

Ex-post Evaluation of Japanese Technical Cooperation on the Capacity Upgrading Project for the National Solid Waste Management Support Center (CUP-NSWMSC) in Sri Lanka

External Evaluator: Mayumi Hamada

Foundation for Advanced Studies on International Development

0. Summary

This project was implemented to enhance capacity development of the National Solid Waste Management Support Center (hereafter, NSWMSC), which is at the central level, in terms of its planning and implementation for the sake of supporting solid waste management (hereafter, SWM) of local governments. Relevance is high, because improvement of SWM is consistent with the development needs and development policy of the country and with Japan's ODA policy. Effectiveness/Impact is fair, as the Outputs and the Project Purpose were mostly achieved by the project completion except for some indicators. Efficiency is high, since quality, quantity and timeliness of the inputs were appropriate in comparison with the achievement of the Outputs and the Project Purpose, except for allocation of human resources. Sustainability is fair, because sustainability from policy and financial aspects is high, whereas there is some concern about organizational and technical aspects. In light of the above, this project is evaluated to be satisfactory.

1. Project Description



(Project Location)



(Compost plant in Kuliyaipitiya UC¹)

¹ UC stands for Urban Council, which is one of the categories of Local Authorities in Sri Lanka. The LAs

1.1 Background

In Sri Lanka, the increased amount of waste which is not properly processed due to activated commercial activities and diversification of life brought about environmental degradation (water pollution, bad smell, etc.), deteriorating of the country's impression as a tourist destination. However, many of the problems were left unaddressed, and there were concerns that sanitary and environmental problems caused by wastes would worsen. Also, since the budget for SWM shared approximately 20% to 50% of the annual budget of the Local Authorities (hereafter, LAs), it was an urgent task to improve SWM and establish a sustainable management system for the sake of maintaining and improving the administrative service of the LAs.

In order to address the problem, Japan International Cooperation Agency (hereafter, JICA) conducted a development study called "The Study on Improvement of Solid Waste Management in Secondary Cities of Sri Lanka" from March 2002 to December 2003 upon request by the Sri Lankan government. This development study recommended that the government should establish a support system by the central government to the LAs, because it was technically difficult and inefficient for small-scale LAs and Provincial Council (hereafter, PC) without engineers with expertise in SWM to formulate SWM plans by themselves. More specifically, the study recommended the establishment of the NSWMSC to support LAs for improving SWM under the Ministry of Local Government and Provincial Council (hereafter, MLGPC), which is responsible for supervising LAs. Furthermore, for the same purpose, it also recommended strengthening the financial system for SWM by LAs. In July 2006, the Sri Lankan government established the NSWMSC as a part of the MLGPC, but there was a delay resulting from the necessity to cope with the damage caused by a tsunami in the Indian Ocean in 2004.

However, difficulty was anticipated for the MLGPC to provide high-quality support for SWM of the LAs, due to insufficient accumulation of knowledge and capacity on the solid waste management. Thus, the Sri Lankan government made an official request to Japan to implement a technical cooperation project for the sake of enhancing capacity of the NSWMSC in August 2004. Upon this request, JICA conducted a preliminary study in November 2006 and started to implement a technical cooperation project with the

in Sri Lanka are under supervision of Provincial Council, and categorized into three; Municipal Council (hereafter, MC), Urban Council (hereafter, UC) and Pradeshiya Sabha (hereafter, PS). MC corresponds with a city, UC with a town and PS with a village in Japan. Administrative service of MC is positioned as transferred authority from the Provincial Council, which is limited to general local environment such as hygiene, waste management, protection of regional environment, management of parks, etc. It is almost the same in UC and PS (Preliminary study report).

NSWMSC as the counterpart for a four-year period from March 2007, after signing the R/D².

1.2 Project Outline

Overall Goal		Local Authorities improve solid waste management.
Project Purpose		The NSWMSC acquires the capacity to support the SWM activities of LAs with close collaboration of relevant stakeholders so that the LAs can implement SWM activities in accordance with the National Strategy for Solid Waste Management.
Output(s)	Output 1	The NSWMSC establishes basic organizational structure with a mid-term implementation strategy.
	Output 2	The NSWMSC establishes an efficient mechanism for supporting LA's SWM by stakeholders.
	Output 3	Facilitation capacity of the NSWMSC for implementation of SWM Action Plans of LAs is acquired.
	Output 4	The NSWMSC provides necessary information so that the ministry can contribute national SWM policy and strategy.
Inputs		<p>Japanese Side:</p> <ol style="list-style-type: none"> 1. Experts <ul style="list-style-type: none"> • 12 experts for 6 fields (81.78M/M) 0 experts for Long Term 12 experts for Short Term 2. 1 trainee received (counterpart training in Japan) 3. 0 trainees for third-country training programs 4. Equipment: 6.1 million yen and 400 thousand Rs. (PC, software, printers, spring balance, 4WD car, etc.) 5. Local cost: amount unknown <p>Sri Lanka Side:</p> <ol style="list-style-type: none"> 1. 12 counterparts³ 2. Facilities and equipment (desks, chairs, cabinets, tables for OA equipment such as PC, etc.) 3. Facilities: facility for project office (in the MLGPC)

² R/D stands for Record of Discussions, which is a document which stipulates the framework of the project (name, period, objectives, main inputs, etc.). It is formulated when JICA starts its technical cooperation project to be agreed upon between Japan and its partner country. It is signed by both countries.

³ Although the number of counterparts varies depending on the year, the maximum number throughout the project is shown here. The minimum number is seven in 2010. For further details, see the part of Efficiency.

	4. Local cost: 357,509,428.67 Rs.
Total cost	336.8 million yen
Period of Cooperation	March 2007–February 2011
Implementing Agency	The Ministry of Local Government and Provincial Council (MLGPC), National Solid Waste Management Support Center (NSWMSC)
Cooperation Agency in Japan	Kokusai Kogyo Co., Ltd.
Related Projects	<ul style="list-style-type: none"> • “The Study on Improvement of Solid Waste Management in Secondary Cities of Sri Lanka” (March 2002–December 2003) (Development study, JICA) • “The Project for Development of Pollution Control and Environmental Restoration Technologies of Waste Landfill Sites Taking Into Account Geographical Characteristics in Sri Lanka ” (April 2011–March 2016) (Technical cooperation project, JICA) • “Local Government Infrastructure Improvement Project (LGIP)” (L/A signed in 2005) (ADB) • “The Environmental Remediation Programme (ERP)” (2010–2013) (UNOPS)

1.3 Outline of the Terminal Evaluation

1.3.1 Achievement of Project Purpose at the time of the Terminal Evaluation

The project purpose was assessed to have been mostly achieved. The reasons mentioned were enhanced capacity of the NSWMSC in terms of management and technique improved efficiency by strengthening collaboration with external stakeholders after the Mid-term Review, and increased budget of MLGPC. On the other hand, a concern was expressed on the staff allocation, especially on the shortage of technical staff of the NSWMSC.

1.3.2 Achievement of Overall Goal at the time of the Terminal Evaluation

The probability of achieving the overall goal was not clearly mentioned. It was positively evaluated that the project could increase the amount of compost plants in the country.

1.3.3 Recommendations at the Time of the Terminal Evaluation

The following recommendations were made at the Terminal Evaluation.

- (1) Personnel placement in the NSWMSC
- (2) Collaboration with Provincial Level for supporting LAs as well as collaboration among LAs (extension to other provinces and LAs)
- (3) Human resources development through training (technical staff at provincial and LA levels, environment, health, and community development staff)
- (4) Development of manuals for formulating Action Plans
- (5) Establishment and management of SWM systems in each LA
- (6) Raising public awareness and access to mass media
- (7) Continuation of steering committee

As for (1) among the above recommendations, the number of allocated staff increased after the project completion.

2. Outline of the Evaluation Study

2.1 External Evaluator

Mayumi Hamada, Foundation for Advanced Studies on International Development

2.2 Duration of the Evaluation Study

This ex-post evaluation survey was conducted as follows.

Duration of the Study: October 2013–October 2014

Duration of the Field Study: January 5, 2014–January 25, 2014

April 21, 2014–May 7, 2014

3. Results of the Evaluation (Overall Rating: B⁴)

3.1 Relevance (Rating: ③⁵)

3.1.1 Relevance to the Development Plan of Sri Lanka

At the time of planning, the Sri Lankan government was promoting SWM with the “National Environment Act” (1980) and the “National Strategy on Solid Waste Management” (2000). Afterwards, the government started the “Pilisaru Project⁶” in 2008, in which the national budget is allocated for SWM by LAs and which is an example of the government’s higher priorities in terms of policy. At the time of the project’s completion, there was no change in the “National Environment Act.” Although the “National Strategy on Solid Waste Management” was replaced by “National Policy on Solid Waste Management,⁷” which was enacted in 2007, there was

⁴ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁵ ③: High, ② Fair, ① Low

⁶ It was completed in 2013. Later, it was extended.

