

Summary

I. Outline of the Project	
Country: The Palestinian National Authority	Project title: The Project for Capacity Development on Solid Waste Management in Jericho and Jordan River Rift Valley (JJRRV)
Issue / Sector: Urban Sanitation / Public Utilities	Cooperation scheme: Technical Cooperation Project
Division in charge: Environmental Management Division II, Environmental Management Group Global Environment Department, JICA HQ	Total cost: about 395 million yen
Period of Cooperation	R/D: September 2005 to August 2008 Extension: September 2008 to February 2010
	Partner Country's Implementing Organization: Ministry of Local Government, Joint Councils for Services, Planning and Development for Solid Waste Management in Jericho and the Jordan River Rift Valley(JCspd JJRRV) Supporting Organization in Japan: Yachiyo Engineering Co., Ltd.
Related Cooperation: Project for Improvement in Local Governance System in Palestine (JICA) ; Grant aid by the Government of Japan (provision of waste collection vehicles and equipment) through UNDP and EU/Palestine Action Plan released in July 2006.	
1. Background of the Project	
<p>Under acrimonious political and economical situation, Palestine that consists of the West Bank and the Gaza, has 3.8 million population in total. The Palestinian National Authority (PNA) has 16 Governorates and 500 municipalities/village councils. However, due to Israel occupation, PNA governs only 40% of the territory of the West Bank and the Gaza, where Palestinian communities exist. Israel dominates the major parts of territory, and runs all of the departure/immigration control and the land development.</p> <p>Under such political situations, many local government units (LGUs) of PNA have faced great difficulties to provide public services such as solid waste collection, due to the 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 open-air burning. Those mal practices pose a direct risk to public health and environment in the West Bank. Palestinian Local Authorities Law (1997) allows small-scale LGUs to organize Joint Councils for services, planning and development (JCspd) for providing public services. Small-scale LGUs who could not do by themselves established JCspd for Solid Waste Management (SWM) and some JCspd started the SWM services.</p> <p>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 JCspd as a good practice in</p>	

Nablus and Jericho. An implementation study team was 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 (JJRRV)" (hereinafter referred to as "the Project") and signed a Record of Discussion (R/D). In June 2008, the terminal evaluation for the Project was conducted. According to the evaluation result, it was recommended to extend the project period to achieve the project purpose 1 "Sustainable and sanitary system of SWM is introduced in JJRRV" since the project activities including the action plan for collection and transportation system were not implemented as scheduled because of delay in distribution of the grant equipment provided by Government of Japan through UNDP. Also, financial basis of JCspd JJRRV was needed to be strengthened. As a result, the project period was extended for 1.5 years until February 2010.

2. Project Overview

(1) 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

(2) 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.

(3) 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.

(4) Inputs (as of this final evaluation)

Japanese side:

Total cost:	approximately JPY 395 million
Short term expert:	25 persons (47.83 M/M)
No. of trainees received in Japan:	22 persons (Besides, 9 persons participated in the study tour in Jordan)
Provision of equipment:	Maintenance tools and spare parts, material for dumping site improvement, and a patrol vehicle: equivalent to approximately JPY 72 million

Local cost:	Approximately JPY 142 million
Palestinian side:	
Counterpart:	6 persons
Provision of land and facility:	Office space for the Project, equipment for SWM
II. Evaluation Team	
Members of Evaluation Team	<p>The Japanese Side</p> <p>(1) Dr. Mitsuo Yoshida (Leader) Senior Advisor (Water, Waste and Environment), Institute for International Cooperation, JICA</p> <p>(2) Ms. Eriko Tamura (Cooperation Planning) Assistant Director, Global Environment Department, JICA</p> <p>(3) Mr. Issei Aoki (Cooperation Planning) Assistant Director, Global Environment Department, JICA</p> <p>(4) Mr. Teruki Takahashi (Evaluation Analysis) Project Consultant, PADECO Co., Ltd.</p> <p>The Palestinian Side</p> <p>(1) Mr. Walid Halaiqa (Leader) General Director, Department of Joint Council for Services, Planning and Development Ministry of Local Government</p> <p>(2) Mr. Abdel-Jabbar Abu-Halawa Executive Director, Joint Service Council for Solid Waste Management in Jericho and Jordan River Rift Valley</p>
Period of Evaluation : January 8, 2010～January 20, 2010	Type of Evaluation : Terminal Evaluation
III. Results of Evaluation	
1. Achievements	
(1) Project Purposes	
Project Purpose 1:	The Project Purpose 1 is achieved by improving waste collection and transportation system, realizing sanitary landfill site, and practicing segregated collection and disposal of medical waste. Also, financial basis of the JCspd JJRRV, implementing organization to provide SWM service, has been improved with raised collection rate of SWM collection fee during the extension period of the Project. According to the social survey in the Terminal Evaluation, 80% of residents satisfy the level of SWM service.
Project Purpose 2:	The Project Purpose 2 is being achieved by sharing experience of the JCspd JJRRV as a model case for improvement on SWM among other local authorities through the national

