

## Summary of the Results of Evaluation Study

<b>I. Outline of the Project</b>	
Name of Country: The Republic of Ghana	Project Title: Project for the Sustainable Development of Rain-fed Lowland Production Phase II
Issue/Sector: Agriculture Development	Cooperation Scheme: Technical Cooperation Project
Office In-Charge: JICA Ghana Office	Total Cost(the prospect at the time of the evaluation survey, of disbursement in the original project period)737,719,000 yen
The Project Period: April 2016 – February 2021 (five (5) years)	Partner Country’s Implementing Organization: Ministry of Food and Agriculture (MoFA)
	Related Institutions (Japan): --

### **1-1. Background of the Project**

Rice has become one of the most important staple crops in Ghana, and domestic paddy production increased to 242,000 and 570,000 metric tons between 2004 and 2013. However, because of population growth, urbanization, and change in consumer habits, the estimated annual per capita consumption increased from about 15.4kg in 2000 to about 37.5kg in 2010. The total rice available for consumption in 2013 was estimated to be around 1,037,300 metric tons, which means that rice production does not meet the consumption. Ghana depends on 50% of imported rice to make up the deficit in domestic rice supply. Stakeholders in the food and agriculture sector need to ensure increased and sustained domestic production of good quality rice for food security import substitution and foreign exchange savings.

In Ghana, rain-fed rice production occupies 90% of the total rice production. Therefore, the harvest is largely affected by the climatic condition, which causes low productivity. While domestic rice production increase, most rice producers are small scale farmers that cultivate less than 2ha. Rice yield is one of the most critical challenges for these farmers for better nutrition and higher income. In the continuous effort to tackle the issue, JICA contributed to the improvement of rain-fed rice cultivation in Ashanti and Northern areas applicable for small scale farmers by implementing the Project for Sustainable Development of Rain-fed Lowland Rice Production (hereinafter the Phase1 Project) aiming at the improvement of farming and extension through appropriate cultivation technique technical transfer to extension agents and farmers and development of the Extension Guideline. The Government of Ghana (GoG), with a high acknowledgment to the achievement of the Phase 1 Project, requested the Technical Cooperation Project for the Sustainable Development of Rain-fed Lowland Rice Production Phase II (hereinafter referred to as “the Project”) aiming at increasing rice production by improving extension services through the continuous promotion of an Extension Guideline.

### **1-2. Project Overview**

**(1) Overall Goal:** Domestic rice production is increased

**(2) Project Purpose:** The rice cultivation practice based on the Extension Guideline developed in Phase 1 is disseminated in 35 MMDAs of Ashanti and Northern Regions.

**(3) Outputs:**

- 1) Target MMDAs increase the capacity to develop their District Rice Extension Plan and to estimate needed budget for its implementation.
- 2) Using the extension guidelines, the trainings are conducted in target MMDAs.
- 3) The capacity of RAD and DAD regarding monitoring and evaluation is increased.
- 4) The Extension Guideline is fine-tuned.

**(4) Target Areas:** Rain-fed Lowland in Northern Region and Ashanti Region

**(5) Implementing Agency:** Directorate of Crop Service, MoFA

**(6) Inputs:**

**1) Japanese Side**

- Japanese Consultant Team Members
- 1<sup>st</sup> Year (April 2016 - February 2017) Chief Advisor/M&E System, Deputy Advisor/Rice Development Plan 1, Rice Cultivation 1, Rice Development Plan 2/Extension 1
- 2<sup>nd</sup> to 4<sup>th</sup> Year (April 2017 – February 2020) Chief Advisor/M&E System, Deputy Advisor/Rice Development Plan 1, Rice Cultivation 1, Rice Development Plan 2/Extension 1, Rice Cultivation 2/Nutrition Improvement 2, Extension 2/Nutrition Improvement 2

**2) Ghanaian Side**

- Allocation of C/P Staff: Total 8 officials as of October 2020  
1 Project Supervising Director (Director of Crop Service, MoFA), 2 Project Managers (RDAs in Ashanti region and Northern region), 8 PCU members (RAD Officers in Ashanti region and Northern region)
- Provision of Facility and Equipment  
Project offices were established at the RADs in the two regions with furniture, photocopiers, printers, and desktop computers. Cars were also provided.

**II. Evaluation Team**

Ghanaian Side	Mr. Godfred Antwi, Project Coordination Unit Policy Planning Monitoring and Evaluation Directorate Ministry of Food and Agriculture Mr. Kennedy Donyong, Monitoring & Evaluation Unit Policy Planning Monitoring and Evaluation Directorate Ministry of Food and Agriculture	
Japanese Side	Mr. Minoru Matsunoshita, JICA Headquarters Mr. Megumi Shuto, JICA Headquarters Ms. Kazuko Shirai, Kaihatsu Management Consulting Inc. Mr. Kodai Yugeta, Kaihatsu Management Consulting Inc.	
Period of Evaluation	September 16 – October 9 2020	Type of Evaluation: Terminal Evaluation

**III. Results of Evaluation**

**1. Project Performance**

**1-1. Achievement of Project Purpose**

**Project Purpose:** The rice cultivation practice based on the Extension Guideline developed in Phase 1 is disseminated in 35 MMDAs of Ashanti and Northern Regions.

