

The Korofina District Water Supply Planning Project



Project Sites Bamako

1. Background of Project

The government of Mali identified, as a national agenda, stable supply of clean water to 18 cities with populations over 10,000. Korofina district, which is located in the northeast of the capital city, Bamako, had experienced a rapid population increase. The increase was caused by a population influx from the city center and its rural surroundings.

Meanwhile, according to 1995 statistics, the water supply diffusion rate in the district remained at 47% of approximately the population of 250,000. Moreover, as the population increased, the increase in water demand incurred low water pressure and water failure.

In those areas where there are no access to water supply systems and using aged shallow wells, the following subjects became issues of the poor community. First was the water shortage caused by a decline in well-water levels during the dry season. The second issue was the spread of disease caused by the declining water quality. Therefore, to provide clean water, the government of Mali designed the "Korofina District Water Supply Planning Project" and made a request to Japan in 1993 for grant aid.

2. Project Overview

(1) Period of Cooperation

FY1996 – FY1998

(2) Type of Cooperation

Grant Aid

(3) Partner Country's Implementing Organization

Water Supply Department of Mali Energy Public Cooperation (EDM), the Agency of Water Facilities and Energy in the Ministry of Mining, Energy, and Water Facilities

(4) Narrative Summary

1) Overall Goal

Expansion of water purification plants and improvement of water distribution lines is achieved through the "Korofina District WaterSupply Planning".

2) Project Purpose

Domestic noncommercial water is provided stably to the residents of Korofina district.

3) Outputs

Capability to supply water is improved by constructing water supply facilities.

Japanese Side

Grant	2.2 billion yen (E/N amount)
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Malian Side

Administration of water supply facilities, proliferation of faucets

3. Members of Evaluation Team

Team Leader:

Isao FUKUSHIMA, Grant Aid Management Division, Economic Cooperation Bureau, Ministry of Foreign Affairs

Operating Conditions Evaluation:

Makoto TAKAHASHI, Fourth Project Management Division, Grant Aid Management Division Department, JICA

Facilities Conditions Evaluation:

Hirofumi MIYASHITA, Japan International Cooperation System

Interpreter:

Masashi ISHIKAWA, Japan International Cooperation System

4. Period of Evaluation

12 February 2001 – 24 February 2001

5. Results of Evaluation

(1) Relevance

This project was implemented based on the "Bamako Water Supply Planning Project" which aimed for the expansion of water purification facilities and improvement of water distribution lines for areas with poor water

supply facilities including Korofina district.

As this plan was founded upon a Mali national agenda, it is considered relevant.

(2) Effectiveness

The project increased the water supply to Korofina district from 12,000m³ per day in 1995 to 21,000m³ per day in 2000. It also increased the water supplied population from 117,000 in 1995 to 256,000 in 2000 and the district's water supply rate to 75%.

Thus, the project has almost achieved the objective set by the basic design study of 1996. That is, the project would supply clean water to 310,000 people, accounting for 78% of the estimated population of year 2000, 400,000.

In addition, the Mali side installed 1,968 private faucets and 136 communal faucets, constructed 10 km of secondary distribution pipes, and constructed lead-ins for connecting distribution pipes and power cables in water purification facilities.

(3) Efficiency

The materials and equipment for the project were procured smoothly within the contracted period, and passed Mali Customs efficiently. As the construction was done efficiently, it was completed as scheduled.

By the efforts of the EDM, police force, municipality, and mass media, no delays were caused in the construction of waterlines from the Bamako water purification facility to the Korofina water distribution reservoir, despite them having to run through the heavy traffic roads, many crossings over railways and rivers and residential areas.

(4) Impact

The EDM installed 162 communal faucets in this project. As the objective of the basic design, the sum of the communal faucets was expected to be 198 in Korofina district in 2000. However, the communal faucets amounted to 278 in 2000.

More than the intended number of faucets was installed by the municipality (18 faucets) and individuals (93 faucets). This success could be attributed to the community's understanding of the significance of the project. As the community actively participated, the government of Mali appreciated this project as a successful model of community participation for development planning.

In 1999, 1,252 individuals who had abandoned their water service contracts, re-signed their contracts. This proved that the water service operation had gained the users' trust. Consequently, water bills were smoothly collected, and the collection rate increased from 70% in 1995 to 93% in 2000. As a result, the financial standing of the Bamako purification facility was improved.

The improvement of the water supply rate solved problems that used to be prevalent in Korofina district, such as low water pressure and water failure. According to interviews with the residents, there were decreases in water shortages during the dry season and waterborne diseases such as diarrhea. Moreover, the workloads of women and children carrying water were reduced.



Communal faucet

(5) Sustainability

This project contributed to the drastic increase in income of the water service section of EDM; to be more precise, from 890 million yen in 1995 to 1.52 billion yen in 2000. Consequently, the water service operation in Bamako was covered 100% by the income. In addition, the EDM increased the number of personnel from 90 in 1996 to 114 in 2000.

Regarding technical level, there seemed to be no problems as EDM engineers have handled breakdowns that have happened so far.

6. Lessons Learned and Recommendations

(1) Lessons Learned

The project was implemented successfully because coordination between the governments of Japan and Mali had been smoothly done and the community actively participated. The government of Mali appreciated this project as a successful case of public and community participation for development planning. They have been conducting the development research for the improvement in urban water supply systems in Bamako and surrounding areas. This project should be referred to as a model for future urban water supply development projects in Mali.

(2) Recommendations

The EDM made a request for counterpart trainings in Japan in order to expand their services and to improve efficiency of the facility operations and maintenance capacity. The Japan side should consider this request thoroughly to generate a synergistic effect from this project.