

Country Name	The Project for Integrated Solid Waste Management System in Federal Capital Territory
Federal Republic of Nigeria	

I. Project Outline

Background	The Federal Capital Territory (FCT) consisting of six Area Councils (ACs) including FCC are governed by the Federal Capital Territory Administration (FCTA). FCC had a population of 1,320,000 and generated approximately 800,000 tons of general solid waste a year. The Department of Waste Management and Sanitation (DWMS), Abuja Environmental Protection Board (AEPB) was responsible for solid waste management in FCC. Lots ¹ in FCC were serviced by private waste collection companies subcontracted by AEPB, and the collection of waste in residential areas was directly undertaken by AEPB. The collected waste in FCC was open-dumped at Gousa and Ajanta landfill sites without an appropriate management plan. In addition, solid waste generated in the ACs was jointly managed by ACs and the Satellite Town Development Department (STDD) excluding FCC and they had just started waste collection and transport by private companies in lots. While AEPB challenged to enhance solid waste management, there were various issues for the establishment of a more systematic waste collection system and the operation of landfill sites. Under those situations, the government of Nigeria requested the government of Japan a technical cooperation project to support organizational and individual capacity enhancement for establishing a model of integrated solid waste management in FCC.		
Objectives of the Project	Through improvement of AEPB's capacity for problem analysis, solid waste collection, safe and sanitary waste disposal, and public awareness activities on the Integrated Solid Waste Management (ISWM), as well as enhancement of the institutional settings and capacity for the financial management of AEPB concerning ISWM, the project aims at improving the ISWM system in FCT, thereby contributing to sustaining its integrated solid waste management.		
	1. Overall Goal: Integrated solid waste management in FCT is sustained. 2. Project Purpose: The ISWM system in FCT is improved.		
Activities of the Project	1. Project Site: The Federal Capital Territory 2. Main Activities: 1) Studying current policy, identifying the issues, and drafting an action plan for ISWM in FCT, 2) Studying waste generation, waste collection and transportation in FCT, drafting a plan on them, and conducting a pilot activity, 3) Drafting a landfill improvement plan and operation manual to conduct a pilot activity, 4) Drafting a plan to improve the institutional settings and financial management of AEPB, and conducting a pilot activity for them, 5) Conducting a public awareness program about the environment based on a baseline survey, etc. 3. Inputs (to carry out the above activities) Japanese Side 1) Experts: 7 persons 2) Trainees Received: 15 persons 3) Equipment: Multi-functional photocopy machine, Desktop Computer, Notebook Computer 4) Local cost: Cost for the pilot project Nigerian Side 1) Staff Allocated: 22 persons 2) Facilities and land: Office space with necessary equipment 3) Local expense: Transportation fee, Running expenses necessary for the implementation of the Project, Supply or replacement of machinery, etc.		
Project Period	(ex-ante) March 2015 – March 2018 (36 months) (actual) June 2015 – September 2018 (39 months)	Project Cost	(ex-ante) 370 million yen (actual) 388 million yen
Implementing Agency	Federal Capital Territory Administration (FCTA), Abuja Environmental Protection Board (AEPB)		
Cooperation Agency in Japan	Yachiyo Engineering Co., Ltd.		

II. Result of the Evaluation

<Constraints on Evaluation>

- STDD and ACs have not answered the questionnaire for the ex-post evaluation survey, and the evaluations of some parts have not been fully conducted.

<Special Perspectives Considered in the Ex-Post Evaluation>

- STDD and AC were added to the project as a counterpart at the time of the second modification of the Project Design Matrix (PDM).

1 Relevance/Coherence

[Relevance]

<Consistency with the Development Policy of Nigeria at the Time of Ex-Ante Evaluation >

The project was consistent with the development policy of Nigeria at the time of ex-ante evaluation such as "Vision 20:2020" aiming at ranking Nigeria among the world's top 20 economies in terms of economic size, with Gross Domestic Products (GDP) of 90 billion US dollars (USD) and an annual national income per capita of 4,000 USD by 2020. Solid waste management was placed as one of the priority projects in the vision that upheld sustainable development and economic growth.

<Consistency with the Development Needs of Nigeria at the Time of Ex-Ante Evaluation >

¹ "lot" is an area unit for garbage collection that is set separately from an "administrative district".

