

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Palestine office: December, 2013

Country Name	The Project for Capacity Development on Solid Waste Management in Jericho and Jordan River Rift Valley in Palestine
Palestinian Authority	

I. Project Outline

Background	<p>Palestine consists of the West Bank and the Gaza. Under the Palestinian Authority, as a central government, there were 16 Governorates (corresponds to prefecture) and 483 Local Government Units (LGU). Since most of LGUs were not able to provide sufficient solid waste management (SWM) service due to the budget constraint, there have been concerns about negative impacts of inadequate waste management on health and environment. On the other hand, the Palestinian Local Authorities Law (1997) allows organize a Joint Services Council (JSC)¹ as a confederation of small scale LGUs in order to provision of public services. In terms of SWM, the joint services such as waste disposal by confederation of LGUs were started. Under the situation, the Palestinian Authority requested Japan' technical cooperation to establish a model of SWM based on JSC in the region of Jericho and Jordan River Rift Valley (JJRRV).</p>				
Objectives of the Project	<p>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 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. 3. Assumed steps for achieving the project goals²: The project establishes organization as a main body (JSC) for SWM in JJRRV, implements an action plan for improvement of SWM (waste collection and transport, rehabilitation of disposal site, etc.), organizes workshops to increase public awareness of SWM. By establishing a model of SWM system and sharing experiences of the model with other LGUs, the project aims at elaboration of a basic policy on SWM at national level as well as dissemination of the SWM model based on JSC.</p>				
Project Information	<p>1. Project site: Jericho and Jordan Rift River Valley 2. Main activities: development of organization for SWM, trainings for JSC staff, development of manuals for SWM, improvement of waste collection and transport, improvement of disposal site, workshop for the citizens, etc. 3. Inputs:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> <p>Japanese Side</p> <p>1) Experts: 0 for Long term, 10 for Short term 2) Trainees received: 22 persons 3) Third country training (Jordan): 9 persons 4) Equipment: expansion of Jericho disposal site, repair of SWM equipment, spare parts, etc.</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Palestine Side</p> <p>1) Staff allocated: 6 persons 2) Land and facilities: facility and equipment of JSC.</p> </td> </tr> </table>			<p>Japanese Side</p> <p>1) Experts: 0 for Long term, 10 for Short term 2) Trainees received: 22 persons 3) Third country training (Jordan): 9 persons 4) Equipment: expansion of Jericho disposal site, repair of SWM equipment, spare parts, etc.</p>	<p>Palestine Side</p> <p>1) Staff allocated: 6 persons 2) Land and facilities: facility and equipment of JSC.</p>
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Project Period	September, 2005 – August, 2008 (Extension) September, 2008 – February, 2010	Project Cost	395 million yen		
Implementing Agency	Ministry of Local Government (MoLG), Joint Council for Services Planning and Development for Solid Waste Management in Jericho and the Jordan River Rift Valley ³ (JSC JJRRV)				
Cooperation Agency in Japan	Yachiyo Engineering Co., Ltd.				
Related Projects	<p>Japan's cooperation: (Technical Cooperation: TA, Grant Aid: GA) Improvement in Local Governance System in Palestine (TC, 2005-2010); Follow-up Cooperation (2008-2011); Improvement in Local Governance System in Palestine Phase II (TC, 2010-2014); Provision of Waste Collection Equipment via UNDP (GA, 2006-2009); The Project for Improvement of Solid Waste Management in the West Bank (GA, 2012-2015) Other donors' cooperation: Solid Waste and Environment Management Project (WB, 2000-2009); South West Bank Solid Waste Management Project (WB, 2009-2014); Solid Waste Management Program (GIZ/KfW, 2005-2012, 2011-)</p>				

II. Result of the Evaluation

1 Relevance
<p>This project has been highly consistent with the Palestine's development policy, such as "establishment of waste management system" specified under "the Palestine Environment Strategy (1999)" and "the Palestine Reform and Development Plan (2008-2010)", and development needs to implement adequate collection and final disposal of wastes, as well as Japan's ODA policy to support for nation-building and reform including improvement of administrative capacity and</p>

¹ During the project period, the name "the Joint Councils for Services, Planning and Development (JCspd)" was sometimes used instead of the Joint Service Councils.

