### 1. Outline of the Project

<table>
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<tr>
<th>Country: Uganda</th>
<th>Project title: Technical Assistance Support to Sustainable Irrigated Agricultural Development Project in Eastern Uganda</th>
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<tbody>
<tr>
<td>Issue/Sector: Agriculture</td>
<td>Cooperation scheme: Technical cooperation project</td>
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<td>Division in charge: Field Crop Based Farming Area Group, Rural Development Department</td>
<td>Total cost (at the time of evaluation): Approximately 312 million yen</td>
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<td>Supporting Organization in Japan:</td>
<td>Related Cooperation: NERICA Rice Promotion Project in Uganda, Technical Cooperation Project</td>
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#### 1-1 Background of the Project

Agriculture is a key industry of Uganda. It contributes to 20% of Gross Domestic Product (GDP), 48% of export earnings and employs 73% of the labor force. The Government of Uganda has been implementing some poverty reduction policies based on “Poverty Eradication Action Plan (PEAP)”. It is considered that the agricultural development is an important issue which contributes to three out of the five focused subjects described in the PEAP. The government has prepared “Plan for Modernization of Agriculture (PMA)” as a sector programme, which aims to shift over the commercial farming. In the Eastern Region, there are many wetlands, and paddy rice is popularly cultivated. However, the productivity is still low, because smallholders do not have enough level of rice cultivation techniques and extension system to support them are not fully developed yet. In this circumstance, the Government of Japan implemented the “Development Study on Poverty Eradication through Sustainable Irrigation Project in Eastern Uganda” (2003-2007), in which verification trials for simple irrigation agriculture suitable for the Eastern Region were conducted and paddy rice production skills were transferred to the counterpart personnel. With appreciation on the outcomes of this Study a ten-year collaboration on rice promotion “Cooperation Program for Rice Promotion (2008-2017)” was agreed by the Ministry of Agriculture of Uganda and JICA in March 2008 and the project started in 2008.

#### 1-2 Project Overview

The project aims to improve rice productivity and production volume of smallholders by establishing and promoting irrigated rice cultivation techniques.

1) Overall Goal

Rice production is increased in the Districts in the Eastern Region of Uganda.

2) Project Purpose

Production and productivity of rice are increased through introduction of sustainable irrigated agriculture techniques in the Project Sites.
(3) Outputs
1. Capacities necessary to provide training and extension on irrigated rice production techniques to the smallholders are developed among the District Agricultural Officers in the target area.
2. Irrigated rice cultivation techniques are promoted among smallholders in the Project Sites.

(4) Inputs (at the time of evaluation)
1) Japanese side: Approximately 312 million yen
   Trainees received: 19 persons  Local cost: 1,042,465,774 Uganda Shillings

2) Ugandan side:
   Counterpart: 90 persons  Local cost: 30,885,650 Uganda Shillings
   Land and Facilities: Office spaces with office equipment, water and electricity have been provided at MAAIF and within the compound of District Production Office (DPO) in Mbale district.

II. Evaluation Team

<table>
<thead>
<tr>
<th>Members of Evaluation Team</th>
<th>(Specialized field: name, title)</th>
</tr>
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</table>
| Japan side                 | (1) Team Leader: Dr. Kunihiro Tokida, Senior Advisor, Japan International Cooperation Agency (JICA)  
                          (2) Cooperation Planning: Mr. Tatsuki Noda, Program Officer, Dry Field Farming Division, Field Crop Based Farming Area Group, Rural Development Department, JICA  
                          (3) Evaluation Analysis: Ms Keiko Itagaki, Researcher, Social Development Department, Global Link Management, Inc.  
| Uganda side                | (1) Team Leader: Mr. Robert Khaukha, Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)  
                          (2) Member: Mr. Henry Opolot, MAAIF  
                          (3) Member: Mr. Daniel Kigula, MAAIF  

| Period of Evaluation | April 5, 2011 – April 28, 2011 |
| Type of Evaluation   | Terminal                        |

III. Results of Evaluation

3-1 Confirmation of Results
(1) Output
Output 1
The Project has developed a group training program for DAOs and farmer representatives together with a textbook entitled as “Lowland Rice Cultivation Guide”. The field training program is almost completed and is now on the final stage of compilation. Group trainings have been conducted 20 times, with a gross total of 283 participants. According to the result of a survey conducted by the Project, 98% of DAOs have already taught the technique to the rice growing farmers and 37% have set up similar demonstration plots.

