

## Summary

<b>I. Outline of the Project</b>		
<b>Country:</b> The Palestinian National Authority		<b>Project title:</b> The Project for Capacity Development on Solid Waste Management in Jericho and Jordan River Rift Valley (JJRRV)
<b>Issue / Sector:</b> Urban Sanitation / Public Utilities		<b>Cooperation scheme:</b> Technical Cooperation Project
<b>Division in charge:</b> Environmental Management Division II, Environmental Management Group Global Environment Department, JICA HQ		<b>Total cost:</b> about 340 million yen
<b>Period of Cooperation</b>	September 2005 to August 2008	<b>Partner Country's Implementing Organization:</b> 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)
	* The period of cooperation is extended to February 2010, based on the result of this terminal evaluation study.	
		<b>Supporting Organization in Japan:</b> Yachiyo Engineering Co., Ltd.
<b>Related Cooperation:</b> 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.		
<b>1. Background of the Project</b>		
<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 JCspds 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).

## 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:

Short term expert:	21 persons (39.33 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 71 million
Local cost:	Approximately JPY 126 million

#### Palestinian side:

Counterpart:	7 persons
Provision of land and facility:	Office space for the Project, equipment for SWM

## II. Evaluation Team

<b>Members of</b>	(1) Dr. YOSHIDA Mitsuo (Leader)
<b>Evaluation</b>	Senior Advisor (Water, Waste and Environment), Institute for International Cooperation,

<b>Team</b>	<p>JICA</p> <p>(2) Mr. MIZUTANI Tetsuya (Donor Coordination) Project Formulation Advisor, JICA Palestine Office</p> <p>(3) Mr. Abed Al-naser Makky Coordinator for JICA project office in Jericho</p> <p>(4) Ms. TAMURA Eriko (Cooperation Planning) Senior Program Officer, Global Environment Department, JICA</p> <p>(5) Mr. TESHIMA Naoyuki (Evaluation Analysis) Chief Economist/Director, Construction Project Consultants, Inc.</p>
<b>Period of Evaluation:</b> June 10, 2008~June 25, 2008	<b>Type of Evaluation:</b> Terminal Evaluation
<b>III. Results of Evaluation</b>	
<p><b>1. Achievements</b></p> <p><b>(1) Project Purposes</b></p> <p>Project Purpose 1: The sanitary system of SWM in JJRRV was established concerning soft components. However, in spite of great efforts made by JCspd JJRRV and the Japanese experts team (JET), the sustainability of JCspd JJRRV is not completely achieved due to acrimonious political and economical situation, and delay in the introduction of new collection and transportation system. The Evaluation Team concludes Project Purpose 1 is not completely achieved.</p> <p>Project Purpose 2: The Project Purpose 2 is being achieved by sharing experience of JCspd JJRRV in the occasions such as JCC meetings, Palestinian Council for SWM (PCSWM) meetings other seminars and workshops.</p> <p><b>(2) Outputs</b></p> <p>Output 1: Organization for project operation was established. 9 JCC meetings, 7 General Body (GB) meetings, 14 Administrative Body (AB) meetings have been held regularly. The Output 1 was achieved.</p> <p>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. Despite the high participation rate in the related assemblies by JCspd JJRRV shows certain level of cooperation by member LGUs, the fee collection rates are not necessarily high in most of the member LGUs.</p> <p>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.</p>	

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 implemented and positive effects such as improvement of Jerico dumping site and decrease of illegal dumping have been observed. However, one of the Action Plan items on "(2) 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. Therefore, the Evaluation Team evaluates that JCspd JJRRV and JET did their best for establishing most appropriate collection and transportation system without new equipment, but Output 5 has not been achieved completely..

Output 6: 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: 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 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”.

Some LGUs delivered waste collection service before the implementation of the Project, however, the SWM system was not established appropriately, which caused some problems such as illegal dumping. Besides, there was no framework among LGUs and JCspds for sharing experiences regarding SWM. Therefore, it is considered as an appropriate approach that the Project exhibited good practice of improvement regarding SWM by JCspd JJRRV, and the experiences of JCspd JJRRV were shared with other LGUs and JCspds through seminars etc.