seminar on SWM, JCC meetings, the 11 JCspd Workshops, Follow-up Committee, and other seminars and workshops. There are several JCspd to utilize the experience of JCspd JJRRV for their activities.

(2) Outputs

Output 1: Organization for project operation was established. 13 JCC meetings, 8 General Body (GB) meetings, 19 Administrative Body (AB) meetings have been held regularly. The Output 1 was achieved.

Output 2: Output 2 has been generally achieved, as a result of making job descriptions of JCspd staff, establishing financing and accounting system by computer and providing maintenance equipments for SWM machineries, since the system for SWM in JJRRV is being established. However there remain significant concerns in financial sustainability of JCspd JJRRV. The fee collection rate has been remarkably increased from 63% in 2006 to 93% in 2009 by the revenue enhancement scheme implemented after the last terminal evaluation

Output 3: Output 3 has been achieved since several studies (survey on the volume and quality of solid waste, survey on conditions of waste collection and transportation, survey on conditions of final disposal site, and survey on conditions of medical waste management) were carried out, and “Seminar on Solid Waste Survey Result” was held in December 2006.

Output 4: 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” in 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 has been effectively implemented. Since the arrival of new compactors granted by the Government of Japan through UNDP in October and November 2009, new collection and transportation system has been started in the extension period of the Project.

Output 6: Output 6 has been achieved, since planned all activities were successfully conducted. The Project held the national seminar on SWM in August 2008. In the national seminar, JCspd in West Bank, Municipalities, MoLG, donors and other relating authorities on SWM were participated where the experiences of JCspd JJRRV was disseminated. Moreover, five times of the 11 JCspd Workshops, and twice of other workshops have been held and the experiences of JCspd JJRRV have been disseminated to the 11 JCspd in the West Bank.

Output 7: Output 7 has been achieved since “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. Consequently a study tour on SWM in Jordan was conducted in September 2006.

2. Summary of Evaluation Results

(1) Relevance

The Evaluation 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 (1997) 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.

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”. The Project is also correspond with priority issues in JICA's assistance such as “Capacity Development in Public Administration” and “Democratization” .

(2) Effectiveness

The Team evaluates the Project Purpose 1 are achieved based on the integrated fulfillment of Output 1 through Output 5. The Team also evaluates the Project Purpose 2 are achieved based on the integrated fulfillment of Output 6 and Output 7. Therefore the Effectiveness of the Project is high.

(3) Efficiency

Despite some difficulties due to the political climates and severe financial status of the JCspd JJRRV, the efforts made by both the Palestinian side and the Japanese experts rendered the Project being implemented efficiently at large.

The Project was essentially designed in collaboration with the Japanese grant aid project for achieving the Project Purpose 1 with introducing the new collection and transportation system. However, the implementation of the new collection and transportation system was rescheduled by the delay in the delivery of the equipment due to shift in the internal situation and change in procurement procedures of the equipment, which resulted in unexpected extension of the Project term. Therefore, the Team evaluate that the Efficiency is moderate.

(4) Impact

It is possible that the experiences of JCspd JJRRV will be reflected in national plan on SWM being made by National Committee on Solid Waste Management and Wastewater. Therefore, Overall Goal 1 can be achieved. Besides, the conference is being established as a result of the workshop (inviting 10 JCspd and organizations

concerned in the West Bank) organized by JCspd JJRRV, which is regarded as platform for sharing experiences of SWM. Therefore, preconditions are being met for achieving Overall Goal 2.

