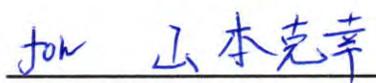


MINUTES
OF
THE FOURTH JOINT COORDINATING COMMITTEE MEETING
ON
THE SUSTAINABLE RICE PRODUCTION PROJECT

25th February, 2019



Hon. Joseph Ndanema
Minister of Agriculture and Forestry,
Freetown



Takashi Kimijima
Chief Advisor, JICA-SRPP

The fourth Joint Coordinating Committee (JCC) Meeting on the Sustainable Rice Production Project (SRPP or the Project) was held on 25th February 2019 at the Conference Hall of Ministry of Agriculture and Forestry (MAF), Youyi Building, Freetown. List of attendants is attached to this document as Appendix 1.

The fourth JCC Meeting started at 10:00AM under the chairmanship of Mr. Sam King Braima, Honorable Deputy Minister of Agriculture and Forestry.

The meeting proceeded with the following agenda:

- 1) Prayer
- 2) Introduction
- 3) Opening remarks by Chairperson
- 4) Presentation on the progress of the Project activities
- 5) Training of Trainers (TOT) for nationwide dissemination of the Technical Package on Rice Production (TP-R)
- 6) Proposed revision of the Project Design Matrix (PDM)
- 7) Issues to be addressed for implementation of the Project
- 8) A.O.B

The meeting started with silent prayers and self-introduction by the participants.

1. Opening remarks by Chairperson

The Chairman welcomed all participants to this important meeting to share progress the project has made so far. On the other hand, he expressed the MAF's disappointment with the Project activities without the use of any machinery while the current Government is working on key priority areas, among which mechanization and large-scale production is of paramount importance in the New Direction.

The Chairman stated, during the last engagement of the Hon Minister with the Japanese Ambassador to Ghana, the Ambassador promised to look into the case further. But unfortunately, nothing good for him has come out from that discussion to date.

He went on to state that the Ministry is transforming agriculture from subsistence to commercial, hence need to reduce drudgery.

The Chairman continued that Hon. Minister and he have agreed to try to put something relevant to the new direction in this Project, by preparing a written document and forward it to the Government of Japan for consideration.

He concluded the opening remarks by encouraging the participants to listen attentively to the report by the Project and make necessary inputs after the presentation on the Project activities.




2. Presentation by the Chief Advisor

Mr. Takashi KIMIJIMA, Chief Advisor of JICA-SRPP explained the main Project activities so far conducted and results obtained during the second period of the Project using a PowerPoint presentation (Appendix 2). The explained activities included: (i) dissemination of the TP-R, (ii) on-farm trials, and (iii) participatory IVS Development. After reporting the Project activities and outputs, he explained about the plan of upcoming Training of Trainers (TOT) for nationwide dissemination of the TP-R as well as proposed the revision of the PDM (Appendices 2 and 3), which deems necessary to adjust to the changes in the circumstances of the Project. The Chief Advisor lastly referred to the issues to be addressed to draw attention of the members of the JCC in search of possible countermeasures.

After the presentation by the Chief Advisor of JICA-SRPP, the Chairman, while expressing appreciation to the achievement so far made, summarized the contents of the presentation.

Then, floor was open to the participants for discussion, where the following question-and-answer sessions were held.

- Q. How many cropping seasons do the farmers practice in these IVS sites that the Project is operating?
- A. Of the 15 IVSs where the Project conducted FFS in the last rainy season, 6 IVSs are continuously cultivated with rice in this dry season.
- Q. Which type of equipment are they using to do their farming as the new direction is now working in terms of promoting mechanization?
- A. We have not introduced any machinery for cultivation yet. JICA put priority on nationwide dissemination of the TP-R. Machinery aspects will be looked into after the nationwide TOT.
- Q. The scale of IVSs to be developed by the project is too small as to the number of farmers available in Mabonkanie, and if the project can improve on it.
- A. Main objective of the IVS development in SRPP is to transfer of technology to MAF staff as the technical cooperation Project. It is expected that MAF will expand the IVS development capitalizing on the transferred techniques.
- Q. Soil test should be carried out to ascertain the level of soil acidity in relation to yield assessment.
- A. In the previous project (SRDP) period, extensive soil analysis and pot experiment have been conducted to determine the factors which influence the yield, through which we do not think soil acidity is really the problem.
- Q. TOT on the TP-R should include some aspects of extension and the duration of training should be more than five days.
- A. The TOT for the TP-R dissemination in the IVS is well streamlined and to be completed in 5 days. It deals with extension methods and consists of both theoretical and practical sessions.
- Q. The number of Modules indicated in the FFS on the TP-R and that of FAO seem different.
- A. SRPP is partnering with FAO, World Bank (WAATP, SCADeP), WFP and other institutions dealing with rice cultivation along the value chain for better

collaboration and creating synergies avoiding duplication and possible overlapping. Furthermore, the module prepared by FAO is on food crops in general, while the Project is now proposing the FFS specifically on the TP-R.

- Q. The Project should share the report on the Baseline survey and first year progress report
- A. They have already been submitted to MAF at the end of the first period of the Project.
- Q. Which criteria were used in selecting the three IVSs for rehabilitation and development in those three districts?
- A. Candidate IVSs were listed by the respective District Agricultural Offices in collaboration with their engineering staff, for each of which, site survey was conducted jointly by SRPP and MAF. Final selection was done based on the results of the survey.
- Q. Why the variance in the yield in the three districts?
- A. As explained in the presentation, the Project considers that yield varied depending on the differences in water management practices, cultural practices, plant protection against diseases and insects, etc.
- Q. How is the adoption rate of the TP-R?
- A. It will be measured in the course of the Project. As the Project has just started disseminating TP-R, it is too early to examine the adoption rate.
- Q. Why is the grain filling ratio low in NERICA L19?
- A. We suspect deficiency of specific nutrients including micro-nutrients. But for the time being, the Project keeps original fertilizer application method in the TP-R unchanged.
- Q. Work plan is targeting 100 FBOs for the entire project period, but it is not clear how the target will be covered.
- A. Starting with 15 FBOs in the last rainy season, the number will increase year by year. In the coming rainy season 2019, the Project will support 20 new FBOs.
- Q. The Project should look into gender issues including FBO members.
- A. Noted. The Project keeps the gender-disaggregated data but not explicitly reporting them in the presentation. From next reporting to the JCC, we will try to indicate them.

As for the plan and milestones for the preparation of TOT on the FFS for the nationwide dissemination of the TP-R and the proposed revision of PDM were endorsed in the absence of any specific comments or objections.

The issues to be addressed raised in the presentation were noted as real challenges for the implementation of the Project, and necessity of any measures to be taken was generally understood.

3. A.O.B.

The Chairman repeatedly emphasized the necessity of the inclusion of mechanization aspects into the Project activities, as all the projects are supposed to be aligned with the New Direction. He provided the policy document to JICA and informed that the Ministry will officially request to JICA in writing to include MAF's policy focus in the framework of the Project

The Fourth JCC Meeting was closed at 11:50 a.m.

Ky

Handwritten signature



ATTENDANCE LIST

THE 4th JOINT COORDINATION COMMITTEE MEETING ON SUSTAINABLE RICE PRODUCTION PROJECT (SRPP)

Organization : JICA-SRPP

Date : 25th February, 2019 at 10 am

Place: MAF Conference Hall, Youyi Building, Freetown

No	Name	Designation	Organization	Phone no.	Email address	sign
1	Samking Braiming	DM	MAF			
2	F.S. Chuevaka	PS	MAF			
3	Amara T. Sheriff	CAO	MAF			
4	Maada Gombu	TA	MAF			
5	Aicela J. Theorie	Ag. Director Extension	MAF			

No	Name	Designation	Organization	Phone no.	Email address	sign
6	David F. Sallu-Sallu	DAO <i>Assembli</i>	MAF			
7	Justice Begega	AKS/CSK	SEMA			
8	Abdul Rahman Kemar	Asst. Agric. Engineer	MAF			
9	John S. Kamara	Ag Dir of CSK MAF	MAF			
10	Mariana M. Turay	Head-Work	MAF			
11	Bonnie Allui Keikura	DAO	MAF			
12	Amana U.D. Summay	SAs	MAF			
13	Augustine Kaybe	M E Editor	Skewoff			
14	Fodouy Silloula	Head of NAFFSL NAFFSL	NAFFSL			
15	JESSE du IOHN	PRESIDENT	NAFFSL			
16	B. J. Bangura	Fbo expert	JICA-			
17	Kochi Otsuka	PFA	JICA			

No	Name	Designation	Organization	Phone no.	Email address	sign
18	Mitsukuni SUGIMOTO	Head	JICA Sierra Leone			
19	Megumi SHUTO	Project Formulation Advisor	JICA Ghana			
20	Taeh H. Jalloh	Head-IA	MAF			
21	Sonie M. Kamara	Deputy CAO	MAF			
22	Yuta SASAKI	M&E	JICA-SRPP			Text
23	Takashi KIMIJIMA	Chief Advisor	JICA-SRPP			
24	Keiko TAGAKI	JICA Expert Extension & Training	JICA-SRPP			ku'co / ty B
25						



The Fourth Joint Coordinating Committee Meeting on Sustainable Rice Production Project in Sierra Leone

25th February, 2019
Conference Hall of MAF, Youyi Building

Agenda of the 4th JCC Meeting

1. Prayer
2. Introduction
3. Chairman's opening remarks
4. Presentation on the progress of Project activities
5. Training of Trainers for nationwide dissemination of the TP-R
6. Proposed revision of the Project Design Matrix
7. Issues to be addressed for implementation of the project
8. A.O.B.

Project Design Matrix (PDM)

Overall Goals

- 1) Rice Productivity is increased in IVS in the target districts
- 2) The Technical Package of Rice (TP-R) is disseminated to FBO farmers in IVSs throughout the country

Project Purpose

The TP-R is adopted by FBO farmers in IVSs in the target districts

Output 1	Output 2	Output 3	Output 4
Situation analysis on IVS rice farming in the target districts	Dissemination of the TP-R to improve rice cultivation techniques of the IVS farmers	Further elaboration of the TP-R for higher adoption by farmers	Recognition of the TP-R for nationwide dissemination

4. Progress of the Project Activities

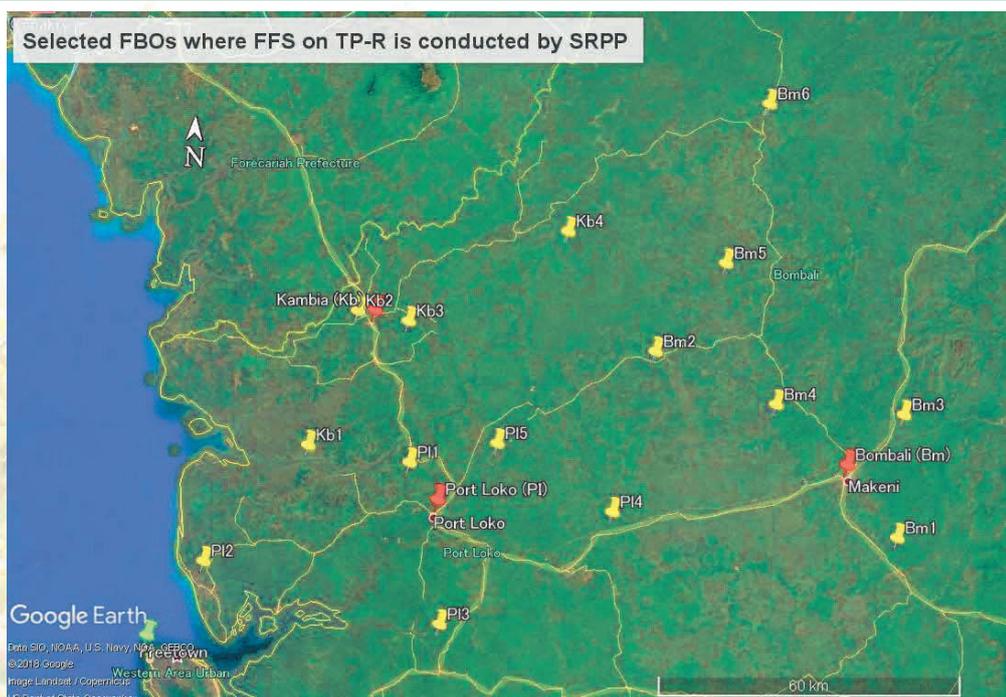
No.	Activities
1	Activities on the dissemination of the TP-R (TOT for FFS, Monitoring of FFS, Yield survey results)
2	On-farm trial to verify or improve the TP-R
3	Implementation of the IVS development with the participation of FBO farmers

4.1 Dissemination of the TP-R

List of the selected FBOs supported through FFS in rainy season 2018

District	Block	Location	Name of FBO
Bombali	1	Makolor, Mapanki	Makoloh Farmers' Association
	2	Batkanu, Libiesaygahun	Makoima Farmers' Association
	3	Mabonkani, Safroko Limba	Taduba Farmers' Association
	4	Magbana, Gbendembu Ngowahun	Nyawalo Farmers' Association
	5	Makomray, Gbanti	Kamuyu Farmers' Association
	6	Kathirie, Sella Limba	Theregoh Farmers' Association
Kambia	1	Rofunk, Mambolo	Rotass Agricultural Development Association
	2	Tawuya, Gbinleh Dixing	Famatho Farmers' Association
	3	Masineh, Magbema	Magbema Women's Cooperatives
	4	Kakola, Tonko Limba	Bapayor Farmers' Association
Port Loko	1	Maghatta, Bureh_Kaseh	Right to life Farmers' Association
	2	Suctarr Lungi, Kaftu Bullom	Suctarr Community Development Association
	3	Makabie, Koya	Makabie Farmers' Association
	4	Rokamba, Buya Romende	Mayenney Farmers' Association
	5	Makump, Dibia	Titikoloh Farmers' Association

4.1 Dissemination of the TP-R (cont'd)



Location of the selected FBOs for FFS in the rainy season 2018

4.1 Dissemination of the TP-R (cont'd)

Training of trainers on FFS on the TP-R for BES and FEW

No.	Type	Theme	Month
1	Classroom	FFS on the TP-R	July
2	Classroom	Monitoring with mobile application (only for the selected FEWs)	July
3	On-site	Transplanting	August
4	On-site	Judgement of panicle initiation stage	October
5	Classroom	Harvesting and post-harvest handling	November
6	On-site	Yield survey	November
7	Classroom	Review on FFS in rainy season/ FFS on the TP-R in dry season	December