² Reviewed at the time of the ex-post evaluation.

³ The JSC JJRRV is composed of 17 LGUs including the city of Jericho and 16 LGUs in Jordan River Rift Valley.

improvement of basic infrastructure including waste management. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The Project focuses on introduction of sustainable and sanitary waste management (WM) system in JJRRV and sharing experiences among related organizations and the Project Purpose was mostly achieved. At the time of project completion, regular waste collection service started in 16 out of 17 LGUs in JJRRV and use of the existing four illegal disposal sites were suspended. Thus, it was considered that illegal dumps were reduced. At the time of ex-post evaluation, the regular waste collection service has been continued in 13 LGUs while the service has been suspending in 3 LGUs where the tariff collection rate decreased. The volume of illegal dumps⁴ at the time of ex-post evaluation is not able to be measured due to no data of total solid waste production. However, the fact that the decrease in the number of illegal dump sites and the increase in the collected and disposed volume of wastes at the Jericho disposal site indicates that the volume of illegal dumps have been reducing in JJRRV. The political instability since March 2006 induced financial difficulties in Palestine. As a result, the medical solid wastes were landfilled at the special site in the Jericho disposal site at the time of project completion due to the lack of budget to cover fuel cost for incineration disposal at the New Jericho Hospital. At the time of ex-post evaluation, the situation has been continued despite that incineration disposal for a part of medical disposal has been started. On the other hand, JSC JJRRV established its organizational structure, including clarified division of responsibilities, introduction of accounting system, and equipment maintenance system, through the project implementation. In particular, improvement of tariff collection method contributed to financial surplus since 2009 and to sustain good financial basis despite concern about financial deficit. In addition, during the project implementation, the waste disposal system introduced by the project was shared as a model of regional WM system based on JSC through a national level seminar on WM system, the West Bank 11 JSC meetings and so on.



The transshipment base before transporting to the final disposal site



Transporting containers of collected waste to the final disposal site

As for the overall goal, as a result that the approach of the WM system based on JSC has been reflected in “the National Waste Management Strategy (2010-2014)”, JSCs providing the WM service were established in all the governorates. Furthermore, dissemination of the model has been promoted through seminars organized by the JICA follow-up cooperation and supports by other donors. Consequently, some components of the model introduced by the project⁵, such as operation and maintenance system of facilities and equipment, human resource management, as well as financial accounting system, have been practiced by 7 out of the 11 JSC in JJRRV. Therefore, it can be judged that the overall goal has been partially achieved. In addition, other positive impacts are observed. Illegal dumps have been decreased in the areas delivered SWM service based on JSC, such as Tulkarem and Nablus, by closing many illegal disposal sites and by adequate WM at the adequate final disposal site. The reduction of illegal dumps contributed to improvement of hygienic environment of surrounding areas. According to the interviews with residents in rural area, bad odor and hygienic environment have been improved and diseases of children have been decreased. Also, the project brought about a social impact of awareness building on coproduction by administrative officers and the residents as well as payment for public services through the project activities. On the other hand, a delay of construction of new regional final disposal site in Ramallah resulted in continuous operation of the Jericho disposal site. Since the capacity of the Jericho disposal site mostly reaches the limit, air pollution has been induced by fires of wastes at the surface of the disposal site. The problem of bad odor has been also caused by undeveloped swage system despite receiving swage and waste of livestock. Those problems are expected to be solved by JICA's grant aid projects: the planned project of expansion of the Jericho disposal site and the on-going project for construction of sewage treatment system to be completed in 2015.

Therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) 1.Introduction of sustainable and sanitary waste management system in JJRRV	Waste collection and transportation system is improved so that illegal dumping is reduced.	<u>Project completion:</u> Achieved. 16 LGUs covered by regular collection service. 4 illegal dumping sites in JJRRV were closed; <u>Ex-post evaluation:</u> The increase in the estimated waste volume collected by the JSC from 11,586 tons in 2010 to 14,025 tons in 2012 and the waste volume disposed at the Jericho disposal site from 10,985 tons to 13,305 tons.
2.Sharing of good practices of waste management	Segregated collection and proper treatment of medical waste is put into practice.	<u>Project completion:</u> Partially achieved. Disposed at the specific section of the Jericho disposal site because incineration at the New Jericho Hospital was not implemented due to the financial difficulty; <u>Ex-post evaluation:</u> Continuously disposed at the specific section of the Jericho disposal site. Some medical equipment, including medicines, has been incinerated at New Jericho Hospital.
	Controlled dumping site which is suited to the situation of JJRRV is realized.	<u>Project completion:</u> Achieved. Implemented disposal at the improved Jericho disposal site; <u>Ex-post evaluation:</u> Possible to dispose waste at the Jericho disposal site by expansion of the capacity from 2.5m to 4m by March 2014 despite the termination of actual capacity of the site.
	The organization to provide SWM service improves its	<u>Project completion:</u> Achieved. Positive financial balance of JSC JJRRV since 2009; <u>Ex-post evaluation:</u> Sustaining positive financial balance of JSC.

⁴ The volume of illegal dumps is estimated by difference between the total solid waste production and the total solid waste disposed at final disposal sites.

⁵ Utilization of the management manuals and public awareness activities have been practiced by 4 JSC.

	financial base.	
	Experiences in JJRRV for improvement on SWM are well shared among other local authorities in PNA.	<u>Project completion:</u> Achieved. Shared experiences of the project with LGUs, related ministries, and other JSCs through the seminars and workshops.
(Overall Goal) 1. Establishment of basic policy and concrete action plans on integrated SWM for LGUs	Policy paper on SWM of the JSC	<u>Ex-post evaluation:</u> Achieved. Reflected a model of SWM based on JSC in the national strategy.
	Concrete action plans (such as medium term plan) based on policy above.	<u>Ex-post evaluation:</u> Achieved. Elaborated an action plan.
2. Dissemination of a effective model of SWM nationwide	Holding seminars and workshops regularly in JJRRV	<u>Ex-post evaluation:</u> Achieved. Implemented seminars and trainings for dissemination of the model as a follow-up cooperation by JICA.
	Realization of SWM modeling JJRRV among local authorities in PNA.	<u>Ex-post evaluation:</u> Achieved. Implemented components of the model, including management of facility and equipment, human resource and financial accounting system, by 7 JSC.

Source : Terminal Evaluation Report, Project Completion Report, and Interviews with the Counterparts

3 Efficiency

While the inputs were appropriate for producing the outputs of the project, the project period and the project cost were exceeded the plan (ratio against the plan: 150%, 146%) due to the delay of procurement of necessary equipment (waste collection vehicles and equipment) and the necessity of extension of the activities by the Japanese experts. The procurement was implemented by UNDP because the political turmoil in Palestine made difficulty for JICA to directly procure them. Therefore, efficiency of this project is fair.

