

Country Name	Project for Improvement of Environmental Management Capacity in Nakuru Municipality and the Surrounding Areas
Kenya	

I. Project Outline

Project Cost	368 million yen	
Project Period	February, 2005 – February, 2009 (Extension period: February, 2009 – July, 2009)	
Implementing Agency	Municipal Council of Nakuru (MCN) (Ministry of Local Government)	
Cooperation Agency in Japan	Ministry of Environment	
Related Projects (if any)	Japan's cooperation: <ul style="list-style-type: none"> • The Greater Nakuru Water Supply Project (1986, ODA Loan) • The Nakuru Sewage Works Rehabilitation and Expansion Project (1994, Grant Aid) 	
Background	<p>Nakuru Municipality or Nakuru town was the fourth largest city in Kenya with an estimated population of more than 400,000. The town had been experiencing rapid population growth and increasing a number of factories including battery, tanning, garment, food processing and pyrethrum in operation. The concentration of population and industries resulted in chronic water shortage and pollution from sewage and industrial wastewater. As a result, the deterioration of the water-related environment had become one of the major concerns in the town. Lake Nakuru, which is famous worldwide for its flamingo, is located at the bottom of a basin, and therefore, the lake received considerable amounts of water flowing from the river and by underground seepage, and all pollutants including sewage and industrial wastewater were likely to accumulate there, posing a serious threat to the ecosystem of the watershed.</p> <p>In response to those issues, the Municipal Council of Nakuru (MCN) had created the Department of Environment in November 2011 to manage the environment including control of major pollutants, however, the capacity of MCN was still weak and improvement in its ability of environmental administration and management was an urgent issue. Many institutions including NGOs and other donor agencies had been working on forest preservation, land use of the watershed region, waste management and protection of wildlife in the watershed region. However, their respective interventions were ad hoc basis and they had not worked jointly. As a result, it was difficult to accumulate study results or achievements of activities. In order to improve this situation, MCN was expected to take initiatives for the environmental management in Nakuru town and Nakuru watershed region.</p> <p>In these circumstances, the Government of Kenya requested the Government of Japan for a technical cooperation to improve the environmental management capacity of MCN in water-related aspects.</p>	
Inputs	Japanese Side	Kenyan Side
	<ol style="list-style-type: none"> 1. Experts: 13 (3 for Long term, 10 for Short term) 2. Trainees Received: 5 (Counterpart training in Japan) 3. Equipment: 29 million yen 4. Local Cost: 22 million yen 	<ol style="list-style-type: none"> 1. Staff allocated :33 2. Land and facilities provided: An office for experts, project-related facilities
Project Objectives	Overall goal	
	To improve environmental management in the Lake Nakuru Watershed Region	
	Project Objective	
To improve the water-related environmental management capacity of the Nakuru Municipal Council		
Outputs		
<ol style="list-style-type: none"> 1. Credible quality with effective coverage in monitoring is attained. 2. Effective environmental management tools and mechanism for enforcement are developed and utilized. 3. Cooperation is established among lead organizations and stakeholders for the study and actions in the watershed for its better management. 4. Public and private participation in local environment management is enhanced. 		

II. Result of the Evaluation

Summary of the Evaluation

In Nakuru Municipality or Nakuru town, the concentration of population and industries resulted in chronic water shortage and pollution from sewage and industrial wastewater. As a result, the deterioration of the water-related environment had become one of the major concerns in the town. Lake Nakuru is located at the bottom of a basin, and therefore, the lake received considerable amounts of water flowing from the river and by underground seepage, and all pollutants including sewage and industrial wastewater were likely to accumulate there, posing a serious threat to the ecosystem of the watershed. In response to those issues, MCN had created the Department of Environment in November 2001 to manage the environment including control of major pollutants. However, the capacity of MCN was still weak and improvement in its ability of environmental administration and management was an urgent issue.

This project has largely achieved the project purpose of improving water-related environmental management capacity

of the MCN. Water quality monitoring programs and environmental management tools including the Factory Inspection Manual and the Guideline for Industrial Effluent Treatment were developed by the project and have been used appropriately for environmental management in Lake Nakuru catchment. The project also has mostly achieved overall goal. MCN, Nakuru Water and Sanitation Services, Co. Ltd (NAWASCO; a company responsible for operation and facility maintenance of water supply and sewage in Nakuru Municipality) and Kenya Wildlife Services (KWS; an organization responsible for the management of Lake Nakuru National Park) have expanded respective activities on the environmental management. In addition, those three organizations together with NGOs have been continuing cooperation for environmental management after the completion of the project. However, sewage system improvement and proper management of a rainwater reservoir as measures for pollution management have not been taken by MCN, although the project proposed and it was expected that MCN take such measures after the project completion.

As for sustainability, there was no problem observed in terms of related policies and technical aspect, however, some problems were observed in institutional and financial aspects. Institutionally, there is a concern whether Pollution Control Section (PCS) at MCN are able to carry out its tasks at the current technical level since most of the staff of PCS are seconded from the Ministry of Health and they might return to the Ministry any time. Financially, although minutes of understanding (MOU) signed by MCN, NAWASCO and KWS stipulates the financial responsibility of three organizations for water quality monitoring activities, sufficient budget is not secured.