4.1 Dissemination of the TP-R (cont'd)

Training on the TP-R for other FEWs who do not conduct FFS on the TP-R

No.	Type	Theme	Month
1	Classroom	TP-R (refresher training)	July
2	Classroom	Harvesting and post-harvest handling/ Dry-season cropping	November

4.1 Dissemination of the TP-R (cont'd)

FFS sessions conducted by BESs and FEWs at 15 sites

No.	Session	Month
1	Introduction, setting of the demonstration plot and land preparation	July
2	Formulation of farming plan and cropping calendar	July
3	Life cycle of rice plant, yield component, rice varieties, and seed selection	July
4	Nursery preparation and sowing	July
5	Construction of bunds, puddling and leveling	August
6	Fertilizer application and transplanting	August
7	Weed management	September
8	Top dressing and water management	October
9	Prevention of damage from rodents and birds	October
10	Harvesting and post-harvest handling	November
11	Evaluation of the TP-R	December/ January

4.1 Dissemination of the TP-R (cont'd)

Training of Trainers (TOT) for rainy season 2018



Uprooting, Port Loko

Yield survey, Bombali



Transplanting, Port Loko

Harvesting, Kambia



Panicle initiation, Port Loko

Measuring moisture contents, Kambia



4.1 Dissemination of the TP-R (cont'd)



Nursery preparation at Mabonkani, Bombali

FFS in rainy season 2019



Transplanting at Kathirie, Karene



Without fertilizer

With fertilizer

Kakola, Tonko Limba, Kambia
Magatha, Bureh-Kaseh, Port Loko

Initial growth of rice under with and without fertilizer; Makabie, Port Loko



With fertilizer

Without fertilizer

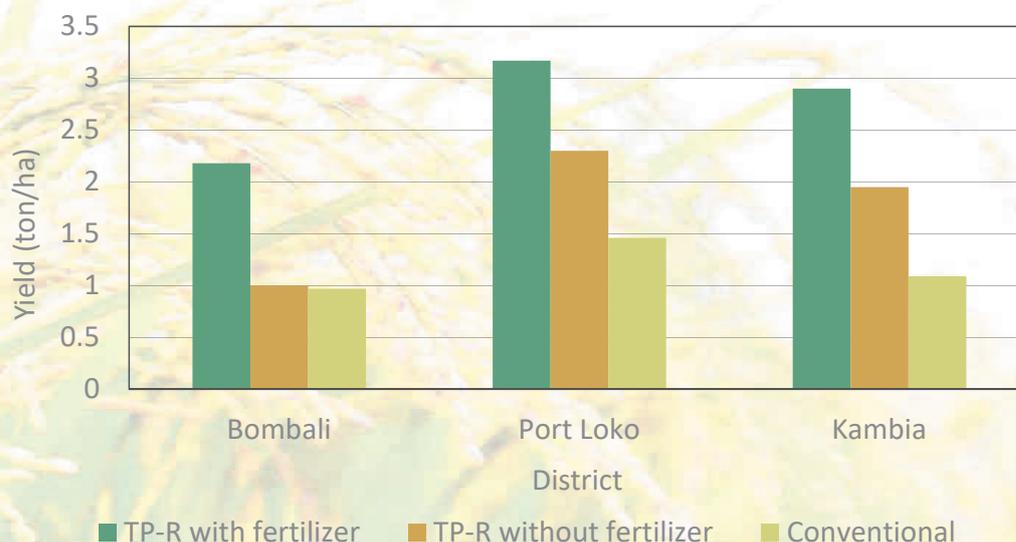


Without fertilizer

With fertilizer

4.1 Dissemination of the TP-R (cont'd)

Rice yield in the FFS plots under different treatments by district



4.1 Dissemination of the TP-R (cont'd)

Factors negatively affecting rice yield in IVS

1. Flood (wash out fertilizer and damage seedlings)
2. Seepage water (difficult drainage, iron toxicity)
3. Insect damage (case worm)
4. Seed (quality)
5. Cultural practices

4.1 Dissemination of the TP-R (cont'd)

Progress of FFS in dry season 2019

District	Block	Location	Progress		
			Sowing	Trans-planting	Top-dressing
Karene	5 (Port Loko)	Makump, Dibia	4-Jan	19-Jan	19-Feb
	6 (Bombali)	Kathirie, Sella Limba	4-Jan	17-Jan	-
Port Loko	2	Suctarr Lungi, Kaftu Bullom	4-Jan	19-Jan	-
	3	Makabie, Koya	4-Jan	18-Jan	-
Kambia	2	Tawuya, Gbinleh Dixing	18-Dec	4-Jan	5-Feb
	3	Masineh, Magbema	16-Jan	31-Jan	-

4.1 Dissemination of the TP-R (cont'd)



4.1 Dissemination of the TP-R (cont'd)

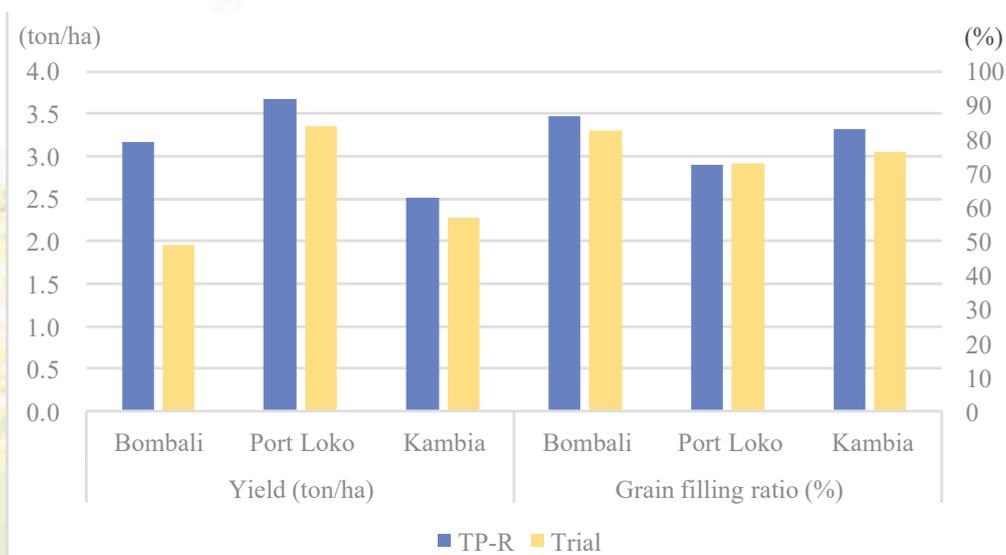
List of FBOs being monitored rice farming in the dry season 2019

District	Block	Location	Name of FBO	Condition of IVS
				(if developed by whom)
Bombali	1	Makoloh	Makoloh Farmers' Association	Developed (Makoloh FA)
		Mapaki	Ansumana Gboyo Farmers' Association	Developed (SCP-GAFSP)
	2	Punthun	Sabufinoh Farmers' Association	Undeveloped
	3	Petifu Mamanso	Tawaleh Farmers' Association	Developed (GAFSP, registered by MAF)
	4	Magbana	Nyawalo Farmers' Association	Developed (Rehabilitated by WFP)
		Makai	Makai Makui Farmers' Association	Developed (FFA/ WFP)
6	Kamaranka	Tawopaneh Agriculture Cooperative	Developed	
Karene		Madina	(No FBO)	Undeveloped
		Rononkoh	Saben Development Association	Undeveloped
		Makulon	Tawopaneh Farmers' Association	Undeveloped
Kambia	1	Malambay	Central Star Farmers' Association	Developed (SCP-GAFSP)
	4	Martunthu	Bandongor Farmers' Association	Developed (SCP-GAFSP)
		Mile 14	Masianday Farmers' Association	Developed
Port Loko	1	Bangro (Makambisa)	Tamareneh Farmers' Association	Developed (rehabilitated by SCP/ GAFSP)
	4	Romango	Maroto Young Farmers' Association	Undeveloped (small)
		Marampa	Sabenty Farmers' Association	Undeveloped

4.2 On-Farm Trials

Items	Description
Field area	500m ²
Treatments	1. TP-R (two-thirds as basal at transplanting and one third as top dressing at panicle initiation stage), and 2. Trial (one-third as basal and two-thirds as top dressing)
Replicates	3 (Mabonkani, Bambali; Rokamba, Port Loko; and Tawuya, Kambia)
Cultivation method	Following the TP-R
Items/aspects to be measured/observed	1. The number of tillers at panicle initiation 2. Yield in each plot (unit area sampling (2 m ² x 2), and all cutting method) 3. Yield components (number of panicles, number of grains per panicle, grain filling ratio, and 1,000 grain weight)

4.2 On-Farm Trials (cont'd)



Conclusion: Neither yield nor grain filling ratio was improved by changing the proportion of split dose of fertilizer application.

4.3 Participatory IVS Development

Flow of Activities of Participatory IVS Development

- (1) Identification of the IVSs to be developed
- (2) Explanatory meetings with FBOs
- (3) Site surveys cum on-the-job training for MAF engineering staff
- (4) Formulation of IVS development plans
- (5) Consultative meetings with FBOs (MOU, bye-laws)
- (6) IVS development planning cum on-the-job training
- (7) Construction management cum on-the-job training

Collaboration with WFP's Food for Assets

- (1) Incentive for the development
- (2) Assurance of quality works by the supervision of JICA's expert

4.3 Participatory IVS Development (cont'd)

Three development sites:

1. Mabonkani, Bombali district (6.7 ha)
2. Gbarray Sarr, Port Loko district (3.0 ha)
3. Masineh, Kambia district (2.1 ha)

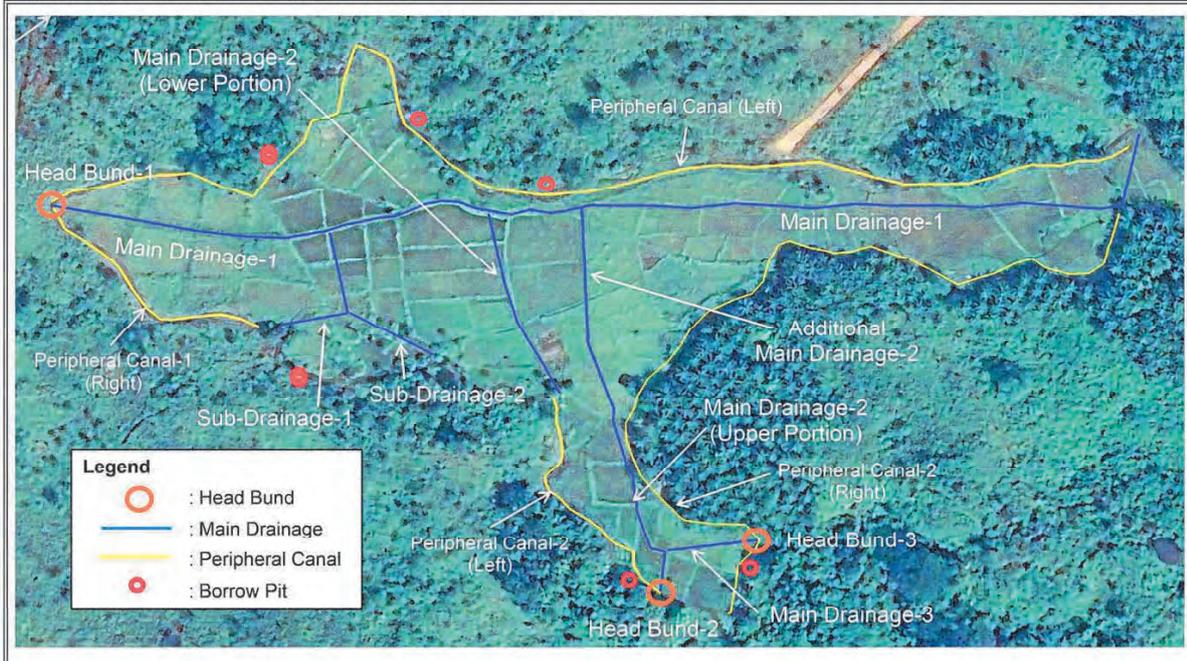
Works to be done:

1. Construction of head bund
2. Rehabilitation/construction of peripheral canal
3. Rehabilitation/improvement of main drainage

Implementation period: February through April, 2019

4.3 Participatory IVS Development (cont'd)

Location Map of Irrigation Facilities (Mabonkani IVS)



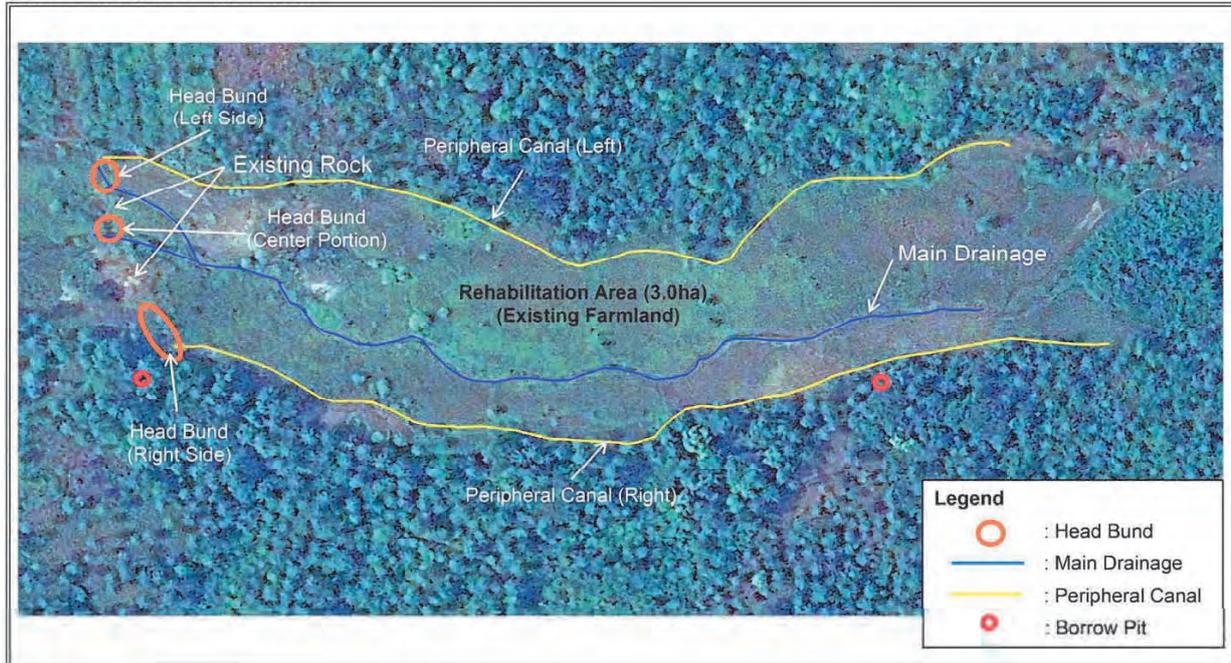
4.3 Participatory IVS Development (cont'd)

