhance financial situation and system of the JCspd. This could be achieved through the following activities:

- a. public awareness regarding the importance of SWM service, and the payments of the fees for this service, through making the community aware of the operation cost paid by the JCspd in order to provide this service to them.
- b. Study the big users and big waste generation organizations in Jericho City and build up a tariff system for them.
- c. Study the operation cost in the refugee camps and build up tariff system for them based on the cost recovery.
- d. Analysing the operation cost of the new solid waste collection system.
- e. Build up a new tariff system for Jericho city.

2. **Management Issues:**

Since the JCspd is going to touch the ISWM field at the next stage, there is a need to enhance the management situation of the JCspd. This could be achieved through the following activities:

- a. Study the current situation of SWM system conducted by the JCspd, and build up a routing system for the collection and transportation of solid waste.
- b. Introducing GIS system for ISWM in JJRRV.
- c. Staff training of JCspd in the field of ISWM.
- d. Studying the opportunities and challenges of ISWM in JJRRV.
- e. Studying the alternatives of landfills and other needs to be used after the closure of Jericho landfill site.
- f. Studying the amount and composition of solid waste generated in JJRRV.
- g. Studying the most appropriate technologies for mitigation of GHGs (Green House Gas).

3. **ISWM Issues:**

This could be achieved through the following activities:

- a. Studying recycling possibilities which may considered as income generation for the JCspd.
- b. Studying waste separation possibilities at all stages, and possibilities of both reuse and resale.
- c. Studying composting opportunities in JJRRV.
- d. Studying the most appropriate technologies for ISWM in JJRRV.

4. **Landfill Issues:**

This could be achieved through the following activities:

- a. Enhancement of the current operations in Jericho landfill site after receiving the new vehicles and equipments.
- b. Training JCspd staff in the field of designing and construction of landfill sites.
- c. Studying the new landfill site in JJRRV.

- d. Studying the feasibility of gathering the bio-gas.

5. New Solid Waste Collection Issues:

This was a component of phase 1 of this project, but since there was a delay in the provision of the new vehicles and equipments, this component was not achieved. To achieve this, the following activities are needed:

- a. Introducing a new system for collection and transportation of solid waste in JJRRV.
- b. Time and motion study of the new system.
- c. Build up a rooting system for this new system.

6. Public Relations Issues:

This could be achieved through the following activities:

- a. Public awareness on ISWM in JJRRV.
- b. Public awareness on waste separation at the source.
- c. Public awareness on the reduction of waste generation.
- d. Issuing of newsletters and leaflets.
- e. Issuing of media products.
- f. Holding seminars/workshops.

7. Modelling Issues:

Modelling of JCspd for SWM in JJRRV was one of the purposes of phase 1 of this project, but since the sustainability of JCspd is still in progress at this stage, and there was a delay in introducing of new solid waste collection and transportation system due to the delay in the provision of the new vehicles and equipments, this purpose was not achieved. There is a need to guarantee the sustainability of the JCspd and introduce the new collection system, in order to achieve the modelling purpose. This could be through carrying out all the above mentioned activities.

b. Timeline:

Three years.

Project Outputs:

The followings are the expected outputs of this project:

1. Sustainable system and organization for ISWM in JJRRV.
2. Present situation and opportunities of ISWM in JJRRV is grasped.
3. Action plan for sustainable ISWM in JJRRV is formulated.
4. The action plan is put into practice and sustainable ISWM system and organization in JJRRV is made.
5. Experiences of the sustainable ISWM in JJRRV modelling JCspd in JJRRV are diffused to other areas in PNA.

Support Needed:

Appendix II (M/M)

Technical cooperation project supported by JICA for a period of three years is needed to achieve the above project purposes.

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**The 9th JCC Meeting
22 and 23 June, 2008**

Jericho

List of Attendant

Name	Organization	Position
(The Palestinian Evaluation Team)		
1 Mr. Kamel Hemeid	MoLG	General Director, DJCspd
2 Mr. Fawaz Rabaia	MoLG	General Manager of Public Relations
3 Mr. Abd Aljabbar Abu Halaweh	JCspd JJRRV	Executive Director
4 Mr. Sleiman A. Abu Mufereh	MoLG	Manager of Rural Development Department
5 Mr. Ghassan Daraghme	MoLG-Jericho	Director
(The Japanese Evaluation Team)		
6 Dr. Mitsuo Yoshida	JICA	Senior Advisor
7 Mr. Tetsuya Mizutani	JICA Palestine Office	Project Formulation Advisor
8 Dr. Abdul Nasser Makky	JICA - Jericho Office	JICA Coordinator
9 Ms. Eriko Tamura	JICA	Senior Program Officer
10 Mr. Naoyuki Teshima	Construction Project Consultants, Inc.	Chief Economist/Director
11 Mr. Mohammad Njoom	MoLG-Tubas	General Manager
12 Mr. Safwan Halabi	MoLG-Nablus	General Director, DJCspd
13 Mr. Khalid Hamd	Jericho Governorate	General Director
14 Mr. Hasan Saleh	Jericho Municipality/JCspd JJRRV	Mayor of Jericho/ President of JCspd JJRRV
15 Mr. Mohammad Abu Mohsen	Jericho Municipality	Financial Mgt
16 Mr. Adnan Hammad	Jericho Municipality	City Council Member
17 Mr. Emad Saifi	PWA	Director
18 Mr. Deeb Abed Al-Ghafour	PWA	Director
19 Mr. Hiroshi Abe	JICA Expert Team	Team Leader
20 Mr. Noboru Osakabe	JICA Expert Team	Deputy Team Leader
21 Mr. Majdi Shomali	JICA Expert Team	Public Relation - Facilitator
22 Mr. James Abed Rabbo	JICA Expert Team	Interpreter
23 Ms. Rawan Ghroof	JICA Expert Team	Secretary

評価項目	評価設問 大項目	小項目（指標）	調査結果
実績 の 検 証	プロジェクト目標の 達成見込み	衛生的な廃棄物管理（SWM）システムの導入は基本的には達成した。しかし、ジェリコ及びヨルダン溪谷地域の広域行政計画・開発カウンシル（JCspd JJRRV）及び専門家チーム（JET）の努力にもかかわらず、財政的な脆弱性、政治的混乱、及び国連開発計画（UNDP）経由無償資金協力による機材の導入の遅れに起因する新しい運搬・収集システムの事業化定着の遅れにより、持続性の確保が達成されておらず、プロジェクト目標 1 は、現状では完全には達成できていない。	
	プロジェクト目標 1 ジェリコ及びヨルダン溪谷に持続的で衛 生的な廃棄物管理シ ステムが導入される。	質問票調査によれば、プロジェクト目標 1 が達成したかについて 26 人の回答者の 5 段階のスコアは、悪い（2）、普通（9）、良好（10）、非常に良い（5）であり、平均は普通と良好の間の 3.7 であった。	JCspd JJRRV による廃棄物収集の開始以前に、定期収集を行っていたのは、ジェリコ（Jericho）など 3 自治体のみであり、現在サービスを受けているそれ以外の自治体は、JCspd JJRRV の収集サービス開始後、新しく廃棄物処理サービスを受けており、収集・運搬はベースラインからは大きく改善されているといえる。また、不法投棄に関しては、定期的な収集サービスを受ける自治体が増えたことに加え、衛生・管理状況の悪い 4 つの処分場への持ち込みをやめ、現在は、ジェリコ、アル・オージャ（Al-Ojah）、トゥバス（Tubas）の 3 ヲ所の処分場を利用している点から、減少したといえる。 しかしながら、連携案件である UNDP 経由での無償資金協力機材の供与が当初の予定より遅れており、プロジェクト期間内の供与は絶望的である。 インタビューした 3 地方自治体の長は、だれもが約束どおりコンテナと収集車両が配布されないことに不満を示した。サービス料金の支払いがなくサービスを休止している自治体の一つ、Ein Al-Bidah の村長は、コンテナの配布とゴミ収集車両の配置がない状態では住民は納得しないと語った。JCspd JJRRV が収集・運搬改善活動が続けるためには、新しい収集車両と重機の投入は不可避であり、確実な調達時期を示す必要がある。 JCspd JJRRV は既存の車両を前提に、ゴミ収集方法の改善策を検討している。しかしながら、耐用年数を過ぎた車両が多く、対策の有効性は短期間に限られ、古い車両の故障により、サービス中止の状況も考えられる。
		医療廃棄物の分別収集と適正 処分がなされる。	プロジェクト・デザイン・マトリックス（PDM）では、医療廃棄物管理実態調査報告ペーパーを作成・報告することで、医療機関が現状を把握し、適正な処分をすることを想定していたが、医療機関の財政状況が厳しく、医療廃棄物もジェリコ処分場で受け入れているという状況である。医療廃棄物の分別収集と適正処分がなされているとはいえないが、厳しい条件下ではほぼ最適の方法であったと評価する。

		医療廃棄物の当該地域での処理方法としては、地域の医療施設から出た医療廃棄物を日本の無償資金協力で建設した新ジェリコ病院に集め、焼却炉で焼却処理をするという方法が提言されたが、実際には、同病院は運転費 200 米ドル/月が工面できず、焼却炉を利用していない。現在は、暫定的な措置として、新ジェリコ病院内にジェリコ市所有のコンテナが置かれ、病院内で発生するすべての廃棄物をジェリコ市が収集し、ジェリコ処分場内にフェンスで隔離した専用場所に投棄している。
	現地の条件に応じた適正技術による衛生埋立（Controlled Landfill）がなされる。	2007 年 1 月よりジェリコ処分場の改善工事を開始し、3 月 21 日には開所式を迎えている。遮水シートを張り、ガス抜き管、浸出水池を備えた準好気性の当該処分場は、当該地域で唯一、衛生埋立方式を行っている処分場として利用されているが、残余期間が半年程度と短いことから、中間評価の提言を受けて、2007 年 11 月、拡張工事が行われ、2008 年 3 月完成、残余期間は合計で 4 年になった。
	廃棄物管理を担う機関が、健全な財政基盤を備える。	<p>JCspd JJRRV の財政基盤は事業立ち上がり時期としてはまずまずであるが、今後収入増に課題を残す。2007 年度の収支実績は、表 1 に示すとおり、2 万 2,000 シェケル (NIS) の赤字（現金のマイナス）である。（なお、この決算にはゴミ持込費の未払い費用が計上されていないこと、減価償却費を計上していないことを考慮すると、実質的赤字は 2 万 2,000NIS より大きいと思われる）。JCspd JJRRV は 2007 年 1 月に SWM サービスを開始して、わずか 1 年間の成果であり、評価できる。</p> <p>専門家はこの決算内容を次のように説明した。「ジェリコ市の収益源である水料金でさえ徴収率は 50% 程度、ジェリコ市によるサービスに対する SWM 料金に至っては 40% 程度である。そういうなかで、JCspd JJRRV の徴収率は 60% であり、この実績は評価できる。JCspd JJRRV の料金には、機材の原価償却費を含んでいる。最初から関係者にその必要性を根づかせること、また最初は減価償却費なしでも済ませたが、後年に含めると大きな反動を来すため、あえて初年度から含めた。このため、徴収率が低く出ているが、戦略的施策である。今後は、財政基盤強化を図る段階である。幸い、優秀な職員が配属され、収入増強策には着手している。また、収入の 8 割を占めるジェリコ市については連携が欠かせないので、JCspd JJRRV の財務は市財務部と定期的に会合をもっている。」 JCspd JJRRV の収入に占めるジェリコ市の比率は、2007 年予算ベースで 77%、2007 年実績ベースで 88% である。事業初年度はジェリコ市の貢献が大きく、他自治体の貢献度のばらつきが目立つ結果であった。</p>

表 1 : JCspd JJRRV 2007 年度収支実績

(単位 : 1,000NIS)

事業活動	収支項目		2007年度		
			a.当初予算	b.実績	差額(=b-a)
SWMサー ビス		2007年度料金及び2006年度負担金	1,713	985	-728
		(参考:修正予算)	(1,583)		
	支出	人件費	546	444	-102
		燃料費:1)車両	237	226	-11
		燃料費:2)重機	108	0	-108
		重機レンタル費	0	113	113
		保全・補修費	170	176	6
		ゴミ持込費	83	0	-83
		その他	54	61	7
		減価償却費	406	0	-406
		合計	1,613	1,020	-593
	収支		100	-35	-135
その他	収入	供与	0	438	438
		その他	0	4	4
		合計	0	442	442
	支出	資産取得	100	429	329
		収支	-100	13	113
総収支			0	-22	-22
現金・預金残高(2007年末)				20.5	

最近 4 ヶ月間の月次収支表については、2007 年同期の実績とともに示す表 2 のとおりである。キャッシュベースでは浮き沈みがあり、不安定であり、改善の余地がある。

表 2 : キャッシュベース・バランス

(単位 : NIS)

		1 月	2 月	3 月	4 月
2007	Cash-in	107,023	71,939	95,097	72,229
	Cash-out	128,198	72,201	97,338	81,078
	Balance	-21,175	-262	-2,241	5,438
2008	Cash-in	102,159	88,659	138,461	96,841
	Cash-out	98,173	93,406	144,093	91,403
	Balance	3,986	-4,747	-5,632	5,438

出所 : JCspd JJRRV

			また、政府からの交付金が財政基盤改善のため不可欠として交付されることを期待してきたが、パレスチナ自治政府（PNA）の財政状況からみて早期解決の見通しは立てにくい。以上から、JCspd JJRRV が、サービス収入を伸ばして健全な財務基盤を固めるまでには、さらに1～2年の時間が必要と思われる。
プロジェクト目標2 ジェリコ及びヨルダン溪谷の改善事例経験が、パレスチナ他都市の廃棄物管理の改善に向けたモデルケースとなる。	JCspd JJRRV の経験を、合同調整委員会（JCC）、パレスチナ廃棄物管理会議（PCSWM：仮称）、セミナー、ワークショップ等の機会に、他 JCspd 等へ提供しており、プロジェクト目標2は達成しつつある。 質問票調査によれば、プロジェクト目標2が達成したかについて23人の回答者の5段階のスコアは、非常に悪い（1）、悪い（1）、普通（8）、良好（10）、非常に良い（3）であり、平均は普通と良好の間の3.6であった。		
	パレスチナ他地域においてジェリコ及びヨルダン溪谷の改善事例が認識される。	アウトプット7については、国別研修に関して、パレスチナ「廃棄物管理能力向上」コースが、2005年9月5日から同10月7日、2006年11月1日から同12月1日と2007年10月10日から同12月2日の、計3回開催されており、それぞれ5人、8人、9人の関係者が参加している。ヨルダンへの第三国研修（2006年9月16日から22日）がヨルダン環境省、アンマン市役所、在ヨルダン JICA 専門家の協力を得て実施されており、JCspd JJRRV 職員、JCspd JJRRV 理事会メンバーら合わせて9人が研修に参加している。付属資料1. ミニッツ（合同評価報告書）の ANNEX5:List of the trainees in Japan and Jordan を参照。 その他、JCC や各種ワークショップには他の JCspd や自治体からも招かれており、その際に JCspd JJRRV の経験が共有され、認識は広がりつつある。地方自治庁広域行政計画・開発カウンスル局（MoLG DJCspd）では、国家廃棄物・下水委員会（National Committee on Solid Waste Management and Wastewater）が活発な活動を再開した際には、この場で JCspd JJRRV の経験を広く共有し、当該委員会を中心に策定予定の廃棄物国家計画にも反映させていきたいと考えている。付属資料1. ミニッツ（合同評価報告書）の ANNEX9:Development Strategy of SWM – Comments by the Project Director を参照のこと。	
アウトプット（成果）の達成状況			
1. プロジェクトの運営体制が確立する	JCC、JCspd JJRRV の総会や理事会が組織され、現在までに、JCC は9回、JCspd JJRRV 総会は7回、理事会は14回、定期的に開催されており、アウトプット1は達成されている。 質問票調査によれば、アウトプット1が達成したかについて、25人の回答者の5段階のスコアは、悪い（3）、普通（8）、良好（9）、非常に良い（5）であり、平均は普通と良好の間の3.6であった。（Questionnaire A-4-1）		
	1.1 プロジェクト合同調整委員会（JCC）等の設置と定期開催	JCC は2005年12月に設立され、プロジェクト全体の運営管理を行ってきた。現在までに、JCC は9回開催されている。JCC メンバーは次の8名であるが、表3の JCC 開催記録によれば、各回ともメンバー以外の関係者が参加して運営されている。 1. Mr. Kamel Hemeid 地方自治庁広域行政計画・開発カウンスル局長 2. Mr. Fawaz Rabaia 地方自治庁 JICA Project 担当	

3. Ms. Cairo Arafat 計画庁
4. Mr. Mahmoud Abu Shanab Environment Quality Authority
5. Mr. Ibrahim Attya 保健庁（MoH）、環境部
6. Mr. Abu Hasab Rjoob ジェリコ県
7. Mr. Hasan Saleh プロジェクトマネージャー/JCspd JJRRV 理事長/ジェリコ市長
8. Mr. Abdel-Jabbar Al-Halawa JCspd JJRRV 事務局長/ジェリコ市衛生部長

