

Summary

I. Outline of the Project	
Country : The Republic of Sierra Leone	Project title : The Agricultural Development Project in Kambia in the Republic of Sierra Leone
Issue/Sector : Agriculture	Cooperation scheme : Technical Cooperation
Division in charge : JICA Ghana Office	Total cost : 350,259 thousand yen Share of Japan's Contribution: <u>100</u> %
Period of Cooperation (R/D): 01/022006~31/03/2009	Partner Country's Implementing Organization : Ministry of Agriculture, Forestry and Food Security, and Rokupr Agricultural Research Center
	Supporting Organization in Japan :
Related Cooperation Project :	Children and Youth Development Project in Kambia District Establishment of Water Supply Management System in Kambia District Integrated Project for Rural Health Improvement
1 Background of the Project	
<p>In the Republic of Sierra Leone, agriculture is key industry which accounts for 45.0 percent of GDP. The main staple crop is rice and it is cultivated by most small-scale farmers. The annual per capita consumption is estimated at about 104 kg. However, production of food crops concentrating on rice as staple food has been halved compared to pre-civil war time and the reduction in food supply has increased the number of population suffering from food shortage. Rice production is also constrained by several factors including the widespread use of traditional rice varieties whose grain yields are usually low. Therefore, the promotion of food security through strengthening of the agricultural sector is prioritized as one of the three pillars of poverty reduction strategy in the Sierra Leone Poverty Reduction Strategy Paper (SL-PRSP) in March 2005.</p> <p>Considering these backgrounds, the Governments of Sierra Leone (GoSL) and the Government of Japan (GoJ) had agreed to launch a new technical cooperation project titled "the Agricultural Development Project in Kambia in the Republic of Sierra Leone" in November 2005. Since Japan International Cooperation Agency (JICA) officially started the Project on March 2006, JICA Project Team has been implementing activities in cooperation with Ministry of Agriculture, Forestry and Food Security (MAFFS) and Rice Research Station at Rokupr (RRS-R) in the district. The project will terminate in March 2009.</p>	
2 Project Overview	
<p>The project tries to formulate agricultural technical package of rice and other crops for five agro-ecological zones in Kambia District and technical support guideline for the implementation of the package.</p>	

(1) Overall Goal

Productivity of food crops for self-sufficiency thereby contributing to food security in Kambia district is improved

(2) Project Purpose

Agricultural technical support system in Kambia district is strengthened

(3) Outputs

1. Agricultural support system of MAFFS-K is improved
2. Agricultural technical package to improve agricultural productivity is formulated
3. Agricultural technical support guidelines for farmers is developed

(4) Inputs

Japanese side : (Total 350,259 (thousand) Yen)

Expert: 9

Equipment: 279,396 US Dollars

Local cost: 34,208 (thousand) Yen

Trainees received: 1

Sierra Leonean Side :

Counterpart: 24

Land and Facilities: Project Office

II. Evaluation Team

Members of Japanese Side:	
Evaluation Team	(1) Mr. Masato KUMAGAI (Team Leader) Senior Representative, JICA Ghana Office
	(2) Mr. Masaaki OTSUKA (Agricultural Technology) Senior Adviser, JICA HQs
	(3) Dr. Junichi SAKAGAMI (Agricultural Technology) Senior Researcher, Japan International Research Center for Agricultural Sciences (JIRCAS)
	(4) Mr. Akira SHINTANI (Evaluation and Analysis) Sanyu Consultants Inc.
	(5) Ms. Seiko TOMIZAWA (Evaluation and Analysis) Evaluation Adviser, JICA Ghana Office
	(6) Ms. Nozomi UI (Evaluation Management) Project Manager, JICA HQs
	(7) Mr. Mitsuhiro KATO (Evaluation Planning) Project Formulation Adviser, JICA Ghana Office
Sierra Leonean Side:	
(8) Mr. Joseph S Bangura (Evaluation and Analysis) Assistant Director of PEMSD, MAFFS	