The project was consistent with the development needs of Nigeria at the time of ex-ante evaluation to improve organizational and individual capacity enhancement for establishing a model of integrated solid waste management in FCC.

<Appropriateness of Project Design/Approach>

The project design/approach was appropriate. No problem attributed to the project design/approach was confirmed.

<Evaluation Result>

In light of the above, the relevance of the project is ③².

[Coherence]

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with the "Country Assistance Policy for Nigeria (2012)" prioritizing "Promotion of social development with a focus on an urban area". In addition, "Yokohama Action Plan 2013-2017" (2013) made in TICAD V declared that improving sanitation is fundamental to preventing diseases and safeguarding, thus contributing to the enhancement of human security. The project was also consistent with this declared policy.

<Collaboration/Coordination with other JICA's interventions>

Any collaboration/coordination between the project and other JICA's interventions was not clearly planned at the time of ex-ante evaluation.

<Cooperation with other institutions/ Coordination with international framework>

Any cooperation/coordination with other institutions was not clearly planned at the time of ex-ante evaluation.

<Evaluation Result>

In light of the above, the coherence of the project is ②.

[Evaluation Result of Relevance/Coherence]

In the light above, the relevance/coherence of the project is ③.

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the Time of Project Completion>

At the time of project completion, the Project Purpose was mostly achieved as planned. Improvement plan and operation manual for waste collection and transportation, and landfill management were produced. In addition, improvement plans for the institutional setting and financial management, and plans for the activity of public awareness on 3R (Reduce, Reuse, Recycle) were also formulated (Indicator 1). According to the director of AEPB, they were used as official plans and manuals (Indicator 1 and 2).

<Continuation Status of Project Effects at the Time of Ex-Post Evaluation>

By the time of the ex-post evaluation, the project effects have been partially continued. The plans and manuals made during the project period have been utilized by AEPB well. On the other hand, STDD and ACs no longer utilize the plan made by the project such as the improvement plan and operation manual for waste collection aside from the plans for the activity of public awareness on 3R because of a lack of financial backup.

<Status of Achievement of the Overall Goal at the Time of Ex-Post Evaluation>

At the time of ex-post evaluation, the Overall Goal has been partially achieved. AEPB has conducted most of the activities in terms of a waste collection system, recycling regulation, and landfill management in line with the plans and the manuals formulated. The scope of public awareness activities has been expanded into other areas. On the other hand, no information has been obtained from AEPB on the activity in institutional settings and financial management (Indicator 1). As mentioned above, STDD and ACs have not implemented the activities based on the manuals due to a lack of financial backup from FCTA.

<Other Impacts at the Time of Ex-Post Evaluation>

No negative impact on the natural environment was observed.

<Evaluation Result>

In light of the above, the effectiveness/impact of the project is ②.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results	Source
(Project Purpose) The ISWM system in FCT is improved.	Indicator 1 The plans and manuals for improvement of waste collection system, landfill management system and public awareness are decided as AEPB's official plans and manuals.	<u>Status of the Achievement (Status of the Continuation): mostly achieved as planned (partially continued)</u> (Project Completion) - Improvement plan and operation manual for waste collection and transportation, and for landfill management were produced. - Improvement plans for the institutional setting and financial management, and plans for the activity of public awareness and 3 R were also formulated. - The above plans and manuals were used as official ones. (Ex-Post Evaluation) - Refer to Indicator 1 of Overall Goal.	Project completion report
	Indicator 2 The plans and manuals are shared to STDD and all ACs by AEPB.	<u>Status of the Achievement (Status of the Continuation): mostly achieved as planned (not continued)</u> (Project Completion) - The director of AEPB mentioned that plans and manuals produced through the project were used as official ones. (Ex-Post Evaluation) - Refer to Indicator2 of Overall Goal	Project completion report
(Overall Goal) Integrated solid waste management in FCT is sustained.	Indicator 1 The activities in line with the plans and manuals are implemented by AEPB.	(Ex-Post Evaluation) <u>partially achieved</u> - In line with the plans and the manuals formulated, AEPB has conducted most of the activities in terms of a waste collection system, recycling regulation, and landfill management. - The activity on public awareness has been expanded into other areas.	Interview to AEPB

² ④:very high, ③: high, ②: moderately low, ①: low *To be the same afterwards.