表 3：プロジェクト合同調整委員会（JCC）等の開催記録

	開催日	主な議題	参加人数
1	2005/12/13	①プロジェクト・インセプションレポートの説明、 ②JCspd JJRRV の果たすべき役割	26
2	2006/03/02	①プロジェクトの進捗、②2006 年度の計画	20
3	2006/07/26	①プロジェクトの進捗、②JCspd JJRRV Regulation、 ③PDM と活動計画表（PO）の改定	31
4	2006/10/16	①プロジェクトの進捗、②2007 年度予算案	50
5	2007/03/14	①プロジェクトの進捗と課題、②アクションプラン案	28
6	2007/6/19、20	①中間評価、②協議議事録（M/M）	延べ 50
7	2007/10/17	①JCspd JJRRV 活動、②国家廃棄物戦略、③JCspd の経験普及	32
8	2008/3/13	①JCspd JJRRV 年次報告・パイロットプロジェクト、 ②国家廃棄物委員会活動・政府交付金・UNDP 機材、 ③ヘブロン JCspd の活動	37
9	2008/6/22、23	①最終評価、②M/M	23

出所：JCspd JJRRV

1.2 プロジェクト実施計画の
具体化とプロジェクト・モニ
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JCspd JJRRV の総会は、全 17 地方自治体に参加して実施される会合のことであり、地方自治庁の JCspd に関する by-law では、少なくとも 1 年に 1 度開催することと規定されている。現在までに、JCspd JJRRV 総会は 7 回開催されている。

			表 4 : JCspd JJRRV 総会 (General Body Meeting) 開催記録		
			回	開催日	主な議題
			1	2005 年 9 月 13 日	理事会 (Administrative Body) メンバーの選出
			2	2006 年 2 月 18 日	JCspd JJRRV 規則の策定等
			3	2006 年 8 月 6 日	基本計画の承認等
			4	2006 年 10 月 16 日	2007 年度予算案の討議等
			5	2006 年 11 月 7 日	2007 年度予算案の承認等
			6	2007 年 12 月 9 日	2007 年度事業活動報告、2008 年度予算案の承認等
			7	2008 年 3 月 24 日	理事会メンバー選出等
			出所 : JCspd JJRRV		
			<p>理事会は、上記 by-law によれば、JCspd の president と deputy president の 2 人に加え、総会で選ばれた 3 人の、計 5 人で構成される会であり、月に 1 度、会合を開くことになっている。現在の理事会メンバーは、Jericho、Aqurabannyah、Zbdat、Ein Al-Bidah、Al-Ojah の 5 自治体の代表である。</p>		
			表 5 : JCspd JJRRV 理事会 (Administrative Body Meeting) 開催記録		
			回	開催日	主な議題
			1	2006 年 2 月 26 日	活動計画案策定・合意
			2	2006 年 8 月 3 日	JCspd JJRRV 規則の変更・策定、基本計画の検討等
			3	2006 年 8 月 19 日	JCspd JJRRV 組織案の策定、アクションプラン案策定
			4	2006 年 10 月 2 日	事務所借上げ準備、職員雇用、機材の移管等合意
			5	2006 年 10 月 12 日	主要職員決定、予算案の決定
			6	2006 年 12 月 10 日	サービス開始時期、事務所借上げ
			7	2006 年 12 月 17 日	2007 年度の運営計画、事務所借上げ契約
			8	2007 年 2 月 3 日	1 月に開始した SWM サービスの現状・問題点
			9	2007 年 3 月 6 日	料金徴収促進対策
			10	2007 年 5 月 6 日	サービス料金徴収対策
			11	2007 年 6 月 12 日	サービス料金徴収対策、理事会メンバー改選
			12	2007 年 8 月 25 日	サービス料金徴収対策、理事会メンバー改選
			13	2007 年 11 月 3 日	2008 年予算案承認
			14	2008 年 6 月 4 日	政府交付金、UNDP 経由無償資金協力供与機材
			出所 : JCspd JJRRV		

<p>2. ジェリコ及びヨルダン渓谷地域における廃棄物管理組織体制が確立される。</p>	<p>当該地域における廃棄物管理組織体制が確立されつつあり、よってアウトプット2はおおむね達成されつつある。しかしながら、経済的基盤の脆弱さと地域経済の低迷から、参加自治体によるサービス料金の支払いが不十分であり課題が残る。また、現行17自治体の広域廃棄物管理に対する費用対効果について再検討の余地がある。</p> <p>質問票調査によれば、アウトプット2が達成したかについて、25人の回答者の5段階のスコアは、悪い(4)、普通(4)、良好(15)、非常に良い(2)であり、平均は普通と良好の間の3.6であった。(Questionnaire A-4-2)</p>	
<p>2.1 JCspd JJRRV による廃棄物管理体制に関する基本計画がつけられる。</p>		<p>プロジェクト関係者(日本人専門家とC/Ps)で作成された基本計画(案)は、アラビア語に訳され、2006年8月3日の第2回JCspd JJRRV 理事会で詳しく検討された。同計画案はJCspd JJRRV の理事長と事務局長によって、8月6日のJCspd JJRRV 総会で紹介・説明され、承認を得た。現在、この基本計画は小冊子(アラビア語)にまとめられ、関係者に配布されている。</p>
<p>2.2 廃棄物管理組織の分掌の明確化と整備</p>		<p>JCspd JJRRV 職員の職務規定については、JCspd JJRRV の事務局長である Abdul-Jabbar 氏が中心になり2006年11月にドラフトを作成、その後2007年1月16日にJCspd JJRRV の理事長に承認されている。2006年12月23日にはJCspd JJRRV 職員を対象とした説明会と訓練が実施されており、職務内容についても説明・議論がなされている。この職務規定はアラビア語に訳され、各職員に配布されている。</p>
<p>2.3 廃棄物管理会計の確立</p>		<p>廃棄物管理会計に関しては、成果5にあるアクションプランの一環として、改善がなされているところである。2007年1月のJCspd JJRRV によるサービス開始後は、暫定的措置として、日本人専門家の作成したエクセルシートを基にコンピューターによる会計管理業務を開始している。2007年8月から財務会計ソフトを導入し、管理をしている。</p>
<p>2.4 市民への広報事業</p>		<p>市民への広報活動は、1年次より積極的に行われてきている。継続的にニュースレターやリーフレットを作成することに加え、ウェブページを開設したり(http://www.jcspd-jericho.org/)、地方テレビや国営テレビに出演したりと、積極的に情報発信を続けている。加えて、17自治体を対象に、多くのコミュニティ会合(173回)を開催し、JCspd JJRRV の役割、SWM サービスの内容、サービス料についての説明を行っている。JICA 専門家チームは2007年5月から2008年2月までに12回のイベントを新聞、TVに取り上げてもらった。学校での環境教育の講義は2008年3月までに36回行っている。詳細は、付属資料1. ミニッツ(合同評価報告書)のANNEX7:List of the public relations activities を参照のこと。</p>
<p>2.5 地方自治体との協力体制</p>		<p>JCspd JJRRV による廃棄物処理サービスの提供は、加入する17自治体の理解・参加なしには行えないことであり、前述の総会及び理事会の開催実績から、ある一定の協力体制はできているといえる。しかしながら、各自治体の経済的基盤の脆弱さ、近年のパレスチナ国内経済の低迷から、分担金や月額サービス料の支払い状況は決して良くない。その点からみれば「自治体からの協力」は十分であるとはいえない。</p>

JCspd JJRRV の収入の大半は分担金とサービス料である。分担金とは、サービス開始前の 2006 年度に各自治体から集められることになっていた JCspd JJRRV の運転資金のことで、企業会計では資本金に当たる。サービス料は 15NIS/household/month で、自治体ごとのサービス料金総計は、15NIS/household/month 掛ける household 数で算出されている。また、1 つの household に複数の family が居住している場合には、25NIS/household/month のサービス料で計算されている。自治体ごとのサービス料金総計とは、全住民から徴収した料金のことである。household 数が変わらない限り、毎月一定である。

分担金や月額サービス料の支払い状況は表 6 に示すように、2006 年度は 63%、2007 年度は 61%である。全額納める自治体がある一方で、全く支払っていない自治体が存在するという状況である。

表 6：地方自治体の分担金及びサービス料金支払い状況

		負担金(2006年度)			ゴミ料金(2007年度)					2008	ゴミ料金(2008年度4月まで)		
		予算	実績	実績/予算	予算	構成比	実績	構成比	実績/予算	予算	予算	実績	実績/予算
		NIS	NIS	%	NIS	%	NIS	%	%	NIS	NIS	NIS	%
1	Jericho	96,224	65,000	68%	1,202,000	77%	840,927	88%	70%	1,202,000	400,667	245,754	61%
2	Al-New'meh & Edyuk Al-Foqa	8,906	4,957	56%	48,000	3%	24,485	3%	51%	48,000	16,000	3,575	22%
3	Al-Ojah	18,045	8,015	44%	70,680	5%	21,171	2%	30%	70,680	23,560	5,765	24%
4	Fasayel	4,050	2,500	62%	19,008	1%	4,330	0%	23%	19,008	6,336	1,165	18%
5	Al-Jiftlik	19,805	10,000	50%	44,740	3%	0	0%	0%	44,740	14,913	0	0%
6	Zbidat	6,030	6,030	100%	24,060	2%	1,900	0%	8%	24,060	8,020	1,275	16%
7	Marj Al-Ghazal	1,733	0	0%	5,400	0%	620	0%	11%	5,400	1,800	245	14%
8	Mari Na'ieh	3,452	0	0%	20,220	1%	1,310	0%	6%	20,220	6,740	450	7%
9	Ein Al-Bidah	4,865	2,500	51%	17,100	1%	6,340	1%	37%	17,100	5,700	0	0%
10	Kardalah	743	750	101%	5,160	0%	2,660	0%	52%	5,160	1,720	0	0%
11	Bardalah	7,097	0	0%	19,775	1%	1,500	0%	8%	19,775	6,592	0	0%
12	Froosh Beit Dajan	5,216	5,216	100%	11,760	1%	0	0%	0%	11,760	3,920	0	0%
13	Ein Shibli	891	891	100%	5,760	0%	2,400	0%	42%	5,760	1,920	1,920	100%
14	Nawaji	1,350	1,350	100%	1,740	0%	1,740	0%	100%	1,740	580	435	75%
15	Beit Hasan	5,364	5,364	100%	18,540	1%	16,260	2%	88%	18,540	6,180	4,065	66%
16	Al-Nassaryyah	6,093	6,093	100%	26,760	2%	15,000	2%	56%	26,760	8,920	4,500	50%
17	Al-Aqrabanyya	4,028	4,028	100%	13,800	1%	13,800	1%	100%	13,800	4,600	3,600	78%
Subtotal(without Jericho)		97,664	57,693	59%	352,503	23%	113,516	12%	32%	352,503	117,501	26,995	23%
Total		193,887	122,693	63%	1,554,503	100%	954,443	100%	61%	1,554,503	518,168	282,749	55%

出所：JCspd JJRRV

	2. 6 廃棄物管理機材の修理・維持管理がなされる。	第1年次には、廃棄物処理関連機材の修理・維持管理の現状についての調査が行われ、遊休機材の修理が行われるとともに、メンテナンス用機材が調達された。詳細は、付属資料1. ミニッツ（合同評価報告書）の ANNEX6-2 の供与機材リストを参照のこと。2006 年 12 月のジェリコ市との委託取り決めの下、現在はジェリコ市のメンテナンス・ワークショップが維持管理を行っている。ジェリコ市のメンテナンス・ワークショップでは、JCspd JJRRV から委託を受けた車両について、適切に維持管理記録が残されている。
3. ジェリコ及びヨルダン渓谷地域における廃棄物管理の現状が把握される。	ゴミ質・ゴミ量調査、収集・運搬の実態調査、処分場の実態調査、医療廃棄物管理の実態調査などの調査が実施され、報告書類がまとめられ、「廃棄物調査結果に係るセミナー」が、2006 年 12 月 20 日に開催され、アウトプット 3 は達成されている。 質問票調査によれば、アウトプット 3 が達成したかについて、24 人の回答者の 5 段階のスコアは、悪い（3）、普通（5）、良好（10）、非常に良い（6）であり、平均は普通と良好の間の 3.8 であった。（Questionnaire A-4-3）	
	3.1 ゴミ質・ゴミ量の調査報告ペーパー 3.2 収集・運搬の実態調査（不法投棄状況調査含む）報告ペーパー 3.3 最終処分場の実態調査（土壌・地下水汚染実態含む）報告ペーパー 3.4 医療廃棄物管理の実態調査報告ペーパー 3.5 実態把握調査の総括レポート	地域の現状を把握するため、各種調査が実施され、調査レポートが作成されている。 <ul style="list-style-type: none"> ● ゴミ質・ゴミ量調査 ● 収集・運搬実態調査（不法投棄実態調査含む） ● 最終処分場実態調査（土壌地下水汚染調査含む） ● 医療廃棄物実態調査 ● 観光に係る廃棄物、農業系廃棄物に関する調査 ● 実態把握調査総括レポート
	3.6 廃棄物管理の現状についてのワークショップが開催される。	廃棄物管理の現状についてのワークショップ「廃棄物調査結果に係るセミナー」が、2006 年 12 月 20 日に開催され、17 自治体（LGU）関係者、ジェリコ市職員、地方自治庁（MoLG）関係者、JCspd 関係者、病院関係者など約 80 人が参加している。
4. ジェリコ及びヨルダン渓谷地域における廃棄物管理の改善方針（アクションプラン）が策定される。	アクションプランは策定され、2006 年 12 月 20 日開催の「廃棄物調査結果に係るセミナー」において公表、議論のうえ、合意されており、アウトプット 4 は達成されている。アクションプランは次の 6 項目である。① 住民意識向上、② 収集改善、③ 処分場改善、④ 機材メンテナンス、⑤ 組織・制度整備、⑥ 会計制度 質問票調査によれば、アウトプット 4 が達成したかについて、25 人の回答者の 5 段階のスコアは、悪い（3）、普通（4）、良好（17）、非常に良い（1）であり、平均は普通と良好の間の 3.6 であった。（Questionnaire A-4-4）	

	<div>4.1 実態把握の調査結果に基づくアクションプラン案の策定</div> <div>4.2 アクションプラン案に基づき公開ワークショップが開催される</div> <div>4.3 アクションプランの確定</div>	<div>アクションプランには、以下の6項目が含まれている。</div> <div>① 住民意識向上、</div> <div>② 収集改善、</div> <div>③ 処分場改善、</div> <div>④ 機材メンテナンス、</div> <div>⑤ 組織・制度整備、</div> <div>⑥ 会計制度</div>
5. アクションプランが実行され、改善が具体化する。	<div>6つのアクションプランはいずれも効果的に実施され、アウトプット5はほぼ達成されている。しかしながら、外部条件として設定したUNDP経由の無償資金協力供与機材の調達プロジェクト期間中に行われる可能性がなくなったことにより、②収集改善が、達成される見込みはない。予定された供与機材が来ない状態でJCspd JJRRV及びJETが、既存機材の補修による工夫により収集運搬システムを確立したことは高く評価する。</div> <div>質問票調査によれば、アウトプット5が達成したかについて、24人の回答者の5段階のスコアは、悪い（1）、普通（11）、良好（11）、非常に良い（1）であり、平均は普通と良好の間の3.5であった。（Questionnaire A-4-5）</div>	
	5.1 収集率の向上、不法投棄の減少	<div>JCspd JJRRV 構成自治体の数は17、推計人口は約5万人である。プロジェクトが開始する以前より、廃棄物管理と呼べるようなシステムをもっていたのは、ジェリコ市（Jericho Municipality）、アル・ニアメ町（Al-New'meh & Edyuk Al-Foqa）、アル・オージャ村（Al-Ojah）の3自治体のみである〔この3自治体に加え、1990年代にUNDPがJSC Middle Jordan Valley（参加自治体は、中部の10自治体）を対象にした開発事業を行った際に車両を供与しており、一部の自治体ではその車両を利用して、一部地域で収集を行っていたとのことである。車両が供与される以前は、収集は行われていなかった〕。</div> <div>現在サービスを受けている上記3自治体以外の自治体¹は、2007年1月のJCspd JJRRVの収集サービス開始後、新しく廃棄物処理サービスを受けており、以前に比べ収集率は向上しているといえる。</div> <div>また、2007年1月のサービス開始以降、JJRRV内の非衛生処理の4処分場（Fasayel dumping site、Almalake Bridge dumping site、Bardalah dumping site、Marj Na'jeh site）を閉鎖し、ジェリコ（Jericho）、アル・オージャ（Al-Ojah）、トゥバス（Tubas）の3カ所の処分場を利用して、定期収集を行っていることから、不法投棄は減少したといえる。</div> <div>しかしながら、連携案件であるUNDP経由での無償資金協力機材の供与が当初の予定より遅れており、具体的な収集・運搬改善活動に不可欠な収集車両と重機が不足しているため、収集・運搬の改善状況は限定的である。</div>

¹ 2007年1月より3ヵ月間は試験期間として、全自治体を対象にサービスを提供したが、現在は、サービス料金不払いを理由に、5つの自治体へのサービスを停止している。Al-Jiftlik、Froosh Beit Dajan、Bardalah、Kardalah、Ein Al-Bidahの5自治体である。