	(9) Mr. Ben A Massaquoi (Extension)	National Extension Coordinator, MAFFS
Period of Evaluation	15/11/2008 ~ 07/12/2008	Type of Evaluation : Terminal Evaluation
III. Results of Evaluation		
1. Project Performance		
- Outputs		
<u>Output 1: Agricultural support system of MAFFS-K is improved</u>		
Agricultural support system of MAFFS-K has been improved as follows.		
<ul style="list-style-type: none"> - Sufficient tools and equipments for extension work have been provided to MAFFS-K, which includes twenty four (24) motorbikes, four (4) personal computers, two (2) printers, a set of office furniture, a set of technical books, one (1) generator and electrification of the office, etc. These machineries considerably contributed to the improvement of agricultural support system in MAFFS-K., - The Project conducted a baseline survey and some additional surveys to know the actual situation of agriculture and rural socioeconomics in Kambia district. In the baseline survey, information of 134 villages and 1,995 households selected randomly were collected and analyzed. In addition, surveys on agricultural machinery, local markets, agro-ecology, post harvest etc. have been conducted. These basic data are expected to be utilized for the betterment of their work., and - The trainings have been held as planned. Fifteen (15) officers / workers have participated in seventeen (17) training sessions, totally two hundred and thirty three (233) man-days. These trainings were conducted by JICA experts from May to November 2008. One (1) Subject Matter Specialist (SMS) was trained at Tsukuba International Centre in Japan from July to November 2008. The subject of the training was ‘Upland Rice Variety Selection Techniques for Sub-Saharan Africa’. 		
<u>Output 2: Agricultural technical package to improve agricultural productivity is formulated</u>		
An agricultural technical package is to be formulated by the end of the Project as follows.		
<ul style="list-style-type: none"> - A rice cultivation manual for five agro-ecological zones and a vegetable cultivation manual for 3 crop species are to be completed by the end of the Project with the result of pilot projects. - Manuals for rice milling, rice threshing and rice winnowing machines have already been supplied to 7 pilot villages with the collaboration of FINIC, the domestic manufacturer of the machines. - Through pre-pilot project in 2006, the profitability of the technical package of Rice Research Station at Rokupr (RRS-R, which was converted to Rokupr Agricultural Research Centre (RARC)) was tested. With this result, the Project developed an improved technical package and verified in pilot projects (PP) in 2007. In 2008, the Project has been verifying it again. After reflecting these results, the package is to be finalized by the end of the Project. 		

Output 3: Agricultural technical support guidelines for farmers is developed

The guideline of agricultural technical support is to be completed by the end of the Project. Implementation method and measures to disseminate the agricultural technical package to farmers are to be given in it.

-Project Purpose

Project Purpose: Agricultural technical support system in Kambia district is strengthened

The project purpose is to be achieved by the end of the Project as follows.

- Sufficient tools and equipments for extension work have been provided to MAFFS-K and the Project conducted a baseline survey and some additional surveys to know the actual situation of agriculture and rural socioeconomics in Kambia district. These considerably contributed to the improvement of agricultural support system in MAFFS-K.,
- As a result of continuous technical transfer through PP and PT, and trainings conducted, the capability of extension officers / workers have been strengthened, which implies that agricultural extension of MAFFS-K has progressed., and
- The agricultural technical package prototype for every five (5) agro-ecological zones and the technical support guideline, which shows the extension methodology of the package, are to be finalized by the end of the Project.

2 Summary of Evaluation Results

(1) Relevance

The relevance of the Project is very high as the following reasons.

- In Agricultural Development Strategy of 2004 and Development in the Agricultural Sector 2003-2005, the government aimed to achieve self-sufficiency of the country before 2007.
- Agricultural production increase is one of the most important issues in Kambia district, as most people engage in agriculture sector,
- Rural community development is one of the priority issues and Kambia district is one of the focused areas of Japanese aid to Sierra Leone
- In PP, seven villages were selected to verify the draft technical packages and all of the 5 agro-ecological zones were covered by them to develop feasible agricultural technical packages at the end,
- Number and sex ratio of farmers in PP and PT are appropriate. A group of model farmers consists of 7-8 men and 2-3 women since work of rice cultivation is mostly hard physical labor while a women's group consists of 3 men and 10 women since the vegetable cultivation does not accompany so much physical work..

(2) Effectiveness

Effectiveness of the Project is high as the following reasons.

- The extension services of MAFFS-K have improved by capacity development through the

implementation of PP and PT, trainings for CP and provision of tools and equipments and the other two outputs are to be achieved before the termination of the Project. As a result, project purpose “Agricultural technical support system in Kambia district is strengthened” is to be achieved by the end of the Project.

- Most of CP personnel and farmers appreciate that the improved agricultural technical package, which includes (i) farming calendar, (ii) land preparation, (iii) timely transplanting of a few seedlings per hill, (iv) timely weeding, (v) fertilizer application, and (vi) post-harvest techniques.
- The concept of the technical package, “low-cost” and “easy to adopt”, suits the situation of farmers. In addition, CP personnel and model farmers were not only provided equipments but also introduced and trained in improved agricultural techniques, therefore it is likely that they will be able to maintain the system for extension and continue the activities.