Output 2
The Project has set up training/demonstration plots in 54 Project sites in 18 districts, where the field training programs have been conducted with the participation of 780 farmers. In the 24 Project Sites where the field training had been completed before this Study, a total of 395 farmers had received the training and 254 farmers (64%) were applying the rice cultivation techniques introduced by the Project. The farmers in the remaining 30 sites were also showing high interest and motivation; therefore, it is expected that the farmers in those Project Sites would adopt the techniques in the coming cropping season.

(2) Achievement of the Project Purpose

The yield performances of the demonstration plots in the Project Sites ranged from 0.5 to 7.6 t/ha but the average yield was 3.6 t/ha and exceeded the target value. It has been confirmed that approximately 63.5 ha in and around the Project Sites have adopted the technique introduced by the Project so far but the results of the questionnaire survey to the district technical staffs indicate that the technique has been disseminated to approximately 112 ha additional areas outside the Project Sites. Programs for group training and field training are expected to be completed by the end of the cooperation period; therefore, the Project Purpose is also expected to be attained satisfactorily.

(3) Prospects to Achieve the Overall Goal

According to a survey conducted by the Project, the yield in the Project Sites have increased by approximately 2.7 times and it has been reported during the interviews conducted by the Terminal Evaluation Team that the acreage devoted to rice has increase by 3 to 4 times. Based on these data, a fair prospect of achieving the overall goal seems to be expected, yet under the condition that the district technical staff and the trained farmers would continue to make efforts to further explore the potential sites and to accelerate wider dissemination of the techniques to other farmers.

3-2 Summary of Evaluation Results

(1) Relevance: High

The Project is consistent with the policy direction of the Government of Uganda which aim to increase the production and productivity as envisioned in the Development Strategy and Investment Plan (DSIP) (2010-2015) and the Uganda National Rice Development Strategy (UNRDS) (2008-2017). Moreover, the Project is also coherent with the Japanese aid policies to Uganda in which the emphasis is placed on the support to agricultural development, particularly to promote rice production in the framework of the Coalition for African Rice Development (CARD). Both the farmers and the DAOs appreciate that the Project activities have effectively enhanced the productivity; therefore, it can be said that the Project has adequately addressed the needs of the beneficiaries.

(2) Effectiveness: High

The Outputs, namely the capacity building of DAOs and the capacity building of smallholders, are appropriate means to achieve the goal of productivity improvement and there is a logical sequence between the outputs and project purpose. The two Outputs adequately contribute to the achievement of the Project purpose within the cooperation period.

(3) Efficiency: High

Planned inputs were made in appropriate quantity and quality from both the Japanese side and the
Ugandan side and contributed to the achievement of the Outputs. In addition, the Project collaborated with NERICA Rice Promotion Project and Japan Overseas Cooperation Volunteer program (JOCV). The collaboration between the NERICA Project and the research activities at the National Crops Resources Research Institute (NaCRRI) was especially helpful and can be considered as one of the attributing factors to the efficient management of the Project.

(4) Impact: High
Rice production is expected to increase in other regions given that the dissemination efforts will be continued after the cooperation period; therefore, positive impacts of the Project are anticipated on the overall goal. In the Project Sites, increased rice production has increased the income of the farmers and has resulted in the improvement of their livelihood and household economy. Furthermore, the activities as farmers’ groups have helped the farmers to improve the relationship with other farmers, strengthen partnership with external assistance organizations, and improve self-esteem through the experience of learning or teaching new techniques. In other words, the Project has also made a positive impact on the social capital. Moreover, there has not been any negative impact observed or reported during the Study.

(5) Sustainability: Fair
The Project is implemented in line with the UNRDS and current DIPS; therefore, political sustainability of the Project is high. Moreover, technical sustainability is also considered to be high since the irrigated rice cultivation techniques introduced by the Project are basic techniques and require only minimal inputs. It is also considered that the organizational and financial sustainability at the level of beneficiary farmers would be secured to a certain extent although organizational/financial sustainability of the implementing agency needs to be strengthened in order to ensure further expansion and continuation of the Project activities, including training. In particular, it will be necessary to urgently coordinate the institutional arrangements between the routine agricultural expansion of the District Production Office (DPO) and the initiatives of the National Agricultural Advisory Services (NAADS).