⁷ It was enacted in September 2007. Thus, “the National Strategy on Solid Waste Management” enacted in

no big difference between the two in terms of content, and promotion of SWM was stressed at the time of the project's completion. Thus, it has been assessed that the project direction had been consistent with the national policy of the country from the ex-ante evaluation until the project's completion.

3.1.2 Relevance to the Development Needs of Sri Lanka

At the planning stage of the project, improvement of SWM of LAs met the development needs of the country for the following reasons: 1) provision of service by the NSWMSC is meaningful because it is technically difficult and inefficient for the small-scale LAs and PC without in-house SWM engineers to formulate SWM plans by themselves, 2) activation of commercial activities and diversification of life brought about increase of wastes, and dumping of the collected wastes resulted in environmental degradation, and 3) the budget for SWM shares 20% to 50% of the total budget of LAs, which was one of the biggest issues for LAs. On the other hand, 1) above was almost the same at the time of project completion. Also, at the time that the questionnaire survey was conducted for the ex-post evaluation, a question concerned "the needs of improving SWM (only from the project commencement till the project completion)." Both of the replies from MLGPC and the NSWMSC rated the level of concern as "very high" (5 out of 5 levels, i.e., the highest level). Further, the average of the replies to the same question for PCs and LAs, which were the targets of the project, were high, i.e., 4.5 out of 5 for 4 PCs and 4.8⁸ for 6 LAs. Hence, it was assessed that the development needs of improving SWM had been high at all of the national, provincial and local authority levels, from the project commencement till the project completion.

3.1.3 Relevance to Japan's ODA Policy

Japan's Country Assessment Program for Sri Lanka (April 2004) indicated that Japan will support Sri Lanka to realize and maintain "beautiful Sri Lanka" through improving the infrastructure of urban areas and preserving life and social environments (water supply and sewage, air pollution and solid waste management, etc.) from the viewpoint of promoting environment-oriented tourism. Also, "improvement of environment in urban [areas]" was included in one of the priority areas of JICA's assistance, and this project was positioned as the core project of the "Urban Environment Program." Thus, it was assessed that the project direction was

2000 was abolished. There is no big difference in terms of basic standpoint.

⁸ Both are the five-level evaluation. The five answers were "5: very high 4: high 3: medium 2: low 1: very low."

identical with Japan's assistance policy at the time of ex-ante evaluation.

Therefore, this project is highly relevant because its implementation sufficiently conformed to the Sri Lankan development policy, its development needs and Japan's ODA Policy.

3.2 Effectiveness and Impact⁹ (Rating: ②)

3.2.1 Effectiveness

3.2.1.1 Project Output

The achievement of the indicators for each output at the time of project completion is shown in Table 1.

- (1) Output 1: The NSWMSC establishes basic organizational structure with a mid-term implementation strategy.

The output 1 intends to establish the basic infrastructure of the NSWMSC, which was newly established, from an organizational aspect. The output 1 is assessed as achieved because all the indicators were achieved.

- (2) Output 2: The NSWMSC establishes an efficient mechanism for supporting LA's SWM by stakeholders.

The output 2 was added after the Mid-term Review for the sake of improving sustainability of support to LAs. It aims at institution-building, which enables the ministries at the central government to formulate policy¹⁰, the NSWMSC to provide technical support, and PCs to establish their master plans and give advice to LAs (including technical ones). Although the importance of collaboration among the stakeholders was indicated from the initial stage, specific measures were not clarified in the plan. The PCs are responsible for supervising LAs. However, until then, PCs neither formulated a provincial-level master plan, nor continuously gave advices to LAs, without being conscious that those were some of their responsibilities. It was necessary to therefore increase the awareness of people concerned at the PC-level, but the necessity was not sufficiently recognized by the Japanese mission team at the time of planning stage¹¹. Upon receipt of recommendations as the result of the Mid-term Review, the NSWMSC started to conduct training programs for the staff of PCs and LAs, starting from the latter half

⁹ Sub-rating for Effectiveness is to be put with consideration of Impact.

¹⁰ The Ministry of Environment and Renewable Energy mainly formulate policy, while MLGPC supervises implementation and promotion of the policy from the central ministry's standpoint.

¹¹ Ex-Japanese mission team hearing

Table 1: Achievement of Outputs by Project Completion (February 2011)

Outputs	Objectively Verifiable Indicators	Achievement	Level of Achievement
Output 1: The NSWMSC establishes basic organizational structure with a mid-term implementation strategy. (○)	① The NSWMSC formulates and updates a comprehensive mid-term plan for NSWMSC.	The mid-term plan was formulated in 2009, and updated in 2009 and 2011.	○
	② Each staff of NSWMSC can effectively work with understanding its tasks.	The staff shared the activities schedule, project documents, etc. All the staff understood their own tasks and concentrated on them.	○
	③ The NSWMSC can execute activities with clear work and decision making processes.	Work flow charts and task plans were formulated. Progress was reported and shared at the monthly meeting, and manuals were produced. The instructions by the Director were clear and quick.	○
	④ Staff training materials produced are compiled for self-learning.	The training materials utilized for more than 40 times are edited and utilized for self-learning by the staff.	○
	⑤ All staff in the NSWMSC can work on SWM with basic understanding.	All the staff acquired basic knowledge of SWM.	○
Output 2: The NSWMSC establishes an efficient mechanism for supporting LA's SWM by stakeholders. (△)	① SWM committees are established in more than 5 PCs and they start to function.	The committees were not established in the Northern Province where negative effects by the civil war still remained, but were established in 4 provinces. The basic framework of the committee was established and the activities started although they were rather limited.	△
	② A provincial SWM action plan is formulated in more than 5 provinces and it is executed.	Action plans were formulated in 4 provinces (Central, Sabaragamuwa, Eastern and North Western).	○/△
	③ The NSWMSC can disseminate information with regard to SWM to stakeholders through various means.	This indicator is the same as Indicator 4 below. Thus, Indicator 4, which is more specific, is utilized as the indicator instead of Indicator 3.	—
	④ The NSWMSC's website is updated more than 4 times a year, and NSWMSC News is sent to all stakeholders quarterly.	The NSWMSC's website is updated once every year. A Sinhalese version of NSWMSC News, which was most frequently issued, was sent to stakeholders 1 to 3 times per year.	×
	⑤ The NSWMSC can promote guidelines and manuals produced to be used by stakeholders.	8 kinds of manuals were developed. NSWMSC staff were enabled to utilize the manuals for extension as they acquired basic knowledge on SWM.	○
	⑥ SWM training is conducted to cover 5 PCs and more than 20% of trainees utilize the knowledge learned.	18 training programs were conducted in 8 provinces, in which 728 participants took part. Information on the extent the knowledge was utilized to was not available during the ex-post evaluation.	△
Output 3: Facilitation capacity of the NSWMSC for implementation of SWM Action Plans of LAs is acquired. (○/△)	① The NSWMSC can assist LAs to formulate SWM action plans.	14 action plans were formulated.	○
	② The NSWMSC can assist LAs to acquire new lands.	The NSWMSC supported 2 LAs, i.e., Kuliapitiya UC and Nawalapitiya UC, to acquire lands that needed support during the project period.	○
	③ The NSWMSC can assist LAs to get legal permission and approval.	The NSWMSC supported 7 LAs to apply environmental permission, which succeeded to acquire it.	△
	④ The NSWMSC can assist LAs to manage social problems.	The NSWMSC organized meetings for briefing the residents and the residents agreed on the construction in 4 LAs, whereas the construction was suspended due to opposition of the residents at 2 LAs.	△
	⑤ The NSWMSC can assist LAs to get funds for projects.	The total amount disbursed to support LAs was 358 million Rs.	○
	⑥ The NSWMSC can assist LAs in procurement work (detailed design, tender, contract, supervision, project account).	A "small-scale compost plant design manual" developed by the project enabled technical staff at LAs to design the compost plant and estimate and prepare for tender documents.	○