(3) Efficiency

Efficiency of the Project is fair as the following reasons.

- Tools and equipments supplied, e.g. motorbikes, personal computers, textbooks etc., have generally been well utilized and contributed to the achievement of output 1 except some cases of its dishonest utilization and theft of several equipments, and
- Number and fields of JICA experts were appropriate. However, some MAFFS-K officers / workers and relevant farmers commented that their assignment period was too short while MAFFS officers said that it was too long. In addition, assignment periods of JICA experts were segmented into many times and so many days were spent for travel from and to Sierra Leone. It was inefficient under the circumstance of very limited assignment periods.
- In total 24 counterpart personnel and However, in terms of their specialties for the technical cooperation, they were not properly dispatched.
- MAFFS-K has not received any budget for local activities from MAFFS for the Project. It negatively affected on the implementation and JICA bore all of the costs.

(4) Impact

Some impacts are observed as follows.

- All of the farmers who participated in PP or PT have practiced improved agricultural techniques introduced by the Project at their own rice fields / farmlands. Since then, their yields have been increasing and fruit quality improving.
- In Robbenah, Sabuya and Makatick, model farmers and women’s groups have started management of micro finance, utilizing the benefits from operation of post-harvest machineries or sales of agricultural production. Furthermore, new farmer groups were established to follow the pilot farmer group in Robot.
- As mentioned above, application of introduced agricultural techniques by farmers were confirmed. By continuing this, future attainment of self-sufficiency is expected. However, for the attainment of self-sufficiency, strengthening of extension system such as securing extension workers, capacity development of extension workers and sufficient budget allocation is also needed.

(5) Sustainability

To make the effects of the Project sustainable, some challenges have to be tackled. The followings are the major factors influencing on the sustainability.

- Although the capacity of MAFFS-K has been strengthened by the Project, it still has difficulty of human and financial resources for extension services. It was confirmed during the evaluation exercise that MAFFS has a bright indication and plan to raise extension unit to a division and strengthen its' extension services.
- If the technical package and guideline developed by the Project are well recognized and utilized in MAFFS, the technical transfer in MAFFS will be highly effective, since they are the first technical materials for extension services in the organization.
- The Project has been trying to develop easy and low input agricultural techniques, which could be easily adopted by ordinary farmers. It was found that all of model farmers and women's group members in PP or PT sites have already started transferring the improved techniques to other farmers.
- At present, the extension policy in Sierra Leone is under consideration. It is important for MAFFS to clarify measures for increased production of food crops and self-sufficiency and the position of extension of agricultural technologies, and then share them among all stakeholders.

3. Factors promoting better sustainability and impact

(1) Factors concerning to Planning

The new president Mr. Koroma, who was inaugurated in August 2007, held up agricultural promotion as one of the priority issues. Therefore the Project is consistent with the basic policy of GoSL and matches the needs of the country. In addition, there are few agricultural support activities of other donor agencies in Kambia District and Japan has comparative advantage in rice cultivation.

(2) Factors concerning to the Implementation Process

At the district level, the Project has held regular weekly meetings since the second half of 2006 with participation of CP personnel and JPT and had series of discussion for decision making. At the national level, steering committees has been held by necessity about two times a year for information exchange among stakeholders.

The project has been utilizing local radio program to conduct extension activities efficiently and effectively and compensate for shortage of extension staffs. It is considered that this extension approach has potential of big impact on the improvement of agriculture technique, since 70 % of households have radios in the Project area and all of the farmers answered that they had listened to the program of the Project in the interview.

In addition, implementation of pre-pilot project was effective for the formulation of low-cost and applicable technical package as the utilization of large quantity of fertilizer, which was introduced in the RARC's technical package, was found unrealistic through the implementation of pre-pilot project.

4. Factors inhibiting better sustainability and impact

(1) Factors concerning to Planning

At the early stage of the Project, JPT surveyed the institutional arrangement and capacity of MAFFS and RARC. As a result, it was concluded that it was not realistic to continue the Project according to the 1st version of PDM. Then it was suggested to revise the PDM by the Project. It was approved in the Steering Committee in February 2008.

(2) Factors concerning to the Implementation Process

As for the baseline survey, input and tabulation data were delayed due to the re-check and re-do of data input done by PEMSD. Therefore the report was finally submitted in December 2007. Following the delay of the baseline survey, the commencement of pilot project was also delayed.