**Mabonkani,
Bombali**



4.3 Participatory IVS Development (cont'd)

(4) Location Map of Gbarray Sarr IVS



4.3 Participatory IVS Development (cont'd)

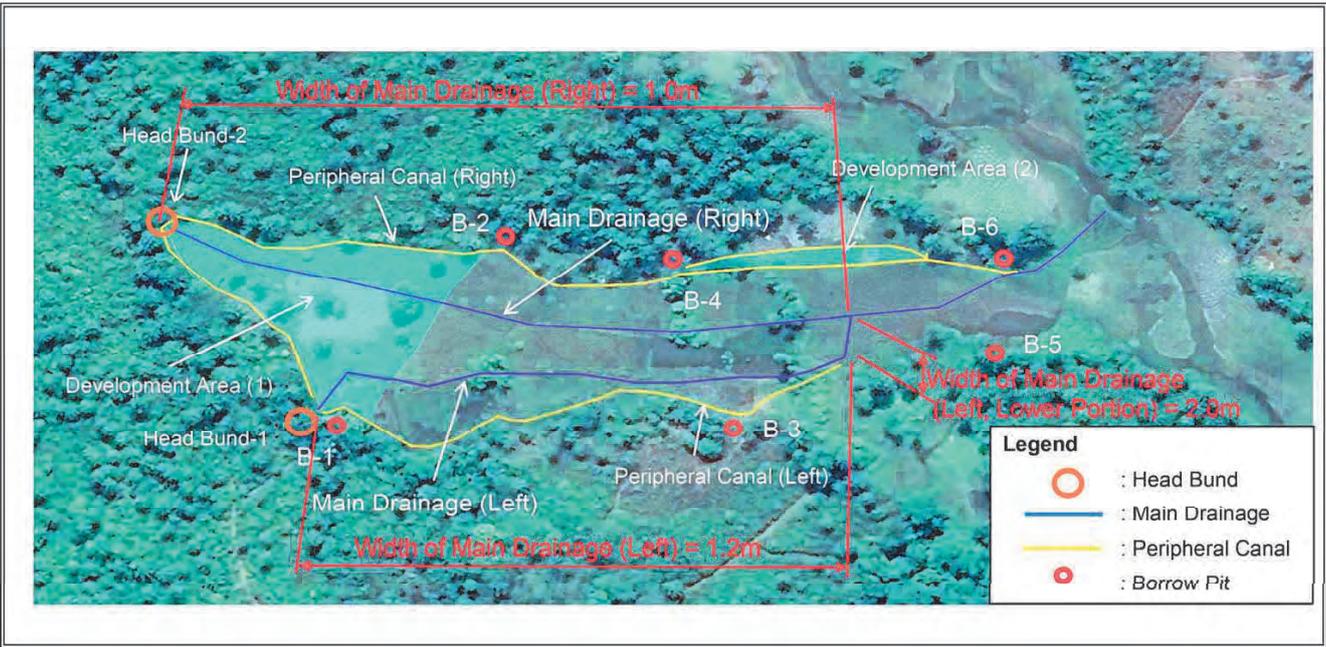


**Gbarray Sarr,
Port Loko**



4.3 Participatory IVS Development (cont'd)

Location Map of Irrigation Facilities (Masineh IVS)



4.3 Participatory IVS Development (cont'd)



**Masineh,
Kambia**



5. TOT for nationwide dissemination of the TP-R

Objectives:

To capacitate the extension staff to be able to extend the TP-R to the farmers who cultivate rice in the IVSs in the districts other than the target districts of the Project.

Participants:

Extension Staff of MAF (with PIN Code) in the districts other than Bombali, Karene, Kambia and Port Loko who should have good command of English to understand the lectures and instructions

Training Batches:

Batch 1: Eastern districts (Kono, Kenema and Kailahun)

Batch 2: Southern districts (Bo, Moyamba, Pujehun and Bonthe)

Batch 3: Northern and Western districts (Tonkolili, Koinadugu, Falaba, Western Rural and Urban)

5. TOT for nationwide dissemination of the TP-R (cont'd)

Duration of the Training: Five (5) days

Two (2) days on the technical details of the TP-R, followed by a three-day TOT including exercises and guidance for field sessions and monitoring

Tentative Schedule and Venue of the Training:

- * Training for Batch 1: the second week (from 8th to 12th) of April 2019 at Lambayama (MAF training centre in Kenema)
- * Training for Batch 2: the third week (from 15th to 19th) of April 2019 at Bo (conference hall at DAO's Office in Bo)
- * Training for Batch 3: the second week (from 10th to 14th) of June 2019 at Makali (MAF training centre in Magburaka)

5. TOT for nationwide dissemination of the TP-R (cont'd)

Responsibilities of MAF as the Organizer of this TOT:

- To make the training facilities mentioned above available for this training
- To select the qualified participants for this training
- To select active FBOs in IVSs in each block with which the FFS on the TP-R will be conducted by the trained staff after the TOT.
- To secure the resources for and facilitate the implementation of the FFS on the TP-R by the trained MAF staff in accordance with the standards set by SRPP with 11 field sessions and additional monitoring visits.
- To ensure that the trained MAF staff who implement the FFS on the TP-R submit the reports including the final yield data at the end of the season and to share the information to SRPP

5. TOT for nationwide dissemination of the TP-R (cont'd)

Supports to be rendered by SRPP:

- To provide trainers, consumables and training materials needed for this training
- To teach the participants the techniques and recommendations of the TP-R
- To train the participants as the trainers to teach the TP-R to the farmers who cultivate rice in the IVSs
- To provide transportation and DSA for the participants coming from the districts in accordance with the rules and regulations of JICA
- To provide extension materials to be used in the FFS on the TP-R to be implemented by the trained MAF staff after the training
- To provide guidelines for implementation of FFS and field monitoring to be conducted after the training

5. TOT for nationwide dissemination of the TP-R (cont'd)

Milestones for preparation:

- (1) Submission of the list of participants with relevant information on their qualifications:
- (2) Submission of the list of FBOs to be trained on the TP-R through FFS by the trained MAF staff after the TOT
- (3) Submission of the list of FBOs to be trained on the TP-R through FFS by the trained MAF staff after the TOT
- (4) Preparation of the budget plan and securing the resource to conduct the FFS on the TP-R
- (5) Formulation of the roll over plan of the TP-R in each district

Timeline (deadline)

- By the end of February 2019
- By the end of February 2019
- By the end of February 2019
- By the end of March 2019
- By the end of March 2019

6. Proposed revision of the Project Design Matrix

- In line with the establishment of Karene District, the geographical coverage of which was delineated from the two of the three original target districts of the Project, the **Karene District should also be included** as the target area of the Project in the stipulation of the PDM.
- The Training of Trainers (TOT) for nationwide dissemination of the TP-R is to be **added as new activity for Output 4** of the Project, which should also be captured in the PDM.
- It was originally agreed upon that **the target figures of some quantitative indicators** shall be set based on the results of the baseline survey.

6. Proposed revision of the Project Design Matrix (cont'd)

Project Title:
Sustainable Rice Production Project (SRPP)

Project Period: June 2017 – May 2022 (5 Years)

Target Area:
Bombali, Port Loko and Kambia Districts

Target Group:
Farmer Based Organization (FBO) farmers engaged in rice farming in Inland Valley Swamps (IVSs) in three districts

Implementation Institutions:
Ministry of Agriculture, Forestry and Food Security (MAFFS); Headquarters and District Agriculture Offices (DAOs) in the three districts

Version No. 1
Date: August, 2019



Project Title:
Sustainable Rice Production Project (SRPP)

Project Period: June 2017 – May 2022 (5 Years)

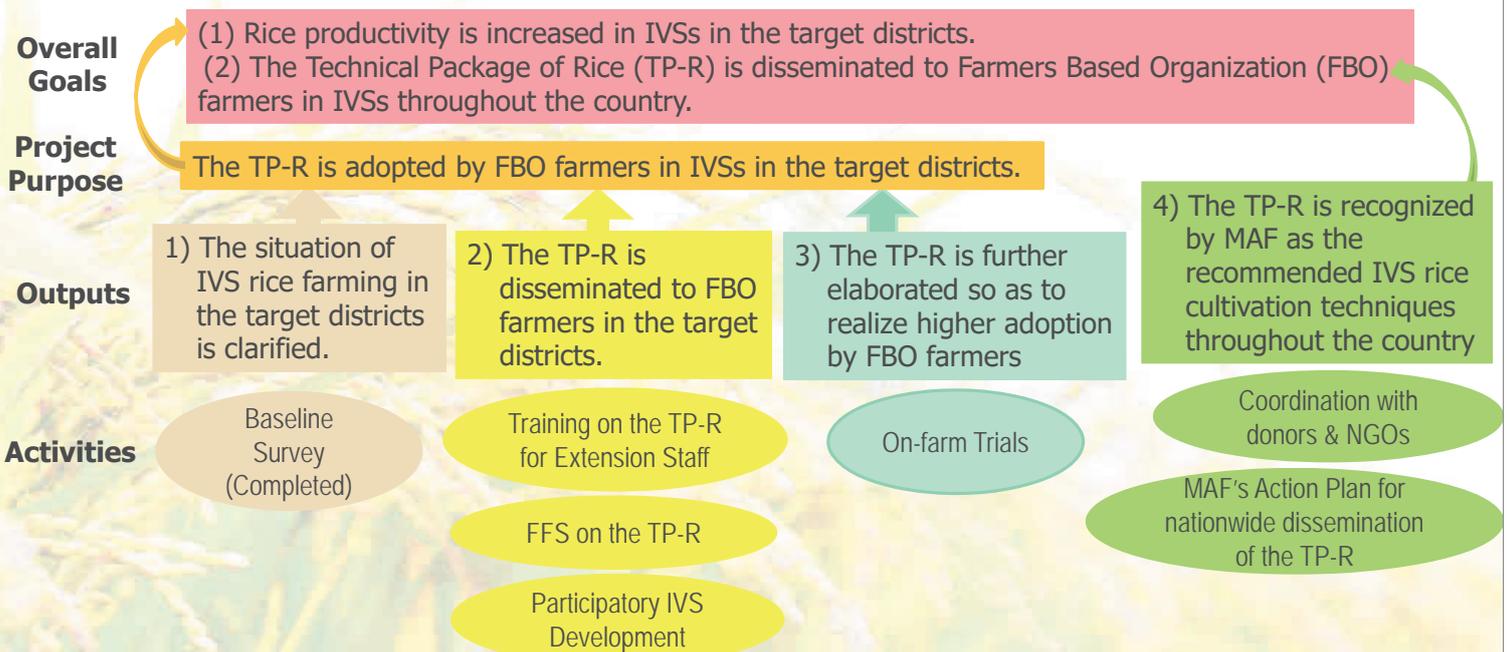
Target Area:
Bombali, **Karene**, Port Loko and Kambia Districts

Target Group:
Farmer Based Organization (FBO) farmers engaged in rice farming in Inland Valley Swamps (IVSs) in **the target districts**

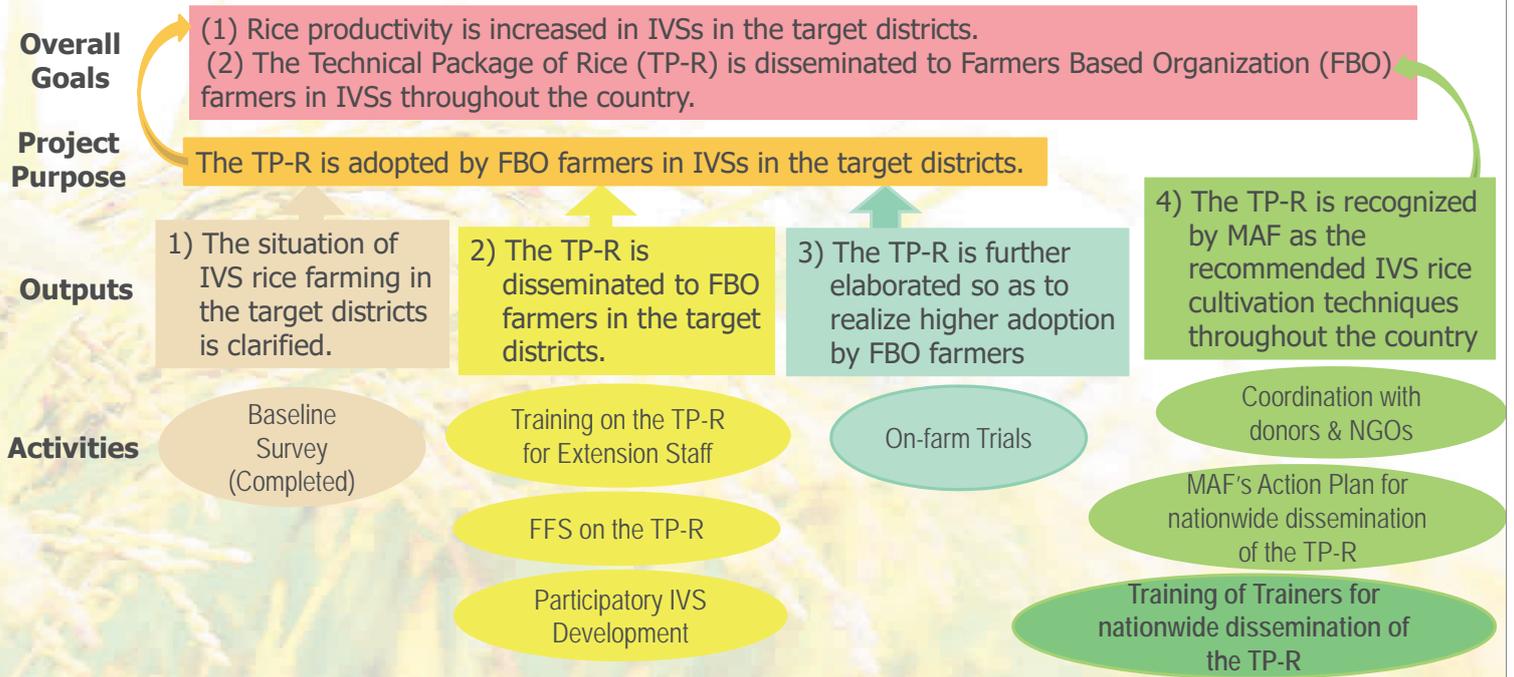
Implementation Institutions:
Ministry of Agriculture and Forestry (MAF); Headquarters and District Agriculture Offices (DAOs) in the **target districts**