	⑦	The NSWMSC can assist LAs in operation and maintenance of the facilities.	The NSWMSC developed a manual for the maintenance of compost plants and utilize it for lectures and on-the-site training. The NSWMSC also supported the 1-week on-the-site training programs in Balangoda and Weligama so that the supervisors and workers at the compost plant acquire knowledge and skills on maintenance of the facility before the compost plant starts its operation.	○
	⑧	The NSWMSC can assist LAs in monitoring.	The NSWMSC organized monitoring committees involving residents. Also, monitoring by the SWM committee (on the 3 LAs, i.e., Kuliapitiya UC, Matara MC and Wennappuwa PS) was conducted.	○
	⑨	More than 17 SWM action plans for LAs are formulated.	SWM action plans were formulated in 17 LAs.	○
	⑩	More than 50% of projects formulated in the action plans are materialized.	8 out of 14 model projects were implemented (including those with construction completed and that are under construction).	○
Output 4: The NSWMSC provides necessary information so that the Ministry can contribute National SWM policy and strategy. (○/△)	①	The NSWMSC can understand the present SWM conditions in the country.	A database was developed with the data of an overview of the LA's SWM in the country, detailed information on the LA's SWM, an overview of night soil treatment of LAs, and the result of a questionnaire survey on the actual SWM by LAs in the country.	○/△
	②	Valuable recommendations to National SWM policy and strategy are included in the NSWMSC's annual report.	Recommendations to National SWM policy were not included in the annual report. On the other hand, the indicator itself is not relevant to the position of the NSWMSC. The data on SWM shown in the annual report is useful to some extent.	△
	③	National and international institutional links and communication channels are established and maintained.	The linkage was established with other donors, international organizations, other ministries in the process of discussions and exchange of information to enhance collaboration with them.	○/△

Source: Produced based on document review, hearing, questionnaire survey results

Remarks: 1. The symbols in the "Level of Achievement" column show the following:

○ Achieved ○/△ Mostly achieved △ Middle level × Not achieved – Not applicable

Table2: Achievement of Project Purpose by Project Completion (February 2011)

Project Purpose	Objectively Verifiable Indicators	Achievement	Level of Achievement	
The NSWMSC acquires capacity to support SWM activities of LAs with close collaboration of relevant stakeholders so that LAs can implement the SWM activities in accordance with the National Strategy for Solid Waste Management. (○/△)	①	100% of the proposed staff (1 Director, 2 Deputy Directors, 3 Assistant Directors and 8 Staff) is to be assigned as of the end of 2010.	As of August 2010, 1 Director, 1 Assistant Director and 5 Staff (7 in total) are assigned.	×
	②	The NSWMSC's management capacity achieves 70% of the target.	Both the staff's self-evaluation and the Chief Advisor's evaluation reached more than 70%.	○
	③	The NSWMSC's SWM knowledge and skills achieve 70% of the target.	Neither the self-evaluation of the staff nor the Chief Advisor's evaluation reached 70%. But compared with the initial stage of the project, the capacity seemed to have enhanced drastically.	×
	④	The NSWMSC's working conditions achieves 70% of the target.	The Chief Advisor's evaluation exceeds 70%, although self-evaluation by staff remained at between 60% and 70% since 2008.	○/△
	⑤	The ministry's SWM expenditure exceeds 50 million Rs. per year.	The expenditure from MLGPC increased year by year and reached 55.3 million Rs. in 2010.	○
	⑥	The NSWMSC's budget to be used for the execution of site surveys reaches 1 million Rs. per year.	The data does not exist because there is no item of expenditure for "site surveys" in the financial record. It was indicated that about 1 million Rs. were available as the cost for the site surveys.	○
	⑦	The NSWMSC maintains a good	The NSWMSC maintains a good relationship with	○

		network with various stakeholders.	domestic organizations such as the Central Environment Authority for the Pilisaru Project, SWM committee of Western Province, Morotuwa University, as well as other donors such as UNOPS, USAID and AusAid.	
--	--	------------------------------------	---	--

Source: Produced based on document review, hearing, questionnaire survey results

Remarks: The symbols in the "Level of Achievement" column show the following:

○ Achieved ○/Δ Mostly achieved Δ Middle level ×Not achieved — Not applicable

of the project period. As a result, 728 staff members were involved in SWM by PCs and LAs (technical and non-technical staff) and heads and cadres of LAs (mayors, deputy mayors, etc.) in 8 provinces participated. Also, in the five target provinces, SWM committees were established, field surveys were done on SWM conditions, ranking from A to D in terms of SWM conditions based on the field surveys, and support for formulating provincial-level Action Plans was provided by the project. Thus, the activities started under a new framework.

As shown in Table 1, there are 6 indicators for the outputs. However, as Indicator 3 and Indicator 4 are the same, Indicator 4, which is more specific, is utilized instead of Indicator 3. Concerning the achievement of indicators, Indicator 5, the extension of manuals, was achieved, Indicator 4, dissemination, was not achieved, and the rest of the indicators were mostly achieved or medium. The achievement of the output 2 by the end of the project period was medium, because basic institution-building was completed to some extent, although there were some concerns such as that the activities at SWM committees in 5 provinces were limited.

(3) Output 3: Facilitation capacity of the NSWMSC for implementation of SWM Action Plans of LAs is acquired.

The output 3 aimed to enhance the NSWMSC's capacity to support LAs. This project selected 14 LAs as model projects, and took an approach in which the NSWMSC staff actually experience the whole process of the SWM cycle to support LAs to enhance NSWMSC's capacity. The indicators were achieved except for Indicator 3 and Indicator 4. Thus, the output 3 is assessed to be mostly achieved.

(4) Output 4: The NSWMSC provides necessary information so that the Ministry can contribute national SWM policy and strategy.

The output 4 intended that the NSWMSC disseminates information, which contributes to the formulation of national strategy on SWM by MLGPC. The indicator 2 was not achieved because policy recommendations were not made by the NSWMSC. However, this indicator is not appropriate, as it requires contents that are higher (policy recommendation) than what the output level objectives (information dissemination) can expect. On the other hand, the Indicators 1 and 3 were mostly achieved, so the Output 4 is assessed to be mostly achieved.

3.2.1.2 Achievement of Project Purpose

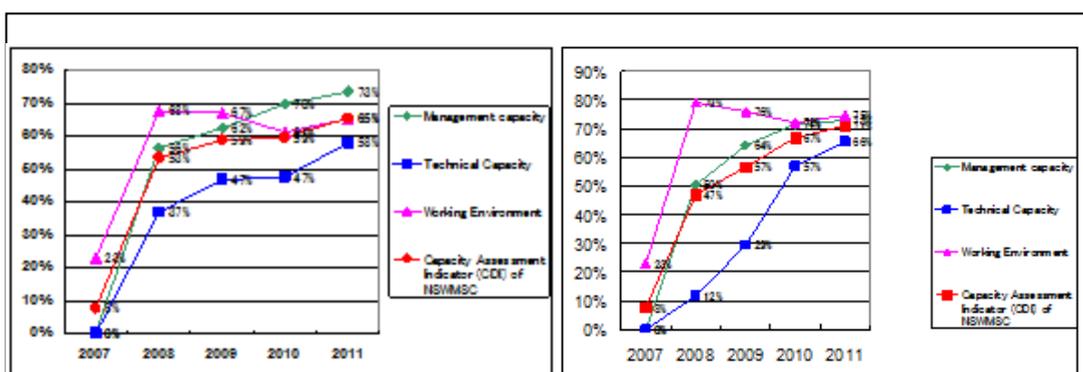
The achievement of the indicators of the project’s purpose by the end of the project cooperation period is shown in Table 2.

(1) Indicator 1: Allocation of Staff

This indicator was originally a part of “Inputs” with which “Activities” were implemented in order to achieve “Outputs.” Thus, it is logically inappropriate for an indicator to measure the achievement of the “Project Purpose, which should be achieved by the Outputs.” Therefore, it is not proper to put the same stress with other indicators (such as Indicator 2, 3 and 4), although this indicator was not achieved by the end of the project period.

(2) Indicator 2: Management Capacity

In order to measure the improvement of the organizational capacity of the NSWMSC, detailed lists of capacities to be acquired and organizational capacity assessment sheets for each of the three fields, i.e., management capacity, knowledge and skills (technical capacity), and working environment, were formulated in this project. Based on them, both staff of the NSWMSC and the Chief Advisor made organizational assessments every year (Figure 1, Figure 2). The target amount was 70% for all the three fields. As for the management capacity, the results of both staff’s self-assessment and the Chief Advisor’s evaluation reached more than 70% and achieved the target in 2010 and 2011.



Source: The Project Completion Report
 Figure 1: Capacity Assessment of NSWMSC (Self-assessment by NSWMSC staff)

Source: The Project Completion Report
 Figure 2: Capacity Assessment of NSWMSC (By Chief Advisor)

(3) Indicator 3: Knowledge and skills

The figure showed a drastic increase compared with the commencement. In 2007, the result of assessment on knowledge and skills by both the NSWMSC staff themselves and the Chief Advisor was 0%. As for the self-assessment of the NSWMSC, it increased to 47% in 2010 and 58% in 2011. In case of the assessment by the Chief Advisor, it increased to 57% in 2010 and 66% in 2011. However, they did not achieve the target level of 70%, although it drastically improved compared with the time of project commencement.

