Summary of Terminal Evaluation

1. Outline of the Project			
Country: The Republic of the Sudan		Project title: Capacity Building Project for the Implementation	
		of "The Executive Programme for the Agricultural Revival"	
Issue/Sector: Planning/ Government –		Cooperation scheme: Technical Cooperation Project	
Government - Government/ General			
Division in charge: JICA Sudan Office		Total cost (estimated at completion of the Project):	
		approximately 0.94 billion Yen	
Period of	[Original Period]	Partner Country's Implementing Organization:	
Cooperation	From March 29, 2010 to	Federal Ministry of Agriculture and Irrigation, State Ministry	
	March 28, 2014	of Agriculture of the target area (Gezira, White Nile, Sennar,	
	[Extended Period]	Gedaref, Northern, and River Nile)	
	From March 29, 2014 to	Supporting Organization in Japan: None	
	March 28, 2016		

1-1. Background of the Project

The Republic of the Sudan is in urgent need to revive the agriculture sector. The agricultural production, comprising 35% of Gross Domestic Product and 62% of labor force in 2007, has been stagnant in the last two decades, particularly in major crops such as sorghum, wheat, sesame, cotton and ground nuts. Sudan is a net importer of food because of the rapid increase in domestic consumption due to the population growth at 2% per annum. Sudan had been dependent on oil revenues to achieve economic growth and balance external accounts, which significantly decreased due to the Secession of South Sudan.

To tackle this imminent challenge, the Government of Sudan (GOS) formulated the "Executive Programme for Agricultural Revival" (EPAR) in April 2008 to promote agricultural exports, eradicate poverty, and attain food security. EPAR is an across-the-board program under direct supervision of Vice President of Sudan and encompassing eight ministries including the Federal Ministry of Agriculture and Irrigation, which was reorganized into Federal Ministry of Agriculture and Forestry in 2015 (FMoA). EPAR aims at improving agricultural productivity and export competitiveness through constructing/rehabilitating dams and irrigation canals, doubling cultivated areas and growing horticulture production. EPAR was extended after the end of its original term from 2008 to 2011, and FMoA itself formed its own Five-Year Plan 2012-2016 to play its roles to achieve the overall national goals.

FMoA also established the National Rice Project (NRP) in 2005 to promote the production of rice, which also lags behind the growing domestic demand, by formulating rice development plans, introducing rice cultivation to suitable areas, and facilitating marketing and sales.

In view that capacity development for action planning, implementation, and monitoring is the key to the success of EPAR and NRP, GOS requested the Government of Japan (GOJ) for Technical Cooperation to develop capacity of FMoA and related organizations. GOJ accepted the request of GOS in December 2009. Subsequently FMoA and JICA entered discussion on the framework of the Project, signed the Record of Discussions on 21st January, 2010, and the Project started in March 2010. The original duration of the Project was four years until March 2014.

From September to October 2013, the Terminal Evaluation in the original Project period was conducted. It concluded that, while most of the Project Purpose and Outputs were achieved, two Output indicators regarding

(i) appropriate upland rice cultivation technology development and (ii) capacity development of extension officers in five participating States (White Nile, Sennar, Gedaref, Northern and River Nile) other than Gezira were not fulfilled, and thus recommended two-year extension of the Project period. Subsequently FMoA and JICA discussed the recommended period extension, and signed a new R/D for the extended duration from March 2014 to March 2016 on 12th February, 2014.

1-2. Project Overview

This Project aims to strengthen human and institutional capacity of the Ministry of Agriculture and the organizations concerned to materialize "The Executive Programme for the Agricultural Revival". There are 2 main pillars in the project. The first one is for development of human resources and institutional capacity development to enforce FMoA's capacity for planning, implementation, and monitoring. The second pillar is for promotion of upland rice production which is regarded as one of the strategic crops, and for human resource development through the introduction and extension of its production. The latter is implemented in the state level.

(1) Overall Goal

The quality of public services provided by the Ministry of Agriculture and the organizations concerned are improved through their capacity development.

(2) Project Purpose

Human and organizational capacity of the Ministry of Agriculture and the organizations concerned is strengthened to materialize "The Executive Programme for the Agricultural Revival."

(3) Outputs

- 1) Through the experimental activities of the Project, a model system of human resource development and organizational capacity development of the Ministry of Agriculture has been developed.
- 2) Planning, implementation, monitoring & evaluation for promotion of rice production are enhanced. In the extended period, the Project continues the activities to achieve the following two Output Indicators of the Output 2), which were not fulfilled in the original period.
 - Indicator 2-4 A practical/technical handbook on upland rice cultivation is prepared.
 - Indicator 2-6 Two of trained participants respectively in five States excluding Gezira State are qualified as trainers on appropriate rice cultivation technique.