Considering consistency with relevant Palestinian and Japanese policies and appropriateness of the approach for technical cooperation, the Relevance of the Project is high.

### **(2) Effectiveness**

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

### **(3) Efficiency**

Despite some difficulties due to the political climates and delay of equipment provision, the efforts made by both JCspd JJRRV and JET 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 JCspd JJRRV to conduct more frequent monitoring activities in the service target areas.

### **(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 JCspds 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 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 directors of 11 JCspds/JCs will hold a meeting for establishing new platform for exchanging various experiences and result of studies on SWMs.
- 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 Evaluation 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 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. Regarding financial aspect, a cost benefit analysis needed from geographical and economic viewpoint.

- **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 JET 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 is 61% in 2007. The member LGUs varies in wide range, and some are close to nil. (due to the suspension of the services). This is causing a constant financial predicament to 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.
- **Economic aspect:** The current formation of 17 membership LGUs, which are geographically situated far and wide in the entire Jordan Valley region, needs to be examined on the basis of cost-benefit

performance from economic scale and PNA's policy.

### **3. Factors that promoted realization of effects**

#### **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.

#### **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 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.

### **4. Factors that impeded realization of effects**

#### **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.

#### **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. Conclusion**

The 17 member LGUs and main C/Ps, particularly in terms of their technical capacity, ownership, and self-motivation, was much enhanced, and capacity development in SWM has been achieved to some extent. However, on the basis of the Five Evaluation Criteria, Relevance and Efficiency of the Project reached quite satisfactory level, and the Evaluation Team discovered various positive Impacts in the course of the Project, whereas Effectiveness is not very remarkable and Sustainability still remains insufficient. In addition to that, on the basis of indicators regarding the Project, 2 out of 7 Outputs (Output2 and Output5) have not been achieved sufficiently. As a result of that, the Evaluation Team concludes that Project Purpose has not been fully achieved. In particular, the Evaluation 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.

Considering such situations, the period of the Project will be extended for another one and half years , in order that Project Purpose1 can be achieved.

## **6. Recommendations**

During the extended period, the activities with equipment through UNDP's grant aid project will be implemented, so that Project Purpose 1 may be achieved. Recommendations for the following activities are given below.

### **(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 JCspd JJRRV. The nature of the capacity development is a long term process, and from this perspective, the Project still has some rooms to be developed, thus the Evaluation Team concludes that seamless and continuous inputs by JICA to some aspects of JCspd JJRRV are still vital at least for the coming years.

### **(2) Activities for Securing Sustainability**

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 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 Evaluation Team recommends to examine the economic feasibility on the basis of the scale merit of JCspd JJRRV with its current formation of 17 membership LGUs, which are situated far and wide in entire JJRRV region over three different governorates, and PNA's policy.



### (3) Dissemination of the Experiences of JCspd JJRRV

The Evaluation 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 Evaluation 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.

## **7. 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 Evaluation Team concludes that these changes are not 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 Evaluation 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 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 Evaluation Team conceived these areas of tasks should be dealt in the long run.

### (3) Capacity Development

Finally, the Evaluation Team concludes that the biggest achievement in this Project is the progress in the capacity development of the stakeholders concerning SWM, such as JCspd JJRRV. The Palestinian side established new organization and system, acquired techniques, and developed region-wide SWM system though it remains vulnerable. It is also worthwhile mentioning that going through such difficulties by working together on the ground level induced the viable capacity development, in spite of unstable political and

economic situation.

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.

#### **8. The Situation of Follow-up**

As mentioned above, the period of the Project will be extended for another one and half years, and JET will be dispatched continuously. During the extended period, the Project will put focus on two points as follows;

- 1) It is necessary to give technical guidances and advices when new equipment through grant aid project is introduced, after confirming the timing of delivery of equipment. (According to UNDP, equipment will be introduced by October 2009). This activity was planned from the beginning of the Project.
- 2) Before the delivery of the new equipment, JET continuously supports the Palestinian side by monitoring and giving advice to the activity by the Palestinian side in order to secure the sustainability. Further dissemination of JCspd JJRRV's experience using the opportunities such as PCSWM is also implemented to achieve Overall Goal 2