Version No. 2
Date: **February 25, 2019**

6. Proposed revision of the Project Design Matrix (cont'd)



6. Proposed revision of the Project Design Matrix (cont'd)



6. Proposed revision of the Project Design Matrix (cont'd)

Narrative Summary	Objectively Verifiable Indicators
<p>Overall Goals</p> <p>(1) Rice productivity is increased in IVSs in the target districts.</p> <p>(2) The Technical Package on Rice Production (TP-R) is disseminated to FBOs in IVSs throughout the country.</p>	<p>1. In the IVSs in the target districts, the rice yield per unit area exceeds 2.0 tons /ha, and rice production is increased by 45% compared with the rice cropping in 2017.</p> <p>2-1 The TP-R training for farmers engaged in rice farming in the IVSs is conducted throughout the country by all (100%) of the trained extension officers/workers in the nationwide training of trainers (TOT) on the TP-R.</p> <p>2-2 The Key techniques of the TP-R is adopted by at least 50% of the trained FBOs who are engaged in rice farming in IVSs throughout the country after the completion of the Project.</p>

6. Proposed revision of the Project Design Matrix (PDM)

Narrative Summary	Objectively Verifiable Indicators
<p>Project Purpose The TP-R is adopted by FBO farmers in IVSs in the target districts.</p>	<p>1. The key techniques of the TP-R are adopted by at least 90% of the trained FBO farmers in their individual farms.</p> <p>2. The key techniques of the TP-R are adopted in the group farms by at least 50% of the neighboring FBOs who are disseminated with the TP-R by the Model FBOs / Model Farmers.</p>
<p>OUTPUT 1 The situation of IVS rice farming in the target districts is clarified.</p>	<p>Based on the Baseline survey, Project strategy is formulated and the direction of the Project including Project indicators is agreed at the Joint Coordinating Committee (JCC). (Qualitative Indicator)</p>

6. Proposed revision of the Project Design Matrix (cont'd)

Narrative Summary	Objectively Verifiable Indicators
<p>OUTPUT 2 The TP-R is disseminated to FBO farmers in the target districts.</p>	<p>2-1 The TP-R training for the famers in the target FBOs are conducted at least for 100 times.</p> <p>2-2 At least 80% of trained Block Extension Supervisors (BESs) and Frontline Extension Workers (FEWs) pass the examination of rice cultivation techniques to be conducted at the end of the training.</p> <p>2-3 The yield per unit area of the group farms of the trained FBOs with TP-R is higher at least by 45% than that of the plots with the conventional practices.</p> <p>2-4 The key techniques of the TP-R are disseminated to at least 70 neighboring FBOs by the Model FBOs / Model Farmers.</p>

6. Proposed revision of the Project Design Matrix (PDM)

Narrative Summary	Objectively Verifiable Indicators
<p>OUTPUT 3 The TP-R is further elaborated so as to realize higher adoption among the FBO farmers.</p>	<p>3-1 Effective technologies of rice cultivation are confirmed through on-farm trials. (Qualitative Indicator)</p> <p>3-2 The technologies confirmed through on-farm trials are reflected in the TP-R to realize higher adoption by the farmers. (Qualitative Indicator)</p>
<p>OUTPUT 4 The TP-R is recognized by MAF as the recommended rice cultivation techniques for IVSs throughout the country.</p>	<p>4-1 Collaboration with donors/NGOs for dissemination of the TP-R is accelerated. (Qualitative Indicator)</p> <p>4-2 The TP-R is approved by MAF as the recommended rice cultivation techniques for IVSs. (Qualitative Indicator)</p> <p>4-3 MAF's action plan for nationwide dissemination of the TP-R is drafted and distributed to the relevant authorities of districts throughout the country. (Qualitative Indicator)</p> <p>4-4 At least 5 extension officers/workers are trained as trainers on the TP-R in each of the districts other than the target districts of the Project.</p>

7. Issues to be addressed

- MAF staff in Karene District: Delineation of blocks and circles has not been determined and BESs and FEWs have not officially been assigned.
- Many “volunteer” extension workers who have not yet been given PIN codes
- Chronicle insufficiency in terms of means of mobility and fuel for extension workers

Version No. 2

Proposed Revision of Project Design Matrix (PDM)

Project Period: June 2017 – May 2022 (5 Years)

Project Title: Sustainable Rice Production Project (SRPP)

Target Area: Bombali, Karene, Port Loko and Kambia Districts

Target Group: Farmer Based Organization (FBO) farmers engaged in rice farming in Inland Valley Swamps (IVSs) in the target districts

Implementation Institutions: Ministry of Agriculture and Forestry (MAF); Headquarters and District Agriculture Offices (DAOs) in the target districts

Date: February 25, 2019

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal</p> <p>(1) Rice productivity is increased in IVSs in the target districts.</p> <p>(2) The Technical Package on Rice Production (TP-R) ⁴¹ is disseminated to FBOs in IVSs throughout the country.</p>	<p>1-1 In the IVSs in the target districts, the rice yield per unit area exceeds 2.0 tons/ha, and rice production is increased by 45% compared with the rice cropping in 2017.</p> <p>2-1 The TP-R training for farmers engaged in rice farming in the IVSs is conducted throughout the country by all (100%) of the extension officers/workers trained in the nationwide training of trainers (TOT) on the TP-R.</p> <p>2-2 The key techniques of the TP-R² is adopted by at least 50% of the trained FBOs who are engaged in rice farming in IVSs throughout the country after the completion of the Project.</p>	<p>1-1 Statistical data on rice production in IVSs in the target districts</p> <p>2-1 Records of the TP-R training for FBO farmers conducted by the extension officers trained in the nationwide TOT on the TP-R</p> <p>2-2 Data from DAOs in the target districts where the TP-R training is conducted.</p>	
<p>Project Purpose</p> <p>The TP-R is adopted by FBO farmers in IVSs in the target districts.</p>	<p>1. The key techniques of the TP-R are adopted by at least 90% of the trained FBO farmers in their individual farms.</p> <p>2. The key techniques of the TP-R are adopted in the group farms by at least 50% of the neighboring FBOs who are disseminated with the TP-R by the Model FBOs / Model Farmers.</p>	<p>1. Results of monitoring on FBO activities recorded by extension workers</p> <p>2. Sample interviews with the neighboring FBOs who are disseminated with the TP-R by the Model FBOs/Model Farmers</p>	<p>1. No significant change is made in the national policy on rice extension.</p> <p>2. MAF District Councils continuously provide necessary technical and financial supports for FBO farmers.</p> <p>3. The TP-R training for farmers is conducted in accordance with the MAF's action plan</p> <p>4. Serious climatic problems, pest and disease do not occur.</p>
<p>Outputs</p> <p>(1) The situation of IVS rice farming in the target districts is clarified.</p> <p>(2) The TP-R is disseminated to FBO farmers in the target districts.</p> <p>(3) The TP-R is further elaborated so as to realize higher adoption among the FBO farmers.</p> <p>(4) The TP-R is recognized by MAF as the recommended rice cultivation techniques for IVSs throughout the country.</p>	<p>1-1 Based on the results of the baseline survey⁴³, Project strategy⁴⁴ and the direction of the Project including Project indicators are agreed at Joint Coordinating Committee (JCC).</p> <p>2-1 The TP-R training for the farmers of the target FBOs are conducted at least for 100 times.</p> <p>2-2 At least 80% of the trained Block Extension Supervisors (BESs) and Frontline Extension Workers (FEWs) pass the examination of rice cultivation techniques.</p> <p>2-3 The unit yield of the group farms of the trained FBOs with TP-R is higher at least by 49% than the unit yield of the plots with the conventional practices.</p> <p>2-4 The key techniques of the TP-R are disseminated to at least 70 neighboring FBOs by the Model FBOs / Model Farmers.</p> <p>3-1 Effective technologies of rice cultivation are confirmed through on-farm trials⁴⁵.</p> <p>3-2 The technologies confirmed through on-farm trials are reflected in the TP-R to realize higher adoption by the farmers.</p> <p>4-1 Collaboration with donors/NGOs for dissemination of the TP-R is accelerated.</p> <p>4-2 The TP-R is approved by MAF as the recommended rice cultivation techniques for IVSs.</p> <p>4-3 MAF's action plan for nationwide dissemination of the TP-R is drafted and distributed to the relevant authorities of districts throughout the country.</p> <p>4-4 At least 5 extension officers/workers are trained as trainers on the TP-R in each of the districts other than the target districts of the Project.</p>	<p>1-1 Baseline survey report</p> <p>1-2 Selection criteria of target FBOs</p> <p>2-1 Records of training for farmers</p> <p>2-2 Records of training for BESs and FEWs</p> <p>2-3 Record of the demonstration farm activities at the trained FBOs</p> <p>2-4 Record of the demonstration farm activities conducted by the Model FBOs / Model Farmers</p> <p>3-1 Result papers of the on-farm trials</p> <p>3-2 The TP-R documents and relevant materials prepared with reflection of the confirmed technical components</p> <p>4-1 Progress / Completion Reports of the Project</p> <p>4-2 MAF's document</p> <p>4-3 MAF's draft action plan for nationwide dissemination of the TP-R</p> <p>4-4 Report of the TOT</p>	<p>Natural disasters, climatic problems, epidemic, pests and diseases do not bring any profound effect on the Project.</p>

<p>Activities</p> <p>(1)-1 To formulate the plan of baseline survey.</p> <p>(1)-2 To conduct the baseline survey.</p> <p>(1)-3 To set the selection criteria of target FBOs for TP-R training for farmers.</p> <p>(1)-4 To develop the Project strategy including PDM indicators based on the results of the baseline survey.</p> <p>(2)-1 To conduct introductory sessions on the TP-R for extension officers/workers to familiarize themselves with technical components of the TP-R.</p> <p>(2)-2 To develop a program of the TP-R training for farmers.</p> <p>(2)-3 To conduct orientation sessions and TOT for the extension officers/workers⁷ on the TP-R training for farmers.</p> <p>(2)-4 To select the target FBOs based on the criteria identified in (1)-3 above.</p> <p>(2)-5 To establish a TP-R demonstration farm⁸ in each target FBO.</p> <p>(2)-6 To facilitate the BESs and FEWs to conduct the TP-R training for farmers of the target FBOs with proper gender considerations.</p> <p>(2)-7 To select outstanding FBOs and farmers who shall serve as "Model FBOs / Model Farmers".</p> <p>(2)-8 To facilitate dissemination of the TP-R techniques/knowledge to other neighboring FBOs using the plots of the "Model FBOs / Model Farmers".</p> <p>(2)-9 To monitor the rice cultivation activities through field visits by extension workers at the demonstration farms and group farms of the trained FBOs, at the individual farms of the trained farmers, as well as at the group farms of the neighboring FBOs who are disseminated with the TP-R by Model FBOs / Model Farmers.</p> <p>(2)-10 To consolidate the results of monitoring conducted in (2)-9 above.</p> <p>(2)-11 To conduct a survey on IVS conditions.</p> <p>(2)-12 To conduct training for relevant extension officers/workers on IVS development.</p> <p>(2)-13 To formulate the plan of participatory IVS development in selected potential IVSs.</p> <p>(2)-14 To implement participatory IVS development in collaboration with the FBOs in the respective IVSs selected in (2)-13 above.</p> <p>(2)-15 To conduct a survey on post-harvest activities of Agricultural Business Centres (ABCs) and FBOs.</p> <p>(2)-16 To design and conduct training on post-harvest processing for relevant extension officers/workers and ABC/FBO representatives based on the results of (2)-15 above with proper gender considerations.</p> <p>(2)-17 To review the training program and training materials to revise the existing "Guidelines for the dissemination of the TP-R" based on the examination by extension officers/workers as well as on the results of monitoring consolidated in (2)-10 above.</p> <p>(3)-1 To formulate the plans of on-farm trials on some components of the TP-R.</p> <p>(3)-2 To establish on-farm trial plots in the target districts.</p> <p>(3)-3 To conduct on-farm trials at each plot.</p> <p>(3)-4 To analyze the results of the on-farm trials.</p> <p>(3)-5 To conduct the field day for various stakeholders at the on-farm trial plots.</p> <p>(3)-6 To identify the technical components to be reflected in the TP-R based on the analysis of the results of the on-farm trials.</p> <p>(4)-1 To seek the possibility of and promote collaboration with donor agencies for scaling up of the Project.</p> <p>(4)-2 To coordinate with the DACOs and the District Councils in their formulation of annual work plans to ensure the inclusion of activities to disseminate the TP-R in the budgets of the respective districts.</p> <p>(4)-3 To assist MAF to formulate an action plan for nationwide dissemination of the TP-R.</p> <p>(4)-4 To organize nationwide TOT on the TP-R for the extension officers/workers in the districts other than the target districts.</p> <p>(4)-5 To hold a final seminar on the TP-R for stakeholders including donor agencies and private sector.</p>	<p>Inputs:</p> <p>Sierra Leone side (MAF HQ/MAF-Bombali, MAF-Karene, MAF-Port Loko, MAF-Kambia)</p> <p>(a) Counterpart personnel</p> <p>(b) Office space for experts</p> <p>(c) Available data (including meteorological data, IVS inventory, maps and photographs) and information related to the Project;</p> <p>(d) Running expenses necessary for the implementation of the Project;</p> <p>(e) Expenses necessary for transportation within Sierra Leone as well as for the installation, operation and maintenance thereof</p> <p>Japanese side (JICA)</p> <p>(a) Dispatch of experts to cover following areas:</p> <ul style="list-style-type: none"> - Chief advisor/Rice cultivation techniques/Training/Extension/Socio economic survey/Farmers organization/Extension material development/Project monitoring and evaluation/Post harvest treatment/Participatory IVS development/Project Coordinator and Others according to necessity. (b) Counterpart Training - Training in Third countries is conducted as necessary. (c) Machinery and Equipment - Project vehicles/motorbikes, training equipment, generators, office equipment and other necessary equipment for the implementation of the Project (d) Local expenses for the Project activities which are not covered by Sierra Leone side - Expenses for training/workshop/seminar, extension materials, etc. <p>Pre-condition</p> <p>Security conditions in the target districts and Freetown do not deteriorate.</p>	<p>1. Any transfer of the counterpart personnel does not negatively affect continuous operations of the Project.</p> <p>2. Damages by birds, rats, pests and diseases are not significantly increased.</p> <p>3. Water conditions in the group farms of the trained FBOs are not seriously affected by flood or drought.</p>
--	--	--

*1: TP-R= The Technical Package on Rice Production (TP-R) refers to the rice cultivation techniques developed by the foregoing project (SRDP, 2010-2014), which is to be further elaborated through the activities of the Project so as to be presented as the final output at the end of the Project

*2: The key techniques of the TP-R to be looked at as indicators shall be specified by the Project, such as the techniques of seed selection, levelling transplanting, weeding and so forth.