DG and DDA were changed due to the change of the Government and its policies were re-directed. It influenced the participation of MAFFS and other authorities concerned. MAFFS-K should have reported the activities to MAFFS and discussion between the GoSL and JICA should have been held more frequently. The budget stipulated in R/D was not allocated to MAFFS-K for local activities, which lowered ownership of MAFFS-K and hindered smooth operation of the Project. In addition, CP personnel were not properly dispatched in terms of their specialties.

For JICA's technical cooperation, counter-government should arrange financial and human resources in order to implement projects smoothly and heighten the sustainability of post-project, however MAFFS-K faced limited budgetary allocation and JICA shouldered all the necessary costs for the implementation. The fragility of sustainable development on the extension activities of MAFFS-K is left and smooth implementation of the Project was limited.

5. Conclusion

The Project activities have been smoothly implemented with joint effort of both governments. As a result, agricultural technical support system in Kambia district is strengthened through improvement of agricultural support system of MAFFS-K, development of the agricultural technical package and guidelines.

According to the five evaluation criteria, the relevance of the Project is very high; effectiveness of the Project is high; efficiency of the Project is fair. For the impacts, some outstanding facts are observed. The capacity and skills of the MAFFS-K CP personnel and model farmers are strengthened through a series of trainings and vigorous instruction of the JPT. Improved agricultural techniques are generally acquired to the extent that MAFFS-K CP personnel and model farmers will be able to continue activities on their own. In addition, other farmers started to learn and adopt the techniques with model farmers, in one of which a new farmer s' group was established to follow the model farmer group. Furthermore, model farmers and women's groups have started management of micro finance, utilizing the benefits from operation of post-harvest machineries or sales of agricultural production. To make the effects of the Project sustainable, there should be a part taken by the GoSL and allocation of the human and financial resources to MAFFS-K should be secured.

According to the second version PDM, the Project purposes will be successfully achieved by the end of the Project. Based on the findings mentioned above, it is concluded that the Project will be terminated on March 2009 as planned.

6. Recommendations

(1) Ownership of the Government of Sierra Leone (GoSL)

Since the beginning of the Project, the input of financial and human resources allocated by the GoSL have not been appropriate and it retarded the implementation of the Project. In addition, the effort to reach common understanding between GoSL and JICA on the Project was not enough and it led up to insufficient ownership of the Project by GoSL. Therefore, continuous discussion between GoSL and JICA is recommended so that the GoSL gets more involved in the Project with a strong initiative. Then GoSL should take necessary measures including appropriate provision of budget and logistics for the suitable and independent agricultural support system.

(2) Appropriate involvement of RARC

To pursue more adaptive agricultural technologies and research-extension cooperation, appropriate involvement of RARC is essential. It is, however, necessary for RARC to be rehabilitated its facilities and allocated budget for research activities on the basis of its strategies and programmes. It is recommended that JICA and RARC establish stronger linkage for agronomical studies, under the condition of earnest support and recognition of the GoSL for the institutional capacity development of the RARC.

(3) Proper Project Management

Some of the equipments provided by the JICA have not been utilized in the way as stipulated in R/D. In addition, the progress of investigation on the lost equipments has not been made clear to JICA so far. It is strongly recommended that the appropriate actions for these issues are taken by the GoSL as quickly as possible to ensure the smooth and sustainable implementation of the Project and accountability of the proper project management should be enhanced.

(4) Cultivation of Vegetable in dry season

The JPT has found the high potential in cash crop cultivation by women in dry season. It was found effective and important for empowering women, generating income as well as ensuring the food security. It is recommended that the cultivation of vegetables and other cash crops continue to be encouraged by MAFFS.

(5) Collaboration with other organizations

It was found that people in the Project sites understand the importance of improved agricultural technology and became to adopt them in their farm. To disseminate the Agricultural Technical Package by the JPT more widely, the collaboration with other organizations engaged in the capacity

development of rice farmers should be taken into consideration by MAFFS in the future.

7. Lessons Learned

(1) Collaboration with other organization

Initially the Project was planning to provide trainings on technical package to the staff of other organizations. However, their activities were not implemented as properly as the Project expected and actual collaboration in the field was not realized. For the collaboration with other organizations, sufficient information collection prior to the Project is essential.

(2) Cooperation in the post conflict situation

Prompt formulation and implementation of project are inevitable in the post conflict situation. Having said that, sufficient discussion and minimum investigation are needed. In most cases, the condition of JICA's technical cooperation is different from the one of other donors. Therefore, to obtain enough understanding and necessary cooperation from recipient government is important.

8. Follow-up Situation

N/A