	5.2 最終処分場の改善	最終処分場の改善に関しても、2007 年 1 月より、ジェリコ処分場の改善計画が行われ、3 月に開所式を迎え、現在、利用されている。しかしながら、残余期間が半年程度と短いことから、中間評価の提言を受けて、2007 年 11 月から拡張工事が行われ、2008 年 3 月に完成した。残余期間は合計で 4 年になった。																						
	5.3 改善実施の総括レポート （実践を踏まえたパレスチナ自治政府への提言を含む）	改善実施総括レポートに関しては、2008 年 8 月に完成する予定となっている。																						
6. 現地国内セミナーが開催され、ジェリコ及びヨルダン溪谷地域の事業が普及される。	現地国内セミナー、ワークショップは計画どおり実施された。また 11JCspd/JCs の事務局長が集まり、廃棄物管理についての経験や調査結果の交流をする会議の準備が進んでいる。このようなことからアウトプット 6 は達成される見込みがある。 質問票調査によれば、アウトプット 6 が達成したかについて、25 人の回答者の 5 段階のスコアは、非常に悪い（1）、悪い（2）、普通（5）、良好（9）、非常に良い（8）であり、平均は普通と良好の間の 3.8 であった。（Questionnaire A-4-6）																							
	6.1 パレスチナ各地域の廃棄物担当者を対象とした現地国内セミナー（研修・現場視察を含む）の開催	JCC や各種セミナーには他の自治体や JCspd から参加があり、JJRRV の経験を普及することに役立った。さらに廃棄物処理関連施設の視察に関しては、2006 年 10 月 3 日に改善前のジェリコ処分場とイスラエル側が運営管理をしているトブラン（Tovlan）処分場への視察が、2007 年 3 月 1 日には世界銀行の支援で建設されたジェニン（Jenin）処分場、2007 年 3 月 21 日には改善後のジェリコ処分場への視察が実施され、ジェリコ市職員に加え、教師やジャーナリストらが参加し、処分場の適切な運営の重要性について学ぶ機会を得ている。他自治体・JCspd、援助関係者からの現地視察は、その後続いている。また、プロジェクトの経験交流を目的にした PCSWM を 11 JCspds/JCs が結集して始めつつある。																						
表 7：廃棄物管理セミナー（研修・現場視察を含む）																								
<table><tr><th>実施日</th><th>内容</th></tr><tr><td>2006/10/3</td><td>トブラン（イスラエル処分場）視察会</td></tr><tr><td>2006/10/20</td><td>JJRRV 内の廃棄物実態調査報告</td></tr><tr><td>2006/12/20</td><td>JCspd JJRRV のアクションプラン案紹介</td></tr><tr><td>2007/10/17</td><td>JCspd JJRRV のアクションプラン進捗報告会</td></tr><tr><td>2007/7、2007/11</td><td>ベツレヘム及びヘブロンのリサイクル施設視察</td></tr><tr><td>2007/12、2008/3</td><td>ジェニン処分場及びナブルス中継基地視察</td></tr><tr><td>2008/2/4</td><td>西岸地域 11JCspd 会議</td></tr><tr><td>2008/5/19</td><td>PCSWM 準備会キックオフ</td></tr><tr><td>2008/5/29</td><td>PCSWM 準備会</td></tr><tr><td>2008/6/24</td><td>PCSWM 11JCspd 理事長会</td></tr></table>			実施日	内容	2006/10/3	トブラン（イスラエル処分場）視察会	2006/10/20	JJRRV 内の廃棄物実態調査報告	2006/12/20	JCspd JJRRV のアクションプラン案紹介	2007/10/17	JCspd JJRRV のアクションプラン進捗報告会	2007/7、2007/11	ベツレヘム及びヘブロンのリサイクル施設視察	2007/12、2008/3	ジェニン処分場及びナブルス中継基地視察	2008/2/4	西岸地域 11JCspd 会議	2008/5/19	PCSWM 準備会キックオフ	2008/5/29	PCSWM 準備会	2008/6/24	PCSWM 11JCspd 理事長会
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出所：JCspd JJRRV																								

	7. 本邦研修が開催され、廃棄物管理に係る基礎知識が獲得され、普及される。	<p>本邦での国別研修パレスチナ「廃棄物管理能力向上」コースは予定どおり過去3回実施され、合計22人が研修を受けているほか、ヨルダンでの第三国研修も実施され JCspd JJRRV から9名が参加しており、アウトプット7は基本的に達成されている。しかし、中間評価において新たに加えたアウトプットである、普及のための活動については、まだ初歩的な段階である。</p> <p>質問票調査によれば、アウトプット7が達成したかについて、25人の回答者の5段階のスコアは、悪い（2）、普通（10）、良好（11）、非常に良い（2）であり、平均は普通と良好の間の3.5であった。（Questionnaire A-4-7）</p>	
	7.1 ジェリコを含むパレスチナ各都市の廃棄物担当者を対象とした国別研修集団型コースの開催	<p>国別研修に関しては、パレスチナ「廃棄物管理能力向上」コースが、2005年9月5日から同10月7日、2006年11月1日から同12月1日と2007年10月10日から同12月2日の計3回開催されており、それぞれ5人、8人、9人の関係者が参加している。ヨルダンへの第三国研修（2006年9月16日から22日）がヨルダン環境省、アンマン市役所、在ヨルダン JICA 専門家の協力を得て実施されており、JCspd JJRRV 職員、JCspd JJRRV 理事会メンバーら合わせて9人が研修に参加している。詳細は、付属資料1. ミニッツ（合同評価報告書）の ANNEX5:List of the trainees in Japan and Jordan を参照のこと。</p>	

実施プロセスの検証	活動の実施状況	活動の進捗状況	<p>パレスチナにおいては不安定な政治状況が続いており、実際、2006年3月のPNAの政権交代に際しては、一時、日本人専門家の派遣が見合わされるなどの影響が出た。しかしながら、パレスチナ関係機関、日本人専門家、C/Ps、JICA パレスチナ事務所らの努力により、プロジェクト全体への影響は最小限にとどめ、JCspd JJRRV による2007年1月サービス開始という目標を実現することができた。よって、UNDP 経由で調達予定の収集車両や機材を利用した収集・運搬改善事業を除いては、おおむね、活動は計画どおり行われている。</p>
		モニタリングの実施状況	<p>モニタリングについては、プロジェクト全体に関しては、定期的に開催される JCC 会合において、JCspd JJRRV の運営のモニタリングに関しては、JCspd JJRRV の総会や理事会で適宜行われており、適切であるといえる。</p> <p>＜プロジェクト全体の進捗状況モニタリング＞</p> <p>2007年6月の中間評価において、JCC の開催頻度をあげることが提案され、これを受けて、2007年10月、2008年3月に JCC を開催している。</p> <p>JICA 専門家とのインタビューによれば、プロジェクトでは JCspd の C/P と専門家の定期的会合を意識的に行っているという。地方行政システムの効率向上をめざし、情報交換により不要な誤解も避けられる。</p> <p>＜JCspd JJRRV 業務のモニタリング＞</p> <p>モニタリングシステムはうまく機能している。質問票調査によれば、JCC メンバー（複数）が現在のモニタリングシステムは適当であると回答している。「JCspd JJRRV の業務システムはすばらしい」「車両の故障などが起こってもスムーズに業務が進む」</p>

		モニタリングのメカニズムは適切か	<p><プロジェクト全体の進捗状況モニタリング></p> <p>質問票調査の結果から、モニタリングシステムは適当であると評価する。</p> <p><JCspd JJRRV 業務のモニタリング></p> <p>プログレスレポート及び JICA 専門家インタビューによれば、2007 年 1 月の SWM サービス開始後、会計データ、業務データを PC を用いた情報システムに蓄積することを始めている。このデータベースは、経営の意思決定に役立つ。会計ソフトが 2007 年 8 月に導入された。</p>
		組織における責任の所在は明確になっているか。	JCspd JJRRV の業務をモニタリングするのは、総会と理事会である。プロジェクト目標 2 を含めてプロジェクト全体をモニターするのが JCC である。質問票調査では MoLG からの支援がより強く求められている。
		UNDP 経由無償資金協力機材供与遅れ対応策	<p>UNDP による機材調達の遅延に関するプロジェクト期間内/期間外の対応を検討する。</p> <p>JCspd は既存の車両を前提に、ゴミ収集方法の改善策を検討している。しかしながら、耐用年数を過ぎた車両が多く、対策の有効性は短期間に限られ、古い車両の故障により、サービス中止の状況も考えられる。</p> <p>UNDP 経由無償資金協力による機材調達〔8m³ コンパクター 5 台、1.1m³ コンテナ 234 台（調達済み）、バックホーローダー 1 台、15t ダンプトラック 1 台〕の大幅な遅れが、プロジェクト成果（成果 5「アクションプランの実施」）に対し負の影響を及ぼしている。</p> <p>インタビューした 3 地方自治体の長は、だれもが約束どおりコンテナと収集車両が配布されないことに不満を示した。サービス料金の支払いがなくサービスを休止している自治体の一つ、Ein Al-Bidah の村長は、コンテナの配布とゴミ収集車両の配置がない状態では住民は納得しないと語った。JCspd JJRRV が収集・運搬改善活動が続けるためには、新しい収集車両と重機の投入は不可避であり、確実な調達時期を示す必要がある。</p>
	パレスチナ C/Ps と JICA 専門家の関係	C/Ps と専門家チームの間では、良好なコミュニケーションがとられており、その関係は良好である。	
		コミュニケーションの状況	<p>質問票調査によれば、パレスチナ C/Ps と JICA 専門家の関係は良好である。次のようなコメントがある。</p> <ul style="list-style-type: none"> ・ JICA 専門家は非常に協力的で JCspd JJRRV の成功のために大きな貢献をしている。 ・ 関係は良好であるべきで、特に組織的にパレスチナ人を助けてくれる。 ・ JCspd JJRRV の抱える諸問題に対して、JICA 専門家の協力、助言、指導は有効である。
		C/Ps 選定の適当性	JCspd JJRRV には高度な記述知識をもつ技術者はいないが、C/Ps はプロジェクト期間中にキャパシティ・ディベロップメントを果たした。
		問題対応方法	<p>JCspd JJRRV が直面した問題は、公式には理事会か総会で検討される。</p> <p>JCspd JJRRV は既に自立して問題解決を自ら行う能力を有する。例えば、2008 年 6 月 12 日、ジェリコ処分場で火事が起こった際には、C/Ps がテキパキと必要な行動を実行に移した。</p>
		C/Ps の行動の変化（自立的行動）	<p>インタビュー調査及び質問票調査によれば、JCspd JJRRV 職員は次のコメントを回答している。</p> <ul style="list-style-type: none"> ・ わたしは現在の仕事のやり方に感謝している。 ・ わたしはゴミの分別回収について学んだ。

受益者の事業とのかかわり方	プロジェクト関係者（地方自治体、住民、地方自治庁など）の間では、必要に応じてコミュニケーションがとられており、その関係は良好である。	
	DJCspd/MoLG 職員の意識と行動の変化	DJCspd/MoLG は JCspd を推進する組織であるが、これまでのところ JCspd の重要性にもかかわらず、JCspd 強化戦略はできていない。
	JCspd 職員の意識と行動の変化	JCspd JJRRV の作業員、運転手とのフォーカス・グループ・ディスカッションにおいて、安全作業の認識を示す発言があった。しかし、大多数は給料や仕事時間のような労働条件の不平不満であった。
	JJRRV 住民の意識と行動の変化	<p>インタビュー調査、質問票調査によれば、次のようなポジティブな変化が住民にあった。</p> <ul style="list-style-type: none"> ・ SWM サービス開始後、人々は清潔さと共同意識と時間の正確性の便益を得た。 ・ ゴミの野焼きをしなくなった。 ・ 不法な処分場は閉鎖した。 ・ 住民集会は住民の意識改革に効果がある。 <p>しかしながら、ほとんどの C/Ps は、住民の多くは問題意識もそれほど高くなくて協力的ではないこと、したがって、サービス料金徴収率が低いことを知っている。</p>
相手国実施機関のオーナーシップ	JCspd JJRRV のオーナーシップは満足できる。しかし、DJCspd/MoLG のリーダーシップがもっと発揮されてもよい。	
	C/Ps の配置の適合性	C/P と JICA 専門家とのインタビューによれば、財政基盤脆弱のため、必要人員を雇うことができない現状である。JCspd JJRRV の 2006 年基本計画における計画人員は 30 人であり、2008 年 6 月現在の人数 23 名とかけ離れている。人員不足は、JCspd JJRRV による SWM サービス実施に影響を与えている。
	予算配分	<p>DJCspd とのインタビュー及び質問票調査の回答から、JCspd JJRRV が中央政府からの予算配分を受けることは難しい。</p> <ul style="list-style-type: none"> ・ この地域の政治変動により PNA に頼ることはできない。 ・ 政府に金がないので補助金を期待するのは無理だ。 ・ 政府からの補助金は出るとは決まっていますが、実際には無理だ。
	C/P の参画意識、モチベーションの変化	<p>プロGRESSレポート V の“Capacity Development of JCspd JJRRV”によれば、JCspd JJRRV の C/P は皆経営のすべての局面で参画意識を高めている。専門家チームとのインタビューによれば、特に、2007 年 1 月に収集サービスが始まって以降、C/P や関係者の主体性・積極性には、下記の事例のとおり変化がみられつつある。</p> <ul style="list-style-type: none"> ・ 当初は、サービスの開始・運営そのものやサービス料の徴収に関して自信のない C/Ps もあったが、現在では、サービスに自信をもつとともに、料金徴収等についても JCspd JJRRV の理事会・総会にて堂々と各自治体の長に説明・説得を繰り返している。

			<ul style="list-style-type: none"> ・ 当初は、自治体の多くは、JCspd JJRRV の構成員であるという認識も浅く、また、公共サービスを提供しなければならないという意識も低かった。現在、コミュニティ会合をもっと開き、料金徴収のためにも自治体支援をしてほしいとのコメントからも分かるように、そのような意識、主体性が高まりつつあるといえる。 ・ また、各種セミナーやワークショップにおいて、ほとんどの場合、C/P 自らがプレゼンテーション資料を準備し、プレゼンテーションを行っていることから、能力の向上とともに積極性が見受けられる。
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5 項目評価結果

評価項目	評価設問 大項目	小項目	調査結果
妥当性	<p>PNA による中期開発計画であるパレスチナ改革開発計画（PRDP）（2008～2010 年）、環境法（Palestinian Environmental Law、1999 年）において、廃棄物管理（SWM）体制の確立の重要性が強調されている。パレスチナ地方自治法（Palestinian Local Authorities Law、1997 年）においては、廃棄物管理が地方自治体（LGU）の役割であると記載されており、また、2004 年に地方自治庁（MoLG）により策定された広域行政内規において、かかる公共サービスを広域レベルで実施することが推奨されている。パレスチナ政府の法制度と政策に合致している。一方、日本は、2002 年に効率的、効果的に環境分野の協力を進めていくために、「持続可能な開発のための環境保全イニシアティブ（EcoISD）」を発表し、このなかで「廃棄物処理」を取り上げている。さらに、日本政府のパレスチナ支援の基本方針である「国づくり・改革支援」及び「人道支援」にも合致しており、妥当性は高い。</p> <p>質問票調査によれば、妥当性があるかについて、25 人の回答者の 5 段階のスコアは、悪い（3）、普通（5）、良好（12）、非常に良い（5）であり、平均は普通と良好の間の 3.8 であった。（Questionnaire A-3-1）</p>		
	上位目標やプロジェクト目標は国家開発計画や環境政策に合致しているか	上位目標やプロジェクト目標は国家開発計画や環境政策に合致している。	
		上位目標の国家開発戦略や環境政策との整合性	PNA による中期開発計画であるパレスチナ改革開発計画（PRDP）（2008～2010 年）において、廃棄物管理体制の確立の重要性が強調されている。
		プロジェクト目標の環境政策や地方自治政策との整合性	パレスチナの地方自治法 Palestinian Local Authorities Law（1997）では、15 条 “The Council’s powers, authority and role” において廃棄物処理を自治体の役割としており、また、“the Joint Service Council” の設立も規定されている。この基本法に基づき、2006 年に JCspd 設立に関する by-law がつくられており、JCspd JJRRV はこれらの法令にのっとり設立されている。本プロジェクトによって試行された JCspd による広域廃棄物管理制度は、今後の地方分権による廃棄物管理戦略として、国家レベルの政策モデルとして意識されており、MoLG としては、JCspd による廃棄物管理をより全国レベルで展開・定着させていきたい意向をもっている。他方、環境庁の関与・政策は不明（おそらく人員等キャパシティの不足により不十分）。なお、廃棄物管理以外の分野での JCspd についての戦略は確立していないものと思われる。
		環境政策における環境（廃棄物）分野の優先度	パレスチナの環境法 Palestinian Environmental Law（1999 年）では、7 条、8 条、9 条において、廃棄物計画策定、減量化やリサイクリング、処分場の管理について、その重要性が述べられている。
		各国支援との整合性	ドイツ技術協力公社（GTZ）は、全国向け活動と、特定県を対象にした活動から成る廃棄物改善のプログラムを実施している。全国向けの活動のなかには、National Committee on Solid Waste Management and Wastewater に対する支援が含まれている。今後、JCspd JJRRV の経験をこのような委員会で共有しつつ、当該委員会が作成予定の国家廃棄物管理計画に反映させていくことも可能であり、プロジェクト目標 2 と整合的である。