4 Sustainability

In the policy aspect, the SWM model introduced by the Project was reflected in the National Waste Management Strategy (2010-2014), setting out development of regional waste collection and final disposal based on JSC. The organizational arrangement of operation and maintenance of disposal site and collection vehicles, waste collection service for 13 LGUs, final disposal at the Jericho disposal site has been sustaining by JSC JJRRV. The number of staff of JSC JJRRV increased to 38 staff. In addition, LGUs covered by the collection service have been continuing tariff collection, primary waste collection, monitoring of secondary collection and public awareness activities. There is a certain mechanism to disseminate the SWM model through the national committee for WM and the number of staff has been gradually increasing. However, the organizational structure for dissemination of the SWM model has not been sufficient due to the lack of budget and staff. In addition, the 11 JSCs in the West Bank committee has not been functioning since the completion of the follow-up cooperation by JICA, while the information and experience have been informally shared among the directors of each JSC despite the experience sharing of the improved SWM by the project through the 11 JSC meetings. From the technical aspect, in JSC JJRRV, the manuals for SWM and operation of final disposal site have been utilized and the knowledge and skills acquired through the project activities have been sustaining. However, those technical manuals have not been necessarily utilized by other JSCs. The frequent changes of technical staff induced by the suppressed salary required technical trainings for newly recruited technical staff but the trainings have been delivered by the donors' supports including the follow-up cooperation by JICA (2010) and the support by EU (since 2013) because of the limited budget of MoLG and the lack of human resource for training planning and technical training. As for the financial aspect, the overall collection rate of waste collection tariff, the main revenue source of JSC JJRRV, improved from 63% in 2008 to 93% in 2009. Since 2009, JSC JJRRV has maintaining the financial surplus. On the other hand, the collection rate of each LGU covered by JSC varied. The revenue from the City of Jericho with the collection rate of 100% compensated the loss from LGUs in rural areas where the population have lower affordability (the collection rate 36%-59%). The service for LGUs stopping payment of tariff has been suspended. The subsidy from MoLG was provided until 2010, but stopped in 2011 due to the fiscal difficulty. It is expected that the subsidy will be offered to active JSC, but the continuity is uncertain. Therefore, sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has mostly achieved the project purpose to introduce the sustainable and sanitary SWM based on JSC JJRRV. As a result, regular waste collection and sanitary waste disposal have been realized in JJRRV and the financially stable organizational structure for service provider of waste collection and disposal was established. Also, the overall goal has been mostly achieved as planned through reflection of the SWM model based JSC in the national waste management strategy. As for sustainability, although the SWM model is endorsed by the national strategy, the SWM model have not been sufficiently disseminated to other JSCs due to the limited budget of MoLG and the lack of staff. In addition, technical trainings for staff in charge of waste disposal have been depending on the donors' support. While the JSC JJRRV has been sustaining financial surplus generated by the stable tariff collection, the suspension of service for LGUs stopping payment has been partially contribution of financial stability. Therefore, some problems have been observed in the organizational, technical and financial aspects. As for efficiency, the delay of procurement of waste collection via UNDP resulted in the delay of the project activities which brought about the extension of the project period as well as the increase in the project cost.

In the light above, the evaluation of the project is satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- In order to disseminate the SWM model introduced by the project, it is recommended to allocate necessary staff and

budget in the JSC division of MoLG and to support other JSC with insufficient capacity through utilization of the SWM manuals developed by the project. In addition, it is essential to reactivate the 11 JSC meeting which is a good opportunity for notification and guidance from the central government to the local administrative units.

Lessons learned for JICA:

- It is essential to consider methodologies for encouraging the residents of the service users to participate project activities as well as organizational structure of service provider incorporating participatory approach from the project formulation and planning stage. This project implemented large scale public awareness activities for the residents and establishment of organizational structure for regular waste collection service incorporating cleaning duty of the residents for garbage collection points. Such participatory approach made understanding of the residents and contributed to high collection rate of waste collection tariff. As a result, the stable financial basis of JSC enabled to stably continue the waste disposal service after the project completion. In addition, the approach of co-work involving the residents, which improved awareness of the residents for public services, is a key factor to ensure sustainability.
- Utilization of the follow-up cooperation is effective to disseminate project effects or to reflect them in national policy because those activities require continuous efforts even after the project completion. For this project, the follow-up cooperation contributed to promotion of spontaneous cooperation activities among implementing agencies of each administrative areas which provide SWM services. On the other hand, it is important to consider how to utilize such follow-up activities to support continuous efforts after the project completion at the planning stage.
- For the project aiming at establishment and dissemination of a model, it is preferable to incorporate activities for capacity development of agencies responsible for dissemination of the model, such as a line ministry of the central government. In the case of this project, the speed of dissemination has been slowed down after the completion of the follow-up cooperation due to the undeveloped institutional structure of MoLG for dissemination.