*3: Baseline survey= Baseline survey is to be conducted to collect necessary information, especially the current situation of the target area. Aspects to be covered in the baseline survey include rice cultivation techniques, farming practices, basic data of ABCs / FBOs, status of IVS development, social and economic situations, etc.

*4: Project strategy= Project strategy indicates an overall direction of the Project for 5 years with appropriate extension approaches and implementation structures. It also sets the PDM indicators to measure the achievement of Outputs, Project Purpose and Overall Goals of the Project.

*5: On-farm trial= On-farm trials are to be conducted to re-examine the TP-R components under various experimental conditions at on-farm level.

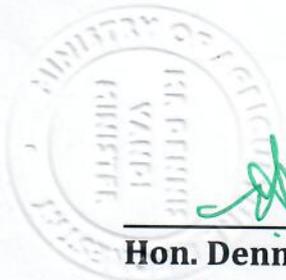
*6: The output 4 aims to contribute to the achievement of the overall goal, not directly to achieve the Project Purpose.

*7: Extension officers/workers = "Extension officers" mean District Agriculture Officers and Subject Matter Specialists, while "extension workers" mean BESs and FEWs.

*8: Demonstration farm = A demonstration farm is to showcase the advantages (productivity, efficiency, cost effectiveness, etc.) of TP-R application in comparison with conventional cultivation techniques at on-farm level.

MINUTES
OF
THE FIFTH JOINT COORDINATING COMMITTEE MEETING
ON
THE SUSTAINABLE RICE PRODUCTION PROJECT

14th February 2020



Hon. Dennis K. Vandi
Minister of Agriculture and Forestry
Freetown

Takashi Kimijima
Chief Advisor, JICA-SRPP
Bombali

The Fifth Joint Coordinating Committee (JCC) Meeting on the Sustainable Rice Production Project ("SRPP" or "the Project") was held on 14th February 2020 at the Conference Hall of Ministry of Agriculture and Forestry (MAF), Youyi Building, Freetown. List of attendants is attached to this document as Appendix 1.

The Fifth JCC Meeting started at 10:00AM under the chairmanship of Mr. Samking K. Braima, Honorable Deputy Minister 1 of Agriculture and Forestry.

The meeting proceeded with the following agenda:

- 1) Prayer
- 2) Introduction
- 3) Chairman's opening remarks
- 4) Presentation on the Project activities and results obtained during the second period of the Project
- 5) Proposed revision of the Project Design Matrix (PDM)
- 6) Proposed activities for the third period of the Project
- 7) Issues to be addressed for implementation of the Project
- 8) A.O.B.

The meeting started with silent prayers and self-introduction by the participants.

1. Opening remarks by Chairperson

The Chairman welcomed all participants to this important meeting to share the outputs of the Project, while acknowledging that the framework of the Project has been modified by JICA in response to MAF's requests to make it relevant to the new strategies of the Ministry. He appreciates that some requests have been taken but noted that some others are still being worked upon.

He concluded the opening remarks by encouraging the participants who are the technical front officers to take part actively in discussion and validate the output of the Project, while requesting the presenter to include some recapitulation of the achievements of the first period before presenting the activities and results of the second period.

2. Presentation by the Chief Advisor, SRPP

Mr. Takashi KIMIJIMA, the Chief Advisor of JICA-SRPP, after summarizing the achievement of the first period of the Project, explained the main Project activities so far conducted and results obtained during the second period of the Project using a PowerPoint presentation (Appendix 2). The explained activities included: (i) training of the extension staff on the TP-R, (ii) dissemination of the TP-R, (iii) on-farm trials, (iv) participatory IVS development, (v) Training of Trainers (TOT) for nationwide dissemination of the TP-R, (vi) demonstration of small farm machineries, and (vii) overseas technical training in Madagascar. During the

presentation, a short video clip on the voices of beneficiary FBO farmers of the Farmer Field School (FFS) was also shown.

After reporting the Project activities and results obtained, he explained about the proposed revision of the PDM (Appendix 3), as the previous version did not include the activities related to small farm machineries, which was added upon request from MAF, thus it is necessary to include them in the PDM for proper monitoring. The proposed inclusion of the activities related to the small farm machineries was endorsed in the absence of any specific comments or objections.

The Chief Advisor then proceeded with explanation on the proposed activities of the upcoming third period of the Project, the detailed plan of which would be presented to be discussed in the next JCC meeting to be held at the commencement of the third period of the Project.

He lastly raised some issues to be addressed to the attention of the JCC members for suggestions on any possible measures, for which, the Director of Extension replied as follows:

- i) Allocation of the staff in Karene District is currently being worked on, and it is anticipated that the existing gap may be filled in the next set of recruitment in 2020,
- ii) Issue of license for motorbike riders should be well addressed by all DAOs for further enforcement,
- iii) As the new set of recruitment is scheduled to be done, problems of volunteer extension workers can also be gotten over very soon, and,
- iv) Monitoring on the roll-out of the TOT for nationwide dissemination of the TP-R should be strengthened, and inclusion of the roll-out of the program in the annual budgets of the district local councils would also be reinforced.

3. Comments and Discussions

After the presentation by the Chief Advisor of JICA-SRPP, the Chairman expressed appreciation to the achievements made, and opened the floor for any views and comments from the participants as well as for discussions. Major remarks in the discussion were summarized as follows.

- The reported low yield performance in Port Loko came to the concerns. What could be the reason for the low yield even in the plot with fertilizer? It may be needed to conduct some analysis in collaboration with research institute.
 - It was mainly due to the problem in site selection, as most of the demonstration plots in Port Loko located in the places where water control was very difficult. They were also badly affected by the floods.
- The gender disaggregated data in the presentation were very much appreciated. It was also good to note that more than 40% of the beneficiary farmers are women.
- Participatory IVS development was well appreciated as it could foster the farmers' sense of ownership of the swamps. Very active participation of the farmers themselves should not be overlooked, not only in construction when they were provided with food assistance, but also in the repair works without such provisions.

- One important insight obtained through the overseas technical training in Madagascar was that all projects were to adopt the technical package developed and disseminated by the JICA project there (PAPRIZ 2).
- It is a pleasure to witness the benefits of the Project that the farmers have enjoyed very much, as illustrated in the video clip. Such benefits should be provided to the farmers not only in the target districts of the Project but also in other districts throughout the country.
- It is necessary for the project to look into the adoption of the TP-R by the farmers. Any study on the farmers' adoption of the TP-R should be organized perhaps by PEMSD.
 - Noted. The project is also trying to gather the data on the adoption of the TP-R by the farmers in their individual farms.
- It was reported in the presentation that some plots were affected by African Rice Gall Midge attacks. The extension material of the TP-R should also include the details on the pest management such as biological characteristics and possible control method.
 - In the current materials, there are some explanation on the pests and diseases, but they are not very much in detail. Inclusion of more information will be considered in future revision of the SRPP extension materials.
- What are the rice varieties used in the TP-R demonstration and where are these planting materials from?
 - The Project uses NERICA L19, and the seeds were procured locally from some NGOs. The Project also teaches the farmers how to multiply seed by themselves and currently mobilizes some FBOs to produce quality seed for the Project activities in the subsequent period.
- The possibility of collaboration between SRPP and research (RARC) should be considered for further promotion of rice development. Is there any possibility to apply the TP-R in different rice ecologies such as in boliland?
 - The TP-R has originally been developed for and thus is primarily to achieve its utmost performance in IVSs. However, it could be applied to other ecologies as far as the water can properly be controlled and effectively used in the different stages of rice growth.
- SRPP's work over the past years has been good and should continue. However, proposed activities during the last period of the Project should include, in close cooperation with MAF, to provide startup kicks for farmers to sustain the technologies while at the same time promoting the nationwide dissemination and adoption of the TP-R.
- Field monitoring using the ICT is an interesting trial, the know-how of which should also be shared to MAF.
- In the prototype schedule of the FFS indicated that the TP-R is meant for about six (6) months in the rainy season. Is the multiple cropping with the TP-R not possible?
 - The TP-R can be applied in the dry season cropping as far as water can be secured. However, considering various risks and economic returns, the recommended cropping pattern may be the combination of rice with TP-R and vegetables. Most of

the farmers grow vegetables with application of fertilizer, the residual effect of which on rice in the following season is notable.

- It was noted with appreciation that the Project have reported even some negative results with proper analysis of possible reasons and lesson learnt to overcome similar problems in future, rather than trying to hide any unfavorable aspects. This kind of honest attitudes should be modeled after in any other projects.
- In the report of Madagascar training, irrigation facilities with concrete was captured, which should be applied to the swamps in Sierra Leone. It is expected to the directorate of engineering to make efforts towards that end. We are keen to see any “concrete” things in the projects, not all mud and stones.
 - In the scope of SRPP as a technical cooperation project, IVS development with advanced engineering techniques cannot fully be addressed as the development is supposed to be made with participatory approach. Any project that specifically focuses on civil engineering and irrigation development should be the one who would work in collaboration with SRPP on that sphere.
- For the proposed activities of the Project in the third period of the Project, it is expected that the inputs made by JCC members should well be taken into account and that the MAF's concerns will be properly addressed in preparation of the details plan.
 - Noted. Although the framework of the Project cannot drastically be changed, the Project will try to address the inputs and comments made by the JCC members.

In absence of A.O.B, the Chairman adjourned the Fifth JCC Meeting at 12:15 p.m.



**Attendance List of 5th Joint Coordinating Committee (JCC)
in Sustainable Rice Production Project**

Date:

Place:

	Name	Designation	Organization	Mobile phone no.	e-mail address
1	Lambing K. Braima	DM 1	MAF		
2	Dr. Abu B. Karim	DM 2	MAF		
3	Soni M. Kamnang	DCAD	MAF		
4	Aisla J. Theolie	Director, Spt	MAF		
5	Iselta Pansaray	Plany. & Budget	PIAF		
6	Mariama M. Turay	Head of WIAP	MAF		
7	Brois A. Kwikwa	DAD	MAF		
8	David-F. Sello-fallo	DAD - Bombali	MAF		
9	Saidn Samyange	DAD - Kambia	MAF		
10	B. J. Bangura	FBO Expert CB.	JICA-SRPP		
11	John O. Fullah	Ag. Sec. Coe	MAFFSL		
12	Lamba Kanya	Civil Eng. AGD	MAFFS		
13	Kennis P. J. Yankon	Head - Food Crops Unit	MAF		
14	Ali H. Mansaray	Sr. Agric. Officer - crops	MAF		
15	Oya J. Kargbo	President	SlewoFF		

**Attendance List of 5th Joint Coordinating Committee (JCC)
in Sustainable Rice Production Project**

Date:

Place:

	Name	Designation	Organization	Mobile phone no.	e-mail address
16	Leslie T. Thomas	Acting President	NAFFSA		
17	Dr. Adam S. Kourou	Director RARC	SLARI-HARC		
18	Koji OHASHI	Project Formulator	JICA		
19	Hi-Toshi SAITO	Resident Representative	JICA		
20	Takashi KIMIJIMA	Chief Advisor	JICA-SRPP		
21	Yuta SASAKI	M&E	JICA-SRPP		
22	Keiko ITAGAKI	Extension & Training	JICA-SRPP		



The Fifth Joint Coordinating Committee Meeting on Sustainable Rice Production Project in Sierra Leone

February 2020

Conference Hall of MAF, Youyi Building, Brookfields, Freetown

Agenda of the 5th JCC Meeting

1. Prayer
2. Introduction
3. Chairman's opening remarks
4. Presentation on the Project activities and results obtained during the second period of the Project
5. Proposed activities for the third period of the Project
6. Issues to be addressed for implementation of the Project
7. A.O.B.

4. Project Activities and Result Obtained

Project Framework

Overall Goals

- 1) Rice Productivity is increased in IVSs in the target districts
- 2) The Technical Package of Rice (TP-R) is disseminated to FBO farmers in IVSs throughout the country

Project Purpose

The TP-R is adopted by FBO farmers in IVSs in the target districts

Output 1	Output 2	Output 3	Output 4
Situation analysis on IVS rice farming in the target districts	Dissemination of the TP-R to the IVS farmers	Further elaboration of the TP-R for higher adoption by farmers	Recognition of the TP-R as recommended techniques for nationwide dissemination

4. Project Activities and Result Obtained

No.	Activities implemented during this reporting period
1	Training of extension staff on the TP-R
2	Dissemination of the TP-R to IVS farmers (FFS on the TP-R, Support to the “graduate FBOs”)
3	On-farm trial to further elaborate the TP-R
4	Implementation of the participatory IVS development
5	Training of trainers (TOT) for nationwide dissemination of the TP-R*
6	Introduction and demonstration of the small farm machineries*
7	Overseas technical training on rice development

* Note: These activities were not originally planned in the project framework, but they were included in response to the request made by MAF when a mission headed by Director of the Rural Development Department of JICA HQ visited Sierra Leone in November 2018.