(4) Inputs

Total Inputs of Japan: USD9.4 million

	Item	Original Period	Extended Period	Total
Japan	Experts	Long-term: 4	Short-term: 6	Long-term: 4
		Short-term: 10		Short-term: 16
	Training in Japan	45	18	63
	Training in Uganda	129	27	156
	Training in Egypt	50	109	159
	Provision of equipment	USD 0.9 million	USD 0.06 million	USD 0.96 million
	Local Cost	USD 0.6 million	USD 0.3 million	USD 0.9 million

Sudan	Local Cost	USD 0.2 million	USD 0.2 million	USD 0.4 million
	Counterpart	Management: 24, Extensionists: 120, Reserachers: 11 (as in October 2015)		
	Provision of office space		Minitsry of Agriculture	

2. Evaluation Team

Members of	1) Team Leader: Mr. Shigeru Otake, Senior Representative, JICA Sudan Office		
Evaluation	2) Rice Development: Mr. Kozo Ito, Advisor to Director General, Team 5, Group 2, Rural		
Team	Development Department, JICA Headquarters		
	2) Cooperation Planning: Mr. Masahiro Shiomi, Project Formulation Advisor, JICA Sudan		
	Office		
	3) Evaluation and Analysis: Mr. Mistuo Nishiya, Director, Engineering Management		
	Department, NTC International Co., Ltd.		
Period of	From October 11, 2015 to October 27, 2015 Type of Evaluation: Terminal		
Evaluation			

3. Results of Evaluation

3-1. Achievement

This terminal evaluation is mainly focused on the extended period to review inputs, implementation management, and to assess progress and achievements by the five criteria in accordance with the Development Assistance Committie (DAC) criteria for Evaluating Development Assistance.

Output 2:

"Planning, implementation, monitoring & evaluation for promotion of rice production are enhanced."

Achievement:

The Project focused on the development of upland cultivation method and capacity development of the extension officers of the 6 target SMoAs during the extension period. The Project will finalize the "Handbook of Upland Rice Cultivation" by the end of the Project period. The capacity of the extension officers is expected to reach at satisfactory level.

Project Purpose:

"Human and organizational capacity of the Ministry of Agriculture and the organizations concerned is strengthened to materialize "The Executive Programme for the Agricultural Revival.""

Achievement:

It was judged that the capacity of FMoA was improved enough during the original period. During the extension period, the Project has focused on only the SMoAs in the target 6 States. In conclusion, the capacity of the SMoA officers, especially in planning, implementation, monitoring and evaluation aspects, regarding upland rice cultivation, is improved at a satisfactory level by the end of the Project period.

3-2. Summary of Evaluation Results

(1) Relevance: High

The Project (Project title; Capacity Building Project for the implementation of the Exective Programme for the Agricultural Revival, Extended project period; From March 29, 2014 to March 28, 2016) addresses the need of capacity building of officers in FMoA as well as the need of farmers to introduce profitable

alternative crops or additional summer crops. The Project is well consistent with the polices of GOS, GOS puts higher priority on institutional capacity building of governmental organizations, in "Exective Programe for Agricultural Revival (EPAR)" which was formulated 2008 for the purpose of promoting agricultural exports, reducing poverty, and fulfill food self-suficienty. FMoA carries out its own Five-Years Plan 2012-2016 to achieve the objectives of EPAR. SMoAs have also started "National Rice Project (NRP)" since 2005 to regard rice as one of the strategic crops. The objectives of the Project, which supports to reduce poverty and establish food security through MoAs' capacity development in thier policy making and its emforcement, simultaneously to improve the productivity anchancement of rice in the target states, are also consistent with priority of Japan's ODA policy to Sudan (2012), which states that agricultural development and improvement of the governmental services are the priority areas of assistance. There were two main components in the extened period of the Project: 1) capacity development of SMoA staff; and 2) development of upland rice production techniques in the PDM version 5.0, which was prepared in February 2014. To conclude, it may be said that the project approach is appropriate in general.

(2) Effectiveness: High

The strengthened capacity of the SMoAs is expected to be at a satisfactory level. The Project has been properly implemented without any serious obstacles by focusing on particular parts of PDM (version 5.0, revised in February, 2014) during the extension period. Therefore, we may conclude that the effectiveness of the Project is high during the extension period.