(4) Indicator 4: Working Environment

The working environment in the capacity assessment increased in 2008. Since then, although self-assessment by NSWMSC staff was between 60% and 70%, the assessment by the Chief Advisor exceeded 70% every year. Thus, this indicator is assessed to be mostly achieved. Concerning the self-assessment by the staff, a staff member whose self-assessment is high does not necessarily mean that his/her capacity is high. Rather, staff with high capacity tended to give low assessment of himself/herself¹². On the other hand, the Chief Advisor was experienced in the sector and had continuous contacts with the staff through accompanying field visits, human resources development, daily work and so on, which means that he can make more objective assessments on the enhancement of capacity of the staff. Therefore, emphasis was put on the Chief Advisor's assessment in the ex-post evaluation.

(5) Indicator 5: SWM Budget

As shown in Table 2, this indicator was achieved. In addition to the MLGPC's budget, the Pilisaru Fund was also established by the Central Environment Authority, the total of which amounted to more than expected.

(6) Indicator 6: Budget for Field Visits

As shown in Table 2, this indicator was achieved.

(7) Indicator 7: Network

As shown in Table 2, the indicator was achieved.

¹² Project Completion Report (P65)

Based on the above points, although Indicator 3 did not reach the target level, Indicators 2, 5, 6 and 7 achieved the target, while Indicator 4 was mostly achieved. Though Indicator 1 was not achieved, the indicator itself is regarded as inappropriate. Therefore, the achievement of the Project Purpose was fair

3.2.2 Impact

3.2.2.1 Achievement of Overall Goal

(1) Achievement of Overall Goal

1) Indicator 1: The number of Grade C and D local authorities in terms of SWM condition in 2010 will be reduced by 50% by 2015.

a) Data of the Indicator

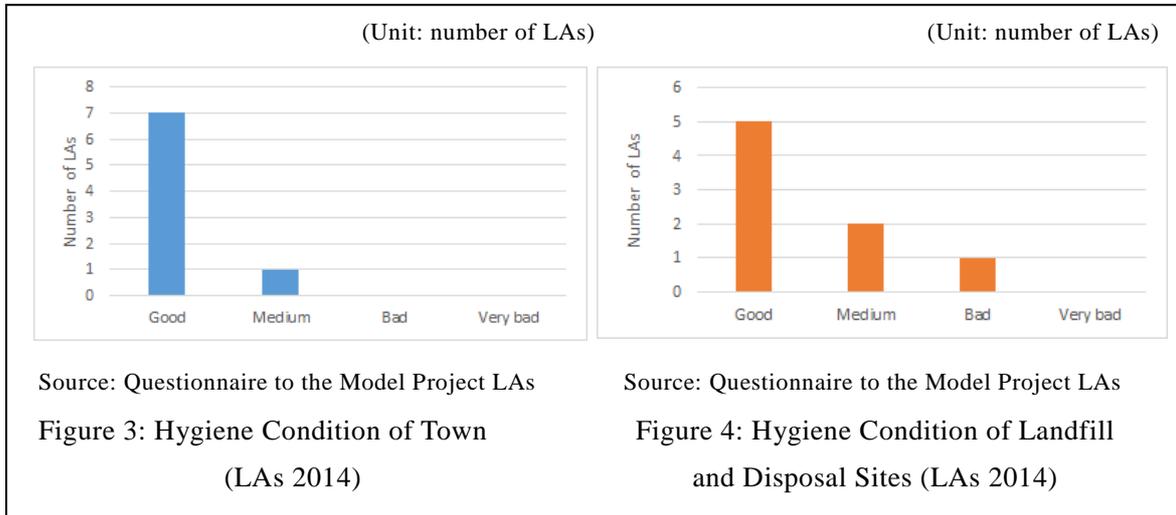
As part of the support for formulation of the action plan at the provincial level conducted between 2009 and 2010 in five provinces (Central Province, Sabaragamuwa Province, Northern Province, Eastern Province and North Western Province), a field survey on the actual condition of SWM in LAs was conducted by PCs and the NSWMSC. In the survey, all of the targeted LAs were categorized into 4 grades, i.e., A, B, C and D. Based on the survey result, the indicator of the overall goal was revised as above (PDM3). The criteria of “the grades” are i) hygiene condition of town, ii) hygiene condition of landfill sites & disposal sites, iii) negative impact to natural environment and iv) negative impact on living environment of disposal site. The conditions of SWM at the target LAs were rated according to the criteria, to be categorized into 4 grades.

At the time of ex-post evaluation, however, neither SWM committees at the provincial level were functioning, nor site surveys to comprehend the actual situation of SWM mentioned above with ranking of the LAs from A to D were conducted. Therefore, the actual data for the indicator of the overall goal does not exist, and a simple comparison between the present situation and the set indicator is not possible.

b) Questionnaire survey to LAs

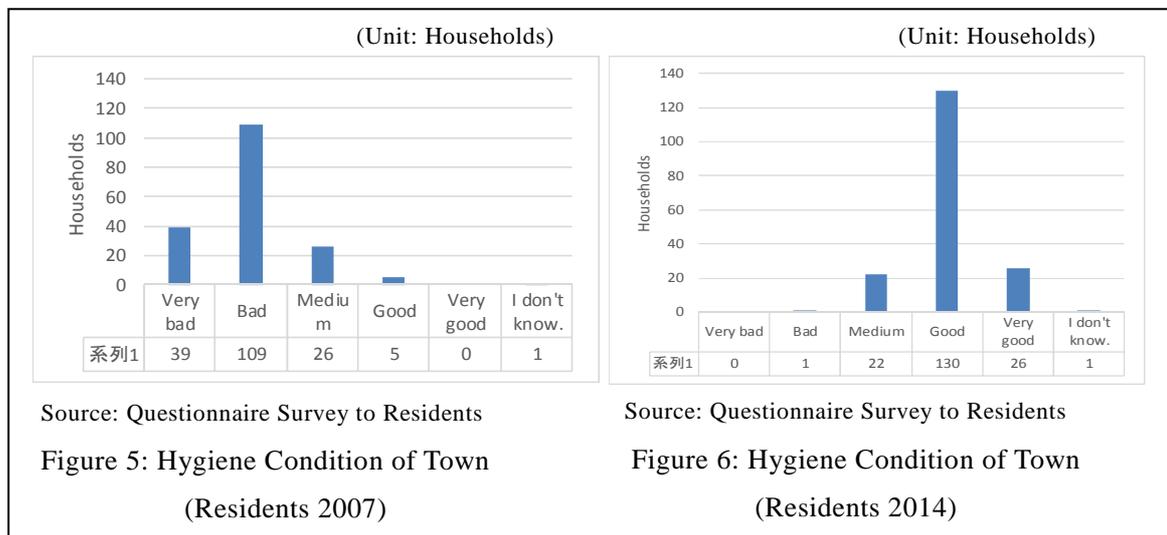
On the other hand, in the questionnaire survey conducted at the ex-post evaluation to the LAs that were selected as the model project during the project period, questions were made on the hygiene condition of town (i of the above-mentioned 4 criteria) and hygiene condition of landfill sites (ii of the above). The results are as shown in Figure 3 and 4 (8 valid respondents). As for the hygiene condition of landfill sites, except for 1 LA, which rated 2 among the 4 levels (4: good, 3: fair, 2:

bad, 1: very bad), 7 LAs rated either 4 or 3. Particularly concerning the hygiene condition of towns, 7 out of 8 LAs rated 4, which is high. Also, at the hearing from people concerned at PCs and LAs, there were some comments that the situation before the project was terrible with scattered garbage, a bad smell and illegal dumping, but those are significantly improved at present.



c) Interview Survey to the Households

On the other hand, in the interview survey to residents (6 LAs in 2 provinces, with 180 samples¹³), a question was asked on the hygienic condition of towns (scattering



¹³ As for the selection of the samples, North Western Province was selected from among the provinces supported by the project during the project period in terms of establishing collaborative institutions. Southern Province was selected as one of the provinces where the effects of diffusion were expected after the project is completed. From each of the 2 provinces, 2 LAs that received support from NSWMSC and 1 LA that had not received support from NSWMSC were selected, and hearing to 30 households in each LA were selected, which makes 180 samples in total, and the interviews were conducted based on the questionnaire. Among 30 households at each LA, 15 were chosen from the town area, another 15 from rural area, and the survey was implemented.

of garbage, bad smell, etc., which are some parts of the indicator for the overall goals) in the 1st year of the project, as well as at the time of ex-post evaluation by 5-grade¹⁴ evaluation. As shown in Figure 5 and 6, the hygiene condition of towns was significantly improved compared with 7 years ago.