	ターゲットグループの選定は妥当であったか	ターゲットグループの選定は、おおむね妥当であったといえる。	
		JCspd JJRRV への協力内容に対するニーズは高いか	JCspd JJRRV は 1 年以上の準備期間を経て、2007 年 1 月から廃棄物収集サービスを開始した、いまだ「幼少期 (infant stage)」にある組織であり、プロジェクトを通して技術力強化、組織力強化を図っていくことへのニーズは一貫して非常に高いといえる。
		廃棄物分野において JCspd はどのような役割を果たしているか	また、JCspd JJRRV は、今まで自治体による定期収集サービスを受けたことのない地域へのサービスの導入を可能にしたという点で、地域住民の環境意識を高め、衛生状況の改善に貢献している。
		ターゲットグループの規模は適切か	ターゲットグループは 17 LGU で JJRRV 全域を 1 つの JCspd として扱う PNA の政策であるので、一般的には適当な設定である。しかし適正な経済規模とはいえず、政府からの補助金を得るために費用便益計算を行うことが必要である。
	わが国の開発課題、援助重点分野と合致しているか	わが国の開発課題、援助重点分野と合致している。	
		援助重点課題との関連性はあるか	日本は、2002 年に効率的、効果的に環境分野の協力を進めていくために、「持続可能な開発のための環境保全イニシアティブ (EcoISD)」を発表し、このなかで「廃棄物処理」を取り上げている。2006 年 7 月に発表した「平和と繁栄の回廊」構想で、域内協力によりヨルダン溪谷の経済開発を進めることとなっている。本プロジェクトでも、イスラエル処分場の見学、ヨルダンでの研修実施等、本構想に配慮した活動を進めている。本プロジェクトは、JICA「ジェリコ地域開発プログラム」のうちの「行政能力・社会サービス強化サブプログラム」の一要素となっている。JICA プロジェクト間の情報交換の活発化で相乗効果発現を図っている。さらに、日本政府のパレスチナ支援の基本方針である「国づくり・改革支援」及び「人道支援」にも合致しており、妥当性は高い。
有効性	プロジェクトの有効性は認められる。しかし、現時点において、アウトプット 2、5 が未達成であるところ、プロジェクト目標は完全には達成されないため、有効性は必ずしも高いとはいえない。 質問票調査によれば、有効性があるかについて プロジェクト目標 1 の達成度：平均スコアは普通と良好の間の 3.7 であった。 プロジェクト目標 2 の達成度：平均スコアは普通と良好の間の 3.6 であった		
	プロジェクト目標 1「ジェリコ及びヨルダン溪谷に持続的で衛生的な廃棄物管理システムが導入される。」の達成度は現時点において適正範囲内か	プロジェクト目標達成の見込み	JCspd JJRRV による広域廃棄物管理システムの導入には成功し、収集・運搬はベースラインからは大きく改善されている。負の要因として、UNDP 経由無償資金協力機材の調達の遅れと JCspd・JJRRV の財政基盤の脆弱性があり、プロジェクト目標 1 は完全には達成されるとはいえない。

プロジェクト目標 2「ジェリコ及びヨルダン溪谷の改善事例経験が、パレスチナ他都市の廃棄物管理の改善に向けたモデルケースとなる。」の達成度は現時点において適正範囲内か	プロジェクト目標達成の見込み	全国セミナーが 2008 年 8 月に開催される予定である。既に合同調整委員会（JCC）やその他のセミナーには、他の JCspd や自治体も招かれており、JCspd JJRRV の経験が共有されつつあり、プロジェクト目標 2 はほぼ達成される。
成果はプロジェクト目標を達成するために十分であったか	成果の数、内容、質の適正度	インタビュー調査、質問票調査によれば、UNDP 経由での無償資金協力機材の供与の遅れによる収集・運搬改善活動の遅延を除き、アウトプットの数、内容等に関しては、概して、関係者の満足度は高く、十分であったと判断される。
プロジェクト目標の達成の妨げとなっている要因はあるか	プロジェクト目標の達成状況/ 外部条件/阻害要因	<p>UNDP 経由での無償資金協力機材の供与の遅れ、地域経済の停滞、中西部のイスラエルチェックポイントによる自由な通行の阻害、地方自治体の脆弱性などがあげられる。</p> <p>プロジェクト目標 1 に関しては、以下のとおり、回答があった。</p> <ul style="list-style-type: none"> ・ 地域の住民にとって、廃棄物処理が最優先課題ではない場合が多い（特に、ジェリコ市から離れた小さな自治体の農民など）。よって、住民からサービス料を徴収することが難しい状況が続いている。 ・ 地方自治体という名称で呼ばれているものの、多くの自治体には、職員もおらず、財政基盤ももたず、非常に脆弱である。 ・ 17 の地方自治体が非常に広範な地域にわたって点在しており、収集サービスの運転費用が高くなる。 ・ 第 2 次インティファダ以降、特に地域経済が停滞している。特に中西部のイスラエルチェックポイントにより自由な通行が阻害されて、経済の発展が妨げられている。 ・ UNDP 経由での無償資金協力機材の供与の遅れにより、収集・運搬改善活動も遅れている。
プロジェクト目標の達成を促進している要因はあるか	プロジェクト目標の達成状況/ 外部条件/貢献要因	<p>プロジェクト目標 1 に関しては、以下の要因が考えられる。</p> <ul style="list-style-type: none"> ・ JCspd JJRRV 職員の多くが、ジェリコ市の保健衛生局からの出向者であるが、彼らは、基本的な廃棄物処理に関する知識・経験をもっており、円滑な JCspd JJRRV サービスの提供を可能にしている。 ・ 第 2 次インティファダ以降、多くの地域で自治体は機能不全に陥っていた。JCspd JJRRV の開始とともにこの広域組合のメンバーになることで、地方自治体の長は、明示的に住民サービスを再開・提供するという機会を得ているといえ、協力的な体制の背景となっている。JCspd JJRRV 職員の知識・経験に加え、これら自治体の長の熱意と理解も、円滑な JCspd JJRRV サービスの提供を可能にしているといえる。

			<p>プロジェクト目標 2 に関しては、以下の要因が考えられる。</p> <ul style="list-style-type: none"> ・ 成果 6 や成果 7 以外にも JCC 会合の場やその他のワークショップで、他地域の JCspd や他自治体の意見交換が行われている。
効 率 性	<p>政治的な変動、予算不足や外部条件の変化にもかかわらず、C/P と専門家チームの努力により、プロジェクトはおおむね効率的に運営されているといえる。廃棄物処理関連機材の修理・維持管理に関しては、供与機材であるスペアパーツで遊休車両を修理し、使用している。メンテナンス用機材も、メンテナンスを委託しているジェリコ市のメンテナンス・ワークショップに供与されている。また、供与機材である監視用車両の導入により、JCspd JJRRV の機動力が増した。これらの機材の活用度は非常に高く、効率性は高いと評価できる。</p> <p>質問票調査によれば、効率性があるかについて、アウトプット 1 から 7 までの達成度平均スコアは</p> <p>アウトプット 1 の達成度：平均スコアは普通と良好の間の 3.6 であった。</p> <p>アウトプット 2 の達成度：平均スコアは普通と良好の間の 3.6 であった。</p> <p>アウトプット 3 の達成度：平均スコアは普通と良好の間の 3.8 であった。</p> <p>アウトプット 4 の達成度：平均スコアは普通と良好の間の 3.6 であった。</p> <p>アウトプット 5 の達成度：平均スコアは普通と良好の間の 3.5 であった。</p> <p>アウトプット 6 の達成度：平均スコアは普通と良好の間の 3.8 であった。</p> <p>アウトプット 7 の達成度：平均スコアは普通と良好の間の 3.5 であった。</p>		
	各成果の達成度は現時点において適正範囲内か	成果の達成度合いの適正度	<p>成果 5 を除く、各成果の達成度合いに関しては、概して、関係者の満足度は高く、適正範囲内であったと判断されている。成果 5 に関しては、機材の供与の遅れにより、収集・運搬改善活動も遅れている。</p>
	活動は（7 つの）成果を出すのに十分であったか	活動の数、内容、質の適正度	<p>アウトプット 5 を除く、各アウトプットの達成度合いに関しては、概して、関係者の満足度は高く、適正範囲内であったと判断されている。アウトプット 5 に関しては、UNDP 経由での無償資金協力機材の供与の遅れにより、収集・運搬改善活動も遅れている。</p> <p>また、プロジェクトでは、地域コーディネーターを雇用し、地域でのコミュニティ会合開催、自治体による料金収集に関する広報といった活動を強化してきている。また、地域コーディネーター雇用の背景には、JCspd JJRRV 地域が南北 70km に及び、自治体によっては往復 2 時間程度を要する場合もあり、JCspd JJRRV の職員が（会合準備等のために）頻繁に訪問することが難しいということ、また、Hamra には厳重なチェックポイントが存在し、そのポイントの先にある自治体を訪問する場合は、JCspd JJRRV 職員も許可証を持参しなければならないという事情がある。</p> <p>2006 年 8 月～3 月：JCspd JJRRV 活動広報のためのコミュニティ会合開催支援 3 名雇用 2007 年 5 月以降：サービス料金徴収のためのコミュニティ会合開催支援 現在 2 名（2 名追加予定）</p>

投入された資源量に見合った成果が達成されているか	投入された人材・研修・機材の適正度	<p>活動の数、内容、質に関しても、概して、関係者の満足度は高く、アウトプットを出すのに十分であったと判断される。</p> <p>JCspd JJRRV 職員へのインタビュー、質問票回答からは、投入された人材・研修・機材への満足度は高く、適正度は高いといえる。プロジェクトや研修を通して、新しく学んだことは多いとの意見であった。</p> <p>廃棄物処理関連機材の修理・維持管理に関しては、供与機材であるスペアパーツで遊休車両を修理し、使用している。また、メンテナンス用機材も、メンテナンスを委託しているジェリコ市のメンテナンス・ワークショップに供与されている。これらの機材の活用度は非常に高く、適正なものであるといえる。</p>
	投入（人・研修・機材）の活用度	<p>現在、改善されたジェリコ処分場では、8 年前の無償資金協力でジェリコ市に供与したトラックショベルにて覆土等が行われている。2007 年のサービス開始時期には、このトラックショベルをジェリコ市から移管することになっていたが、これが進んでおらず、時間当たり使用料 150NIS を払い続けており、財政的自立発展性にとっての阻害要因となっている。</p> <p>投入された資源量に見合ったアウトプットが達成されているといえる。</p> <p>JCspd JJRRV 職員へのインタビュー、質問票回答からは、投入された人材・研修・機材への満足度は高く、適正度は高いといえる。プロジェクトや研修を通して、新しく学んだことは多いとの意見であった。</p> <p>廃棄物処理関連機材の修理・維持管理に関しては、供与機材であるスペアパーツで遊休車両を修理し、使用している。また、メンテナンス用機材も、メンテナンスを委託しているジェリコ市のメンテナンス・ワークショップに供与されている。これらの機材の活用度は非常に高く、適正なものであるといえる。</p> <p>JCspd JJRRV 職員とのインタビュー、ジェリコ市メンテナンス・ワークショップ担当者とのインタビューからは、投入された人材・研修・機材の活用度は高いことが分かった。</p>
	投入のタイミングの適正度	<p>PNA の政権交代のため、2006 年 3 月から 7 月中旬までの 3.5 ヶ月間、日本人専門家の派遣が滞ったものの、関係機関、日本人専門家、C/Ps の努力により、プロジェクト全体への影響(JCspd JJRRV による 2007 年 1 月サービス開始という目標を含む) は最小限にとどめることができたため、全体として、投入のタイミングは適正であったといえる。</p>

			しかしながら、別案件とはいえ、UNDP 経由での無償資金協力機材の遅れにより効率性は十分とはいえない。
	効率性を阻害あるいは貢献した要因はあったか	阻害・貢献要因の有無	<p>(貢献要因)</p> <p>プロジェクトの提供した技術協力内容のうち、わが国の一部事務組合方式（広域組合方式）JCspd JJRRV の事業を開始するうえで、大きな役割を果たした。さらに全国都市清掃会議（全都清）をモデルにしたパレスチナ廃棄物管理会議（PCSWM：仮称）のために 2008 年 6 月 24 日に 11 JCspd 理事長会が開催された。</p> <p>廃棄物処理関連機材の修理・維持管理に関しては、供与機材であるスペアパーツで遊休車両を修理し、使用している。メンテナンス用機材も、メンテナンスを委託しているジェリコ市のメンテナンス・ワークショップに供与されている。また、供与機材である監視用車両の導入により、JCspd JJRRV の機動力が増した。これらの機材の活用度は非常に高く、効率性向上に貢献した。</p> <p>(阻害要因)</p> <p>現在、改善されたジェリコ処分場では、8 年前の無償資金協力でジェリコ市に供与したトラックショベルにて覆土等が行われている。2007 年度のサービス開始時期には、このトラックショベルをジェリコ市から移管することになっていたが、これが進んでおらず、時間当たり使用料 150NIS を払い続けており、財政的自立発展性にとっての阻害要因となっている。</p> <p>UNDP 経由での無償資金協力機材の供与の遅れが、一部、効率性を阻害している。</p>
	次のような正のインパクトが多数確認された。負のインパクトは確認されていない。よって全体として非常に大きなインパクトを残したと評価できる。		
インパクト	上位目標 1「パレスチナ自治政府に地方都市の包括的な廃棄物管理に関する基本政策が確立し、具体的な方針が整備される。」は達成される見込みか	<ul style="list-style-type: none"> 地方都市の廃棄物管理に関する政策文書 上記政策に基づく具体的な方針（5 ヵ年計画など） 	JCspd JJRRV やその他の活動的な JCspd/JSC の存在は、DJCspd が National Committee on Solid Waste Management and Wastewater を組織することを促すという正のインパクトを与えており、今後も、当該 Committee が作成する予定の国家廃棄物管理計画に JCspd JJRRV の経験を反映させていくことが可能である。
	上位目標 2「パレスチナ全土の地方都市にジェリコ及びヨルダン渓谷地域をモデルとした効果的な廃棄物管理体制が普及する。」は達成される見込みか	<ul style="list-style-type: none"> ジェリコ及びヨルダン渓谷におけるセミナー・研修コースの定期開催 パレスチナ自治政府内におけるジェリコ及びヨルダン渓谷をモデルとした廃棄物管理の実現 	JCspd JJRRV がパレスチナ西岸地区内の 10JCspd ほか関係機関を招き、2008 年 2 月に実施したワークショップの結果、2008 年 6 月 24 日に 11JCspd が集まり、パレスチナ版全都清の結成をすることになった。11 の JCspds/JCs 理事長が SWM 経験交流のプラットフォームとなる会議を結成しつつある。

	ターゲットグループ以外への波及はあるか	環境（廃棄物）政策作成過程への影響は発現しているか	パイロットとして行っている農業プラスチックゴミのリサイクル事業は地元住民にリサイクルの意義を認識させたのみならず、ウェイストピッカーに同様の活動への関心を惹起した。
		MoLG DJCspd の政策作成過程への影響は発現しているか	先述「インパクト：上位目標 1 の達成見込み」に同じ。
	その他の正負のインパクトはないか	アクションプラン A（住民の意識向上）の広報効果はあったか	<p>C/P、地方自治体などとのインタビュー、住民集会での討議では、次のようなインパクトがあったという。</p> <ul style="list-style-type: none"> ・プロジェクトで実施した住民集会により、コミュニティが協同で活動する意識づけに役立った。また、不適切なゴミ投棄をなくす環境教育が進められた。 ・環境教育により、むやみにゴミを捨てなくなった ・ゴミ収集の時間に合わせて時間を守るようになった ・JCspd JJRRV やその他の活動的な JCspd/JSC の存在は、DJCspd が National Committee on Solid Waste Management and Wastewater を組織することを促すという、正のインパクトを与えている。 ・GTZ の支援する廃棄物管理研修に関するワーキンググループのメンバー9名のうち1名は、Abdel-Jabbar 氏であり、広域廃棄物管理システムをもつ JCspd の代表として JCspd JJRRV の経験を共有している。 ・ジェリコ処分場は西岸地域でパレスチナとしては初めての小規模衛生処理施設である。これまでにジャーナリストや他自治体からの見学者も多く、各地に存在するオープンダンプ改善の典型例を提供している。 ・ヨルダン環境省、アンマン市役所の協力を得て、同国への第三国研修が実施された際に、参加者はプラスチックリサイクル工場を見学した。このことが、現在計画中の JCspd JJRRV による農業プラスチックゴミのリサイクルにヒントを与えたといえる。 ・JCspd JJRRV に参加している自治体は、公共サービスを行うことがほとんどできていなかったが、プロジェクトの SWM サービスが始まり、コミュニティへ公共サービスを提供する格好の機会になった。 <p>質問票調査によれば、プロジェクトの正のインパクトについて、次のようなコメントが寄せられている。</p> <ul style="list-style-type: none"> ・「JCspds のアイデアが可能であることを実績で示した。この経験をもって他の JCspd で事業を立ち上げることができる」（Questionnaire A-6-3） ・「JCspd の構造進化と地方自治体の参加の可能性がある」（Questionnaire A-6-3） ・「JCspds の経験交流のために全国レベルの会議体をつくった」（Questionnaire A-6-3）