4.1 Training of the Extension Staff on the TP-R

1. Training of trainers (TOT) for FFS on the TP-R in 2019

(BESs and the selected FEWs in the target districts)

No.	Type	Theme	Month
1	Classroom	FFS on the TP-R	June 2019
2	Classroom	Monitoring with mobile application (only for the selected FEWs)	June 2019
3	On-site	Transplanting	August 2019
4	On-site	Identification of panicle initiation	September 2019
5	Classroom	Harvesting and post-harvest handling	October 2019
6	Classroom	Review of activities in rainy season 2019	January 2020

4.1 Training of the Extension Staff on the TP-R (cont'd)

Participants of the TOT on the TP-R

Districts	No. of BESs			No. of FEWs			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Bombali	5	1	6	3	3	6	8	4	12
Karene	1	0	1	3	1	4	4	1	5
Port Loko	4	1	5	4	1	5	8	2	10
Kambia	4	0	4	5	1	6	9	1	10
Total	14	2	16	15	6	21	29	8	37

4.1 Training of the Extension Staff on the TP-R (cont'd)

2. Refresher Training on the TP-R (for FEWs who do not conduct FFS on the TP-R)

District	Date	No. of participants		
		Male	Female	Total
Bombali (for staff in Bombali and a part of Karene)	June 28, 2019	24	5	29
Port Loko (for staff in Port Loko and a part of Karene)	June 27, 2019	18	9	27
Kambia	June 26, 2019	12	2	14
Total		54	16	70



4.2 Dissemination of the TP-R

1. Implementation of Farmer Field School (FFS) on the TP-R

- (1) Provision of farm tools, seed and fertilizer for the TP-R demo plots
- (2) Training on the TP-R techniques through the 11 sessions of the FFS with demo plots of the TP-R with fertilizer, TP-R without fertilizer and conventional plots
- (3) Monitoring on the cultivation practices and technical guidance when needs arise
- (4) Yield survey in demo plots and conventional plot

4.2 Dissemination of the TP-R

Standard schedule of FFS sessions

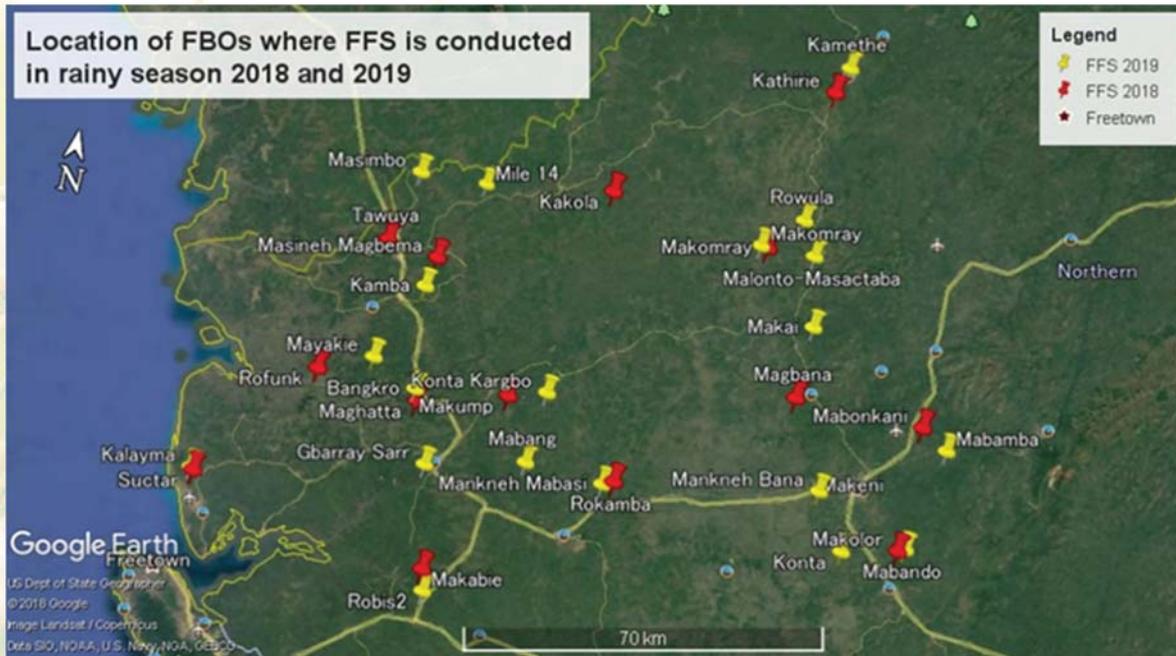
No.	Session	Month
1	Introduction, setting of the demonstration plot and land preparation	July
2	Formulation of farming plan and cropping calendar	July
3	Life cycle of rice plant, yield component, rice varieties, and seed selection	July
4	Nursery preparation and sowing	July
5	Puddling and leveling	August
6	Basal fertilizer application and transplanting	August
7	Weed management	August
8	Top dressing and water management	September
9	Prevention / control of pests and diseases	October
10	Harvesting and post-harvest handling	November
11	Evaluation of the TP-R	December/ January

4.2 Dissemination of the TP-R (cont'd)

List of the selected FBOs supported through FFS in rainy season 2019

District	Block	Chiefdom	Village	Name of the FBO	No. of members		
					Male	Female	Total
Bombali	1	Paki Masabong	Mabando	Mabando FA	22	14	36
	2	Makari	Mankneh Bana	One word FA	16	14	30
	3	Bombali Shary	Konta	Tamaraneh FA	10	20	30
	4	Gbendembu	Makai	Makai FA	19	24	43
	5	Safroko Limba	Mabamba	Mabamba FA	37	46	83
	6	Kamaranka	Rowula	Tawopaneh FA	21	2	23
Karene	1	Sella Limba	Kamethe	Kamabom Women's Support Group	12	18	30
	3	Gbanti	Makomray	Kamuyu FA (*Follow-up FFS)	11	22	33
	3	Sanda Tendaren	Malonto	Falaka FA	12	8	20
	5	Dibia	Konta Kargbo	Taskleneh FA	23	27	50
	6	Romende	Mankneh Mabasie	Tanthokuru FA	18	12	30
Port Loko	1	Bureh	Bangkro	Tamaraneh FA	23	17	40
	2	Kaftu Bullom	Kalayma	Kalayma FA	20	10	30
	3	Koya	Robis 2	Tamaraneh FA	20	10	30
	4	Maforki	Gbarray-Sarr	Tamaraneh FA	31	24	55
	5	Makama	Mabang	Masempe Munafa FA	18	7	25
Kambia	1	Mambolo	Mayakie	Tamareneh FA	10	10	20
	2	Dixon	Masimbo	Kamalaneh FA	13	12	25
	3	Magbema	Kamba	Sambenty FA	20	10	30
	4	Tonko Limba	Mile 14	Masianday FA	20	10	30

4.2 Dissemination of the TP-R (cont'd)



Location of the selected FBOs for FFS in the rainy season 2018 & 2019

4.2 Dissemination of the TP-R (cont'd)



TOT: Classroom session, Kambia
 FFS session, Bombali



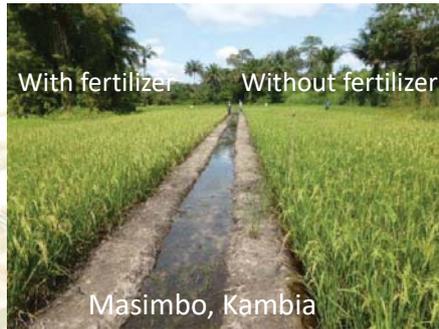
TOT: Uprooting, Port Loko
 FFS session on Nursery, Kambia



TOT: Panicle initiation, Bombali
 FFS session on Harvesting, Karene

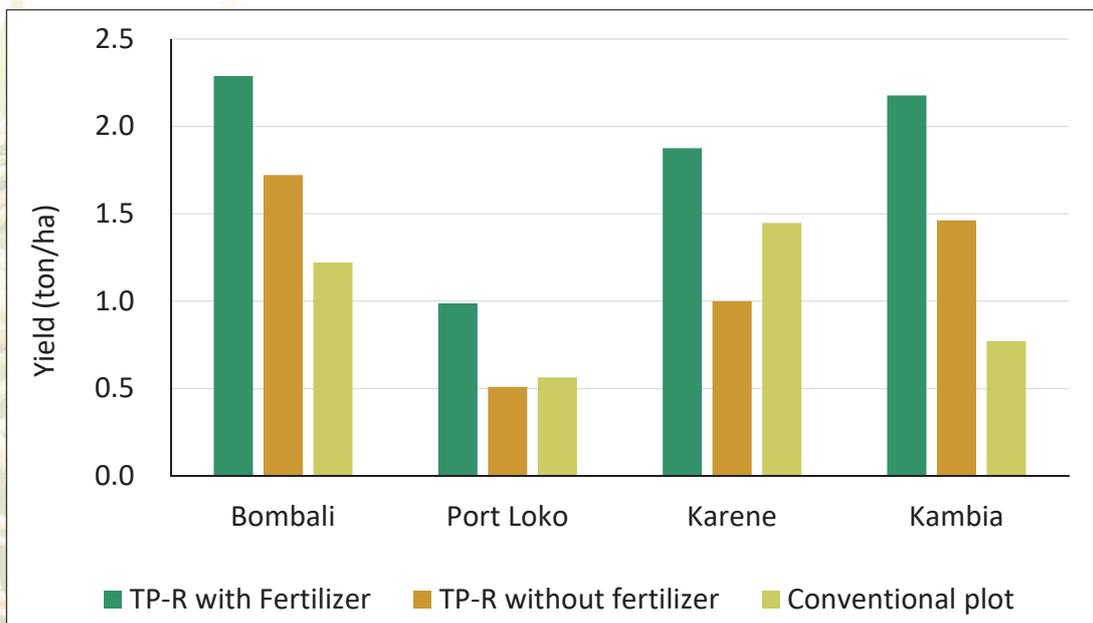


4.2 Dissemination of the TP-R (cont'd)



4.2 Dissemination of the TP-R (cont'd)

Rice yield in the FFS plots under different treatments by district



4.2 Dissemination of the TP-R (cont'd)

Factors negatively affecting rice yield in IVS

1. Flood (wash out fertilizer and damage seedlings)
2. Soil condition (sandy soils, organic soils)
3. Cropping season (transplanting at peak rainy season)
4. Insect damage (African rice gall midge)
5. Cultural practices

4.2 Dissemination of the TP-R (cont'd)

2. Support to the “Graduate FBOs” from FFS in rainy season 2018

- (1) Provision of seed and fertilizer for the rice cultivation with the TP-R in the maximum of one (1) acre of demonstration farm
- (2) Training on the seed multiplication techniques to produce their own seeds in 100m² plot within the demonstration farm
- (3) Monitoring on the cultivation practices as well as on the status of dissemination of the TP-R to the neighboring FBOs
- (4) Provision of technical guidance when needs arise
- (5) Yield survey
- (6) Facilitation for sustainability planning for upcoming seasons

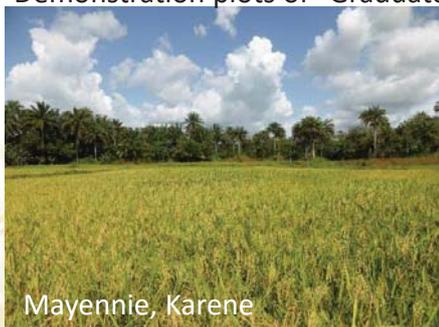
4.2 Dissemination of the TP-R (cont'd)

List of the "Graduate FBOs" supported in the rainy season 2019

District	Block	Chiefdom	Village	Name of the FBO	No. of members		
					Male	Female	Total
Bombali	1	Mapanki	Makolor	Makolor FA	22	11	33
	5	Safroko Limba	Mabonkani	Taduba FA	16	14	30
	6	Gbendembu Ngowahun	Magbana	Nyawalo FA	21	9	30
Port Loko	1	Bureh Kaseh	Maghatta	Right to life FA	20	10	30
	2	Kaftu Bullom	Suctarr	Suctarr Community Dev't Assoc.	13	18	31
	3	Koya	Makabie	Makabie FA	20	11	31
Karene	1	Sella Limba	Kathirie	Therogoh FA	34	13	47
	6	Buya Romende	Mayenneh	Mayenneh FA	21	9	30
	5	Dibia	Makump	Titikoloh FA	27	13	40
Kambia	1	Mambolo	Rofunk	Rotass Agri. Dev't Assoc.	34	1	35
	2	Gbinleh Dixing	Tawuya	Famatho FA	15	15	30
	3	Magbema	Masineh	Magbema Women's Coop	11	19	30
	4	Tonko Limba	Kakola	Bapayor FA	17	14	31

4.2 Dissemination of the TP-R (cont'd)

Demonstration plots of "Graduate" FBOs



Mayennie, Karene



Mabonkani, Bombali



Maghatta, Port Loko

Seed multiplication plots of "Graduate" FBOs



Mayennie, Karene



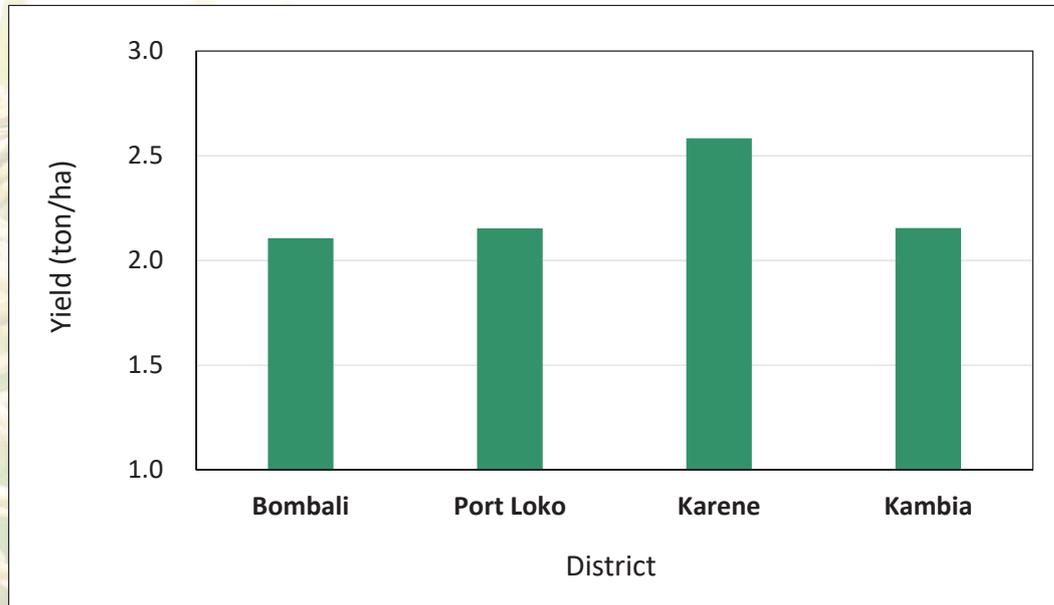
Masineh, Kambia



Mabonkani, Bombali

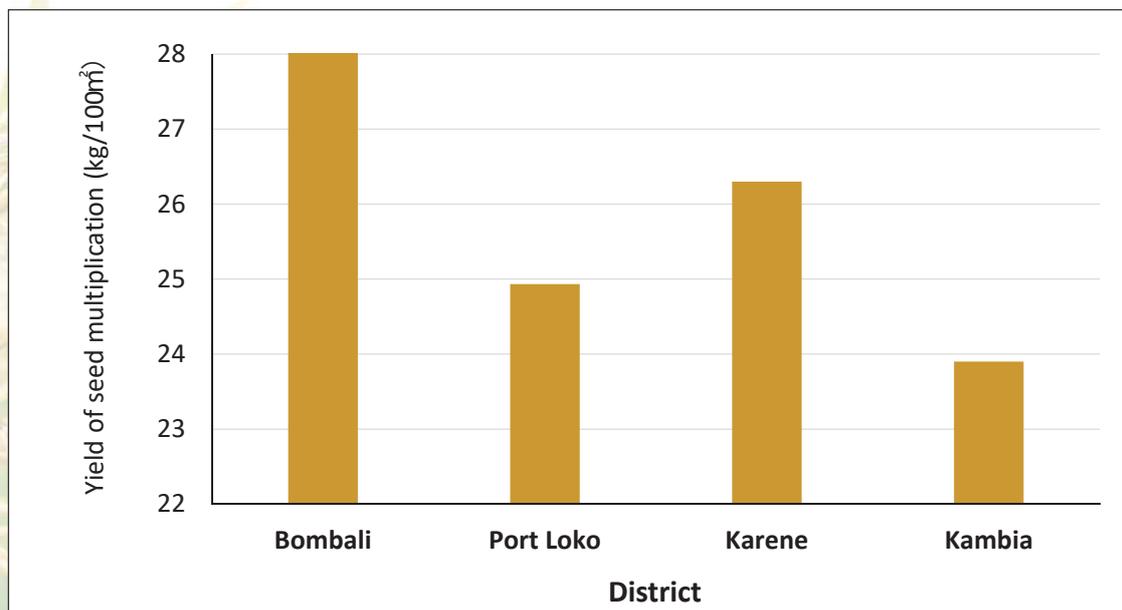
4.2 Dissemination of the TP-R (cont'd)