The Evaluation Team confirmed the levels of achievement of the Project Purpose indicators as follows and concluded that the Project Purpose is expected to be achieved.

**1) Indicator 1:** The yield/ha of farmers who have applied the techniques in the Guideline increase 100% of the yields before the application.

The indicator is expected to be achieved when the data for average yield in 2020 of the farmers in the two regions become available. The Guideline techniques have been disseminated in 41 districts, including six newly established districts that the Project has provided technical support and follow-ups.

2017-2019 average yield in the two regions: 2.81 ton/ha (Currently 105 % increase)

Ashanti Region: 3.47 ton/ha (117% increase)

Northern Region: 2.21 ton/ha (97% increase)

## **1-2. Achievement of Outputs**

The Project has implemented its activities without any significant delays in the schedule since its commencement in February 2016 until recently. However, the outbreak of the COVID19 has been causing delays in several activities that need to be completed before the project completion these days.

**1) Output 1:** Target MMDAs increase the capacity to develop their District Rice Extension Plan and to estimate needed budget for its implementation.

Almost achieved

- The Project Team is now trying to confirm prioritization of rice extension in the 9 out of 35 MMDAs' District Medium Term Development Plans (DMTDP) by collecting the documents.

**2) Output 2 :** Using the extension guidelines, the trainings are conducted in target MMDAs.

Achieved

- 13.8 times of training sessions per district per year were conducted.

**3) Output 3 :** The capacity of RAD and DAD regarding monitoring and evaluation is increased.

Expected to be almost achieved

- The Project is going to finalize the M&E Tool in 2020 and will suggest it as the best M&E system for the DADs' rice extension activities.
- 3.3 times of training sessions per region per year have been provided by 2019.

**4) Output 4 :** The Extension Guideline is fine-tuned.

Expected to be achieved

- The rate of application of the Guideline techniques by trained farmers increased by 7.4% compared to the Phase 1.

## **1-3. Implementation Process**

The Steering Committee (SC) as the highest decision-making mechanism of the Project was held five times so far. The Technical Committee (TC) as the mechanism to discuss the Project's technical issues was held eight times so far. Two Project Coordination Units (PCU) were established and functioned to coordinate activities in the two regions.

## **2. Summary of Evaluation by Five Criteria**

### **(1) Relevance: High**

The Project is a part of The Planting for Food and Jobs (PFJ) Campaign by GoG and the GoJ's Country Assistance Policy for Ghana. The Project corresponds to the needs of the DCS, RAD, DAD, and small scale farmers, which are the development of rice cultivation technology, development of the capacity of planning, implementation, and M&E of rice extension activity by the local governments.

### **(2) Effectiveness: High**

The Project Purpose is expected to be achieved in 2021 if the same trend continues. Achievement of each output has been contributing to the expected achievement of the Project Purpose.

### **(3) Efficiency: High**

The four Outputs are already almost achieved and will be completely achieved by the end of the Project period. The inputs from the Japanese side (experts, equipment, and local activity costs) were effectively utilized. The outbreak of the COVID19 has been forcing the Japanese experts to work remotely from Japan. However, the Japanese experts have frequently communicated with the C/P online to continue developing the training materials. The inputs from the Ghanaian side included the C/P, project offices and activity costs provided by the DCS.

#### **(4) Impact: Relatively High**

- The Overall Goal's 1<sup>st</sup> indicator (35 MMDAs apply the Extension Guideline) is expected to be achieved due to the MMDA's efforts.
- The 2<sup>nd</sup> Indicator (regional rain-fed and irrigation rice production in 2023), is expected to be achieved for the Ashanti region while not expected for the Northern region because of the low fertility of the soil and severe climate conditions.

#### **(5) Sustainability: Relatively High**

**1) Policy Aspect:** The MoFA has its intention to continue to increase national rice production.

**2) Institutional Aspect:** The DCS showed its strong commitment to continuing the rice extension structure in the future. The number of AEAs has been increasing thanks to the PFJ, thus it is likely that the same structure will be secured.

**3) Financial Aspect:** Both the DCS and the MMDAs face a shortage of the budget, but they are expecting an increase in the tax revenue as a result of the increased rice production and sales in the market. They also plan to utilize donor funds more effectively.

**4) Ownership of Target Group:** The DCS showed its commitment to continuing the rice extension activity. MMDAs consider it essential that their budget officers participate in the project training and understand the importance of rice extension.

**5) Technical Aspect:** It is expected that RAOs, DAOs, and AEAs who have participated in project training will continue to apply new rice cultivation skills and knowledge as well as the M&E tool.

### **3. Factors Promoting Better Sustainability and Impact**

#### **(1) Factors Concerning the Planning**

- The Project included the allocation of the C/P budget, which is usually considered as an Important Assumption in other technical cooperation projects, into its Output indicators. This was remarkable but also challenging because the Project had promoted the local governments to utilize their financial sources and encouraged them not to rely on donor funds.
- Demo plots were effectively utilized that accelerated the extension of techniques. The introduction of quality seeds led to an increase in rice quality and its sales. Several ex C/Ps have been promoted to DDAs, which motivated the current C/Ps. The Project's M&E tool is in line with the existing M&E system of the GoG.