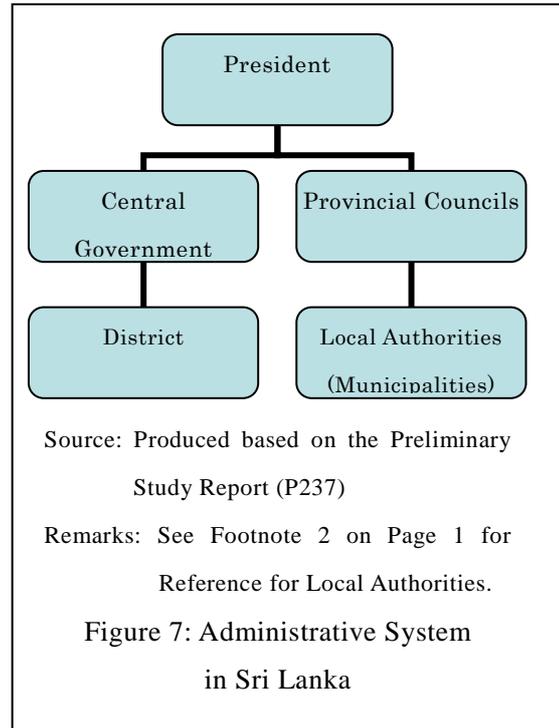
(2) Project Effects to Achieve Overall Goal after Completion of the Project

a) Involvement of Provinces after project completion

The project expected to see institutions in which PCs would take initiative to decide the priority of LAs, of which the SWM should be improved based on the result of the field surveys, and formulate action plans. However, this did not happen after the project completion in any province. The SWM committees at the provincial level established in 4 provinces during the project period were seldom held after the project completion and do not function. Although the project intended to establish a SWM committee in the Northern Province within the project period, the committee has not been established by the time of ex-post evaluation. Also, the field survey by PC to comprehend the situation of the SWM by LAs has not been conducted after the project completion. However, only the North Western Province established a multi-year action plan (from 2009 to 2013) and has been actively promoting SWM, while some indicators even exceeded the target amount.

There are some reasons that the collaborative system between the target provinces and the NSWMSC was not maintained, and why other provinces and the NSWMSC could not establish a collaborative system after completion of project duration.

Firstly, “parallel mechanism,” which consists of Districts under direct control of the central government, and PCs and LAs resulted from the administrative organization of the country. Though PCs receive administrative support and financial allocation



¹⁴ There are five options, but “I don’t know” was actually added to the questionnaire.

from MLGPC, the NSWMSC cannot directly give instruction to or order PCs, because PCs are not under the control of the MLGP¹⁵.

Secondly, the duration was too short to radically change consciousness of those at the PCs concerned. As already mentioned in the Effectiveness section, a radical change in consciousness was necessary in order for PCs to be proactively involved in SWM and take initiatives. However, it was only in the latter half of the project when the activities to establish a new relationship were clarified and started. During that period, a basic foundation was made, but a radical change in consciousness was not realized except for some of them. Thus, even in the province where the responsible person promoted the project activities with the core organization of an SWM committee during the project period, when a key person at a provincial level was transferred to another place after the project period, no other seniors had interests in SWM and activities were stopped in spite of the effort for coordination by the NSWMSC¹⁶.

Thirdly, politicians' influence is very big at PCs. The draft plan formulated by the Commissioner of Local Government (hereafter, CLG)¹⁷ and his staff often tends to be affected by politicians' wills and political factors. In one province, approximately 80% of the formulated plan was sometimes modified by the political background¹⁸. So, in this type of the province, the motivation of the people concerned to prioritize LAs based on the site survey and to formulate regional level action plans that conform to the needs of the people tends to decrease.

b) Support to LAs by the NSWMSC

The support implemented by the NSWMSC to LAs since the project completion until the ex-post evaluation is as follows. Concerning the support to LAs on selection of LAs for allocating budget from the MLGPC, training, land acquisition, coping with social problems (only 1 case in 2013) and procurement (2 cases in 2012, designing only), the NSWMSC is continuing its support. On the other hand, support

¹⁵ In Sri Lanka, PCs have responsibility of management of LAs and authority to dissolve the local assembly, instead of the central government or Districts, which is stipulated in the constitution (The Thirteen Amendment (November 14, 1987) Article 154G).

¹⁶ NSWMSC hearing

¹⁷ PC basically consists of politicians. The top position of the secretariat is assigned more than one CLG. Also, under CLG, Assistant Commissioners of Local Government (ACLG) are assigned. Some of the ACLG are assigned to PC secretariat, others are posted to the branch office of the province. In both cases, ACLG performs the task as an administrative officer of PC.

¹⁸ Provincial staff hearing

for formulating action plans, legal procedures and F/S are not continued after the project completion. The reason that the support to formulate the action plans were not implemented was that the LA's capacity for action plan formulation increased¹⁹ compared with the beginning of the project. Also, in addition to the effects of this project, the government's efforts to recruit a huge number of new graduates with bachelors' degrees in order to enhance the level of the civil servants in the country also gave complimentary effects²⁰.

The construction and operation of the model projects after project completion until the ex-post evaluation are shown in Table 3. 8 out of 14 LAs completed construction of compost plant and landfill sites, and 1 LA is now constructing it (as of April 2014). Among the 8 LAs that completed construction as indicated in Table 3, one of the LA facilities was an Internally Displaced Person (hereafter, IDP) camp, and it has completed its mission. The facilities at the rest of the 7 LAs are operating at the time of ex-post evaluation²¹. One of the model projects categorized in

Table 3 : Situation of Model Project at the time of ex-post evaluation
(Number of LA)

Planned	Construction completed	Under construction	Gave up construction	Other
14	8	1	4	1

Source: Questionnaire survey and hearing to NSWMSC

Remarks 1. The 8 LAs of "construction completed" include Badulla MC, where a compost plant was constructed but not a landfill site, due to difficulty in land acquisition, and an IDP camp in Cheddikukumu PS in Northern Province, which was set at the time the civil war was over.

Remarks 2. "Other" means Kurunegala MC, which was transferred to the Pilisaru Project in May 2010.

"Other" received support from the Pilisaru Project before construction started. On the other hand, in 4 LAs, the facilities were not constructed, due to the difficulty of land acquisition. With regard to the SWM facilities "operating," some are properly

¹⁹ NSWMSC hearing

²⁰ NSWMSC hearing

²¹ It includes Badulla MC, of which the compost plant was already completed, while landfill site could not be constructed due to difficulty of land acquisition.

maintained and operated at the time of ex-post evaluation, such as Kuliyaipitiya UC, Wennappuwa PS and Matara MC, although the situations of maintenance and operation differ from each other. The manual developed by the project was initially targeted for engineers at the provincial level²². However, it is also utilized for other LAs²³ in addition to engineers at PCs.

c) Support to LAs by PCs

As described before, neither the established SWM committee functions nor the support by SWM committee at PCs to LAs, which was aimed at during the project period are implemented in other provinces after the project completion. On the other hand, the North Western Province, which was recognized as its capacity was enhanced during the project implementation, has been actively promoting SWM of LAs after the completion of the project as well. The North Western Province already completed construction of 16 compost plants out of 33 LAs. It will continue to construct compost plants in the remaining 17 LAs²⁴. Also, North Western Province has been conducting progress meetings every three months, to share the progress and the problems, and to give advices, inviting Environmental officers of LAs in the province. The strong leadership to enhance SWM and allocation of staff in charge with SWM expertise are the key factors in their success. Also, technical assistance by the project to the model projects, as well as continuous implementation of the National SWM Contest, also accelerated the effects.

d) Other effects, continuation of activities

The frequency of information dissemination by the NSWMSC after the project completion has not achieved the target level at the time of ex-post evaluation either, although it updates the website once a year and the newsletter²⁵ is also issued once a year. Although policy recommendations were not made by the NSWMSC after project completion, the annual report with the basic information on SWM was issued up to 2012. The amount of the data input did not increase after the project completion, but the database is now being prepared, with financial support from JICA Alumni of JICA SWM training in Japan program. The database is expected to be completed by the end of 2014.

²² Japanese Mission Team member hearing

²³ LAs hearing

²⁴ As of April 2014.

²⁵ Issued in Sinhala, Tamil and English. However, the English version of 2013 has not been issued.

Concerning the linkage and establishment and maintenance of information channels between the NSWMSC and domestic and international organizations since the project completion till the ex-post evaluation, the NSWMSC continuously maintains a good relationship with Morotuwa University, in the process of establishment of the database above, and with UNOPS in the “Environmental Remediation Programme” (2010–2013) in the Eastern Province.

For the above reasons, although the latest data for the indicator 1 of the overall goal do not exist, the major parts of the indicator, such as the hygiene condition of towns and the hygiene condition of landfill sites, appear to be improved to some extent. The construction of the compost plants and the landfill sites, distribution and utilization of manuals, technical support and monitoring by the NSWMSC contributed to achieving the overall goal to some extent in combination with the Pilisaru Project. On the other hand, the effect of output 2 (involvement of PC to establish effective mechanisms) did not last after the project completion and did not expand to the rest of the PCs. Thus, it became a hindering factor for achieving the overall goal. Therefore, it is assessed that achievement of the project purpose is fair²⁶.

