

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Senegal office: March, 2013

Country Name	Project of Water Supply in Rural Area
Senegal	(Projet d'approvisionnement en eau en milieu rural)

I. Project Outline

Project Cost	E/N Grant Limit: 495 million yen (Phase I) and 355 million yen (Phase II)	Contract Amount: 494 million yen (Phase I) and 353 million yen (Phase II)
E/N Date	Phase I: November, 2004, Phase II: June, 2005	
Completion Date	Phase I: March 2006, Phase II: March, 2007	
Implementing Agency	Ministère de l'Habitat, de la Construction et de l'Hydraulique, Direction de l'Hydraulique Rurale (since December, 2011)	
Related Studies	Basic Design Study: March, 2004 to September, 2004	
Contracted Agencies	Consultant(s)	Phase I: Japan Techno Co., Ltd., Phase II: Japan Techno Co., Ltd.
	Contractor(s)	Phase I: Nissaku Co., Ltd, Phase II: Nissaku Co., Ltd.
	Supplier(s)	Phase I: Kanematsu Corporation, Phase II: None
Related Projects (if any)	<ul style="list-style-type: none"> Grant Aid: Project of Water Supply in Rural Area (17 projects in total from 1979 to 1998) Technical Cooperation: Project for Safe Water and the Support on Community Activities (PEPTAC) (Phase I:2003-2006 and Phase II: 2007-2010), Belgium: Project for water supply facilities including establishment of ASUFOR (1997-02 and 2002-08) 	
Background	<p>In Senegal, 60% of the population inhabited in rural areas with limited access to safe water. More than 40% of the rural population had no other choice to use unsanitary and unhealthy water from surface and rain water or shallow wells more than 10 km away from villages. Fetching water, including long-way conveyance, was heavy burden for women and children in rural areas. Thus, the sustainable safe water supply in rural areas was one of priority issues for the country. The government of Senegal targeted the installation of 1,800 motorized water supply facilities in rural areas until 2010 in "the Special Program of Water (PHS: le Programme Spécial de l'Hydraulique)". Although 958 water supply facilities were installed up to 2003, they could not cover the target population yet; therefore, the government of Senegal requested the government of Japan to support the construction of water supply facilities in the priority sites in the program.</p>	
Project Objectives	<p>Outcome</p> <p>To sustainably supply safe water of 35 litter/person/day for the population of 45,070 in Louga, Matam, St. Louis, Tambacounda Kaolack and Thiès by construction and rehabilitation of water supply facilities.</p>	
	<p>Outputs</p> <p>Japanese Side</p> <ul style="list-style-type: none"> Newly installation of water facilities in the 10 sites of Saré Gaty, Thicky, Touba Sam, Mbousobé, Diabal, Yoli, Guénnène, Boustane, Thiagnaf, Oudallaye Rehabilitation of existing water facilities constructed by the past grant aid projects in the 4 sites: Malème Niani, Kathiote, Ngomène, Keur Yaba Diop Equipment: Vehicles for O&M and equipment for measurement test Soft Component: 10 Water Users Association (ASUFOR : Association de Usagers de Forages) established in the newly installed sites and 2 ASUFORs reorganized in the rehabilitated sites, and water charge systems in the 12 sites. <p>Senegal side</p> <ul style="list-style-type: none"> Land preparation Development of access roads Installation of water meter provided by the Japanese side 	

II. Result of the Evaluation

Summary of the Evaluation

In the target areas, the most of population depended on the traditional shallow wells which dried up in the dry season for their water source. The waiting time for fetching water per household per day was around 78 minutes for households in the sites without water supply facilities and around 44 minutes for households in the sites with water supply facilities. Therefore, construction of water supply facilities was a critical issue to ensure sustainable and stable water supply in rural areas.

This Project has achieved the increase in the population with access to safe water and the accessible volume of safe water in the 14 sites in the 6 target provinces. As for sustainability, some problems have been observed in terms of financial aspect due to the insufficient budget of the Center for Maintenance (BPF: Brigade des Puis et des Forages) to supervise and support ASUFORs although most of the water facilities newly installed or rehabilitated by the Project have been well maintained and function due to the improvement of the technical capacity and the adequate level of water charge collection by ASUFORs by the JICA's technical cooperation of PEPTAC. For relevance, the Project has been highly relevant with Senegal's development policy, development needs, as well as Japan's ODA policy. For efficiency, although the project cost was as planned (ratio against plan, 100%), the project period slightly exceeded the plan (ratio against plan, 104%).