#### **(2) Factors Concerning the Implementation Process**

The Project has submitted in a total of 8 Monitoring Sheets to communicate the progress and the issues to JICA. There is no communication trouble observed within the Project.

### **4. Factors Inhibiting Better Sustainability and Impact**

**(1) Factors Concerning Planning:** The delays in the MMDA's budget release have caused delays in the Project's rice extension activity (The Output 1 targeted only timely allocation but not timely disbursement).

**(2) Factors Concerning the Implementation Process:** N/A

### **5. Conclusion**

The Project is in line with the GoG's rice promotion policy and the GoJ's assistance policy. The Project supported MMDAs in planning, budgeting, and improving the M&E tool for rice extension activities. All these project activities met the needs of RAD, DAD, MMDA, and rice farmers, and it is expected that the Project will achieve its goal, a 100% increase in rice production by using the techniques indicated in the Extension Guideline by the end of the project period. The Project utilized the outputs of the Phase 1 project in terms of

human resources and the Extension Guideline. Large impacts were observed in the dissemination of rice cultivation techniques in other regions by ex-C/Ps. The Guideline will likely to be used after the project end. The continuous budget allocation and disbursement from MMDA are the keys for sustainable activities to TOT, monitoring, and technical backstopping by RAD officers, and rice extension in the field.

## 6. Recommendations

**(1) Extension of the project period:** Extend the Project period for three months and complete such activities as end-line data collection and wrap-up events that are delayed due to the outbreak of the COVID19.

**(2) Revision of PDM:** Revise the target figure of the current Overall Goal indicator for the Northern region to a more feasible and realistic figure and change the means of verification.

**(3) Budget assurance:** To secure the budget, 1) MoFA is expected to continue to promote rice extension by using the Extension Guideline, not rely on the donor fund, 2) MoFA and RAD secure budget for traveling cost for monitoring and technical assistance by RAD officers, 3) MoF, with the support of the Project, clarify the critical points that cause delays of budget release, and develop solutions, 4) RAD provides the budget officers of MMDA with the opportunity to enhance their knowledge about rice production for further understanding of the value and importance of rice extension activities. In the long term, MMDA is recommended to increase the portion of IGF in its revenue by presenting MoF that an increase of rice production will lead to a rise in tax income from the market.

**(4) Continuation of TC:** The RADs are recommended to have the same technical discussions on rice extension activity as ones they had in the Technical Committees (TC) held by the Project in the existing Extension-Linkage-Committee (RELC).

## 7. Lessons Learned

**(1) Promotion of agricultural projects not relying on a budget of development partners:** The Project conducted its extension activity following the central and local governments (MMDA)' budgeting process and crop calendar and improved the MMDAs' capacity of planning and budgeting. This is an ideal assistance approach because it decreases dependency on donor funds and is thereby applicable to other crops than rice.

**(2) Development of the Extension Guideline aiming at nationwide dissemination:** The Project planned the activities in accordance with the MMDA's existing system and tried not to go through official approval procedures that usually take time. The Project targeted the whole process of planning, budgeting, implementation and monitoring, and prioritized concrete activities that would lead to the allocation of the budget. Such an approach of the Project that reviewed the Extension Guideline by looking at the nationwide dissemination of the Guideline from the very beginning of the Project, will be a good example for other projects that include similar activities of guideline and/or manual development.

**(3) Elaboration of M&E tool for wider application:** The Project developed and improved its M&E tool to make it in accordance with the GoG's existing M&E system, so the tool is easily applicable. The proper monitoring of the Project progress and achievements contributes to appropriate planning and becomes a useful explanation tool for donors. These Project outcomes are beneficial not only for agricultural but other technical cooperation projects.

**(4) Effective use of demonstration plots:** Strategic selection of demo plot sights is essential to maximize the demonstrational effect of the demo plots.

**(5) Market-oriented rice cultivation:** Farmers apply new techniques and continue rice cultivation with the techniques because they want to increase rice production to sell extra rice at a reasonable price to get more income. Therefore, it is essential for rice extension promotion that the Project facilitates the linkage between farmers and the market so that the farmers can realize actual income increase as a benefit of the appropriate techniques. That is why it is essential to consider how the Project can support the entire rice value chain. This Project will be a good example for other rice projects as a successful rice project with the SHEP approach.

**(6) Introduction of machine and small-scale land development:** The farmers' needs for agricultural machinery will become more significant as their rice production increases. In the Northern region, where there is a severe dry season, a stable supply of agricultural water is also important. Therefore, the introduction of proper agricultural machinery and small-scale land development are crucial points to discuss for the next rice project in Ghana. The Project introduced manual rice cultivation techniques in the revised Guideline. However, the Guideline needs to be revised once again if the next Project aims at agricultural mechanization. The introduction of a revolving fund system may also be considered to promote agricultural mechanization.