3.2.2.2 Other Impacts

(1) Impacts toward the natural environment

As mentioned already, scattered garbage is decreasing, so a positive impact is observed (beneficiary survey to residents).

(2) Impacts on resettlement or land acquisition

No resettlement and land acquisition have occurred, and no negative impact was observed.

(3) Other indirect impacts

- Increase in the number of compost plants

The number of compost plants was 17 in 2006 in Sri Lanka, and it increased to 56 in 2010, which amounts to 17% of 330 LAs²⁷. As for the causes of the phenomenon, they include not only the effects coming from the Pilisaru Project, but also LA such as Weligama UC, which had a compost plant with high quality

²⁶ There are 4 components in the indicator of the overall goal. As for the remaining indicators, i.e., “negative impact against natural environment” and “negative impact of dumping site against natural environment,” the residents must be most familiar with the facts. However, it is rather difficult for residents without specific knowledge of SWM to understand the specific content. Thus, at the time of ex-post evaluation, survey was conducted on “Hygiene condition” (scattered garbage, bad smell), which is easily understandable for both residents and LAs, and “Hygiene condition of landfill site” which is easy to assess for each LA.

²⁷ Terminal Evaluation Report (P18)

even before this project started. Furthermore, manuals and guidelines developed and extended; continuous implementation of the National SWM contest, which enhanced the motivation of LAs, together with Pilisaru Project, are regarded to have given certain effects on promoting construction of compost plants by LAs.

- Positive/negative impacts from the viewpoint of LAs

In the questionnaire survey to the 14 model projects, respondents were asked whether or not the following changes had occurred (8 respondents). The results are shown below. Seven LAs out of 8 LAs replied that “the reputation of the scenery” and “the reputation of the hygiene condition” improved.

Table 4: Other positive impacts (LAs)

Questions	Yes	No
Improved reputation of the scenery	7	1
Improved reputation of the hygiene condition	7	1
Improved drainage capacity at the time of rain	6	2
Decrease of expenditure of SWM of LA due to improvement of SWM	5	3

Source: Questionnaire survey to the model projects

- Change in consciousness and behavior among residents

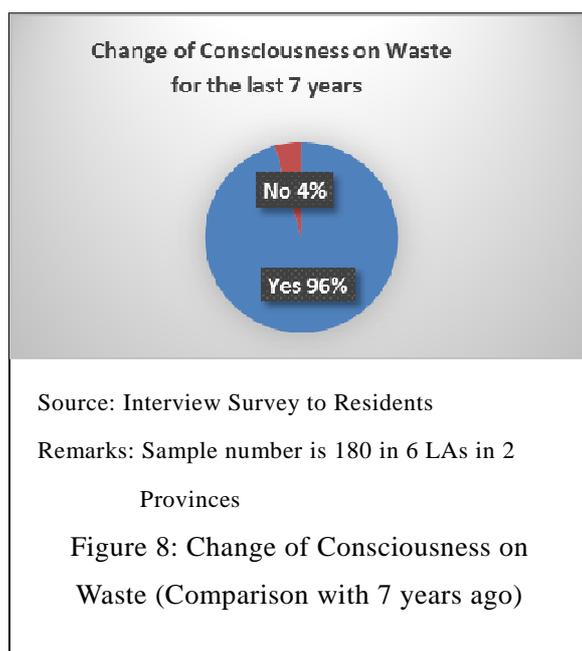
With regard to the change of consciousness about waste, a question was asked in the beneficiary survey whether there was a change compared to 7 years ago. Out of 180 households, 172 (96%) replied that they had changes in their consciousness. For example, some people explained changes such as, “We became more collaborative to the waste collection,” “We stopped illegal dumping,” “We began to segregate the waste before waste collection²⁸,” and so on.

²⁸ The residents who replied “We began to segregate the waste before waste collection” were limited to those who lived in Kuliypitiya UC, where waste segregation is successfully conducted among the 6 LAs targeted for the interview survey.

- Negative impact
No negative impact was observed²⁹.

As a result of the implementation of the project, certain effects appeared and effectiveness and impact is fair. As for the project purpose, though Indicator 3 did not achieve the target level, Indicator 4 was mostly achieved, and the rest of the indicators were achieved. Concerning Indicator 1, it was not achieved, but Indicator 1 itself is inappropriate as an indicator. With

regard to the achievement of the overall goal, the actual data for the indicator does not exist, and simple comparison with the planned target is not possible. However, judging from the other information, a certain improvement is observed. The project contributed to achievement of the overall goal by development and extension of manuals, implementation of the national SWM contest, which enhanced the motivation of LAs, and so on. Also, other positive impacts are partly observed.



3.3 Efficiency (Rating: ③)

3.3.1 Inputs

Inputs	Plan	Actual
1. Japanese side (1) Experts	<ul style="list-style-type: none"> ● No description on the number of experts for long-term and short-term ● Approx. 75 M/M in total 	<ul style="list-style-type: none"> ● 0 Long-term, 12 Short-term ● 81.78 M/M in total
(2) Trainees received	The number and the major fields will be decided during the implementation period.	<ul style="list-style-type: none"> ● 1 trainee (ex-Director). ● The field: SWM management system.
(3) Third-country training programs	If it is implemented, major fields will be decided during	Nil. (However, 6 staff of NSWMSC participated in the

²⁹ Negative impact on the people who are engaged with the work of collecting recyclable wastes could not be checked in this survey, because they were not included in the respondents of the interview survey to the residents.

	the implementation period.	group training in Japan.)
(4) Equipment	Equipment for data management	PC, software, printer, spring balance, 4WD vehicle, etc.
Total project cost	350 million yen	336.8 million yen
2. Sri Lankan side	Assignment of staff (no description on the number)	Maximum number of staff was 12 during the project.
(1) Counterparts		
(2) Equipment	—	Desk, chair, cabinet, tables for OA equipment, etc.
(3) Facilities	Office space, training room, meeting space	Facilities for project office (including (3) left.
(4) Local Cost	(No indication on the amount)	<u>Total: 357 million Rs.</u>

Remarks: The amount of the local cost born by the Sri Lankan side includes not only the MLGPC but also the Pilisaruru Fund and 2KR (Project Completion Report). The JICA exchange rate for May 2010 was Yen=0.826 SL Rupee.

3.3.1.1 Elements of Inputs

The equipment and facilities from both sides were utilized in terms of quality, quantity and timeliness. Although the number of the participant of a counterpart training in Japan is only one, who is the ex-Director, the knowledge was sufficiently utilized for achievement of the four outputs³⁰. Also, including 6 NSWMSC staff and 9 from outside the NSWMSC (CLGs from Central, North Western, Eastern Provinces, and the Director at CEA in charge of Pilisaruru), altogether 15 persons in total participated in JICA's group training on "Sri Lanka Special SWM Group Training Course." The participation of the key persons at major organizations concerned helped the understanding of SWM and enhanced awareness, which resulted in a smooth implementation of activities and contributed to achievement of the project outputs. Also, the assessment of quality of the Japanese experts by the Sri Lankan side was high³¹. In terms of quantity of the Japanese experts, the duration increased by 6.78 M/M compared with the initial plan. However, this increase is regarded to be appropriate, because of the new output concerning the establishment of new collaboration mechanism with PCs, which was added during the implementation period. The number of the model projects was also increased from 13 to 14 and the activities also increased. However, the total cost borne by the Japanese side is still

³⁰ Ex-participant questionnaire

³¹ Questionnaire survey with those who were concerned with NSWMSC during the project implementation

within the planned amount.

On the other hand, the staff allocation by the NSWMSC did not reach the proposed number indicated in PDM3 by the project completion. Insufficient allocation of NSWMSC staff (most of them were of non-science backgrounds, and engineers are limited) led all the project team to be pressed with tasks. This resulted in a shortage of time for technology transfer from the Japanese experts to the counterpart team, since the Japanese experts were given the work that the Sri Lankan side was originally supposed to do. Thus, the insufficient allocation became a hindrance factor for the former half of the project period. However, in order to cope with this problem pointed out by the Mid-term Review Mission Team, the project strengthened the collaborative relationship with external local resources, such as utilization of university teaching staff and the Environment Officer at the World Bank, so that they gave lectures and exercises at the technical training programs, in order to make up for the insufficiency of the staff and to produce expected effects. For the same purpose, the development and extension of manuals and guidelines were promoted. With these actions, the organizational or institutional system was improved. As a result, the Japanese experts returned to their original jobs such as instruction and guidance, while the center keeps the quality of service. Although the number of staff who were the target of the technology transfer was limited due to the shortage of staff with science background, planned activities were implemented owing to the efforts of the staff who worked even on weekends in order to keep up with the schedule, with technical advice from the Japanese experts. Thus, the outputs except for Output 2 were achieved or mostly achieved.

3.3.1.2 Project Cost

As shown in Table 5, the project cost was lower than planned (96.3%).