3-3 Factors that Promoted Realization of Effects
(1) Factors Concerning Planning:
The Project had incorporated innovative ways to ensure future sustainability, such as introducing selected basic rice cultivation techniques that would improve the productivity, minimizing the external inputs for field trainings/demonstration methods, and requesting the inputs from the beneficiaries. These efforts have contributed to the acceptance of the new techniques at the beneficiary level and to sustainable practice.

(2) Factors Concerning the Implementation Process: None in particular.

3-4 Factors that Impeded Realization of Effects
(1) Factors Concerning Planning
Despite the fact that the Project activities were implemented mainly in the target districts, the main office was placed at MAAIF in Entebbe while the Liaison Office was at DPO in Mbale District. In view of the physical distances between Entebbe and the target districts, convenience of transportation, and efficiency, reversal of the roles and functions of these two offices should have been considered.
### 2) Factors Concerning the Implementation Process

The experts were dispersed across a wide area and the activities on the Project sites were diverse. This had made it was difficult for the Project Team to hold meetings and there were reports about problems they had faced in terms of timely and accurate communication or information-sharing. However, toward the end of the Project, regular meetings were held to share the necessary information.

### 3-5 Conclusion

The expected outputs have largely been achieved without any critical problem or notable delay in the implementation of the Project and it is assumed that the Project would successfully achieve the Project Purpose within the cooperation period. It is therefore appropriate to terminate the Project in June 2011 as planned.

### 3-6 Recommendations

#### (1) Recommendations for the Remaining Period of the Project

1) Conduct of wrap up activities

As experiences of application of the new irrigated rice production techniques are accumulated in different Project Sites, allowing the DAOs and farmers who had participated in the Project to share their experiences would be useful to derive lessons for the future dissemination of the technique and also to enhance their motivation. Moreover, it would also be important to grasp the overall yield performance and the degree of application of techniques in the sites which will soon complete the Project, in order to confirm the general achievement of the Project. Therefore, it is recommended to continue these activities until the end of the Project.

#### (2) Recommendations for the Future (after the completion of the Project)

1) Efforts to continue training and demonstration activities for farmers

Although the importance of rice is increasingly recognized at policy level, budget allocation for trainings and demonstration activities on rice cultivation techniques are still limited. MAAIF is strongly requested to continue its efforts to secure financial resources for further dissemination of the technique and to mobilize the institutions concerned.

2) Discussions with interested parties on productive use of the wetlands

Although a National Policy on environmental protection of the wetland has already been formulated, the potential of rice productivity should be considered and it will be important to promote further discussions on the future management and utilization of the wetlands as well as to assess the possible environmental impacts of agriculture with scientific validation.

### 3-7 Lessons Learned (Cases from this projects that may be a reference for the discovery, formulation, implementation, and operation for other similar projects)

#### (1) Proper installation of offices for efficient operation

Two long-term experts were allocated to the Project’s main office in MAAIF while 1 long-term expert and short-term experts were also assigned as full-time staff to the Liaison Office in Mbale District. However, in view of the physical distances and the inconvenience of transportation to the target Districts, the Capital can hardly be considered an appropriate location for the main office in terms of efficiency of
project operation. Efficiency should be studied thoroughly when selecting the location of the central unit of project operation, especially if field-level activities are the main components of the Project.

(2) Mobilization of participation of local leaders and gaining recognition of the project activities

Although the Project Team had given full explanation to the local leaders in the process of Project Site selection, the local leaders were not deliberately approached to solicit participation or to obtain recognition of the Project activities. However, in the Project Sites where the local leaders were participating in the Project activities as members of the farmer groups, they were found to have played an active role in the dissemination of the project achievements. Since the local leaders are in the position to exercise direct and indirect influences over the farmers in the community, it would be beneficial to mobilize participation or to acquire favorable recognition from them to ensure future dissemination. It is therefore important for the Project Team to make awareness-raising activities.