Negative impacts caused by the Project were not found, so the Evaluation Team concluded that the Project had significant positive impacts. The confirmed positive impacts are as follows;

- Activeness of the JCspd JJRRV and other JCspd 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 and it is probable that Overall Goal 1 will be accomplished.
- The directors of 11 JCspd have held 5 meetings for establishing new platform for exchanging various experiences and result of studies on SWMs. Also there are some cases that the experiences of JCspd JJRRV are utilized in other JCspd such as accounting system and it is probable that Overall Goal 2 will be accomplished.
- The Project improved and enlarged Jericho's open dump site as a first case of small scale sanitary landfill site in the West Bank. This is currently receiving numbers of visitors including practitioners from other LGUs/JCspd 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 Evaluation Team identified that the Project was raising the awareness among the people through 204 community meetings, 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 JCspd JJRRV, which were barely functional in public services, joining JCspd JJRRV after its inception of SWM service was a significant opportunity to start/revitalize their public services to the local communities.

(5) Sustainability

The Evaluation Team concluded that JCspd JJRRV has enough sustainability in legal and technical aspects. However there is still a room for improvement in sustainability of JCspd JJRRV especially from financial and organizational aspects.

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

- **Organizational aspect:** Most of its staff members are rather seconded from the Jericho Municipality, this means that they are not the permanent staff of 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.
- **Financial aspect:** The service fee collection ratio has been improved from 63% in 2006 to 93% in 2009. The member LGUs varies in wide range and it is causing a constant financial predicament to JCspd JJRRV. Subsidy by MoLG is also unstable. The financial situation is not from affluent enough to invest on additional human resources and machineries which would promise its sustainability in a fundamental sense.

3. Factors that promoted realization of effects

(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.
- Willingness-to-pay survey contributed for formulating effective fee collection strategy.
- Introduction of accounting system enables JCspd JJRRV to calculate the cost, which helps to formulate the budget projection.

(2) Factors concerning the Implementation Process

- Most staff of JCspd JJRRV are seconded from Jericho Municipality with relative skills and experiences of SWM, this contributed to the smooth operation of SWM service by JCspd JJRRV in an early stage.
- Exchange of experience among JCspd/JSC 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 JCspd/JSC.
- Introduction of social survey contributes to implement the Project with concerning the residents who are beneficiaries of the Project. Also it enables to review the effects of the Project objectively.
- Introduction of prepaid meters and collecting waste collection fee together with electric charge contributed to improve the fee collection rate.

4. Factors that impeded realization of effects

(1) Factors Concerning to Planning

- SWM is often not highly prioritized in the region, especially for farmers in remote LGUs. Therefore, 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.
- 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.

(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. As a result, project period has been extended for 1.5 years.
- Dissemination of information and experience of the Project to other JCspd in Palestine has not been efficient enough due to a lack of capacity and leadership of MoLG.

5. Conclusion

All the Outputs from 1 through 7 and Project Purposes have been achieved. On the basis of the Five Evaluation Criteria, Relevancy, Effectiveness and Impact of the Project have reached quite satisfactory level, and the Team discovered Efficiency and Sustainability is moderate.

JCspd JJRRV could successfully implement SWM service in the area, and people living in the area generally satisfy with the quality of service, which was identified in the social survey implemented in December 2009 where general satisfaction rate reached 90%. Sustainability has also been improved since the last terminal evaluation and the fee collection rate has been improved through the revenue enhancement schemes implemented in the extended term. Though the total fee collection rate has been improved, that of LGUs varies in wide range. Thus there still remains a room to improve the financial sustainability. Also organizational capacity has been enhanced during the course of the Project. However, the financial and organizational capacities are still fragile because limited human resource and restriction of external environment. Most of its staff members are seconded from the Jericho Municipality. 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 Team highly evaluated remarkable elevation of capacity in member LGUs and main C/Ps, particularly in terms of their technical capability, ownership, self-motivation, and eventually capacity development in SWM has been accomplished.