Table 5: Project Cost and Period of Cooperation

	Planned	Actual	Ratio Against the Plan (%)
Project Cost	3.5 hundred million yen	3.37 hundred million yen	96.3
Period of Cooperation	Mar 2007–February 2011 (4 years)	Mar 2007–February 2011 (4 years)	100.0

Source: Documents provided by JICA

3.3.1.3 Period of Cooperation

The period of cooperation was as planned (100%) (Table 5).

Based on all of the above, the quality, quantity and timeliness of the inputs were appropriate, except that the number of allocated staff was below the target, while the outputs were achieved except for Output 2. Since the project cost and the period of cooperation were also as planned, efficiency is high.

3.4 Sustainability (Rating: ②)

3.4.1 Related Policy toward the Project

Sri Lanka has been putting emphasis on promoting waste management as indicated in the “National Environment Act” and the “National Policy on the Waste Management,” etc. Further, the policy priority on SWM is still high at the time of ex-post evaluation, which is exemplified by the extension of the Pilisaru Fund for the 2nd phase (2014~2018). The Pilisaru Fund allocates a national budget to SWM of LAs, the 1st phase of which started in 2008 and was completed in 2012.

Also the priority on SWM is still high from the viewpoint of MLGPC, which indicates that the direction will not be changed in the future as well³². LAs also put high priority on SWM. In the questionnaire survey at the ex-post evaluation, a question was asked to LAs on the priority of improvement of SWM at 5-grade evaluation³³. The average of the replies from 8 LAs selected for the model projects was 3.9 out of 5. As for the priority on SWM from the viewpoint of PCs, on the other hand, the average of the replies from 7 PCs to the same question was 3.4, which was rather high at the time of ex-post evaluation. Thus, improvement of SWM is still emphasized by the Sri Lankan government.

3.4.2 Institutional Aspects of the Implementing Agency

3.4.2.1 Institutional Aspect of NSWMSC

At the time of ex-post evaluation, there is no change in the position and the function of the NSWMSC³⁴. After the project completion, the number of NSWMSC staff has

³² Questionnaire survey to MLGPC

³³ The 5 grades indicates the followings; “5: Very high, 4: High, 3: Medium, 2: Not so high, 1: Not high at all.”

³⁴ NSWMSC hearing

Table 6: NSWMSC Staff after the project completion

(Unit: persons)

	2011	2012	2013	2014
1: Management Staff	3	3	3	4
Director	1	1	1	1
Acting Director	0	0	0	0
Deputy Director	0	0	0	0
Acting Deputy Director	0	0	0	0
Assistant Director	2	2	2	3
2: Technical Staff	2	3	8	8
Development Officer	1	2	6	6
Assistant Development Officer	1	1	2	2
3: Administrative Staff	3	3	2	1
Assistant Administrator	3	3	2	1
Total	8	9	13	13

Source: NSWMSC Questionnaire Survey

increased as shown in Table 6. Especially, technical staff, the insufficiency of which was pointed out as an issue before, increased staff since 2013.

The total number of NSWMSC staff became 13 since 2013, which is getting close to the targeted figure, i.e., 14. On the other hand, 4 staff left the NSWMSC due to transfers or quitting the job, after the project completion. Although the successors were allocated and received briefing from the management staff, being in an environment accessible to the related manuals and documents, all of the successors are less experienced compared with the predecessors³⁵, which is problematic in terms of quality. It is still clear where responsibility lies within the NSWMSC and no problems which impedes sustainability of the project effects are seen in terms of decision-making process even after the project completion.

3.4.2.2 Collaborative System with PCs

The NSWMSC will promote 3Rs mainly in villages, while continuing further construction and maintenance of compost plants. At the time of ex-post evaluation, in order to realize it, the NSWMSC is considering to establish a new system to strengthen collaboration with PCs and will submit a proposal to MLGPC soon. The

³⁵ NSWMSC hearing

major points of the proposal are: 1) to establish provincial-level committees and district-level committees, in order to monitor SWM of LAs and solve the problems; 2) that provincial-level committees will monitor the office of ACLG. ACLGs belong to PC, but are responsible for the district level, mostly located in the District Office. The Chairman is the Chief Secretary of PC, members are ACLGs (10 to 20 persons, depending on each PC); and 3) that the district-level committee is where substantial discussions are made at the regular meeting with LAs, of which the chairman is ACLG, and members are the LA staff such as environment officers, who are in charge of SWM. Staff at NSWMSC also attend the meetings when necessary. The objective of the new system is to establish a new monitoring system at the district level with ACLGs as the key persons, in order to substantially cover LAs more easily. As for the possibility of maintaining or reorganizing the collaboration system, monitoring is required on the future situation.

3.4.2.3 Collaborative Monitoring System with LAs

As for the model projects for which construction is already completed and that are currently under operation, monitoring through field visits are still made by the NSWMSC, and the pipeline between them are maintained. Due to constraints on the budget of field visits for NSWMSC staff, the frequency of the visits after the project completion is in decline³⁶. However, decreased frequency of the visits by NSWMSC staff is not a problem³⁷ for the LAs, which acquired sufficient capacity through the project.

Thus, as for the sustainability from institutional aspects, there is no problem in the NSWMSC itself, but the maintenance and expansion of the collaborative system with PC is problematic.

3.4.3 Technical Aspects of the Implementing Agency

3.4.3.1 Technical Aspect of the NSWMSC

At the time of ex-post evaluation, there is a gap between the recognition of related organizations on the technical capacity of the NSWMSC and that of the NSWMSC itself. The evaluation of PCs and LAs on the technical capacity of NSWMSC is lower than the self-evaluation of the NSWMSC, while the evaluation by PCs is the lowest among the three (Table 7).

³⁶ NSWMSC hearing

³⁷ NSWMSC, Kuliyaipitiya UC and Nawalapitiya UC hearings

Table 7: Evaluation on the capacity of NSWMSC

(Unit: %)

Evaluator/Evaluation Criteria	Management Capacity	Technical Capacity	Working Environment
NSWMSC	80	80	80
PC	57	58	65
LA	67	63	-

Source: Questionnaire survey to the NSWMSC, PCs and LAs

Remarks: Average amount of the replies to the question above in the questionnaire to CLG office

for PCs and the LAs selected for model projects. The number of respondents of PCs is 7, and that of LAs is 8.

The low evaluation of the PCs is regarded to be linked with the collaboration on the support to LA's SWM with the NSWMSC and motivation toward participation with the training provided by the NSWMSC. Hence, it is necessary to secure the technical advantage of the NSWMSC to PCs, and to urgently regain trust on the technical capacity of the NSWMSC by the related organizations. During the project period, 52 internal training programs were conducted for NSWMSC staff, whereas there are none after completion of the project³⁸. The person responsible for the NSWMSC, however, indicated that he would like to restart the internal training by the end of 2014³⁹.

When a NSWMSC staff member is transferred, there is no briefing from the predecessor for taking over the task because the successor is allocated 1 week or 1 month after the predecessor leaves. However, briefing is made by the management staff, such as the director. Also, all data of the related documents, such as manuals, materials and reports, are stored in the server, and the successor is in the environment in which they are accessible⁴⁰. With regard to the provided equipment, there is no problem in the maintenance, except that the provided PCs become old and it is necessary to replace them so that current software can be utilized⁴¹.

³⁸ The reason was asked in the NSWMSC hearing, but clear answer was not given, although it is assumed to be financial reason.

³⁹ NSWMSC hearing

⁴⁰ NSWMSC questionnaire and hearing

⁴¹ NSWMSC questionnaire

3.4.3.2 Technical Aspect of PCs and LAs

The manuals developed by the project were distributed to LAs in the country through PCs. They seem to be well utilized at the time of ex-post evaluation⁴².

As for the training for the PCs and LAs by the NSWMSC, the number of training courses has been decreasing after completion of the project. Also, the ratio of technical staff among all the participants decreased and it reached 0 in 2013, whereas it used to include both technical and non-technical staff during the project period, and the ratio of technical staff who participated in the training was one fourth in 2009. On the contrary, the ratio of the training programs implemented for non-technical staff, such as laborers at the SWM sites, has been increasing recently. According to

Table 8: The NSWMSC's SWM training programs conducted for PCs and LAs

	2009	2010	2011	2012	2013	Total
Number of training programs	9	6	3	4	2	24
Number of Participants	560	142	26	799	426	1,953
Technical staff	140	60	0	50	-	-
Non-technical staff	420	82	26	749	-	-

Source: NSWMSC Questionnaire and hearing

the NSWMSC, the major reasons for this are importance of knowledge and attitude of the laborers,⁴³ who are actually engaged with waste collection and the work at the compost plant sites for the sake of improving SWM, and generally rather low interest in participation of the training by the engineers at PCs, who are too proud to participate⁴⁴.

