

Terminal Evaluation

Africa

1. Outline of the Project

Country:

Ghana

Project title:

The Small-scale Irrigated Agriculture Promotion Project

Issue/Sector:

Agriculture/General

Cooperation scheme:

Project-type Technical Cooperation

Division in charge:

Agricultural Technical Cooperation Division, Agricultural Development Cooperation Department

Total cost:

968 Million Yen

Period of Cooperation 1 August 1997 - 31 July 2002

Partner Country's Implementing Organization:

Ghana Irrigation Development Authority (GIDA), Ministry of Food and Agriculture

Supporting Organization in Japan:

Ministry of Agriculture, Forestry and Fisheries of Japan

Related Cooperation:

Development Study; "The Study for the Rehabilitation of Irrigation the Projects in the Republic of Ghana"

Mini-Project; "Research cooperation in the development of irrigation agriculture"

Grant Aid; "The Project for Rehabilitation of Irrigation in the Republic of Ghana"

1-1 Background of the Project

In Ghana, land for irrigation has been developed since the 1960s, and GIDA was established in 1997 for the development, management and extension of services for all national irrigation projects. The activities of small-scale farmers were based on paddy rice and other crops in the 22 irrigated agriculture areas administered by GIDA. The Irrigation Development Center (IDC) was established in 1991 as a center for improving technology, extension and training of GIDA. JICA implemented the Mini-Project Technical Cooperation, "Research cooperation in the development of irrigation agriculture" for three years from 1993 focusing on IDC. However, the productivity of the agriculture was not improved because of immaturity of water management and farming techniques, insufficient maintenance and management of irrigation facilities, a shortage of water, and the inadequate support services to farmers in the pilot areas.

Under these circumstances, the Government of Ghana requested the Government of Japan to provide Project-type Technical Cooperation for the improvement of existing irrigated agricultural areas and the administration, management and maintenance of the facilities by farmers with the objective of establishing a sustainable farming system and technical support for small-scale farmers.

Along with the Project, Grant Aid for improvement on irrigation facilities and construction of the training facilities at Ashaiman and Okyereko irrigation schemes was implemented and completed in March 2000.

1-2 Project Overview

To establish a model farming system at Ashaiman and Okyereko area, the Project conducted a survey to determine the current situation of farming techniques and the level of technical development required for improvement in the areas. Moreover, the project verified the farming system and implemented and trained extension officers, agricultural organization members and farmers in the areas.

(1) Overall Goal

- 1) Farmers' income is increased.
- 2) Fanning system for the respective irrigation scheme under GIDA is improved.

(2) Project Purpose

A model farming system (*) is established in irrigated agriculture areas under the supervision of GIDA.

(*)A Model Farming System means a comprehensive system comprising both appropriate farming technologies to promote multiple farming based on paddy rice and other crops utilizing irrigation facilities, and institutional systems to support farmers organizations as well as farmers under the supervision of GIDA.

(3) Outputs

- 1) Farmers' situation and the farming system of irrigation scheme are clarified.
- 2) Component technology is improved.
- 3) Farming system is verified based on the two model schemes.
- 4) Farming supporting system is improved based on the two model schemes.
- 5) Extension officers, staff of farmer organizations and farmers acquire the necessary knowledge and skills related to a model farming system.

(4) Inputs

Japanese side:

Long-term Experts	11	Equipment	139 Million Yen
Short-term Experts	16	Local Cost	91 Million Yen
Trainees received	17	Others	24 Million Yen

Ghanaian Side:

Counterparts	43		
Local Cost		1042.1 Million Cedi (18 Million Yen)	

2. Evaluation Team

Members of Evaluation Team

Team Leader/ Training; Ryozo HANYA, Director, Agricultural Technical Cooperation Division, Agricultural Development Department, JICA
Water Management; Masashi NAKAI, Senior Technical Official, Technical Cooperation Division, International Affairs Department, Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries of Japan
Cultivation/Farm Management/Farm Machinery; Takeaki TOMIOKA, Senior Consultant, IC Net Limited
PCM Evaluation; Takahiro MIYOSHI, Program Officer, Department of Planning and Program, Foundation for Advanced Studies on International Development
Planning Management; Tomoko TANAKA, Staff, Agricultural Technical Cooperation Division, Agricultural Development Department, JICA

Period of Evaluation

3 February 2002 - 17 February 2002

Type of Evaluation:

Terminal Evaluation

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

The project's relevance is evaluated as very high. The Project Purpose and its Overall Goal are set to promote irrigated agriculture with a participatory approach of farmers, which is highly relevant to the needs of local farmers, the Ghanaian development policy, and JICA's country program for Ghana which supports the promotion of irrigated agriculture with farmer organizations and the participatory approach of farmers.

(2) Effectiveness

The Project is effective to some extent. The farming situation was surveyed and analyzed mainly at the pilot areas. Although achievement differs according to the technique, each technique was improved, an example of which is selection of the appropriate seeding for the field of cultivation. Farming support systems such as the farmers' organization and dissemination system in the two pilot areas were rehabilitated to some degree. The establishment of a model farming system contributed significantly to attainment of the Project Purpose. However, this was not the sole achievement of the Project, as that attainment can also be attributed to other Inputs such as to irrigation facilities by the Grant Aid.