		No information has been obtained from the implementing agency on the activity on institutional setting and financial management	
	Indicator 2 The activities based on the manuals are implemented by STDD and AC.	(Ex-Post Evaluation) <u>not achieved</u> STDD and ACs have not implemented the activities based on the manuals due to a lack of financial backup.	Interview to AEPB

3 Efficiency

Both the project cost and the project period slightly exceeded the plan (the ratio against the plan: 105% and 108%, respectively) because of combined factors. Outputs were partially produced since some pilot projects had been canceled due to delays in counterpart fund execution, and the plan had been changed.

In the light above, the efficiency of the project is ③.

4 Sustainability

<Policy Aspect>

ISWM policy guidelines and ISWM strategic framework were developed in 2015 and have since been updated by all relevant stakeholders such as STDD, the Federal Ministry of Environment, and NGOs. Also, the recycle guideline policy was developed in 2018 and covers contents such as the involvement of Private Sector Participation (PSP) in recycling registration as well as supervision of activities for regular database creation and documentation.

<Institutional/Organizational Aspect>

It is unclear whether there are any particular changes in institutional and organizational aspects of AEPB after the project completion. At least, AEPB has continued to be responsible for promoting/disseminating the system/the model/the activities for the improvement of the solid waste management system introduced/established by the project. In total, there are more than 1,000 staff in AEPB to spread ISWM and keep FCC clean. In addition, the engagement of private recyclers has contributed to the dissemination of the recycling system. It is noted that there are no data on the number of STDD and ACs members to conduct any activity in FCT other than FCC.

<Technical Aspect>

In order to disseminate skills and knowledge, AEPB has provided trainings on waste collection and transportation to new staff as well as to learn the current situation of landfill activities. Furthermore, public awareness promotion training and financial analysis to its various ranges of staff has been conducted. In addition, some training and on-the-job training (OJT) on public awareness have been conducted and new guidelines have been developed. On the other hand, STDD and ACs have not used manuals on activities shared by AEPB since they did not receive the training for use of manuals.

<Financial Aspect>

The financial condition of AEPB has been fragile to conduct the activities introduced by the project continuously though the FCTA budget is approved by the federal government through the national assembly. For multiple reasons, including low waste collection service charges from residents and its inefficient management, AEPB has not been able to conduct sound and stable operations. Additionally, STDD and ACs have not been financially supported by FCTA.

<Environmental and Social Aspects>

No negative impact on the natural environment was observed.

<Evaluation Result>

In light of the above, some problems have been observed in terms of the institutional/organizational, technical, and financial aspects of the implementing agency. Therefore, the sustainability of the project effects is ②.

5 Summary of the Evaluation

The project almost achieved Project Purpose as planned to improve the ISWM system in FCT and Overall Goal to sustain ISWM in FCT. As for sustainability, some problems have been observed in terms of the institutional/organizational, technical, and financial aspects of the implementing agency, AEPB. When it comes to efficiency, the project cost and period slightly exceeded the plan.

Considering all of the above points, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- The AEPB's budget from the government has been declining and it needs to conduct other ways to secure the budget. For this purpose, AEPB needs to increase the fee for waste management services, while educating the users about the need for segregation and payment, and ensuring the cost recovery of solid waste management by collecting the service charge from users.
- The current selling price for recyclables has not been sufficient. By utilizing the knowledge that private recycling companies have, it is necessary to conduct recycling collection more effectively as seen in the case of companies. In addition, appropriate segregation that results from continuous activities on public awareness would lead more productive recycling collection.
- STDD and ACs have not used any of the manuals provided by FCTA. This is not only because of budget limitations but also because of the technical problems they face. That is, FCTA shares all the manuals, but that is an oversupply of information. Based on an understanding of the capacities and constraints of STDD and ACs, FCTA should pick up some manuals that they could make use of and recommend them to use. FCTA should also provide support such as explaining the content and use of the manuals if necessary so that STDD and ACs can do them to implement waste management services in line with the manuals.

Lessons Learned for JICA:

- STDD and ACs were added to the project design as a counterpart in 2017 and AEPB shared the improvement plans and manual with STDD and ACs. However, in 2018, they have not implemented any activities based on the manuals at all. When the project involved AC and STDD as counterparts in the project, JICA should have checked the project design to see if the process was such that they could be trained in the use of the manuals and taught the know-how.



Truck offloading at the Gousa dumpsite



AEPB Workshop for vehicle maintenance