			<ul style="list-style-type: none"> ・「村がきれいになった」 (Questionnaire A-6-3) ・「SWM の技術を広めるためワーカーを雇った」 (Questionnaire A-6-3) ・コミュニティにおける協力意識が形成された。 (Questionnaire A-6-3) ・「医療ゴミの隔離投棄場所を作った」 (Questionnaire A-6-3)
自立発展性	JCspd JJRRV の自立発展性については、法制度面、技術面では確保されているが、組織面、財務面で改善の余地がある。これに関連して JJRRV における SWM サービスの地理的コストベネフィット分析を行うことが必要である。		
	廃棄物分野での JCspd JJRRV の位置づけ	JCspd JJRRV が将来にわたり廃棄物事業を担う組織であるか	<p>DJCspd、MoLG の JCspd に対する政策・支援に変更がない限り、JCspd JJRRV は今後も当該地域の廃棄物事業を担う組織であるといえる。</p> <p>JCspd JJRRV は、パレスチナ地方自治法、by-laws に従って設立され、細則を決定し、廃棄物処理サービスを実施してきた先行的な JCspd である。また、JCspd JJRRV は、廃棄物処理サービス提供の基本方針等をまとめた基本計画を作成し、それに基づきサービスを行っており、今後も当該地域で、広域の廃棄物処理サービスを提供していくと考えられる機関である。</p>
	組織・制度的側面からみて、自立発展の見込みは高いか。	事業を継続するだけの能力が JCspd JJRRV に備わりつつあるか	<p>組織・制度面からみれば、自立発展性が高いとはいえない。</p> <p>JCspd JJRRV 職員の多くが、ジェリコ市の保健衛生局からの出向者である（現在 23 名中、18 名がジェリコ市からの出向）。彼らは基本的な廃棄物処理に関する経験をもっていることに加え、プロジェクトを通して、各種技術を日本人専門家、本邦研修を含む各種研修、あるいはアクションプランの実施から新しい知識等を習得しており、事業を継続する能力はついてきていると思われる。しかしながら、彼らは、JCspd JJRRV 独自の人材とはいえず、よって、現時点で自立発展性が確保されているとはいえない。</p>
		政府あるいは MoLG DJCspd からの支援は期待できるか	<p>政治的要因からドナー支援やイスラエル側からの還付金が滞っており、PNA の財政状況は極めて厳しい状態にあり、JCspd や地方自治体を財政面から支援することは難しい状況である。しかしながら、MoLG DJCspd によれば、JCspd は自治体の公共サービス提供を可能にするための仕組みであり、JCspd や自治体の能力強化に関し、できる限りのことはしたいとの意見であった。しかしながら、MoLG DJCspd の JCspd に対する政策・戦略は、必ずしも確立していない。</p> <p>本プロジェクトでは JCspd 廃棄物条例及び規則の草案を作成中である。</p>
	財政的側面からみて、自立発展の見込みは高いか。	JCspd JJRRV、あるいは傘下の地方自治体の財政状況は健全か	財政的側面からみて、現状のままでは、自立発展の見込みが高いとはいえない。

			<p>「会計制度アクションプラン」により、財務ソフトの導入等、会計システムの確立が進められている。他方、SWM サービス料金の回収率は 2007 年は全体で 61%であり、17LGU の回収率のばらつきは大きく、0%から 100%までである。中長期的視点からみると、操業開始後 1 年のアウトプットとしては十分評価できる。しかし、収入不足のため追加人材の採用ができない状況である。また、中央政府からの補助金の交付が決定しているものの、未だ実行されていない。現時点では持続性確保は必ずしも十分ではない。</p> <p>追加的にコメントすると、17LGU は地理的に広範囲に展開していて、しかも人口密度は低い。この地域で SWM サービスをするコストとベネフィットを分析して、効率的システム構築を図る必要がある。</p>
	廃棄物管理事業を継続するうえで必要な予算（人件費含む）を確保できるか		<p>現在も、ジェリコ市の保健衛生局からの出向者である 18 名については、ジェリコ市が直接人件費を支払っており、独自の人材と、人件費を含む必要な全予算が確保できているとはいえない状況である。</p> <p>ジェリコ市の分担金は、17 自治体の分担金合計の約 72%と、JCspd JJRRV においてはジェリコ市の存在が非常に大きく、ジェリコ市との信頼関係をより強固なものにすることで、JCspd JJRRV の財政基盤を安定させることが可能となる。</p>
技術的側面からみて、自立発展の見込みは高いか	JCspd JJRRV の技術レベルを配慮した適切な技術の開発・移転がなされたか		<p>技術的側面からみて、自立発展の見込みは高い。</p> <p>専門家チームの報告によれば、技術移転内容については適切に予算措置がなされれば、おおむね C/P が独力で実施が可能であると思われるが、処分場管理、会計ソフトの活用、農業ゴミリサイクル等、一部まだ自立的な業務遂行に不安なものがある。</p> <p>JCspd JJRRV 職員へのインタビュー、質問票回答からは、プロジェクトを通して日本人専門家から習得した技術・知識、本邦研修を含む各種研修や、アクションプランの実施から習得した技術・知識は、有益だったとの回答を得ており、適切なレベルの技術移転が行われたものと考えられる。また、2007 年 1 月より実施されたジェリコ処分場の改善においては、遮水シートを張った、ガス抜き管、浸出水池を備えた準好気性の処分場が造られており、当該地域の技術レベルを考慮した、適切な技術の移転が行われたといえる。</p>
	C/P は、移転された技術、知識を十分身につけたか		<p>JCspd JJRRV 職員へのインタビュー、質問票回答からは、プロジェクトを通して日本人専門家から習得した技術・知識、本邦研修を含む各種研修や、アクションプランの実施から習得した技術・知識により、業務が改善したとの回答を得ている。</p>
	機材、移転技術などが、今後も広く活用されるか		<p>供与機材であるスペアパーツで遊休車両を修理し、使用している。また、メンテナンス用機材も、メンテナンスを委託しているジェリコ市のメンテナンス・ワークショップに供与されている。これらの機材の活用度は非常に高く、今後も広く活用されると考えられる。</p>

	環境社会配慮	埋立処分場の拡張工事の実施により環境社会配慮カテゴリーが C から B に変更になった	<p>ジェリコ処分場の改修・拡張工事について JICA 環境社会配慮ガイドラインに基づき、その環境社会インパクトの調査を行った結果、チェック項目の大半は微小ないし無の評価であったが、項目 2（経済活動）、項目 12（地下水）、項目 17（大気汚染）、項目 18（水質汚染）及び項目 22（異臭）に関して対策が必要である。処分場は小規模で人家から離れた場所に立地していて環境社会面のインパクトは限られているものの、水・大気のモニタリングは必要である。</p> <p>附属資料 2. 評価グリッドの巻末添付資料：Environmental and Social Consideration on the Improvement and Extension Project of Jericho Disposal Site 参照のこと。</p>
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巻末添付資料 **Environmental and Social Consideration on the Improvement and Extension Project of Jericho Disposal Site**

1. Outline of the Improvement and Extension Project of Jericho Disposal site

Even though the Jericho dump sites are not located in populated areas, some improvement works are required for further use to mitigate current environmental problems. The Improvement and Extension Project was planned and implemented in two stage as shown in Table 1. The Improvement and Extension project is conducted in the same site.

Table.1 Improvement and Extension Project of Jericho Disposal Site

Site	Improvement and Extension	Remarks
First Stage Improvement of Jericho Disposal site (Jan 2007-March 2007)	Fence and gate	To control and manage the site properly (North, east and west side)
	Guard house	To facilitate site workers and to control and manage the site properly
	Preparation of landfill area and lining	Preparation of landfill area To prevent leachate seepage in groundwater and other part of the site.
	Leachate collection and pond	To facilitate leachate collection and storage
	Gas removal pipe	To remove landfill gas
	Planting around the site	To improve aesthetic view
	Access road	For movement of collection vehicle

Second stage Extension of Jericho Disposal site (Oct. 2007- March 2008)	Extension of landfill area and lining	Extension of landfill area within the site and lining To prevent leachate seepage in groundwater and other part of the site.
	Leachate collection pipe and gas removal pipe	To facilitate leachate collection and landfill gas removal
	Discharge place for septage	To control discharge point of septage
	Fence and gate	To control and manage the site properly (South side and specified area for medical waste)
	Surrounding road	For movement of collection vehicle
	Garage	To keep heavy equipment for landfill
Operation (Continue)	Cover soil in Operation	To introduce sanitary landfill method To make compaction of waste and to prevent open burning and odor.
	Control of landfill site	Recording of collection vehicle

Source: JICA Expert Team

2. Potential Impacts expected by the Project

From the existing social and natural environmental conditions and project activity, the impacts and mitigation measures are evaluated as shown in Table 2.

According to this table, the social and environmental impacts expected by the Project are slight or nil for most items because of small scale construction and disposal amount of solid waste. However, mitigation measures will be required for item 2

(Economic activity), item 12 (Ground water), item 17 (Air pollution), item 18 (Water pollution) and item 22 (Offensive odor) due to waste disposal at the site.

Although the physical scale of the disposal sites is small and the expected social and environmental impacts are limited, the necessary environmental monitoring of such items as air and water is required during the operation stage.

Table.2 Potential Environmental and Social Impacts of the Project

No	Items	Description	Construction/Operation Activities	Evaluation		Reason and Mitigation measure
				Construc- sion stage	Operation stage	
	I. Social Environment					
1	Resettlement	Transfer of rights of residence and land ownership	The site is present dumping site and no residence. The site is used for disposal site.	Negligible impact	Negligible impact	
2	Economic activities	Loss of production base and change of economic structure	The site is controlled during construction and operation stage. Scavenger's activity will be affected.	B (Some impact)	B (Some impact)	Explanation of the project to the scavengers. Registration of scavenger and allow to work in the site.
3	Traffic and Public facilities	Impacts on school, hospitals and present traffic conditions, such as an increase in traffic jams and accidents.	Small traffic for transportation of construction material and solid waste. Traffic volume will be unchanged.	Negligible impact	Negligible impact	Excavated soil during construction is used on the site.
4	Splitting of communities	Separation of regional communities by disruption of regional traffic.	Small traffic for construction and solid waste disposal	Negligible impact	Negligible impact	Regional traffic will not be disrupted.
5	Cultural property	Loss or decrease of the value of cultural assets and archaeological assets.	No significant cultural property in the site.	Negligible impact	Negligible impact	
6	Water rights and Rights of common	Obstruction of fishing rights, water rights and rights of common.	No water use or rights of commons.	Negligible impact	Negligible impact	
7	Public health conditions	Worsening of health and sanitary conditions due to generation of garbage, and pathogenic insects.	Project is to improve current unsanitary waste disposal to sanitary condition.	Negligible impact	Negligible impact	Open burning will be stopped and waste is covered by soil.
8	Waste	Generation of construction waste, debris, sludge and general waste.	Wastes will be dumped on site during construction period. Waste will be disposed in sanitary manner during operation	Negligible impact	Negligible impact	Excavated soil is stored and used for covering soil. Implementation of covering soil.
9	Hazards (Risk)	Increased risk of cave-ins, ground failure and accidents	Careful construction procedures will ensure safety.	Negligible impact	Negligible impact	Careful construction at the site Proper operation of solid waste disposal
	II. Natural Environment					
10	Topography and Geology	Change of valuable topography and geology due to excavation or earth fill	Neither large excavation nor earth fill will be included in the Project.	Negligible impact	Negligible impact	

11	Soil erosion	Topsoil erosion by rainfall after land reclamation and deforestation	Small rainfall area	Negligible impact	Negligible impact	Reclamation will ensure plantation over the top soil after closure of the site.
12	Groundwater	Exhaustion of groundwater caused by overdraft, and water pollution by leachate	Small use of water for construction and disposal of waste. Water pollution by leachate will be properly mitigated.	Negligible impact	B (Some impact)	Leachate collection and liner system will be installed to prevent seepage of leachate Monitoring of ground water
13	Hydrological situation	Change in discharge or water quality due to reclamation and drainage	No change in discharge or water quality is expected since leachate is collected.	Negligible impact	Negligible impact	No change in discharge or water quality is expected since leachate is collected and stored.
14	Fauna and Flora	Obstruction of breeding and extinction of species due to the change of habitat conditions	No endangered species is reported in the site.	Negligible impact	Negligible impact	
15	Meteorology	Change of micro-climate such as temperature, wind etc., due to large scale reclamation and construction	The project includes small scale construction and reclamation. No change in micro-climate (wind, temperature, etc)	Negligible impact	Negligible impact	
16	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structure	Small change of topography after disposal of solid waste	Negligible impact	Negligible impact	Planting around the site
III. Environmental Pollution						
17	Air pollution	Pollution caused by emission of toxic gases from vehicles and waste fill.	Wind and heavy equipment may be a source of dust, but far from residential area. Open burning of waste will be prohibited.	Negligible impact	B (Some impact)	Make covering soil to prevent open burning during operation stage.
18	Water pollution	Pollution caused by surface runoff and leachate	Leachate will be collected and stored. Sepatage effluent will be unchanged.	Negligible impact	B (Some impact)	Liner system, leachate collection system and leachate pond is provided. Monitoring of Leachate
19	Soil contamination	Contamination by surface runoff and leachate	Disposal site will be covered by soil and leachate will be collected.	Negligible impact	Negligible impact	Leachate will be collected and stored.
20	Noise and vibration	Noise and vibration generated from vehicle and heavy duty machinery	Operation of heavy equipment but site is far from residential area.	Negligible impact	Negligible impact	
21	Land subsidence	Land deformation caused by the draw-down of the water table	Limited use of waster for drinking and planting.	Negligible impact	Negligible impact	
22	Offensive odor	Offensive odor generated from dumpsite.	Solid waste disposal with covering soil	Negligible impact	B (Some impact)	Covered soil to prevent odor emission from dumpsite.

Note : Impact A: significant impact anticipated, B: Some impact anticipated, C: unknown (Requires consideration, may become clear during course of survey) , D: Negligible impact

Source: JICA Expert Team

3. 質問票及び集計結果

1. 質問票の設計

評価グリッドに基づき、質問票を2種 (*Questionnaire* [Type A] と *Questionnaire*[Type B]) 作成した後、アラビア語に翻訳した。

2. 質問票の送付、回収

Questionnaire [Type A]に関しては、JCC メンバーと JCspd JJRRV 参加 17 自治体の長及び MoLG ジェリコ支所長に、*Questionnaire*[Type B]に関しては、JCspd JJRRV の職員に送付した。回答期限を調査団到着時と、極めて短期間の回答依頼であったが、出張・病気の者を除き、配布した質問票を全数回収した。記入されたコメントも多数にのぼり、プロジェクトの関係者全員が本終了時評価に高い関心をもっていることが分かった。

3. 回答の分析

アンケート集計ソフトを用いて回答質問票をデータ入力した。回答コメントはほとんどアラビア語であったので英語に翻訳した。

4. インタビュー調査への活用

インタビュー調査前に英訳された回答を参考に、インタビューの質問を絞り込んで効率的に調査を進めた。

別添資料3として、以下を添付する。

別添資料3-A: 質問票調査の結果要約 (*Questionnaire A* : 回答数 26)

別添資料3-B: 質問票調査の結果要約 (*Questionnaire B* : 回答数 20)

別添資料 3 -A: 質問票調査の結果要約 (Questionnaire [Type A])

■ 回答者の内訳

Questionnaire [Type A] : 回答数 26

JCC Member ----5

AB Member of JCspd JJRRV----5

Head of JCspd Member Council---13

Others---3

(1 LGU で村長と副村長の 2 人からの回答があり、17LGUs から 18 の回答があった)

■ 回答の分析

The following findings are observed from the questionnaire survey.

- (1) Difficulties to achieve Outputs concerning Project Purpose 1 are found. There are some reasons; 1) Low awareness and cooperation of the people, 2) Delay of the delivery of equipment from UNDP, 3) Insufficient input and support from the Palestinian side.
- (2) Project Purpose 2 is considered to be generally achieved.
- (3) Cooperation and relationship among key stakeholders including the respondents of the questionnaire and JET are satisfied.
- (4) Positive impacts are found in the two direction, one is toward the improvement of public service delivery, and the other is toward central governmental policy concerning JCspd. However, current absence of the national strategy on SWM may be giving a negative impact on ground level operation.

■ 回答の度数分布: Questionnaire [Type A]

Question	N			1	2	3	4	5	Average	N comment
	Total	Valid	Missing	Very Bad	Bad	Fair	Good	Very Good		
1-1 Is the Achievement level of the Project Purpose 1	26	26	0	0	2	9	10	5	3.69	5
1-2 Is the Achievement level of the Project Purpose 2	26	23	3	1	1	8	10	3	3.57	4
2-1 As for activities you were engaged in, do you think that planned activities were carried out smoothly after mid-term evaluation ?	26	26	0	1	2	8	13	2	3.50	4
2-2 Do you think that the current monitoring system is appropriate?	26	25	1	0	1	6	15	3	3.80	3
2-3 Are you satisfied with the technical transfer/advise from Japanese experts	26	26	0	1	4	2	13	6	3.73	6
2-4 Do you think that you have had a good relationship with Japanese experts	26	26	0	1	1	3	12	9	4.04	7
2-5 As a member of JCC/JCspd/Council, have you found it difficult to carry out the specific project activity?	26	25	1	2	3	8	5	7	3.48	5
2-6 If you have observed any other issues / problems in the process of implementation, please describe.										8
3-1 Is the Project's approach appropriate?	26	25	1	0	3	5	12	5	3.76	6
4-1 Do you think that Output 1 [Organization for Project operation is established] has been achieved?	26	25	1	0	3	8	9	5	3.64	5
4-2 Do you think that Output 2 [System for SWM in JJRRV is established] has been achieved?	26	25	1	0	4	4	15	2	3.60	5
4-3 Do you think that Output 3 [Present situation of SWM in JJRRV is grasped] has been achieved?	26	24	2	0	3	5	10	6	3.79	4
4-4 Do you think that Output 4 [Action plan for improvement of SWM in JJRRV is formulated] has been achieved?	26	25	1	0	3	4	17	1	3.64	3
4-5 Do you think that Output 5 [The action plan is put into practice and the improvement is made] has been achieved?	26	24	2	0	1	11	11	1	3.50	2
4-6 Do you think that Output 6 [Seminars/workshops are held and Project experiences in JJRRV are diffused among Palestinian local authorities] has been achieved?	26	25	1	1	2	5	9	8	3.84	4
4-7 Do you think that Output 7 [Those who are in charge of SWM in local authorities and related ministries acquire basic knowledge are diffused] has been achieved?	26	25	1	0	2	10	11	2	3.52	3

Question	N			1	2	3	4	5	Average	N comment
	Total	Valid	Missing	Very Bad	Bad	Fair	Good	Very Good		
5-1 Has the Japanese input in terms of Japanese experts been appropriate? Number of Experts	26	26	0	1	1	6	9	9	3.92	0
5-1 Has the Japanese input in terms of Japanese experts been appropriate? Timeliness of dispatching Experts	26	26	0	1	2	9	9	5	3.58	2
5-1 Has the Japanese input in terms of Japanese experts been appropriate? Field of Experts	26	25	1	2	1	3	12	7	3.84	2
5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Number of Trainee	26	24	2	2	0	7	10	5	3.67	2
5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Timeliness	26	21	5	1	1	4	13	2	3.67	0
5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Field of Training	26	23	3	0	1	5	11	6	3.96	3
5-3 Has the Japanese input in terms of Equipment been appropriate? Quantity	26	23	3	0	5	9	4	5	3.39	3
5-3 Has the Japanese input in terms of Equipment been appropriate? Quality	26	23	3	0	2	10	7	4	3.57	0
5-3 Has the Japanese input in terms of Equipment been appropriate? Timeliness of provision	26	22	4	0	5	10	4	3	3.23	1
5-3 Has the Japanese input in terms of Equipment been appropriate? Cost	26	0	26	0	0	0	0	0	-	1
5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Allocation of C/P	26	25	1	4	3	11	5	2	2.92	2
5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Facilities/ Equipments	26	23	3	4	5	9	4	1	2.70	4
5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Operational Cost	26	23	3	0	6	8	8	1	3.17	4
5-5 Has the project support system (project management) functioned well? The JCC functioned Well	26	26	0	0	1	13	10	2	3.50	1
5-5 Has the project support system (project management) functioned well? The project Management	26	26	0	0	1	11	9	5	3.69	0
5-6 If you have any suggestions / request to further improve the project management, please explain.										8
6-1 Do you think that the Overall Goal 1 will be achieved in 3 -5 years after the Project is terminated?	26	24	2	0	1	15	8	0	3.29	5
6-2 Do you think that the Overall Goal 2 will be achieved in 3 -5 years after the Project is terminated?	26	26	0	1	2	10	11	2	3.42	4
6-3 Is there any unintended positive situation produced by the project, such as in terms of evaluation policy and strategy, living condition for the community people, etc.?										10
6-4 Is there any unintended negative situation produced by the project, such as in terms of evaluation policy and strategy, living condition for the community people?										7

■ 回答に付記されたコメント

1-1 Is the Achievement level of the Project Purpose 1 high enough? It was supposed to provide necessary equipments to enhance the collection & Transport system, but a delay occurred on the provision of equipment through UNDP that affected the system efficiency.