(3) Efficiency

The Project is efficient to some degree. Most of the necessary Inputs have been made as planned from the Japanese side, although some delay and change of content occurred on Ghanaian side mainly due to financial difficulty. Nonetheless, most of the expected outputs seem to have been achieved. Consequently, the Project is thought to be efficient in the sense that Inputs have been fully utilized to their utmost potential. On the other hand, the budget from the Ghanaian side was not forthcoming, and some parts of the budget were supplemented by the Government of Japan, resulting in a relative increase in the local cost borne by the Japanese side. Even so, considering the financial difficulty of the Government of Ghana, this was a necessary measure.

(4) Impact

There are many positive impacts, among them are the income of farmers has increased 60 percent, more children go to school, and the status of women has improved. On the other hand, the possibility of Overall Goal achievement is unlikely. During the project period, project managers, extension officers, the leaders of farmers' organizations and farmers from other irrigation projects were invited to the training program; however, with respect to the current financial situation of GIDA and the Government of Ghana and a downturn in the price of rice, expansion of Project activities to other irrigation areas at the same time is unrealistic.

(5) Sustainability

The sustainability of the Project activities under GIDA and IDC is not assured due to the severity of IDC's financial position and the fact that there are no long-term programmed strategies on how to defuse the outcomes of the Project to other irrigation projects. On the other hand, all of the concerned party admit that the financial condition of GIDA is weak and unstable according to the result of field study. GIDA/IDC's counterparts have been fostered to deal with the management of the techniques such as the monitoring of farming activities, minor modification of techniques, etc., but are not capable of developing techniques on their own. Judging from the above, the sustainability of the Project is evaluated as low.

3-2 Factors that promoted realization of effects

(1) Factors concerning Planning

- 1) There were some synergetic effects as a result of implementing the Project at the areas where the facilities were donated by the Grant Aid.
- 2) The Project featured the participation of farmers, who cultivated the fields for the activity.
- 3) Given the importance of training, the Project included activities toward development of training from the planning stage.

(2) Factors concerning the Implementation Process

- 1) By drawing the Tentative Schedule of Implementation (TSI), activities and monitoring were implemented based on the TSI.
- 2) During the latter half of the Project, related personnel could flexibly cope with problems quickly, having met once a week and having established active communication among themselves.

3-3 Factors that impeded realization of effects

(1) Factors concerning Planning

- 1) Having the ambiguous word, "model" in setting the Project Purpose, those concerned to the Project failed to share its concept, adjust its contents and unify the understanding.
- 2) Facilities procured by the Grant Aid Project were expensive, and the farming model utilizing them cannot be applied to the other irrigation areas, which means that the connection of the Overall Goal and the Project Purpose on the Project plan was not fully considered.
- 3) Financial difficulty on the Ghanaian side could be expected; however, the scheme of the governmental organization and Ghana's budgetary difficulties could not be anticipated at the planning stage.
- 4) Because of the survey insufficiencies with respect to social and cultural understanding, response at the traditional village level was delayed.

(2) Factors concerning to the Implementation Process

- 1) Since the TSI was utilized for the project management not the PDM, there was confusion among the Project members between what it written as project purpose in TSI and that in PDM.
- 2) Communication among the related personnel was insufficient during the first half of the Project; however, it improved during the latter half.
- 3) The Okyereko was located quite far from the Project office, which limited visits by the counterparts and experts (once a week or so).

3-4 Conclusion

The Project is appreciated due to its high relevance and positive impacts, and a certain level of effectiveness and efficiency were confirmed. On the other hand, the possibility of achieving the Overall Goal and sustainability will remain of serious concern because they are evaluated as low, particularly if the Project is terminated as planned. Considering that the Project Purpose should be linked to the Overall Goal, the achievement of the Project Purpose still needs to some effort till completion as much as possible.

3-5 Recommendations

(1) The Project Purpose is nearly being accomplished. However, it is necessary to establish a model farming system so that the farming system results in a stable farming income. The two years of technology transfer after the termination of the project at the end of July 2002, from the Japanese side is necessary for following reasons; The integration of improved component technology in consideration of the establishment of the farming system is insufficient; Strengthening and improvement of the farming support system is necessary, especially at Okyereko; strengthening of the diffusion system to other irrigation areas after the termination of the Project, which has been ongoing since September 2000, is necessary.

(2) It is necessary to apply the effects and activities of the Project in the daily work of GIDA. It is recommended that the GIDA/IDC prepare and submit a strategic plan of middle-term practicable diffusion and select priority irrigation areas for the plan. It is also necessary to prepare a concrete activity plan and to decide how GIDA/IDC with support the ex-participants of the Project at the selected priority irrigation areas. GIDA should allocate a budget for furniture for the training center.

3-6 Lessons Learned

(1) For an effective collaboration among different cooperation modalities such as Development Study, Grant Aid and technical cooperation, it is necessary to implement the Development Study with considerations on the final outcome of the whole cooperation and to discuss the timing of implementation at the planning stage.

(2) When the Project Purpose includes a conceptual word such as "system" or "model", it is necessary to define the word as concretely as possible with objectively verifiable indicators through discussions among stakeholders before commencement the Project.

(3) In order to ensure the sustainability of the Project, it is necessary to reach agreement on mid- and long-term strategy and financial matters with stakeholders at the planning stage.

3-7 Follow-up Situation

Based on the recommendation mentioned above, two-year Follow-up Cooperation (1 August 2002 - 31 July 2004) has been implemented to address the guideline and strategy to improve the farming system at the irrigation areas under GIDA.