1. Outline of Project			
Country : République du Sénégal		Project Title: Projet de Développement Rural Durable (PDRD)	
Issue/Sector : Agriculture sector		Cooperation scheme : Technical cooperation	
Division in charge : Bureau de la JICA au Sénégal		Total Cost: 400 million Japanese Yen	
Period of Cooperati on	(R/D) : March 2008 to March 2011 (Extension) : None	Implementing Agency in Partner Country : Directrice de la Direction de l'Analyse de la Prévision et des Statistiques Direction de l'Exploitation et de la Maintenance	
		Supporting Organization in Japan : None	
Related Cooperation : Approvisionnement en Eau en Milieu Rural Equipment de Forages Ruraux			

# **Summary Sheet for Terminal Evaluation**

# 1-1 Background of the Project

With assistance from the donors, the Government of Senegal has constructed deep well water supply facilities with power pump at around 1,500 sites in semi-arid areas in the country. Among these, the water supply facilities at 120 sites have been provided by Japan through the grant aid since 1979. For better management of these water supply facilities, Association des Usagers de Forages (ASUFOR) has been established since 1996 with technical cooperation by the donors. The ASUFOR is a community participatory organization and is aimed at "sustainable maintenance and management of the water supply facilities", "charging of water by a metered rate", "democratic institutional management" and others. In 2010, the ASUFOR is operated in 70% of the water supply facilities in the country and in 80% in Louga Region.

Under the above situation, the PEPTAC, 2-phased technical cooperation project, had been implemented from 2003 to 2010 by JICA. The PEPTAC was targeted at 25 sites out of those that had been constructed with the grant aid from Japan and aimed at systemization of sustainable use of water through establishment of ASUFOR. In the PEPTAC, a series of trials for community development activities was included for a few selected sites where ASUFOR was well managed. As a result, it was identified that utilization of ASUFOR experienced with institutional management would be able to lead more feasible operations of projects for improving living conditions of local communities. In such a viewpoint, this "Projet de Développement Rural Durable" (PDRD) has been implemented with the aim of sustainable rural development based on the AUSFOR institution since March 2008 for three years.

This terminal evaluation was conducted in October to November 2010 for assessing achievements of the PDRD and recommending further actions to improve the project activities in the remained term.

## **1 – 2 Project Overview**

(1) Overall Goal

Parvenir à un développement communautaire dans la région de Louga à travers les expériences de maintenance des ouvrages hydrauliques et des activités collectives.

## (2) Project Purpose

Etablir des repères pour parvenir à un développement communautaire dans la région de Louga à travers les expériences de maintenance des ouvrages hydrauliques et des activités collectives.

(3) Output

- Output 1 : Les personnes chargées de la vulgarisation du développement communautaire sont formées.
- Output 2 : Les outils (Guide & Fiches techniques de développement communautaire) sont élaborés pour réaliser efficacement le développement communautaire à l'initiative de la population.
- Output 3 : Le système de vulgarisation du modèle de développement élaboré par le Projet est renforcé.

From Japan: Experts : 89.4 person-months (planned)	
Local staff : 8 persons (as of November 2010)	
Local operation costs : 67 million JPY (planned)	
Training in Japan: 7 persons (as of November 2010)	
Equipment : copier, laptop computers, etc.	
From Senegal:	
Project staff: 10 persons in total and 23 extension agents	
Land/Facilities : Project offices at DRDR in Louga	
2. Evaluation Team	

Members of the Team	Mr. Shinji Umemoto (Team Leader), Chef de Bureau, Bureau de la JICA au Sénégal Mr. Kazuhito Suga (Community Participation), Board Member, I-I-Net Mr. Rika Atobe (Planning Coordination), Project Officer, Bureau de la JICA au Sénégal Mr. Kojiro Fujino (Planning Coordination), Asst. Director, Arid and Semi-Arid Farming Area Division (Central and West Africa), Rural Development Department, JICA			
	in rejensed terre (2 minuter maryolo), consultant, i ishertes Engineering co.			
Period of Evaluation	19 October to 6 November 2010	Type of Evaluation : Terminal Evaluation		

#### 3. Results of Evaluation

### 3-1 Achievements of the Project

(1) Achievements in Outputs

The Output-1 is aimed at training of organization and technical leaders in village level, as well as the project counterpart personnel and the technical officers in the department offices of various ministries. Since capacity assessment of organization and technical leaders has not been completed yet, an extent of achievement of the Output-1 is assessed to be moderate.

Through activities of the Output-2, the Guideline and the Technology Sheets have been formulated already. Both of them have been focused on rural communities in the semi-arid areas that have access only to limited water resources. The both are also comprised of technical approaches appropriate to such key condition. Achievement of the Output-2 is thus assessed high.

The Output-3 implies identification and establishment of institutional framework to promote the development model. Since several actions to introduce the Guideline and the PDRD model have been observed already in various government and non-government organizations in the state and regional level, it can be judged that the Output-3 has been substantially achieved.

## (2) Achievements in the Project Purpose

The project purpose can be attained by achieving three outputs – development of necessary human resources (Output-1), completion of the Guideline and Technology Sheets (Output-2) and systemization of promotion of the PDRD model (Output-3). As reviewed in Section 3-2, Output-2 and 3 has been achieved but a full assessment of achievement of Output-1 has to be waited for sometime more, mainly because results of the capacity assessment of organization and technical leaders in community groups are not available yet. Since tasks of such assessment will not give difficult hurdle to the Project, it can be concluded at this stage the project purpose will be achieved by end of the Project at latest.