1-2 Is the Achievement level of the Project Purpose 2 high enough?

- ◇ There was a group of activities in this regard, but the concentration was on the dissemination of experience during this period of the Project.

2-1 As for activities you were engaged in, do you think that planned activities were carried out smoothly after mid-term evaluation?

- ◇ There was a delay in the provision of vehicles & equipments where it was to arrive in the last March 2007
- ◇ Yes, on ground the service reached to most of the people and the number of beneficiaries increased

2-2 Do you think that the current monitoring system is appropriate?

- ◇ Yes, needs to follow up the workers more.

2-3 Are you satisfied with the technical transfer/advise from Japanese experts?

- ◇ Yes, we benefit from it, where it affected our production.
- ◇ The Japanese offered the best they have.

2-4 Do you think that you have had a good relationship with Japanese experts?

- ◇ Experts were very cooperative, and they cared a lot to give success to the Project and JCspd.

2-5 As a member of JCC/JCspd/Council, have you found it difficult to carry out the specific project activity?

- ◇ Because of the wide range of the area, low capacity of inhabitants in these areas, and the delay in the provision of the vehicles and equipments, lead to many work burdens that we have to deal with.
- ◇ No cooperation from some LAs

2-6 If you have observed any other issues / problems in the process of implementation, please describe.

- ◇ Till now no containers were distributed to all the area because of the delayed provision of equipment through UNDP.
- ◇ Necessity of raising cooperation level and information exchange
- ◇ Medical Waste Management has to be included within the Project as a main part.

3-1 Is the Project's approach appropriate?

- ✧ Lack of awareness and participation of the people(3)
- ✧ The method of the Project was suitable, but there were many obstacles faced the implementation of the action plan.
- ✧ The vision was not clear at the beginning.

4-1 Do you think that Output 1 [Organization for Project operation is established] has been achieved?

- ✧ Till now no containers were distributed to all the area.(4)
- ✧ Necessity of raising cooperation level and information exchange(2)
- ✧ The organization was established, what rest is the issue of sustainability which need more support.
- ✧ There is the matter of sustainability and it depends on the Palestinian side.

4-2 Do you think that Output 2 [System for SWM in JJRRV is established] has been achieved?

- ✧ The system was established, but there is a need to improve the technical capacity through the provision of the equipments.

4-3 Do you think that Output 3 [Present situation of SWM in JJRRV is grasped] has been achieved?

- ✧ Many studies have been conducted in this regard, I think that the current situation has been grasped very well.

4-4 Do you think that Output 4 [Action plan for improvement of SWM in JJRRV is formulated] has been achieved?

- ✧ Action plan was prepared in a complete and good way.

4-5 Do you think that Output 5 [The action plan is put into practice and the improvement is made] has been achieved?

- ✧ Many enhancements has been implemented which included the extension of Jericho landfill site and raising community awareness in the area.

4-6 Do you think that Output 6 [Seminars/workshops are held and Project experiences in JJRRV are diffused among Palestinian local authorities] has been achieved?

- ✧ Workshops were weak and the citizens did not receive well the concepts. the words of the presentations were pure scientific going beyond the normal understanding of the citizens.
- ✧ Many activities have been made, transferring the experience through workshops, JCC, and there are many activities within this period.

4-7 Do you think that Output 7 [Those who are in charge of SWM in local authorities and related ministries acquire basic knowledge are diffused] has been achieved?

- ✧ Yes, the project idea started to disseminate around the country.

5-1 Has the Japanese input in terms of Japanese experts been appropriate? Number of Experts

✧ (No comments)

5-1 Has the Japanese input in terms of Japanese experts been appropriate? Timeliness of dispatching Experts

✧ (No comments)

5-1 Has the Japanese input in terms of Japanese experts been appropriate? Field of Experts

✧ There were a variety in the team experiences.

5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Number of Trainee

✧ The number is low and we need more experiences in this field

5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Timeliness

✧ (No comments)

5-2 Has the Japanese input in terms of C/P training in Japan been appropriate? Field of Training

✧ It was better to train trainers, and the contents have to be in this direction.

5-3 Has the Japanese input in terms of Equipment been appropriate? Quantity

✧ Because the equipment provision item was not achieved(2)

5-3 Has the Japanese input in terms of Equipment been appropriate? Quality

✧ (No comments)

5-3 Has the Japanese input in terms of Equipment been appropriate? Timeliness of provision

✧ No container used till now.

5-3 Has the Japanese input in terms of Equipment been appropriate? Cost

✧ (No comments)

5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Allocation of C/P

✧ Jericho municipality was the only one that has the human capacities, where it was difficult for it to second all the staff from its own employees.

5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Facilities/ Equipments

✧ We as MoH did not receive ant equipments needed to raise the work efficiency.

5-4 Has the Palestinian input in terms of Palestinian C/Ps been appropriate? Operational Cost

- ✧ Un-commitment from LAs to pay their dues, and no sufficient support from PNA
 - ✧ Weakness and lack of contribution from some of them
- 5-5 Has the project support system (project management) functioned well? (JCC)
- ✧ Replacement of some members from the ministry
- 5-5 Has the project support system (project management) functioned well? (The other project management system)
- ✧ (No comments)
- 5-6 If you have any suggestions / request to further improve the project management, please explain.
- ✧ Collecting fees on monthly basis, asking people for not delaying in paying
 - ✧ Hope to follow up the waste vehicle on ground
 - ✧ Continuous inform to the JCC about the project development
- 6-1 Do you think that the Overall Goal 1 will be achieved in 3 -5 years after the Project is terminated?
- ✧ Basic policies are under preparation and it can be implemented during the next 3 years, if support continues to the project.
- 6-2 Do you think that the Overall Goal 2 will be achieved in 3 -5 years after the Project is terminated?
- ✧ It is possible in a better cooperation circumstances with the other LAs.
- 6-3 Is there any unintended positive situation produced by the project, such as in terms of evaluation policy and strategy, living condition for the community people, etc.?
- ✧ Yes, the idea of JCspds is possible, and we have the current experience of our JCspds. If we established other JCspds other than the current, I am sure that it will be successful.
 - ✧ The possibility to develop the structure and fact of the LAs.
 - ✧ Yes, a workgroup was established for the development of strategies of JCspds and dissemination of experience between JCspds.
 - ✧ Yes, the village became cleaner.
 - ✧ Hiring local work force, increasing experience in SWM
 - ✧ Making a kind of integrity in waste management
 - ✧ Special cell for medical waste in the landfill
- 6-4 Is there any unintended negative situation produced by the project, such as in terms of evaluation policy and strategy, living condition for the community people?
- ✧ Weakness in community participation that will destroy any future project for cooperation.
 - ✧ Intended negative situation: not including medical waste management within

the project

7-1 Do you think that JCspd can independently manage by themselves?

- ✧ Weakness in community participation that will destroy any future project for cooperation.
- ✧ Intended negative situation: not including medical waste management within the project.

7-2 Is the Palestinian government likely to continue supporting JCspd to allocate the sufficient operational budget?

- ✧ There is now a body that can manage itself, but what rest is the issue of financial sustainability because of no commitment of paying the dues.
- ✧ No commitment from the citizens side to pay the fees because of the bad economic situation
- ✧ Yes, in the future but it needs more experience.

7-3 Is the transferred technology properly maintained and utilized?

- ✧ In management yes, but in the field it did not reach to 60% from the required capacity.

7-4 What will be the promoting factors to sustain the project impact after the termination of the project?

- ✧ Following up the citizens to pay their dues
- ✧ Changing work mechanism from time to time
- ✧ Field Training to the responsible people
- ✧ Commitment from LAs to pay their dues
- ✧ Regular support from PNA
- ✧ The commitment of citizens to strengthen the acquired experiences
- ✧ Hope that it will continue working by the experience and efforts of the Palestinian experts and employees.
 - 1- To consecrate the cooperative work in JCspd and activating its members roles
 - 2- Communication of JCspd members through periodical meetings
 - 3- Condensation of community awareness about the project role and its advantages and disadvantages.
- ✧ Providing the necessary equipments

別添資料 3-B: 質問票調査の結果要約 (Questionnaire [Type B])

■ 回答者の内訳

Questionnaire [Type B] : 回答数 20

JCspd JJRRVstaff/C/P---5

JCspd JJRRV worker---15

■ 回答の分析

The survey found the following result;

- (1) Workers are generally satisfied with the improvement of their work and environment.
- (2) However there are some complaints of working conditions such as working hour and salary. New equipment are required to improve their work.

■ 回答の度数分布

Question	N			1	2	3	4	5	Average	N
	Total	Valid	Missing	Very Bad	Bad	Fair	Good	Very Good		
1. Do you think this JCspd mechanism function adequately to improve SWM services?	20	20	0	0	0	2	16	2	4.00	14
2 Does the Project adequately meet your needs? In other words, do you recognize any improvement in your daily work?	20	20	0	3	3	3	7	4	3.30	20
3 As for activities you were engaged in, do you think that planned activities were carried out smoothly after mid-term evaluation ?	20	20	0	1	1	7	9	2	3.50	12
4 Are technical suggestions and technologies used in the Project useful?	20	20	0	0	2	4	7	6	3.70	12
5. Did you learn something new and useful from technical suggestions from Japanese experts?	20	20	0	2	0	5	3	9	3.70	15
6 Has provision of equipment such as repair parts of compactor collection vehicle, computers and printers been adequate in terms of variety, quantity and timing?	20	20	0	2	5	7	4	2	2.95	17
7 If you have observed any other issues / problems in the process of implementation, please describe.										18

回答に付記されたコメント

1. Do you think this JCspd mechanism function adequately to improve SWM services?

- ✧ The required minimum number has been appointed to start the work. Efforts made constantly to increase that number as possible.
- ✧ Improvements and new equipments has to be introduced to the dumping process, and using a suitable compactor for the compaction process
- ✧ Due to raise the level of service of solid waste management, whether at the level of operations of collection, transportation and waste treatment through the presence of a sanitary landfill site created on engineering basis.

2 Does the Project adequately meet your needs? In other words, do you recognize any improvement in your daily work?

- ✧ Administrative referential and work assignments are clear.
- ✧ There is intense pressure at work because of lack of crew and the disruption of the equipments because of its oldness.
- ✧ We have problem in salaries; it was not increased although the work increased as well. In addition we have a problem with vacations
- ✧ Have the knowledge about a new system which is a developed accrual basis accounting system software, where in the past I worked on cash basis.
- ✧ Yes, there are improvements in the daily work through organizing the of PR activities to suite the service nature, and give it success.
- ✧ The project is an urgent need for every citizen, through the application of a good management that reflects on the individual in particular and society in general, taking into account the continuous efforts that has to be made in order to achieve the better.
- ✧ Suitable, improvement in the work of the vehicles, containers, and the landfill.

3 As for activities you were engaged in, do you think that planned activities were carried out smoothly after mid-term evaluation?

- ✧ It has been worked on the development of Jericho landfill site (expansion of the landfill) as the recommendations of the Evaluation Committee.
- ✧ Coordination, cooperation and dissemination of experience after a period of evaluation.
- ✧ Regarding my work, I have been recently amended to the project, but according to the time I spent in JCspd, I see that there is a follow up and implementation to what have been planned during 2008 for the financial & administrative department.
- ✧ Activities have been implemented smoothly and in the right way. This was due

to the good management and continuous follow-up by the JCspd.

4 Are technical suggestions and technologies used in the Project useful?

- ✧ The number and variety of experts in the field of competence between the team members was well, where there was a transfer of these experiences to the Palestinians partners in all fields.
- ✧ Full cooperation, consultation, advice and guidance by the expert team regarding the issues concerning JCspd were good.
- ✧ Convincing so far. But actions have to be continuous in order to achieve the best way to preserve the environment and taking into account the social and economic conditions of the citizen.
- ✧ It is good for the collection and dumping process, which stopped many negative aspects such as the random dumping sites.

5. Did you learn something new and useful from technical suggestions from Japanese experts?

- ✧ Building and management of landfill sites, including design and requirements
- ✧ Financial management and preparation of annual financial reports
- ✧ Proper planning and proper management
- ✧ I have learnt about SWM and how to do waste source separation. I have also taught my wife about separation and asked here to start to separate waste at home.
- ✧ Get more knowledge about the accrual basis accounting system
- ✧ In the beginning of the project, all the 17 LAs inhabitants did not want the service, but now they ask for it, and discuss in issues that can improve the service.
- ✧ Japan is one of the very advanced countries in all fields, especially in the field of waste management, so the suggestions made by the experts comes from a profound experience that we can always benefit from.

6 Has provision of equipment such as repair parts of compactor collection vehicle, computers and printers been adequate in terms of variety, quantity and timing?

- ✧ Many of spare parts have been provided for equipment and machinery.
- ✧ Sufficient number of computers has been provided depending on the needs of the staff, but server was not provided.
- ✧ The vehicle that I work on does not have breaks since two months, and we have so many problems in maintenance.
- ✧ New equipment has to be provided especially for the night shift (1m2 containers collector)

- ✧ Spare parts have to be provided quickly in order to avoid any failure or delay.
- ✧ Regarding the PCs and the overhead projector that is used in the PR activities are more or less suitable
- ✧ Provision with spare parts extended the vehicles life. However, the delay in the provision of the new vehicles affected the collection process because the assumed life of the old vehicles has already expired.

7 If you have observed any other issues / problems in the process of implementation, please describe.

- ✧ It was supposed to provide equipment and new machines in the middle of the project, but there had been delays in the procurement process due to several reasons, thus affecting the development of the current system.
- ✧ Please put a correct mechanism for the maintenance process.
- ✧ To make 2 shifts at night.
- ✧ To divide the areas
- ✧ To distinguish the work of each employee. (job description)

Environmental and Social Consideration for The Project for Capacity Development on Solid Waste Management in Jericho and Jordan River Rift Valley

JICA Expert Team / JCspd in JJRRV

Contents

Introduction

1. Environmental and Social Consideration of the Project
2. Environmental Assessment Policy in Palestine
3. Estimation of Environmental and Social Impacts by the Landfill Improvement in the Project
4. Evaluation of Environmental and Social Impacts and Mitigation Measure
5. Overall Effect

Introduction

It is crucial for sustainable development to implement the appropriate measures for environmental and social considerations

Japan International Cooperation Agency (JICA) takes appropriate considerations of environmental and social factors according to the measures for environmental and social considerations of the recipient governments and “JICA Guidelines for Environmental and Social Considerations”. JICA classifies projects under three categories according to the extent of environmental and social impacts. To make this classification, JICA takes into account an outline of the project, the scale, the site condition, and the environmental impact assessment scheme in host countries.

Category	
Category A	Projects are likely to have significant adverse impacts on the environment and society
Category B	Projects have potential adverse impacts on the environment and society, and are less adverse than those of Category A.
Category C	Projects are likely to have minimal or little adverse impacts on the environment and society.

The Project for Capacity Development on Solid Waste Management (SWM) in Jericho and Jordan River Rift Valley (JJRRV) is a technical cooperation project for capacity development on SWM to improve the SWM system in Palestinian National Authority (PNA). This project was classified as Category C at the beginning, and, with the progress of the project, it was changed to Category B.