The NSWMSC has been conducting seminars since project cooperation period. The seminar, which is different from the training program, is an event targeted for a broader audience for the purpose of enlightenment on SWM. Although the number of

⁴² PCs and LAs hearings

⁴³ Laborers are classified as non-technical staff.

⁴⁴ NSWMSC hearing

the seminars held varies depending on the year, the number of seminars has been decreasing after completion of the projects.

Table9: Seminars conducted by NSWMSC

	2009	2010	2011	2012	2013	計
Number of seminars	1	0	7	5	2	16
Participants (persons)	100	0	700	500	1,000	2,300

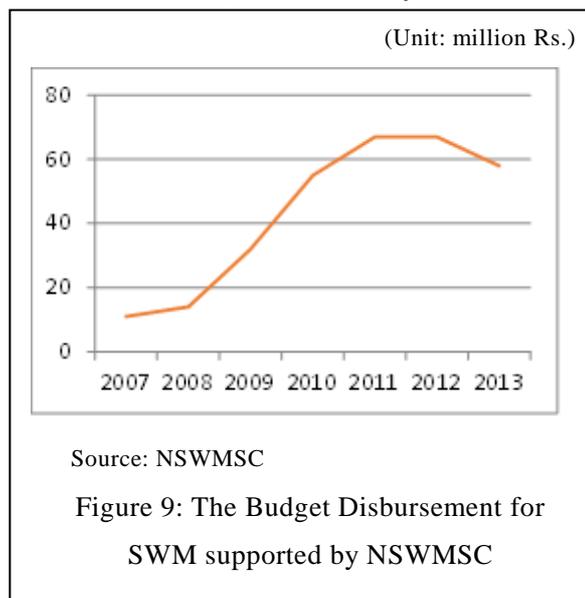
Source: NSWMSC questionnaire and hearing

However, the number of the participants has been increasing. This is because the NSWMSC increased the size of the audience per seminar in order to secure the effects and save the cost and workload. The seminar was not held in 2010 because the expected timing of the seminar was the same as the election for president and the parliament.

Based on the above points, there are some issues in terms of sustainability in technical aspects.

3.4.4 Financial Aspects of the Implementing Agency

The NSWMSC does not have its own budget, because it is positioned as the organization to support LA's budget disbursement. However, the amount by which the NSWMSC supported LAs after the project completion exceeds that during the implementation period. It is remarkable that the project budget for constructing facilities has been borne by the Sri Lankan side from the implementation period, foreseeing the situation after the project completion. In this project, the Japanese side did not dare to bear the construction cost of the facilities from the initial stage but tried to secure the necessary budget of the Sri Lankan side (securing mainly the MLGPC budget, and the Pilisaru Fund later as well), considering the



sustainability after project completion, which resulted in enhancement of sustainability from a financial aspect. Although the disbursed amount decreased in 2013 as shown in Table 9, this does not mean a substantial decrease. Some of the payment for 2013 was delayed and will be paid in 2014, while the amount will be increased in 2014⁴⁵. Meanwhile, information on the amount of the Pilisaru Fund since 2011 was not available either from the NSWMSC or CEA.

As for the future perspective, the budget allocation from MLGPC to LAs for promoting SWM will increase in the future as well⁴⁶, due to the importance of SWM itself as well as that of support to LAs, which are suffering from bad financial conditions, according to MLGPC. Moreover, the budget for promoting SWM by LAs has the probability to further increase, as phase 2 of the Pilisaru Fund is expected to start in 2014. Although the details of the Pilisaru budget amount are not clear, the total budget for Pilisaru from 2008 till 2018 is expected to amount to 5.6 billion Rs⁴⁷.

It seems that the budget for the field visits of NSWMSC staff decreased, resulting in less frequent field visits to LAs⁴⁸. However, as the budget for field costs is not an independent item of expenditure in the government of Sri Lanka, it is not possible to obtain the data of field visits to comprehend this tendency.

Thus, the budget for SWM by LAs exceeds that of the project implementation period, and the sustainability from a financial aspect has been secured, although there is a slight concern that the decreased budget for field visits of the NSWMSC decreased frequency of the monitoring.

As explained above, this project has some issues on institution-building for collaborative relationship with PCs, as well as technical aspects of the NSWMSC. Although some actions will be soon taken to establish a new system mainly with ACLGs, and resumption of the internal training of the NSWMSC, there are some uncertain elements to foresee at the moment on the actual improvement to be made in the future. Therefore the sustainability of the effects resulting from this project is fair.

⁴⁵ NSWMSC hearing

⁴⁶ MOLGPC questionnaire survey

⁴⁷ Unstoppable Sri Lanka 2020 – Mahinda Chintana – Vision for the Future; Public Investment Strategy (2014-2016)

⁴⁸ Hearing from those who are concerned such as NSWMSC

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project was implemented to enhance capacity development of NSWMSC, which is at the central level, in terms of its planning and implementation for the sake of supporting SWM of local governments. Relevance is high, because improvement of SWM is consistent with the development needs and development policy of the country and with Japan's ODA policy. Effectiveness/Impact is fair, as the Outputs and the Project Purpose were mostly achieved except for some indicators. Efficiency is high, since quality, quantity and timeliness of the inputs were appropriate in comparison with the achievement of the Outputs and the Project Purpose, except for allocation of human resources. Sustainability is fair, because sustainability from policy and financial aspects is high, whereas there is some concern about organizational and technical aspects. In light of the above, this project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

- Strengthening technical capacity of the NSWMSC

Although the number of NSWMSC staff increased after completion of the project, there remain some concerns from a technical aspect, as the successors of those who quit or were transferred have less experience compared with the predecessors, and so on. Also, there is a gap between the recognition of PCs and LAs on the NSWMSC's technical capacity and that of the NSWMSC itself. In order to enhance trust from PCs, improve the quality and quantity of technical support to LAs, and cope with the training needs, MLGPC and the NSWMSC should urgently strengthen allocation of technical staff, and increase recruitment of new engineers or new graduates with science backgrounds to be intensively fostered after recruitment, in addition to resumption of internal training of the NSWMSC.

4.2.2 Recommendations to JICA

None.

4.3 Lessons Learned

- The involvement of related organizations in a country under parallel administration system

In Sri Lanka, the administrative system is parallel, with the District directly under the central government, while the Local Authorities are under the supervision of the Provincial Councils. The Provincial Councils are political, and not positioned under the

Ministry of Local Government and Provincial Councils. Under these circumstances, this project tried to change the consciousness of the secretariat at the Provincial Councils so that they would proactively address SWM and establish a supporting system in which PCs and the NSWMSC closely collaborate with each other to improve SWM by LAs. However, the time was not sufficient for raising their consciousness, as the project's substantial activities for it were conducted within 2 years after the Mid-term Review was conducted. As a result, the SWM committees established during the project's duration neither function after the project completion, nor were new SWM committees established in other provinces. When a project is planned in which a certain organization, such as a Provincial Council, which is not positioned under the central government, should be involved as a substantial partner in a country with a parallel administrative system, it is especially important to secure sufficient time for comprehending the situation for project design, as well as for implementing with more years than usual. Also, it would be effective to make it a pre-condition, to be met before starting this kind of project, that the recipient country must strongly influence the specific organization at the top level of the government and clarify its policy or direction at the planning stage, because an ordinary approach in which project staff coordinate with the organization is assumed to be difficult.

<Column>

In Sri Lanka, the budget for SWM shares 20% to 50% of the total budget of LAs, which shows that improvement of SWM is still a big task. In this project, compost plants were adopted as a SWM system for the model projects, which was an appropriate decision reflecting components of waste in the country and the experience of the preceding Development Study Project conducted by JICA. In a sample survey conducted in 3 LAs in each of 2 provinces at the ex-post evaluation, the compost plants were properly maintained in 3 LAs in North Western Province and 1 LA in Southern Province. Also, in a beneficiary survey, the residents recognized that their consciousness on waste had significantly changed and that the hygiene condition had drastically improved. As for the latter point, the recognition was especially remarkable in North Western Province. The promoting factors for the above are regarded as: the technical support by the NSWMSC during the project duration; continuous implementation of the National SWM Contest, which maintained the motivation of the stakeholders; the clear and specific planning as well as monitoring of LAs by organizing regular progress meetings; and the technical capacity and the commitment of the CLG secretariat of North Western Province. Also, at the LAs level, LAs that have both chiefs with strong commitment and a person in charge with knowledge, skills and strong commitment are successful in SWM.

Therefore, it is important for improvement of SWM to simultaneously strengthen the commitment of the leaders and knowledge and skills of technical staff, and the major stakeholders at the PCs and LAs, starting from the project's duration. It is also essential for maintaining sustainability to continue training on the above for both leaders and technical staff, because the leaders and the staff change by election, transfer, etc., as well as to strengthen the infrastructure of human resources and the technical capacity of the counterpart organization during the project period so that it can continue the training after the project's completion.