(3) Efficiency: Relatively high

The inputs made by the Japanese side are appropriate for producing outcomes. Especially, a large number of extension officers have received trainings in rice-developed countries. Only 2 Japanese experts are in charge of instructing upland rice cultivation in as many as 6 States with long distance away from each other. The input of equipments was approximately as scheduled except some combine-harvesters.

A large number of staff of the SMoAs of the target 6 States has been involved in the project activities and a substantial amount of local cost has been borne by the SMoAs of the target 6 States during the extension period.

As for project management, Project activities are conducted in a flexible manner based on their progress, and the Joint Coordinating Committee meetings are held regularly and properly.

As high-level officers, including Ministers, of FMoA and the relevant SMoAs have been changed many times during the Project extended duration, the execution of the local budget for the Project and arrangement of resources was sometimes delayed or insufficient.

(4) Impact:

1) Prospect on achieving the Overall Goal in future: "The quality of public services provided by the Ministry of Agriculture and the organizations concerned are improved through their capacity development."

Quantitative data for assessing the degree of achievement of this indicator are not available at the moment of the Terminal Evaluation. Therefore, it is difficult to judge whether this indicator can be achieved within 3-5 years after the completion of the Project.

2) Other impact

• Exchange visit of the relevant SMoA officers improved the knowledge and morale of the visit

participants to a great extent

- Number of farmers who are interesting in rice cultivation has been increased
- Public Relationship through media made the Sudanese people aware of upland rice development in Sudan

(5) Sustainability: Moderate

Policy sustainability will be secured. Organizational sustainability will be secured in general. Financial sustainability might be secured. As for technical issues in upland rice cultivation, the Project successfully developed basis for introduction stage but continuous assistance from outside of the country seems to be necessary.

1) Policy sustainability

The Government of Sudan considers that institutional capacity building, modernization of agriculture, and improvement of productivity are important. Rice has become one of the strategic crops. Therefore, policy sustainability on capacity building of officers of the government and promotion of rice cultivation will be secured.

2) Institutional/organizational sustainability

The SMoAs in the target 6 States have created rice promotion/production unit by assigning relatively a large number of extension officers. The Ministers and Director Generals in the SMoAs are committed to upland rice promotion as a potential crop in the crop rotation. The coordination between the SMoAs and National Rice Project is kept well in terms of rice promotion. Therefore, it can be said that the SMoAs in the 6 States have appropriate organizational setup for promoting rice cultivation.

3) Financial sustainability

The SMoAs in the target 6 States have allocated local cost for the project activities during the extension period. The annual action plans and 5-year rice development plan have been prepared to request necessary budget for the implementation. The National Rice Project is fully supporting budget allocation to rice promotion. Therefore, it is possible for the FMoA and SMoAs to continue capacity building mainly for upland rice production.

4) Technical sustainability

As for extension officers in the SMoAs concerned, their capacity has improved year by year by participating in various trainings and the OJT at the fields. The technical/practical handbook on upland rice cultivation will be issued as a textbook for the extension officers. Therefore, it can be said that the Project has performed well to start upland rice production. However, upland rice cultivation in Sudan is still at an introduction stage. Further technical investigation and continuous trainings, especially in land leveling and weed control, are necessary to shift it to expansion stage. In addition, production of quality rice seeds remains the key issue for commercial production of rice. The post-harvest handling techniques and marketing issue also need to be studied. In summary, the Project successfully developed basis for introduction stage but continuous assistance from outside of the country seems to be necessary.

5) Sustainability of Outputs achieved in the original Project period

The achievements in Output 1 are mostly buried in oblivion since the end of the original duration of the Project, raising substantial concern about the sustainability of the Project. Activities to sustain what was attained in Output 2 have declined partially, too.

Output 1:

The Management System verified and proposed by the Project for human resource development and organizational capacity development has not been established yet. Despite the letter from the Training Unit in February 2014 requesting all the directorates in FMoA to prepare capacity building plan for the coming years based on the Capacity Development Guideline/Manual developed in the Project, all the directorates have returned to their old practices of training planning and management, not conducting Capacity Assessment or Need Assessment nor, more importantly, applying the "Learning by Doing" approach introduced by the Project. Therefore the Implementation Manual has not provided the intended benefit for FMoA. The continuous changes in the top & middle management of FMoA are the major reason for such a diminishing interest in the achievements of the Project.