According to JICA guideline, it is necessary to evaluate the impacts to the natural environment and society – whether or not they were predicted by environmental and social considerations studies – and the effects of mitigation measures taken, after the completion of technical cooperation program. Since this project is classified into Category B, evaluation survey, in terms of environmental and social consideration, was carried out.

1. Environmental and Social Consideration in this Project

One of the project purposes is the establishment of a sustainable SWM system in JJRRV. The following works were accomplished with the consideration of preparing the related facilities.

(1) Initial Environmental Evaluation on the improvement of the existing dumping sites

It was difficult to construct a new landfill site during the project because of the land acquisition and the implementation of Environmental Impact Assessment (EIA) with Israel. For this reason, the project plan was decided to improve the existing dumping sites and continue to use them. Initial Environmental Evaluation (IEE) was implemented on the improvement of the existing dumping sites and the results were reported in progress report II.

Table 1 shows the landfills used for waste management in JJRRV. The target sites of improvement were Jericho dumping site and Al-Ojah dumping site.

Table-1 Landfills used for waste management in JJRRV

Name	Description	Issues
1. Existing Jericho dumping site	Used by Jericho city, "A" region Open dumping site Adjacent to cultivated lands and wadi Having Environmental pollution problems Having a small remained capacity	It is necessary to mitigate pollution impacts in order to use this site continuously. This site can be improved to be a landfill site which capacity is for three years as the pilot project.
2. Existing Al-Ojah dumping site	Used by Ojah city, "A" region Open dumping site Having a small remained capacity Neighboring on agricultural lands Having a potential of expansion	It is necessary to develop the facilities in order to in order to use this site continuously. This site can be improved to be a landfill site which capacity is for three years as the pilot project.
3. Tovlan landfill site	Sanitary landfill site, "C" region Not having environmental pollution Operated by Israel Collecting the fee of disposal from users	It is possible to use this site for the long period of time. This site does not have any problems about operation and management, and environmental pollutions. Palestinian people have political and emotional resistance feeling to use this site.
4. Tubas transfer station/disposal site (to transfer to Jenin landfill site)	Transferred to Jenin landfill site Not having environmental pollution Collecting the fee of transfer/disposal from users	It is possible to use this site for the long period of time. This site does not have any problems about operation and management, and environmental pollutions. It is difficult to use this site for disposal from the south area of Jordan River Valley because the position of this site, which is in the north area of the west bank, causes the long transportation distance from the south area and there are check points on the way to this site.

Note 1) Landfill in "C" region requires the permission of Israel.

(2) Law and regulation on Environmental and Social Considerations

In the course of the project, following law and regulation in Palestine related to environmental and social consideration and solid waste management is summarized in the Progress Report IV prepared in October, 2007.

- Environmental Law (Law No7/1999)¹
- Environmental Assessment Policy²
- A draft Regulations for Solid Waste Management for 2005 prepared by the EQA

(3) Field survey and environmental monitoring

¹ Law No.7 for the year 1999 regarding the Environment

² Palestinian National Authority, Ministry of Environmental Affairs: The Palestinian Environmental Assessment Policy, April 2000.

Following field survey and monitoring related to Jericho and Al-Ojah disposal sites has been conducted and reported in the progress reports.

- Topographic survey and soil investigation was conducted for Jericho and Al-Ojah disposal sites and reported in Progress report II)
- Ground water analysis was conducted for existing well near to Jericho and Al-Ojah disposal sites and reported in progress report II, III, IV and V.

2. Palestinian Environmental Assessment Policy

(1) Outline of Palestinian Environmental Assessment Policy

Environmental Impact Assessment shall be conducted according to the Palestinian Environmental Policy that was approved by the Ministerial Council on April 23, 2000.

The Environmental Assessment Policy divided the project in following three categories in Article 4.

- Proposed public and private-sector projects, and proposed extensions or additions to existing projects (as described in Annex-1 for IEE and EIA individual projects)
- Proposed plans and programs (as described in Annex 4 Strategic Environmental Assessment, SEA)
- Existing projects as described (in Annex 5 for environmental auditing to deal with existing development)

In the Annex 1, EIA shall be conducted for specified types of the major development project including solid waste disposal sites. And extension to existing projects shall be screened for the need for IEE and EIA studied according to the procedures described in Annex 3.

(2) Procedure for Environmental Assessment

There are three types of Environmental Assessment reports.

- Application for Environmental Approval
- IEE Report
- EIA Report

The procedure for Environmental Approval of the project is shown in Table-2. The procedure is different for the project type listed in Annex 1 and projects which are not listed in Annex 1 that should submit Application of Environmental Approval. Once the Ministry considers that an application for Environmental Approval is complete, it has maximum of 14 business days to determine the need for an IEE or EIA report, or to determine whether Environmental Approval will be granted based on the Application alone.

Table-2 Procedure for Environmental Approval

Type of project	Process
1. Listed in Annex 1	(1) A project must first obtain Initial Approval from the appropriate Ministry of Local Planning Committee.
	(2) The Proponents submits an Application for Environmental Approval to the Ministry (EQA)
	(3) The Ministry will notify the appropriate permitting authorities that an Application for Environmental Approval has been received and that an EIA is required.
2. Not listed in Annex 1	(1) The Proponents submits the Application for Environmental Approval to the appropriated permitting authorities as part of this overall application package for initial approval.
	(2) The Authorities then refer the project to the Ministry (EQA)
	(3) The Ministry (EQA) will apply the screening guideline (Annex 2) and determines whether or not an IEE report or an EIA report is required. If an IEE report or EIA report is not required, the Ministry will determine whether or not Environmental Approval will be granted and, if so, under what condition.
3. IEE	(1) TOR for IEE is prepared by the Ministry. Stakeholder consultation is optional.
	(2) The proponent prepare and submit draft IEE for initial internal review
	(3) The proponent finalizes the IEE report for technical review by the Ministry.
	(4) The Ministry discuss meet with proponents to discuss the IEE reports and if necessary, require revision or additions to the report
	(5) The Ministry determines what course to follow: <ul style="list-style-type: none"> - find that project change and a revised IEE before Environmental Approval, or - Grant Environmental Approval, if necessary, condition to be included in subsequent permits, or - Find that EIA report is required before Environmental Approval can be considered further.
4. EIA	(1) TOR for EIA is prepared by the Ministry. Stakeholder consultation is mandatory
	(2) The proponent prepare and submit draft EIA for initial internal review
	(3) The proponent finalizes the EIA report for technical review by the Ministry.
	(4) The Ministry discuss meet with proponents to discuss the EIA reports and if necessary, require revision or additions to the report
	(6) The Ministry determines what course to follow and advice: <ul style="list-style-type: none"> - Grant Environmental Approval, if necessary, condition to be included in subsequent permits, or - Without Environmental Approval since the project has unacceptable environmental Impacts.

(3) Communication with EQA in this project

Regarding Jericho disposal site, as there was a strike in the PNA organizations. The JCspd in JJRRV contact with EQA officials to inform that we have a pilot project to improve Jericho disposal site. Then on the opening ceremony EQA request the JCspd to submit all the documents regarding the improvement. JCspd sent all documents including the TOR, the water analysis, the topography maps and the soil analysis.

In the extension phase, the JCspd talked to EQA and submit the TOR. EQA did not put any comments, and did not request to make IEE or EIA, since EQA knew that this improvement is to solve the current situation until PNA and JCspd arrange for the future landfill site. EQA knew that necessary measures for protecting the environment were taken into consideration.

3. Estimation of environmental and social impacts by construction works of landfill improvement

The purpose of the pilot project is to improve SWM and to arrange the facilities for a sanitary system at Jericho landfill site. The construction works were implemented as following. All works were accomplished in Jericho landfill site.

- (1) Construction of sanitary landfill, leachate pond and fence in the second year of the project
- (2) Expansion of the sanitary landfill in the third year of the project

Estimated impacts are described in IEE as the Attachement-1 and Attachment- 2

4. Evaluation of Environmental and Social Impacts and Mitigation Measure

Construction work for expansion was implemented in the existing Jericho landfill site this time. The estimated impacts and evaluation on impact of improvement of landfill is as following.

Estimated impacts	Impacts and mitigation measures	Evaluation for impacts and mitigation measures
Land acquisition	In regard to Al-Ojah dumping site, it was necessary to clarify the right of ownership.	It was proved that the site belongs to Al-Ojah village. It was also proved that land acquisition was not necessary, however, it would be necessary to set a clear boundary by fences and so on for the future.
	Jericho landfill site	In regard to Jericho dumping site, fences were established as the boundary according to the discussion with the landowner, Arab society.
Rag pickers	There were impacts on rag pickers to some degree. Measurements were to make a list of rag pickers, and to explain for them about improvement and operation of the landfill in January 2007.	The number of rag pickers was decreased from 10 persons in January 2006 to 3-5 persons in June 2008. Rag pickers are communicating with guards and did not make any complains. Technical manager of JCspd JJRRV informed that a rag picker said income at present is better than before because of no burning of waste and decrease of rag pickers. With some of them, the pilot project about recycling of agricultural plastic was implementing.

Groundwater pollution	Measurements were to equip the appropriate facilities for a sanitary landfill (liners and leachate collecting pipes), and to monitor periodically.	The amount of leachate was able to be checked. As the result, a little leachate was found just after raining. It was found that most leachate evaporated and it did not flow outside. Monitoring of groundwater was implemented before and after the improvement construction work. Any impacts by the landfill were not found.
Surface water pollution	Night soil was disposed at the site. Measurements were to equip the leachate pipes and the pond.	Most leachate evaporated. Also most of night soil, which was disposed at the site, evaporated in the middle of wadi.
Scattered wastes Odor Fires Vectors of diseases	Measurement was to cover disposed wastes with soil.	Odors and fires did not occur. There were not any complains from citizens at Al-Ojah.
Relationship with citizens	Measurements were to held community meetings and landfill visiting tours.	Community meetings were held many times. Citizens did not make any complains about landfill. Landfill visiting tours were held for citizens and students once before improvement, and three times after improvement. Site visit and opening ceremony at landfill site improve recognition of citizens.
Medical wastes	Measurements were to dispose medical wastes separately from municipal solid wastes, and cover with soil.	The tentative disposal zone for medical waste was set. Medical wastes were disposed separately from municipal solid wastes. It is contribute to decrease the risk

5. Overall Effect

(1) Water Quality Monitoring

Four water quality monitoring surveys were carried out at the wells around Jericho and Al-Ojah dumping sites. Concerning Jericho dumping site, the first improvement work was implemented in March 2007, and then this site has been operated for one and a half years. Until now it was confirmed that a little leachate was produced and collected in the pond during the rain and it evaporated soon. This fact proved that leachate collection system with liner system was working in the landfill site.

In JJRRV, the annual rainfall is only about 150 mm. Even in the Tovlan landfill, which is a large-scale landfill in this area, leachate has been collected, but it has never run over.

Under this situation, the leachate collection system with liner system is enough to manage leachate and prevent groundwater pollution.

. Therefore it will be implemented as monitoring to record the rainfall and the collected leachate from now on. And if a risk of leachate will be increased, groundwater monitoring will be conducted in that case.

(2) Waste Picker

The fence was constructed and the guards were provided at the Jericho landfill because it is necessary to control the landfill for environmental protection. In the

landfill, activities of rag pickers are accepted and only coming and going of pickers are checked. The number of active pickers is about three to five. It is desirable that they will join the pilot project of recycling of agriculture plastic waste. A recycle house is constructing at landfill site and operation will start soon.

(3) Environmental and social Impact by this project

In this project, the existing dumping site was improved as the sanitary landfill with liner and leachate collection system. The environment around this landfill site has been changed for better because this improvement was successful and the scale of this landfill is small.

Also people around the landfill site accepted the present management. Improvement of the facilities enabled to make bus tours for showing around the landfill. It was effective to raise public awareness and image of project on the ground.

(4) Effects of Mitigation Measures

Landfill control was neglected before, such as construction of fences and covering soil. For environmental protection, landfill control including the leachate collection system is carried out now. Mostly this landfill control reduces odor and prevents wastes from scattering. And leachate collection system with liner works well and prevents leachate from penetrating into underground. These facilities are the first one introduced in the West Bank. Therefore they draw the attentions of related people.

(5) Additional Mitigation Measures

While Jericho landfill site has fence to control the site, Al-Ojah dumping site has no fence. If Al-Ojah dumping site will be used as the site for future facilities of SWM, it is necessary to construct fences there.

Environmental Survey on Existing Disposal Sites

1.1 Introduction

For the JCspd's SWM services that are expected to start from January 2007, the Jericho dumpsite and the Al-Ojah dumpsite will be used as final waste disposal sites until new disposal site is constructed. These two sites are currently being used as waste dumpsites for their respective LAs. However, the wastes are being dumped in an unsanitary condition because the so-called open dump method is employed. Improvement of these dumpsites from an open dump to a sanitary dump is required to reduce environmental pollution including in the areas close by the sites. In undertaking such a project, the environmental and social impacts which may be brought to bear by the project must be examined beforehand through survey, forecast and assessment so as to avoid or mitigate any adverse impacts.

In general, the impact arising from improvement of these sites will not be large because the sites continue to be used and the amount of waste to be dumped is small. Therefore, an IEE level study based on the secondary data and simple field surveys was conducted for both sites including an analysis of alternative plans, forecast and assessment of environmental impacts, and preparation of mitigation measures and monitoring plans.

1.2 Outline of the Dumpsites and Improvement Project

(1) Overview of the Dumpsites

1) Jericho Dumpsite

This site is located on the bank of El-Qelt wadi in the suburb of Jericho City, at the west end of area "A". The surrounding area is cultivated land used for agriculture and several farmers' houses can be seen. This site has been used as a dump for waste generated in Jericho City including the two refugee camps in the city, and also as a dump for septage collected in the city by private organizations. The amount of waste dumped at this site is estimated to be 35 ton/day.

The waste is dumped in the manner of an open dump without a daily cover or

any countermeasures to prevent environmental pollution, including gas removal or collection and treatment of leachate. Occasionally, the dumped waste is set fire to, either intentionally or unintentionally. The maximum height of the fill reaches nearly 15 m (from the bed of the wadi) and some waste litters the wadi. Leachate seepage is not detected in the periphery of the dump site, but a spillage can be seen in the bed of the wadi at a short distance from the dumpsite, apparently generated by the effluent of septage discharged. Because this is the only water source in the area especially during the dry season, some birds gather there and aquatic plants are growing along the spillage.

There are no organized waste scavengers at this site; but a few people earn a living by picking out valuable items including copper wire.

2) Al-Ojah Dumpsite

This site is an open dumpsite located in area “B” in the suburb of Al-Ojah Council, about 3 km east from Route No. 90. The site is an arid area consisting of several mounds, presumably eroded by a water stream in the catchment area of a wadi that is a tributary of the Jordan River. The dump site is laid out between the wadi and agricultural land that is developed along the wadi. The waste is dumped in the depression created by the mounds and occasionally set fire to. Waste is dumped out of one depression into others. The amount of waste dumped in one depression is estimated to be only 2 ton/day. The site is owned by Al-Ojah Council.

(2) Outline of Dumpsite Improvement

Even though the two dump sites are not located in populated areas, some improvement works are required for further use to mitigate current environmental problems. Table.4 shows the main improvement works for each site.

Table 1 Major Improvement Work on Dumpsites

Site	Improvement	Remarks
Jericho Dumpsite	Fence and gate	To control and manage the site properly
	Office	To facilitate site workers and to control and manage the site properly
	Leachate drainage	To facilitate leachate collection in some part of the site
	Lining	To facilitate leachate collection and to prevent leachate seepage in other part of the site
	Cover soil	To introduce sanitary dump method
	Planting (optional)	To improve aesthetic view
Al-Ojah Dumpsite	Fence and gate	To control and manage the site properly
	Cover soil	To introduce sanitary dump method.

Source: JICA Expert Team

1.3 Existing Environmental Conditions

From the results of the preliminary field surveys at the Jericho dumpsite and the Al-Ojah dumpsite, the existing social and natural environmental conditions in and around the sites are summarized in Table 2. As previously mentioned, both sites are located near agricultural land in the suburbs, and a few people are occasionally seen picking out some recyclables such as metal at the Jericho dumpsite. However they are unlikely to hamper the daily operation of the waste dump. No other economic activities are observed at either site.

Since these dumpsites are located in a semi-arid region, it is thought that leachate generation is limited. A potential source of water pollution, if any, might be the septage that is collected by the private cleansing company and discharged at the Jericho dumpsite. However, septage effluent is observed to make a narrow, shallow water stream a limited distance downstream of the Jericho dumpsite, where some sort of algae and aquatic plants are growing. No epidemiological data connecting these dumpsites with disease are available, but flies and mosquitoes are more likely to breed at the dumpsites.

From a preliminary field survey, no sign of contamination of the water environment can be detected. On the contrary, smoke accompanied by some smell is generated occasionally by waste burning on-site, either intentionally or unintentionally. This may be a source of air pollution and foul odor. A few complains of foul odor are heard from the nearby residents.