For relevance, the project has been highly relevant with Kenya's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante evaluation and project completion. For efficiency, both of the project cost and the project period slightly exceeded the plan.

In the light of the above, this project is evaluated to be satisfactory. .

1 Relevance

This project has been highly relevant with Kenya's development policy; water resource, environmental management and conservation of sustainable and healthy environment, which were set as the priority areas in Kenya Poverty Reduction Strategy Paper and Kenya Vision 2030, development needs "Environmental management in the Lake Nakuru watershed region", as well as Japan's ODA policy "Country assistance program for Republic of Kenya", at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved the project purpose of improving water-related environmental management capacity of the MCN. The project has developed credible water quality monitoring programs for data collection and analysis, effective environmental management tools such as the Factory Inspection Manual and the Guideline for Industrial Effluent Treatment, and therefore MCN's inspection and guidance capacity has improved. Furthermore, cooperation among lead organizations and stakeholders for environmental management of Lake Nakuru catchment has been established through development of the GIS database, and stakeholders' meetings/seminars and discussion on measures for environmental management. As a result, data collection and analysis capacity of Water Quality Testing Laboratory (WQTL; a laboratory which was established by a grant aid assistance project from Japan and currently belongs to NAWASCO) which monitors the water quality has improved, and the analyzed data and environmental management tools have been appropriately utilized by MCN, NAWASCO and KWS for their environmental management in the Lake Nakuru catchment and thereby their environmental management capacity have improved. For instance, MCN which is responsible for pollution control utilizes the tools for their factory inspection and for enforcement of regulations on polluters, NAWASCO has been using the data to maintain acceptable water quality for drinking as well as to assess the effectiveness of the sewerage treatment process, and KWS is accumulating the data to maintain the standards for acceptable habitat for wildlife.

The project also has mostly achieved overall goal. MCN, NAWASCO and KWS have expanded respective activities on the environmental management. In addition, a cooperation mechanism by those three organizations for environmental management was established by concluding MOU by three organizations for their cooperation on the water quality monitoring activities. After the completion of the project, those three organizations together with NGOs have been continuing cooperation for environmental management. However, while sewage system improvement and proper management of a rainwater reservoir as measures for pollution management were expected to be taken by MCN after the project completion, MCN only carries out monitoring activities due to the shortage of personnel and budget.

The project has mostly achieved the targets of outputs, project purpose, and overall goal; therefore, effectiveness/impact of this project is high.



Samples being analyzed at WQTL



A poster for awareness raising on environment which was developed by the project



Lake Nakuru Education Center (Activities for public awareness raising on environment are carried out there.)

3 Efficiency

While the inputs were appropriate for producing the outputs of the project, both of the project cost and project period slightly exceeded the plan (ratio against the plan: 111% and 112% respectively), because MM of short-term experts and a budget for equipment were increased, and the experts were not able to work for five months due to the aftermath of the presidency election. Therefore, efficiency of the project is fair.

4 Sustainability

This project is consistent with the Kenya's environmental policies, since Environmental Management By-laws was enacted which stipulates MCN's roles on environmental management. There is no problem in the technical aspect. Three out of total six staff at WQTL participated in the technical training and therefore they have high skills of water data analysis. The remaining three staff who were assigned after the project completion are scheduled to take part in the training. PCS also carries out training for the newly hired staff with the manual and guideline developed by the project.

With respect to the institutional aspect, although the structure of implementing agency and other related organizations have been sustained in a similar manner with the project implementation period, some problems were observed since most of staff of PCS are seconded from the Ministry of Health and there is a concern whether PCS is able to continue the tasks at current technical level since they might return to the Ministry anytime.

On the financial aspect, although information on WQTL's revenue from the commissioned service for the water data analysis was not obtained, WQTL seems to operate sustainably since the budget includes expenses for purchase of reagent, consumable goods such as lab coats, and equipment including beakers. On the other hand, there are some problems on financial aspect: Although the MOU signed by MCN, NAWASSCO and KWS stipulates the financial responsibility of three organizations for water quality monitoring activities, sufficient budget is not secured. The budget for maintenance of equipment procured is not secured either. The expenses for the environmental education were incurred by Japan during the project implementation; however, after the termination of the project, the budget has not been secured.

Therefore, sustainability of this project effect is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

1. The problem of staff allocation at PCS has not been solved as the most of the staff are seconded from the Ministry of Health. MCN should allocate permanent staff to PCS.
2. The regular meeting among the MCN, NAWASSCO and KWS has been offering a good avenue for the mutual understanding and to address problems in a collective manner. Therefore, this should be continued.
3. Each of MCN, NAWASSCO, and KWS should continuously secure and allocate sufficient budget for the water quality monitoring activities, operation and maintenance budget for the WQTL equipment procured by the project, and others.
4. At the regular tripartite meeting, MCN, NAWASSCO, and KWS should discuss concrete and effective collaborative activities and measures for environmental management in Lake Nakuru catchment.

Lessons learned for JICA

The expenses for the environmental education were incurred by Japan during the project implementation. At the time of project formulation, JICA and a recipient country should discuss the detailed cost breakdown and clarify items incurred by JICA and the recipient country respectively. Based on the agreement, JICA should make the recipient country fully aware of the need for the budget allocation in the future in order to continue the sustainable activities after the project completion.