Rice yield in the Demonstration Farms of the Graduate FBOs



4.2 Dissemination of the TP-R (cont'd)

Yield in the Seed Multiplication Plots of the Graduate FBOs

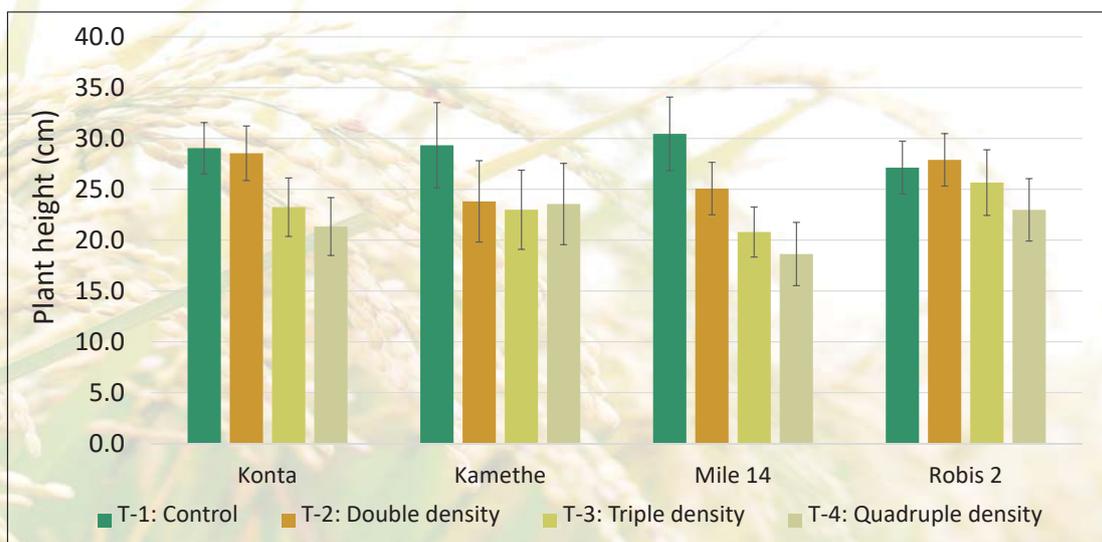


4.3 On-Farm Trials

Items	Description
Purpose	Find the maximum sowing density of rice seeds in the nursery which can maintain the yield
Field area	800 m ² (200 m ² x 4)
Treatments	Different sowing density of rice seeds in nursery bed T-1 (Control): 1 kg of seeds/10 m ² T-2 (Double density): 2 kg of seeds/10 m ² T-3 (Triple density): 3 kg of seeds/10 m ² T-4 (Quadruple density): 4 kg of seeds/10 m ²
Replicates	4 (Konta, Bombali District; Kamethe, Karene District; Robis2, Port Loko District; and Mile14, Kambia District)
Cultivation method	Following the TP-R
Items/aspects to be measured/ observed	1. Height of seedlings, and the number of leaves at the time of uprooting by treatments (30 seedlings of 21-days old are measured in each treatment.) 2. Yield in each plot by treatment (all cutting method)

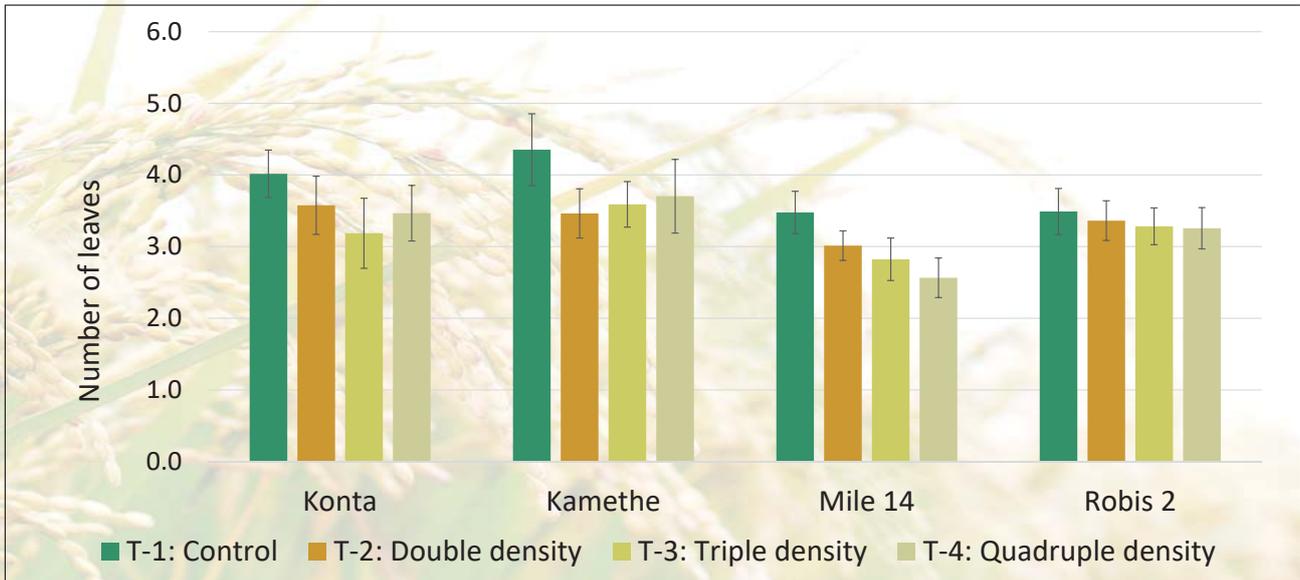
4.3 On-Farm Trials (cont'd)

Plant height of the seedlings at the time of transplanting on the trial



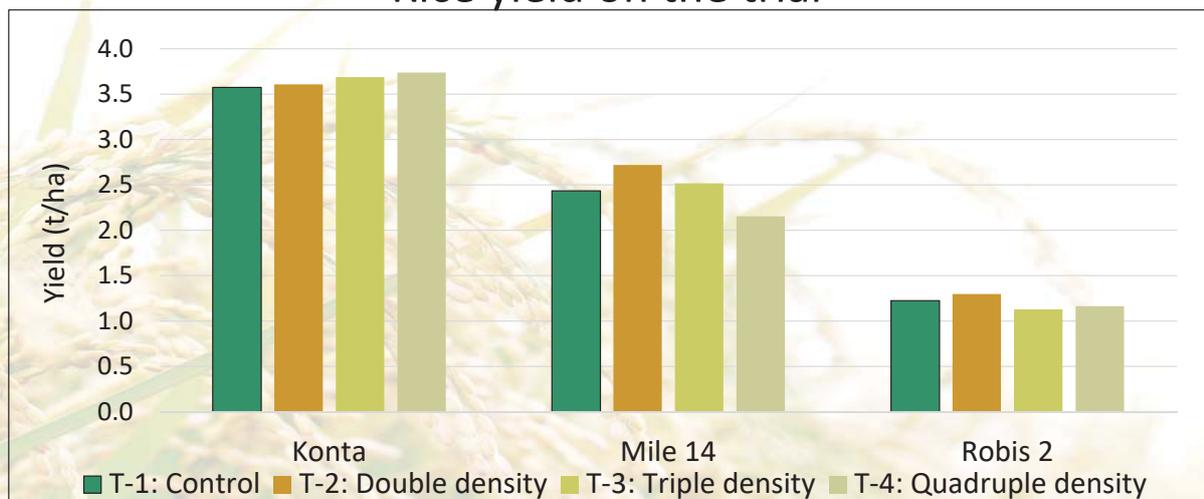
4.3 On-Farm Trials (cont'd)

Number of leaves at the time of transplanting on the trial



4.3 On-Farm Trials (cont'd)

Rice yield on the trial



Conclusion: It is considered that density of rice seeds in the nursery could be doubled to maintain the yield.

4.4 Participatory IVS Development

Three IVS sites developed in dry season 2018/19:

1. Mabonkani, Bombali district (6.7 ha)
2. Gbarray Sarr, Port Loko district (3.0 ha)
3. Masineh, Kambia district (2.1 ha)



Mabonkani, Bombali



Gbarray Sarr, Port Loko



Masineh, Kambia

During the rainy season 2019, some canals and structures of the developed IVS have been damaged, thus the investigation and repair works were conducted.

4.4 Participatory IVS Development (cont'd)

(1) Mabonkani

Summary of repair work

FBO	No. of Participants		Summary of Repair Work
	12 th Sep.	13 th Sep.	
Thaduba FBO	23	26	(1) Repair of Main Drainage (Repair of collapsed canal embankment)
Mabohinanday FBO	12	29	
One Word FBO	13	21	(2) Repair of Drop Structure (Repair & protection of canal bed)
Maloholina Association	28	27	
Total	76	103	



Rehabilitated embankment (12/4/2019)



Collapsed canal embankment (12/9/2019)



Repaired embankment (13/9/2019)

4.4 Participatory IVS Development (cont'd)

(2) Gbarray Sarr

Summary of repair work

FBO	Number of Participants				Summary of Repair Work
	9 th Sept.	11 th Sept.	16 th Sept.	18 th Sept.	
Tamaraneh FBO	22	51	42	53	(1) Construction of Simple Weir (Temporary Weir) (2) Repair of Peripheral Canal



Rehabilitated spillway (15/4/2019)



Spillway destroyed by a flood(29/8/2019)



Simple weir constructed to check water(18/9/2019)

4.5 TOT for Nationwide Dissemination of the TP-R

Objectives:

To capacitate the extension staff to be able to extend the TP-R to the farmers who cultivate rice in the IVSs in the districts other than the target districts of the Project.

Batch	Date	Venue	Participating districts	No. of participants		
				Male	Female	Total
1	April 8 th - 12 th , 2019	Lambayama Agricultural Training Centre, Kenema	Kono, Kenema and Kailahun	24	1	25
2	April 15 th - 19 th , 2019	Conference hall at District Agricultural Office, Bo	Bo, Moyamba, Pujehun and Bonthe	30	3	33
3	June 10 th - 4 th , 2019	Makali Agricultural Training Centre, Tonkolili	Tonkolili, Koinadugu, Falaba, and Western Rural	29	3	32
Total				83	7	90

4.5 TOT for Nationwide Dissemination of the TP-R (cont'd)

Contents of the TOT

- The first two (2) days for the lectures and exercise on the concept and techniques of the TP-R
- The following three (3) days for the Training of trainers for the FFS on the TP-R including how to facilitate each session with the extension materials as well as the monitoring of FFS sessions and demo plot activities



4.5 TOT for Nationwide Dissemination of the TP-R (cont'd)

Implementation of FFS after the TOT

District	No. of Blocks	No. of FFS	Remarks
Kenema	6	6	No fertilizer provided to one of the FFS sites.
Kono	5	5	
Kailahun	5	5	No fertilizer provided to two of the FFS sites.
Bo	6	1	
Bonthe	5	3	
Moyamba	5	4	The mixture of urea and NPK0-20-20 was applied as NPK15-15-15 was not available.
Pujehun	5	4	NPK 0-20-20 was applied to three FFS sites.
Tonkolili	5	13	
Koinadugu	5	3	Basal fertilizer was not applied due to the flood (topdressing only).
Falaba	6	6	The mixture of urea and NPK0-20-20 was applied as NPK15-15-15 was not available.
Western Rural	4	4	Basal fertilizer was not applied in one of the FFS sites (topdressing only).
Total	57	54	

Source: Data obtained through the follow-up meeting organized by SRPP in November 2019

4.5 TOT for Nationwide Dissemination of the TP-R (cont'd)

Follow-up Meeting organized by SRPP

- (1) Updates of the status of implementation of FFS
- (2) Refresher exercise on yield survey including the use of the moisture meters
- (3) Handing over of the moisture meters

Batch	Date	Venue	Participating districts
1	November 11 th , 2019	Lambayama Agricultural Training Centre, Kenema	Kono, Kenema and Kailahun
2	November 12 th , 2019	Conference hall at District Agricultural Office, Bo	Bo, Moyamba, Pujehun and Bonthé
3	November 13 th , 2019	Makali Agricultural Training Centre, Tonkolili	Tonkolili, Koinadugu, Falaba, and Western Rural

4.6 Introduction and Demonstration of Small Farm Machineries

1. Provision of machineries by WFP with technical training by SRPP

Through the collaboration with the WFP, a set of small farm machineries consisting of power tiller, thresher and rice mill was provided by the WFP to each of the FBOs working in the IVSs developed under the participatory IVS development. SRPP has facilitated technical training related to these machineries and monitored the operation and maintenance.

Village/ District	Power tiller	Rice mill	Thresher
Mabonkani/ Bombali	16-20 July 2019	12 August 2019	8 November 2019
Masineh/ Kambia	24-26 June 2019	To be organized upon delivery of the machine in February 2020	12 November 2019
Gbarray Saar/ Port Loko	08 -12 July 2019	To be organized upon delivery of the machine in February 2020	26 November 2019

4.6 Introduction and Demonstration of Small Farm Machineries

Participants of the machinery training

Village / District	Power tiller training			Rice mill training			Thresher training		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mabonkani / Bombali	8	4	12	8	4	12	Details N/A		6
Gbarray Sarr / Port Loko	9	3	12	Not yet			16	4	20
Masineh / Kambia	10	2	12	Not yet			16	6	22



Practice of plowing (Kambia)



Thresher operation (Port Loko)



Rice mill installation (Bambali)

4.6 Introduction and Demonstration of Small Farm Machineries (cont'd)

2. Demonstration of rotary weeder

A simple rotary weeder was introduced and demonstrated in the seed multiplication plots of the Graduate FBOs where the rice seedlings were planted in lines. Farmers from other communities were also invited to observe the demonstration, who also appreciate the machine, given that the line planting is the pre-requisite for the introduction of the machine.