Table 2 Existing Environmental Conditions at Jericho Dumpsite and Al-Ojah Dumpsite

No.	Items	Jericho Dumpsite	Al-Ojah Dumpsite
1	Location	This site is located on the bank of El-Qelt wadi in the suburbs of Jericho City, at the west end of area "A".	This site is an open dumpsite located in area "B" in the suburbs of Al-Ojah local council, about 3 km east from Route No. 90.
2	Demography and community	A few farmers live on the opposite side of the wadi that runs along the south side of the dumpsite.	A few farmers live on the opposite side of the access road to the dumpsite.
3	Economic activity	A few people scavenge recyclables occasionally (Agriculture in the vicinity of the dumpsite).	No economic activity on site (Agriculture in the vicinity of the dumpsite)
4	Current land use	Dumping site for waste collected from Jericho	Dumping site for waste collected from Al-Ojah

		municipality and septage discharge by private company	Authority
5	Water usage and rights	None	None
6	Transport conditions	No heavy traffic. One check point by Palestine Authority before dumpsite. Access road is unpaved.	No heavy traffic. Access road is unpaved.
7	Infrastructure and public facilities	Electricity is available. No piped water.	No electricity and no piped water
8	Archeological and historical attributes	None	None
9	Hygiene and public health	No epidemiologic data connecting the dumpsite with diseases, but flies and mosquitoes are breeding.	No epidemiologic data connecting dumpsite with diseases, but flies and mosquitoes are breeding.
10	Environmental standards	None	None
11	Hydrological conditions	No surface water except for a short period after rainfall. Groundwater level is below 90 m.	No surface water except for a short period after rainfall. Groundwater level is below 40 m.
12	Meteorological conditions	Semi-arid with annual rainfall below 105mm	Semi-arid with annual rainfall below 105mm
13	Geological, topographical and soil conditions	Arid plain	Undulating arid land
14	Surface and subterranean water quality	No documented data but leachate and septage effluent leach out to the wadi without treatment.	No documented data. No leachate observed.
15	Flora and fauna	No special species	No special species
16	Landscape and visual amenity	Eyesore landscape of waste dump	Undulating arid area along wadi leading to the Jordan River
17	Air pollution and odor	Smoke and odor when waste is burnt on site. Slight odor detected the year round.	Smoke and odor when waste is burnt on site. Slight odor detected the year round.
18	Noise and vibration	Noise sources are in-coming trucks and bulldozers when operating.	Noise sources are in-coming trucks only.

Source: JICA Expert Team

1.4 Potential Impacts expected by the Project

From the existing social and natural environmental conditions and project activity, the possible impacts are screened as shown in Table.5. According to this table, the social and environmental impacts expected by the Project are extremely slight or nil for most items. Therefore, further study will not be required. However, item 1 for Al-Ojah dumpsite and item 2 for Jericho dumpsite must be examined in detail for clarification prior to the Project implementation. Although the physical scale of the dumping sites is small and the expected social and environmental impacts are limited, the

necessary environmental monitoring of such items as air and water is required during the improvement work and the dumpsite operation.

**Table 3 Screening of Potential Social and Environmental Impacts
by the Project**

No	Items	Description	Eva- luation	Remarks (Reasons)
I. Social Environment				
1	Resettlement	Transfer of rights of residence and land ownership	J: No A: Yes	No residence on site. No residence on site. Ownership of land should be clarified.
2	Economic activities	Loss of production base and change of economic structure	J: Yes A: No	Scavenger's activity will be affected to a greater or lesser degree. No economic activity on site.
3	Traffic and Public facilities	Impacts on school, hospitals and present traffic conditions, such as an increase in traffic jams and accidents.	J: No A: No	Traffic volume will be unchanged. Traffic volume will be slightly increased.
4	Splitting of communities	Separation of regional communities by disruption of regional traffic.	J: No A: No	Regional traffic will not be disrupted. Regional traffic will not be disrupted.
5	Cultural property	Loss or decrease of the value of cultural assets and archaeological assets.	J: No A: No	No significant cultural property within the area. No significant cultural property within the area.
6	Water rights and Rights of common	Obstruction of fishing rights, water rights and rights of common.	J: No A: No	No water use or commons. No water use or commons.
7	Public health conditions	Worsening of health and sanitary conditions due to generation of garbage, and pathogenic insects.	J: No A: No	Project is to improve current unsanitary conditions to sanitary condition. Project is to improve current unsanitary conditions to sanitary condition.
8	Waste	Generation of construction waste, debris, sludge and general waste.	J: No A: No	Wastes, if generated during improvement work, will be dumped on site. Wastes, if generated during improvement work, will be dumped on site.
9	Hazards (Risk)	Increased risk of cave-ins, ground failure and accidents	J: No A: No	Careful construction procedures will ensure safety. Careful construction procedures will ensure safety.
II. Natural Environment				
10	Topography and Geology	Change of valuable topography and geology due to excavation or earth fill	J: No A: No	Neither large excavation nor earth fill will be included in the Project. Neither large excavation nor earth fill will be included in the Project.
11	Soil erosion	Topsoil erosion by rainfall after land reclamation and deforestation	J: No A: No	Reclamation will ensure plantation over the top soil after closure of the site. Reclamation will ensure plantation over the top soil after closure of the site.
12	Groundwater	Exhaustion of groundwater caused by overdraft, and water pollution by leachate	J: No	No possibility of overdraft of groundwater, and water pollution by leachate will be properly mitigated.

			A: No	No possibility of overdraft of groundwater, and water pollution by leachate will be properly mitigated.
13	Hydrological situation	Change in discharge or water quality due to reclamation and drainage	J: No	No change in discharge or water quality is expected since leachate is collected.
			A: No	No change in discharge or water quality is expected since leachate is collected.
14	Fauna and Flora	Obstruction of breeding and extinction of species due to the change of habitat conditions	J: No	No endangered species is reported in the site.
			A: No	No endangered species is reported in the site.
15	Meteorology	Change of micro-climate such as temperature, wind etc., due to large scale reclamation and construction	J: No	No change in micro-climate (wind, temperature, etc)
			A: No	No change in micro-climate (wind, temperature, etc)
16	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structure	J: No	Change in topography, vegetation is not expected.
			A: No	Change in topography, vegetation is not expected.
III. Environmental Pollution				
17	Air pollution	Pollution caused by emission of toxic gases from vehicles and waste fill.	J: No	Wind and heavy duty machinery may be a source of dust, but far from residential area. Open burning will be prohibited.
			A: No	Wind and heavy duty machinery may be a source of dust, but far from residential area. Open burning will be prohibited.
18	Water pollution	Pollution caused by surface runoff and leachate	J: No	Leachate and septage effluent will be collected.
			A: No	Leachate will not be generated, but will evaporate.
19	Soil contamination	Contamination by surface runoff and leachate	J: No	Leachate and surface run-off will be collected.
			A: No	Leachate and surface run-off will be collected.
20	Noise and vibration	Noise and vibration generated from vehicle and heavy duty machinery	J: No	Far from residential area.
			A: No	Far from residential area.
21	Land subsidence	Land deformation caused by the draw-down of the water table	J: No	No plan to use groundwater.
			A: No	No plan to use groundwater.
22	Offensive odor	Offensive odor generated from dumpsite.	J: No	Cover soil prevents odor emission from dumpsite considerably.
			A: No	Cover soil prevents odor emission from dumpsite considerably.
Overall evaluation: Either IEE or EIA is necessary for the Project implementation?			No	Further study is required to clarify items 1 (for Al-Ojah) and 2 (for Jericho).

Note: J = Jericho Dumpsite, A = Al-Ojah Dumpsite

Source: JICA Expert Team

Attachement -2 Environmental and Social Consideration on the Improvement and Extension Project of Jericho Disposal Site

1. Outline of the Improvement and Extension Project of Jericho Disposal site

Even though the Jericho dump sites are not located in populated areas, some improvement works are required for further use to mitigate current environmental problems. The Improvement and Extension Project was planned and implemented in two stage as shown in Table 1. The Improvement and Extension project is conducted in the same site.

Table.4 Improvement and Extension Project of Jericho Disposal Site

Site	Improvement and Extension	Remarks
First Stage Improvement of Jericho Disposal site (Jan 2007-March 2007)	Fence and gate	To control and manage the site properly (North, east and west side)
	Guard house	To facilitate site workers and to control and manage the site properly
	Preparation of landfill area and lining	Preparation of landfill area To prevent leachate seepage in groundwater and other part of the site.
	Leachate collection and pond	To facilitate leachate collection and storage
	Gas removal pipe	To remove landfill gas
	Planting around the site	To improve aesthetic view
	Access road	For movement of collection vehicle
Second stage Extension of Jericho Disposal site (Oct. 2007-March 2008)	Extension of landfill area and lining	Extension of landfill area within the site and lining To prevent leachate seepage in groundwater and other part of the site.
	Leachate collection pipe and gas removal pipe	To facilitate leachate collection and landfill gas removal
	Discharge place for septage	To control discharge point of septage
	Fence and gate	To control and manage the site properly (South side and specified area for medical waste)
	Surrounding road	For movement of collection vehicle
Operation (Continue)	Cover soil in Operation	To introduce sanitary landfill method To make compaction of waste and to prevent open burning and odor.
	Control of landfill site	Recording of collection vehicle

Source: JICA Expert Team

2. Potential Impacts expected by the Project

From the existing social and natural environmental conditions and project activity, the impacts and mitigation measures are evaluated as shown in Table 2.

According to this table, the social and environmental impacts expected by the Project are slight or nil for most items because of small scale construction and disposal amount of solid waste. However, mitigation measures will be required for item 2 (Economic activity), item 12 (Ground water), item 17 (Air pollution), item 18 (Water pollution) and item 22 (Offensive odor) due to waste disposal at the site.

Although the physical scale of the disposal sites is small and the expected social and environmental impacts are limited, the necessary environmental monitoring of such items as air and water is required during the operation stage.

Table.5 Potential Environmental and Social Impacts of the Project

No	Items	Description	Construction/Operation Activities	Evaluation		Reason and Mitigation measure
				Construc- tion stage	Operation stage	
	I. Social Environment					
1	Resettlement	Transfer of rights of residence and land ownership	The site is present dumping site and no residence. The site is used for disposal site.	Negligible impact	Negligible impact	
2	Economic activities	Loss of production base and change of economic structure	The site is controlled during construction and operation stage. Scavenger's activity will be affected.	B (Some impact)	B (Some impact)	Explanation of the project to the scavengers. Registration of scavenger and allow to work in the site.
3	Traffic and Public facilities	Impacts on school, hospitals and present traffic conditions, such as an increase in traffic jams and accidents.	Small traffic for transportation of construction material and solid waste. Traffic volume will be unchanged.	Negligible impact	Negligible impact	Excavated soil during construction is used on the site.
4	Splitting of communities	Separation of regional communities by disruption of regional traffic.	Small traffic for construction and solid waste disposal	Negligible impact	Negligible impact	Regional traffic will not be disrupted.
5	Cultural property	Loss or decrease of the value of cultural assets and archaeological assets.	No significant cultural property in the site.	Negligible impact	Negligible impact	
6	Water rights and Rights of common	Obstruction of fishing rights, water rights and rights of common.	No water use or rights of commons.	Negligible impact	Negligible impact	
7	Public health conditions	Worsening of health and sanitary conditions due to generation of garbage, and pathogenic insects.	Project is to improve current unsanitary waste disposal to sanitary condition.	Negligible impact	Negligible impact	Open burning will be stopped and waste is covered by soil.
8	Waste	Generation of construction waste, debris, sludge and general waste.	Wastes will be dumped on site during construction period. Waste will be disposed in sanitary manner during operation	Negligible impact	Negligible impact	Excavated soil is stored and used for covering soil. Implementation of covering soil.
9	Hazards (Risk)	Increased risk of cave-ins, ground failure and accidents	Careful construction procedures will ensure safety.	Negligible impact	Negligible impact	Careful construction at the site Proper operation of solid waste disposal
	II. Natural Environment					

10	Topography and Geology	Change of valuable topography and geology due to excavation or earth fill	Neither large excavation nor earth fill will be included in the Project.	Negligible impact	Negligible impact	
11	Soil erosion	Topsoil erosion by rainfall after land reclamation and deforestation	Small rainfall area	Negligible impact	Negligible impact	Reclamation will ensure plantation over the top soil after closure of the site.
12	Groundwater	Exhaustion of groundwater caused by overdraft, and water pollution by leachate	Small use of water for construction and disposal of waste. Water pollution by leachate will be properly mitigated.	Negligible impact	B (Some impact)	Leachate collection and liner system will be installed to prevent seepage of leachate Monitoring of ground water
13	Hydrological situation	Change in discharge or water quality due to reclamation and drainage	No change in discharge or water quality is expected since leachate is collected.	Negligible impact	Negligible impact	No change in discharge or water quality is expected since leachate is collected and stored.
14	Fauna and Flora	Obstruction of breeding and extinction of species due to the change of habitat conditions	No endangered species is reported in the site.	Negligible impact	Negligible impact	
15	Meteorology	Change of micro-climate such as temperature, wind etc., due to large scale reclamation and construction	The project includes small scale construction and reclamation. No change in micro-climate (wind, temperature, etc)	Negligible impact	Negligible impact	
16	Landscape	Change of topography and vegetation due to reclamation. Deterioration of aesthetic harmony by structure	Small change of topography after disposal of solid waste	Negligible impact	Negligible impact	Planting around the site
	III. Environmental Pollution					
17	Air pollution	Pollution caused by emission of toxic gases from vehicles and waste fill.	Wind and heavy equipment may be a source of dust, but far from residential area. Open burning of waste will be prohibited.	Negligible impact	B (Some impact)	Make covering soil to prevent open burning during operation stage.
18	Water pollution	Pollution caused by surface runoff and leachate	Leachate will be collected and stored. Septage effluent will be unchanged.	Negligible impact	B (Some impact)	Liner system, leachate collection system and leachate pond is provided. Monitoring of Leachate
19	Soil contamination	Contamination by surface runoff and leachate	Disposal site will be covered by soil and leachate will be collected.	Negligible impact	Negligible impact	Leachate will be collected and stored.
20	Noise and vibration	Noise and vibration generated from vehicle and heavy duty machinery	Operation of heavy equipment but site is far from residential area.	Negligible impact	Negligible impact	

21	Land subsidence	Land deformation caused by the draw-down of the water table	Limited use of waster for drinking and planting.	Negligible impact	Negligible impact	
22	Offensive odor	Offensive odor generated from dumpsite.	Solid waste disposal with covering soil	Negligible impact	B (Some impact)	Covered soil to prevent odor emission from dumpsite.

Note : Impact A: significant impact anticipated, B: Some impact anticipated, C: unknown (Requires consideration, may become clear during course of survey), D: Negligible impact

Source: JICA Expert Team

5. C/P によるフェーズ 2 提案（和訳）

プロジェクト名：パレスチナジェリコ及びヨルダン渓谷における廃棄物管理能力向上プロジェクト（フェーズ 2）（3 年間）	
プロジェクト目標	備考
1. ジェリコ及びヨルダン渓谷に持続的な循環型総合的廃棄物管理（ISWM）システム及び組織が導入（立ち上げ）される。	
2. ISWM の成功事例が、パレスチナ他地域にモデルケースとして共有される。	
内容	備考
1. 財政 (1) SWM サービスの重要性、サービス料金の支払いに対する意識向上 (2) ジェリコ市内の大口顧客及び主要な廃棄物発生源についての調査 (3) 難民キャンプ関連の SWM サービスに係る運営経費及びコスト回収についての調査 (4) UNDP 経由無償資金協力機材導入後の運営経費の分析 (5) ジェリコ市に対するサービス料金体系の改定（実質的には値上げ）	(1) 現在でもサービス料を支払わない自治体に対しては、サービスの停止だけではなく、支払いをするよう働きかけも同時に行っている。 (2) (3) 現在ジェリコ市と顧客が契約をしているが、料金が 1997 年以降改定されていないため、JCspd JJRRV が契約を行いたい。
2. マネジメント (1) 現在の SWM 体制の調査及び収集・運搬ルートの設定 (2) JJRRV における ISWM のための GIS 導入 (3) ISWM に関する JCspd JJRRV 職員の研修 (4) JJRRV における ISWM 導入に当たっての便益と課題の調査 (5) ジェリコ処分場閉鎖後の代替案の調査 (6) JJRRV におけるゴミ量・ゴミ質の調査 (7) ISWM 導入を通じての気候変動への緩和・適応策についての検討	(2) コンピューター化によって事業実施体制の検討・変更を容易にしたい。 (5) 処分場は C 地域に建設する必要がある。またラマラに運搬する場合の経費も計算したい。EQA は西岸地区には北部、中部、南部の 3 ヶ所に処分場が必要との見解を示しているが、現場の視点から考えると、これはフィージブルではない。MoLG も JJRRV に処分場を建設するとの考えをもともとっていた。 (6) 既に実施済みであるが、見直しを行いたい。
3. ISWM (1) JCspd JJRRV における収入向上のためのリサイクル事業の可能性についての調査 (2) 再利用、再販売も含む廃棄物分別についての調査 (3) コンポスト化の可能性についての調査 (4) ISWM についての最適な技術についての調査	(1) 紙等、現在実施していないものについて。 (3) JJRRV の 60～70% が有機性廃棄物であるため検討したい。 ISWM を考えるうえで、日本の 3R の経験に学びたい。
4. 処分場運営 (1) UNDP 経由無償資金協力機材導入後のジェリコ処分場運営の強化 (2) 処分場の設計・建設についての JCspd JJRRV 職員に対する研修 (3) JJRRV における新処分場建設の調査	
5. 新しい廃棄物収集システム (1) JJRRV における新収集・運搬システムの導入 (2) 新システムに係るタイム及びモーション調査 (3) 新システム導入後の新規収集ルート設定	
6. 広報・意識啓発 (1) JJRRV における ISWM についての意識啓発 (2) 発生源における分別についての意識啓発 (3) 廃棄物の発生抑制に対する意識啓発 (4) ニュースレター及びリーフレットの作成 (5) メディア教材の作成 (6) セミナー/ワークショップの開催	フェーズ 1 で実施しているが、継続する必要がある。
7. モデル化 上記活動を実施することによるモデル化	