6. Recommendations

(1) Actions to be taken by JCspd JJRRV

(1)-1 Continuation of awareness raising

Awareness for proper SWM and satisfaction level of people has been raised during the Project period.

However, judging from the fact that litters are observed around containers and street side, there are still some rooms for improvement of SWM. Continuous public awareness raising activities are necessary to deepen understanding of the importance of SWM and activities of JCspd JJRRV. Continuous awareness raising activities and allocation of necessary budget and staff in charge of these activities are future challenges. Public awareness on SWM is the most important issue especially when JCspd JJRRV revises the service fee in future.

(1)-2 Enhancement of service fee collection in some LGUs

The fee collection rate is still not high in some LGUs. JCspd JJRRV had taken some measures to increase the fee collection rate in some LGUs including making pressure on the LGUs through stopping the service, making agreements with some LGUs to start paying their dues from 2010 with some part from previous years, namely Bardallah and Marj Ghazal. Also the JCspd JJRRV is preparing to have some part time fee collectors in the LGU areas when collection fee is low. JCspd JJRRV is required to take necessary actions such as introduction of joint collection system with other public service charges in order to enhance SWM service fee collection rate.

(1)-3 SWM service for Jericho Municipality

According to the result of social survey, satisfaction level of the residents in Jericho Municipality is relatively low compared to that in other LGUs. SWM services between JCspd JJRRV and Jericho Municipality including street conservancy work and primary collection service should be properly coordinated in order to raise the satisfaction level of residents in Jericho Municipality. Since Jericho Municipality largely contributes the budget of JCspd JJRRV, improvement of such service in Jericho Municipality should be promoted. Increase of service fee in Jericho Municipality also should be considered at the same time in order to increase the revenue.

(1)-4 Introduction of periodical social survey

The social survey is an effective measure to understand the needs of beneficiaries of SWM service and develop appropriate strategy for SWM service by JCspd JJRRV. The social survey is expected to be implemented periodically.

(1)-5 Continuation of human resource development in JCspd JJRRV

During the Project period, series of training and human resource development activities have been

implemented. JCspd JJRRV is recommended to continuously develop the activities after the Project completion especially to enhance administrative staff of JCspd JJRRV for sustainable operation.

(2) Actions to be taken by MoLG

(2)-1 Continuous allocation of subsidies

The subsidies of SWM service for JCspd JJRRV should be allocated continuously and steadily.

(2)-2 Continuous monitoring of JCspd JJRRV and diffusion of its experience for other JCspd.

Five times of the 11 JCspd workshops were organized during the Project period. DJCspd is expected to allocate necessary budget in order to organize the 11 JCspd workshops continuously after the Project completion. Also DJCspd should be responsible to monitor and supervise the activities of JCspd JJRRV for sustaining the SWM service. Strengthening the capacity of the DJCspd at MoLG is necessary in order to enable it to improve the condition and cooperation between the solid waste management joint councils and to carry out activities to improve solid waste reduction and recycling and also to carry out awareness campaign that enhance sustainability of SWM system.

(3) Development plan for future waste disposal in JJRRV

Jericho dumping site is presumed to reach its limit of capacity in the summer of 2011 according to the result of Waste Amount and Quality Survey conducted in 2009. It is urgent for JCspd JJRRV to make a strategy and take actions for developing new waste disposal system. In the course of formulation of the strategy, introduction of intermediate treatment facilities for reducing the waste volume and alternative measure for present dumping site such as construction of transfer station should be considered along with the planning of financial strategy. It is emphasized that proper SWM cannot be realized without proper disposal system.

(4) Enhancement of service fee collection

MoLG has to take more intervention to assure the commitment of LGUs to pay their collection fee.

7. Lessons Learned

(1) Introduction of proper finance and accounting system

Development of proper finance and accounting system is very effective in order to impart financial basis for the activities

(2) Participation of beneficiary

More than 200 community meetings are held during the Project, and this contributes to deepen understanding of the residents for SWM service and importance of activities of JCspd JJRRV. Creation of social environment for supporting SWM implementation agency is essential for securing sustainability.

(3) Application of social survey

Social survey is objective and effective measure to understand the needs of beneficiaries, to assess the outcome and to evaluate the impact of projects.