Mayenneh, Karene



Makabie, Port Loko



Kathirie, Karene

4.7 Overseas Technical Training on Rice Development

Country visited: Madagascar

Objectives:

To acquire the cultivation technology and extension method on rice development as well as the method of construction and maintenance of terraced paddy fields the in Madagascar to stimulate the activities of the Project.

Period of the Training: November 23rd – December 1st , 2019 (9 days)

Institutions visited:

Ministry of Agriculture, Livestock and Fisheries, Government of Madagascar (MAEP)

Regional Department of Agriculture, Livestock and Fisheries (DRAEP) in Vakinankaratra Region

Project for Breakthrough in Nutrient Use Efficiency for Rice by Genetic Improvement and Fertility Sensing Techniques in Africa (Fy-Vary Project)*

Project for Rice Productivity Improvement and Management of Watershed and Irrigation Area (PAPRiz2)*

Center for Manufacturing, Training on Machinery and Agricultural Mechanization (CFFAMMA)

National Center for Applied Research on Rural Development (FOFIFA)

(* JICA's technical cooperation projects implemented in Madagascar)

4.7 Overseas Technical Training on Rice Development

Participants of the overseas technical training

Affiliation	MAF Staff			RARC	Farmers			Total		
	Male	Female	Total	Male	Male	Female	Total	Male	Female	Total
MAF HQ	1	-	1	-	-	-	-	1	0	1
Bombali	2	1	3	-	1	-	1	3	1	4
Kerene	3	-	3	-	1	1	2	4	1	5
Port Loko	2	1	3	-	1	-	1	3	1	4
Kambia	3	-	3	1	1	1	2	5	1	6
Total	11	2	13	1	4	2	6	16	4	20



Visit to irrigation facilities



Interaction with Madagascar farmers



Visit to farm machinery center

5. Proposed Activities for the Third Period of the Project

No.	Proposed Activities
1	Continuation and the monitoring of activities for dissemination of the TP-R
2	Continuation and the monitoring of the on-farm trial to improve the TP-R
3	Continuation and monitoring on the participatory IVS development
4	Continuation of monitoring on the small farm machineries to formulate recommendations
5	Revision of the manual and the guidelines for disseminating TP-R
6	Compilation of the improved TP-R
7	Overseas technical training on rice development in a third country
8	Implementation of the end-line survey
9	Preparation of the monitoring sheets
10	Organizing the final seminar
11	Development and submission of the final report of the project

6. Issues to be addressed

- MAF staff in Karene District: BESs and FEWs have not yet officially been assigned to all of the blocks and circles.
- Drivers license of motorcycle riders: Some extension staff who are riding MAF/Project motorcycles have not acquired / duly renewed their driving licenses despite of the repeated warning by the Project.
- Many “volunteer” extension workers who have not yet been given PIN codes
- Chronicle insufficiency in terms of means of mobility and fuel for extension workers
- Insufficient monitoring on the roll out of the TOT for nationwide dissemination of the TP-R (complete data not yet reported)

Annex I Proposed Revision of Project Design Matrix (PDM)

Project Title: Sustainable Rice Production Project (SRPP)

Project Period: June 2017 – May 2022 (5 Years)

Target Area: Bombail, Karene, Port Loko and Kambia Districts

Target Group: Farmer Based Organization (FBO) farmers engaged in rice farming in Inland Valley Swamps (IVSs) in the target districts

Implementation Institutions: Ministry of Agriculture and Forestry (MAF); Headquarters and District Agriculture Offices (DAOs) in the target districts

Version No. 3

Date: August 31, 2019

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal (1) Rice productivity is increased in IVSs in the target districts. (2) The Technical Package on Rice Production (TP-R) *1 is disseminated to FBOs in IVSs throughout the country.</p>	<p>1-1. In the IVSs in the target districts, the rice yield per unit area exceeds 2.0 tons /ha, and rice production is increased by 45 % compared with the rice cropping in 2017. 2-1. The TP-R training for farmers engaged in rice farming in the IVSs is conducted throughout the country by all (100%) of the extension officers/workers trained in the nationwide training of trainers (TOT) on the TP-R. 2-2. The Key techniques of the TP-R² is adopted by at least 50% of the trained FBOs who are engaged in rice farming in IVSs throughout the country after the completion of the Project.</p>	<p>1-1 Statistical data on rice production in IVSs in the target districts 2-1 Records of the TP-R training for FBO farmers conducted by the extension officers trained in the nationwide TOT on the TP-R. 2-2 Data from DAOs in the target districts where the TP-R training is conducted.</p>	<p>1. No significant change is made in the national policy on rice extension. 2. MAF/ District Councils continuously provide necessary technical and financial supports for FBO farmers. 3. The TP-R training for farmers is conducted in accordance with the MAF's action plan 4. Serious climatic problems, pest and disease do not occur.</p>
<p>Project Purpose The TP-R is adopted by FBO farmers in IVSs in the target districts.</p>	<p>1. The key techniques of the TP-R are adopted by at least 90% of the trained FBO farmers in their individual farms. 2. The key techniques of the TP-R are adopted in the group farms by at least 50% of the neighboring FBOs who are disseminated with the TP-R by the Model FBOs / Model Farmers.</p>	<p>1. Results of monitoring on FBO activities recorded by extension workers 2. Sample interviews with the neighboring FBOs who are disseminated with the TP-R by the Model FBOs/Model Farmers</p>	<p>Natural disasters, climatic problems, epidemic, pests and diseases do not bring any profound effect on the Project.</p>
<p>Outputs (1) The situation of IVS rice farming in the target districts is clarified. (2) The TP-R is disseminated to FBO farmers in the target districts. (3) The TP-R is further elaborated so as to realize higher adoption among the FBO farmers. (4) The TP-R is recognized by MAF as the recommended rice cultivation techniques for IVSs throughout the country. *6</p>	<p>1-1 Based on the results of the baseline survey³, Project strategy⁴ and the direction of the Project including Project indicators are agreed at Joint Coordinating Committee (JCC). 2-1 The TP-R training for the farmers of the target FBOs are conducted at least for 100 times. 2-2 At least 80% of the trained Block Extension Supervisors (BESs) and Frontline Extension Workers (FEWs) pass the examination of rice cultivation techniques. 2-3 The unit yield of the group farms of the trained FBOs with TP-R is higher at least by 45% than the unit yield of the plots with the conventional practices. 2-4 The key techniques of the TP-R are disseminated to at least 70 neighboring FBOs by the Model FBOs / Model Farmers. 3-1 Effective technologies of rice cultivation are confirmed through on-farm trials⁵. 3-2 The technologies confirmed through on-farm trials are reflected in the TP-R to realize higher adoption by the farmers. 4-1 Collaboration with donors/NGOs for dissemination of the TP-R is accelerated. 4-2 The TP-R is approved by MAF as the recommended rice cultivation techniques for IVSs. 4-3 MAF's action plan for nationwide dissemination of the TP-R is drafted and distributed to the relevant authorities of districts throughout the country. 4-4 At least 5 extension officers/workers are trained as trainers on the TP-R in each of the districts other than the target districts of the Project.</p>	<p>1-1 Baseline survey report 1-2 Selection criteria of target FBOs 2-1 Records of training for farmers 2-2 Records of training for BESs and FEWs 2-3 Record of the demonstration farm activities at the trained FBOs 2-4 Record of the demonstration farm activities conducted by the Model FBOs / Model Farmers 3-1 Result papers of the on-farm trials 3-2 The TP-R documents and relevant materials prepared with reflection of the confirmed technical components 4-1 Progress / Completion Reports of the Project 4-2 MAF's document 4-3 MAF's draft action plan for e nationwide dissemination of the TP-R 4-4 Report of the TOT</p>	<p>1. No significant change is made in the national policy on rice extension. 2. MAF/ District Councils continuously provide necessary technical and financial supports for FBO farmers. 3. The TP-R training for farmers is conducted in accordance with the MAF's action plan 4. Serious climatic problems, pest and disease do not occur.</p> <p>Natural disasters, climatic problems, epidemic, pests and diseases do not bring any profound effect on the Project.</p>

<p>Activities</p> <p>(1)-1 To formulate the plan of baseline survey. (1)-2 To conduct the baseline survey. (1)-3 To set the selection criteria of target FBOs for TP-R training for farmers. (1)-4 To develop the Project strategy including PDM indicators based on the results of the baseline survey. (2)-1 To conduct introductory sessions on the TP-R for extension officers/workers to familiarize themselves with technical components of the TP-R. (2)-2 To develop a program of the TP-R training for farmers. (2)-3 To conduct orientation sessions and TOT for the extension officers/workers⁷ on the TP-R training for farmers. (2)-4 To select the target FBOs based on the criteria identified in (1)-3 above. (2)-5 To establish a TP-R demonstration farm⁸ in each target FBO. (2)-6 To facilitate the BESSs and FEWs to conduct the TP-R training for farmers of the target FBOs with proper gender considerations. (2)-7 To select outstanding FBOs and farmers who shall serve as "Model FBOs / Model Farmers". (2)-8 To facilitate dissemination of the TP-R techniques/knowledge to other neighboring FBOs using the plots of the "Model FBOs / Model Farmers". (2)-9 To monitor the rice cultivation activities through field visits by extension workers at the demonstration farms and group farms of the trained FBOs, at the individual farms of the trained farmers, as well as at the group farms of the neighboring FBOs who are disseminated with the TP-R by Model FBOs / Model Farmers. (2)-10 To consolidate the results of monitoring conducted in (2)-9 above. (2)-11 To conduct a survey on IVS conditions. (2)-12 To conduct training for relevant extension officers/workers on IVS development. (2)-13 To formulate the plan of participatory IVS development in selected potential IVSs. (2)-14 To implement participatory IVS development in collaboration with the FBOs in the respective IVSs selected in (2)-13 above. (2)-15 To conduct a survey on post-harvest activities of Agricultural Business Centres (ABCs) and FBOs. (2)-16 To design and conduct training on post-harvest processing for relevant extension officers/workers and ABC/FBO representatives based on the results of (2)-15 above with proper gender considerations. (2)-17 To review the training program and training materials to revise the existing "Guidelines for the dissemination of the TP-R" based on the examination by extension officers/workers as well as on the results of monitoring consolidated in (2)-10 above.</p> <p>(3)-1 To formulate the plans of on-farm trials on some components of the TP-R. (3)-2 To establish on-farm trial plots in the target districts. (3)-3 To conduct on-farm trials at each plot. (3)-4 To analyze the results of the on-farm trials. (3)-5 To conduct the field day for various stakeholders at the on-farm trial plots. (3)-6 To identify the technical components to be reflected in the TP-R based on the analysis of the results of the on-farm trials. (3)-7 To conduct demonstration of small farm machineries for some selected FBOs cultivating rice in the IVSs in the target districts (3)-8 To review the status of operation and maintenance of the introduced machineries to examine feasibility and to draw lessons and recommendations for future introduction of small farm machineries to FBOs cultivating rice in the IVSs.</p> <p>(4)-1 To seek the possibility of and promote collaboration with donor agencies for scaling up of the Project. (4)-2 To coordinate with the DAOs and the District Councils in their formulation of annual work plans to ensure the inclusion of activities to disseminate the TP-R in the budgets of the respective districts. (4)-3 To assist MAF to formulate an action plan for nationwide dissemination of the TP-R. (4)-4 To organize nationwide TOT on the TP-R dissemination for the extension officers/workers in the districts other than the target districts. (4)-5 To hold a final seminar on the TP-R for stakeholders including donor agencies and private sector.</p>	<p>Inputs:</p> <p>Sierra Leone side (MAF HQ/MAF-Bombali, MAF-Karene, MAF-Port Loko, MAF-Kambia)</p> <p>(a) Counterpart personnel (b) Office space for experts (c) Available data (including meteorological data, IVS inventory, maps and photographs) and information related to the Project; (d) Running expenses necessary for the implementation of the Project; (e) Expenses necessary for transportation within Sierra Leone of the equipment provided by JICA as well as for the installation, operation and maintenance thereof</p> <p>Japanese side (JICA)</p> <p>(a) Dispatch of experts to cover following areas: - Chief advisor/Rice cultivation techniques/Training/Extension/Socio economic survey/Farmers organization/Extension material development/Project monitoring and evaluation/Post harvest treatment/Participatory IVS development/Project Coordinator and Others according to necessity. (b) Counterpart Training - Training in Third countries is conducted as necessary. (c) Machinery and Equipment - Project vehicles/motorbikes, training equipment, generators, office equipment and other necessary equipment for the implementation of the Project (d) Local expenses for the Project activities which are not covered by Sierra Leone side - Expenses for training/workshop/seminar, extension materials, etc.</p>	<p>1. Any transfer of the counterpart personnel does not negatively affect continuous operations of the Project.</p> <p>2. Damages by birds, rats, pests and diseases are not significantly increased.</p> <p>3. Water conditions in the group farms of the trained FBOs are not seriously affected by flood or drought.</p> <p>Pre-condition</p> <p>Security conditions in the target districts and Freetown do not deteriorate.</p>
--	---	--

*1: TP-R= The Technical Package on Rice Production (TP-R) refers to the rice cultivation techniques developed by the foregoing project (SRDP, 2010-2014), which is to be further elaborated through the activities of the Project so as to be presented as the final output at the end of the Project.

*2: The key techniques of the TP-R to be looked at as indicators shall be specified by the Project, such as the techniques of seed selection, levelling transplanting, weeding and so forth.

*3: Baseline survey= Baseline survey is to be conducted to collect necessary information, especially the current situation of the target area. Aspects to be covered in the baseline survey include rice cultivation techniques, farming practices, basic data of ABCs / FBOs, status of IVS development, social and economic situations, etc.

*4: Project strategy= Project strategy indicates an overall direction of the Project for 5 years with appropriate extension approaches and implementation structures. It also sets the PDM indicators to measure the achievement of Outputs, Project Purpose and Overall Goals of the Project.

*5: On-farm trial= On-farm trials are to be conducted to re-examine the TP-R components under various experimental conditions at on-farm level.

*6: The output 4 aims to contribute to the achievement of the overall goal, not directly to achieve the Project Purpose.

*7: Extension officers/workers = "Extension officers" mean District Agriculture Officers and Subject Matter Specialists, while "extension workers" mean BESSs and FEWs.

*8: Demonstration farm = A demonstration farm is to showcase the advantages (productivity, efficiency, cost effectiveness, etc.) of TP-R application in comparison with conventional cultivation techniques at on-farm level.