## 3 – 2 Results of Five Criteria Evaluation

(1) Relevance : Generally high

Limited water resource is always a key issue in assisting communities situated in the semi-arid lands spreading over in the northern half of Senegal, and hence the PDRD can contribute to execution of a wide range of the government policies that include PRSP-II (2006-2010), PANA (2006), REGEFOR (1998-2006), and rural development plans of the regional governments.

Agriculture with water-saving and means to improve livelihood introduced by the PDRD are featured as low-input technology. A set of such technologies has been carefully selected in the PDRD so that these can be promptly adopted and practiced by villagers with as less dependence as possible on fresh water and locally unavailable materials. This low-input approach does not consequently contribute to a high generation of income but certainly to a wide and sustained improvement of villagers' life.

#### (2) Effectiveness : Relatively high

The project purpose is expected to be achieved by end of the project at latest. The project purpose is aimed at building of a system of extension services for developing rural community where limited water resource is a key issue in general. Three outputs were designed to perform in line with the project purpose as follows; capacity building of human resources, formulation of the development model to meet the key issue and promotion of the development model. For achievement of the project purpose, it is assessed that all these three outputs are evenly needed.

#### (3) Efficiency : High

It can be judged that all three outputs have been mostly achieved at this stage, though some remaining works have to be done by end of the project. The inputs of project resources from Japan and Senegal have been done mostly as planned. Among the inputs, the local operation cost to be borne by JICA is estimated as 63 million Japanese Yen (approx. 359 million FCFA). The amount of the local operation cost is rather lower than those for other similar project assisted by JICA. It should hence be noted that cost efficiency of the PDRD is high.

#### (4) Impact : High

Achievement of the overall goal is expected to be possible in due course. For applying the PDRD approach fully or partially, the protocol was concluded with Louga Regional Council for preparatory works for their integrated regional development plans (PRDI). Likewise, a protocol with MVP-UNDP is being prepared for introducing the PDRD approach in their 19 sites in Leona CR in Louga Region. These two cases suggest that there exist rather strong concern on application of the PDRD approach in local development plans.

Practices of agriculture using surplus water that seems to refer to the PDRD approach was listed in PNIA (2011 - 2015) as one of possible investment targets in 2011 to 2015. The DEM/MHCH plans to deliver the Guideline to all the ASUFOR in the country. These actions in the state level can also be counted as impacts of the Project.

#### (5) Sustainability : High

The Guideline of the PDRD was formally validated by all technicians in presence of the Minister of Agriculture in 9 August 2010. The DEM/MHCH plans to deliver the Guideline to their ASUFOR in the whole country for improving their water management by applying the surplus water management presented in the Guideline. Such government actions in the state level will ensure continued application of the PDRD approach for a long time. Furthermore, allocation of budget to deploy the PDRD model or approach is being considered in various organizations that include the Ministry of Agriculture through CDSMT, MVP-UNDP, Regional Council in Louga and others.

#### 3-3 Conclusion

The deep well water supply facilities have been constructed at around 120 sites in the semi-arid areas in Senegal through the grant aid by Japan since 1979. As the water supply facilities include those that are aged 30 years, the present challenges are how to handle possible drying up of wells that may be caused locally and aging of mechanical facilities. Through various project activities for saving water, the

PDRD has enabled to prevent shortening of life span of the wells that may be incurred at the sites where water is overly consumed and also to reduce operation hours of generator and pump. Meanwhile, in rural villages situated in the semi-arid areas, there is almost no opportunity of work in the dry season that accounts for a great part of year excluding the rainy season of 3 to 4 months. It is thus usual in these villages that many of earners in households have to go cities or foreign countries for employment. The PDRD has developed opportunities of production that can be worked with in the dry season by means of group or individual activities with a core of ASUFOR. Success in these two measures to cope with the needs in the rural villages has made a significance of this project greater.

## 3-4 Recommendations

- (1) The activities related to the indicator 2.2 should be completed by the end of the project by confirming that the technology sheet reflects voice of villagers, in the field activities. Furthermore, it is expected that the sheet is updated and improved if necessary in the future.
- (2) As for the Output 1, it is needed to assess the result of capacity building for organization and technical leaders and have a follow-up session to ensure that they acquire enough ability by the end of the project.
- (3) To achieve the overall goal, the consultation body for implementation of PDRD approach has to be established with different organizations involved in rural development in Louga Region by the end of the project. This consultation body is recommended to be lead by ARD, and to have roles of the consultation not only for PDRD approach, but also for the related rural development issues in Louga Region.
- (4) To secure continuation of supporting services after the project terminates, an implementation agency of the PDRD model will have to exchange a protocol with relating regional offices to ensure extension services. The process of such a protocol should be covered in the Guideline to generalize the PDRD approach more and thus to make the overall goal be achieved in more visible way.
- (5) It is estimated that the project purpose will be achieved by the end of the project period. However, certain efforts, including the trials at Garki Diaw to verify the Guideline, support for budgeting introduction of the PDRD model and others, are further needed to ensure the sustainability of the PDRD approach. Hence the project period is recommended to extend for this purpose.