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

1 Relevance

This Project has been highly relevant with the Senegal's development plan of the Special Program of Water (PSH: le Programme Spécial de l'HYdraulique) and "the Millenium Programme of Water drinking and Sanitation (PEPAM: le Programme d'Eau Potable et d'Assainissement du Millénaire)", development needs of sustainable access to safe water, as well as Japan's ODA policy, at the time of planning and ex-post evaluation. Therefore its relevance is high.

2 Efficiency

Although the project cost was as planned (ratio against plan: 100%), the project period slightly exceeded the plan. (ratio against plan: 104%). Therefore, efficiency of this project is fair. In terms of the outputs, there were some changes from the plan, such as the decrease in the number of satellite villages due to the economic reasons and the installation of facilities by other project, changes in the design of water system to ensure the water volume and quality and for the parallel use of existing well. Those changes in outputs did not affect the achievement of the project objectives.

3 Effectiveness/Impact



Water Tower constructed by the Project

The Project has achieved its objectives of the increase in the population with access to safe water and the volume of safe water supply in the 14 sites of the 6 target provinces. The population access to safe water in the target sites expanded to 38,364 in 2011 (85% of the target value) from 30,285 in 2003. Also the volume of safe water utilized in the target sites increased to 28 litter/person/day in 2011 (80% of the target value) from 0-25 litter including unsafe water in 2003 while the water facilities can supply 35 litter/person/day as planned. The quality of water supplied through the water supply facilities constructed by the Project fulfills the standard of the country in line with the WHO (World Health Organization) standard. The improved water quality and the expanded access to safe water brought about the improvement of hygiene environment of households and communities in the target sites. As a result, water borne diseases such as diarrhea and dermatosis decreased in the target sites. Also, according to the Directorate of Exploitation and Maintenance (DEM: Direction de l'Exploitation et de la Maintenance), the installation or rehabilitation of the water supply facilities decreased the time of fetching water by 40%. The reduction of work load of fetching water enables the women to spend more time for income generation activities as well as the girls to go and stay at school. Therefore, its effectiveness/impact is high.

	2003 (Base Year)	2007	2011 (Ex-post Evaluation)	2014 (Target Year)
Indicator 1 : An increase in the population with access to safe water in the 14 sites of the 6 target provinces	(Actual) 30,285*	(Actual) 32,077	(Actual) 38,364	(Plan) 45,070
Indicator 2: An increase in the volume of safe water supply in the 14 sites of the 6 target provinces	0-25litter /person/day*	26 litter /person/day	28 litter /person/day	35 litter /person/day

(Source: Direction de l'Hydraulique Rurale)

(Note) * The baseline value includes supply of water with unsafe quality.

4 Sustainability

Most of water supply facilities constructed or rehabilitated by the Project have been well operated and maintained by ASUFORs. DEM is responsible for operation and maintenance (O&M) of the installed water supply facilities at the central level. At the community level, ASUFORs are established for O&M of those facilities and BPFs under the Subdivision of Maintenance (SM: Subdivision Maintenance) supervise and support ASUFOR. Due to the JICA's technical cooperation project of PEPTAC aiming at capacity building of ASUFORs, ASUFORs improved their technical capacity to the water supply facilities as well as their management capacity including collection of water charge, management of funds at bank account, and holding regular meetings. For example, ASUFOR in Kathioite, one of the sites, charges 400 CFA/m³ for the dry season and 200 CFA/ m³ in the rainy season. According to the site survey and the interview with DEM, most of ASUFOR can cover their O&M cost by their water charge. On the other hand, BPFs, which provide supports for ASUFORs, including repair malfunctions which cannot be fixed by ASUFOR and regular checkups for preventing malfunctions of water facilities, do not have enough budget to implement their activities. The institutional structure for O&M of rural water supply facilities has been sustained as the project implementation despite the reform of rural water supply has been under discussion. Therefore, sustainability of the project is fair.



Members of ASUFOR

III. Recommendations & Lessons Learned

Recommendation for Executing Agency:

It is strongly recommended that DEM allocate enough budgets to BPFs in order to implement necessary activities to support ASUFORs. Also it is necessary for DEM to make efforts to continue capacity development of BPFs and ASUFORs which have been supported by the international donors, including JICA.

Lessons Learned for JICA

In order to ensure sustainability of water supply services at community or village level, strategic coordination with technical cooperation can effectively support to establish community level organizations which can be responsible for daily operation and maintenance of facilities and to enhance their technical and management capacity.