Output 2:

The National Rice Development Strategy (NRDS) still remains valid and is drawing refreshed attention from the new management of FMoA. The Rice Sector Development Forum, which was initiated in 2013 and 2014 as the Structure to Implement and Review NRDS, was discontinued, although the discussions on the bottleneck issues are continued in the annual workshop of the Project in the extended period. Annual Action Plans for Rice Development are still formed, implemented, monitored and evaluated by participating SMoAs every year. SMoAs, particularly Gezira State, are also paying good efforts to maintain the Quality of Rice Seeds by thoroughly removing off-types in the seed production farms. The Willingness of Farmers to Grow Rice is kept high as farmers are exposed to the mostly positive results in the demonstration farms.

3-3. Factors that promoted realization of effects

(1) Regarding project plan

None.

(2) Regarding implementation process

SMoAs have always been required to show 1) assured political will to introduce upland rice, 2) strong administrative leadership and 3) close cooperation and collaboration among extension officers, farmers and Japanese experts. As a result, proactive participation took place in training and demonstration farm activities.

The increased number of participants in training in Japan and third countries is contributing to deepening the understanding of rice promotion and to realizing the effects of the Project.

3-4. Factors that impeded realization of effects

(1) Regarding project plan None.

(2) Regarding implementation process

The implementation of the Project was adversely affected to some extent by insufficient coordination between Federal Government and State Governments for a certain period, and by frequent change of management.

Some delay or shortage of budget execution on the Sudanese side was observed, too. Insufficient coordination and arrangement among departments in SMoAs caused some problems such as combine harvesters were not available at the optimal time of harvesting.

3-5. Conclusion

Persons involved in the project activities have made a lot of efforts for achieving objectives of the Project. Their capacity in promotion of upland rice cultivation has been strengthened well at the SMoAs in the 6 States during the extension period. As for rice cultivation, there are good outcomes, for example, results of higher yield at the demonstration farms, that indicate profitability of rice cultivation, and governmental officials and farmers are ready for rice cultivation. Therefore, it can be concluded that the Project shall be terminated on schedule.

However, further capacity strengthening of the extension officers on upland rice cultivation is necessary and there are several technical issues on upland cultivation to be addressed by further development.

4. Recommendations

4-1. Recommendations by the end of the Project

For Japanese experts and counterpart organizations

- (1) Prepare the latest Technical Handbook on Upland Rice Cultivation
- (2) Complete the capacity assessment of the extension officers of the participating six States, especially in those States of White Nile, Sennar, Gedaref, Northern and River Nile

For FMoA and SMoAs

(3) Approve plans and budgets to promote rice production for the next year(s)

4-2. Recommendations for sustaining the Project achievements after the end of the Project

For FMoA

(1) Reactivate the Rice Sector Development Forum or any other form of stakeholder meeting

For FMoA and SMoAs

- (2) Provide necessary and adequate technical support for the rice production activities of the private sector
- (3) Allocate and disburse sufficient budget for annual planning, implementation, monitoring and evaluation of rice promotion

For FMoA and ARC

- (4) Conduct research, and draft, authorize and release official Technical Handbook for use of farmers
- (5) Test and approve herbicides having selective effect on weeds in rice field

For SMoAs

- (6) Fully utilize the rice milling machines provided in the Project
- (7) Train seed-producing farmers thoroughly to keep purity of rice seeds
- (8) Conduct in-country training of extension officers by the most competent leader extension officers
- (9) Encourage all extension officers to continue refining their knowledge and skills through the usage of the field record diary

For FMoA

(10) Review the procedures, especially the "Learning by Doing" practices, and the management system proposed by the Project for human resource development and organizational capacity development, and

re-adopt them where possible and applicable

4-3. Recommendations for further promotion of rice production

For FMoA

- (1) Strengthen the capacity of National Rice Project in FMoA
- (2) Encourage the private sector to be involved more actively

For FMoA and SMoAs

- (3) Open commercial trade opportunities and channels for rice producers
- (4) Form farmer cooperatives specialized in rice
- (5) Ensure that proper storage and post-harvest processing services are available for rice producers

For ARC

(6) Conduct research and development on rice in all targeted States

For ARC, FMoA and SMoAs

(7) Strengthen the existing systems for maintaining varieties and propagating pure rice seeds

For FMoA and SMoAs

(8) Continue searching, testing and introducing agricultural machineries suitable to rice farming in Sudan For SMoAs

- (9) Strengthen the existing system for technology transfer and extension by establishing a Center of Excellence
- (10) Expand / revive the extension network to serve the need of more farmers

5. Lessons Learned

- (1) During the extended Project period, follow-up activities should/could have been conducted to some extent for those Outputs achieved in the original duration of the Project.
- (2) Geographical expansion needs to be planned really deliberately in light of available resources and inputs.
- (3) The "Learning by Doing" approach applied in all the capacity development activities throughout the Project has proved to be quite effective.