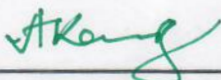
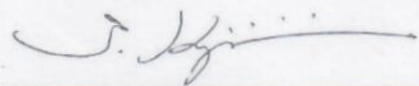


MINUTES
OF
THE SIXTH JOINT COORDINATING COMMITTEE MEETING
ON
THE SUSTAINABLE RICE PRODUCTION PROJECT

23rd February 2022



Dr. Abu Bakarr Karim
Hon. Minister of Agriculture
and Forestry, Freetown



Takashi Kimijima
Chief Advisor, JICA-SRPP

The Sixth Joint Coordinating Committee (JCC) Meeting (the Meeting) on the Sustainable Rice Production Project ("the SRPP" or "the Project") was held on 23rd February 2022 at the Conference Hall of the Ministry of Agriculture and Forestry (MAF), Youyi Building, Freetown. The list of attendants is attached to this document as Appendix 1.

The Meeting started at 10:10 in the morning under the chairpersonship of Dr. Theresa Teneh Dick, Honorable Deputy Minister, MAF, and proceeded with the following agenda.

- 1) Prayer
- 2) Introduction
- 3) Chairperson's opening remarks
- 4) Presentation on the Project activities and results obtained during the last rainy season 2021
- 5) Proposed activities during the remaining Project period
- 6) Issues to be addressed
- 7) A.O.B.

After the participants' silent prayers and the self-introduction, Chairperson made opening remarks.

1. Opening remarks by Chairperson

Chairperson welcomed all the participants to this important Meeting to share the outputs of the Project. She expressed her gratitude for the inter-organizational cooperation between MAF and JICA while recalling the roles of the JCC meeting to be held at least once a year to review the overall plan, evaluate the project activities, and exchange opinions on the primary issues.

After the opening remarks, Hon. Deputy Minister left the venue for other urgent meetings while appointing Mr. Aiah J. Thorlie, Director of Extension, to take over the chairpersonship of the Meeting on her behalf.

2. Presentation by the Chief Advisor, SRPP

Mr. Takashi KIMIJIMA, Chief Advisor of the SRPP, at first explained the framework and implementation organization of the Project. And then he continued to explain the main Project activities so far made and the results obtained during the last rainy season 2021 using a PowerPoint presentation (Appendix 2). The explained activities included:

- i) Training of Trainers (TOT) for the dissemination of the TP-R in the target districts,
- ii) Dissemination of the TP-R to the farmers,
- iii) TOT for Nationwide Dissemination of the TP-R,
- iv) Training on the survey techniques for the IVS development, and,
- v) Monitoring on the operation and management of the small farm machinery introduced by WFP in 2019 to three FBOs.



During the presentation, he also showed short video clips on the voices of beneficiary FBO farmers of the Project and the extension materials.

After reporting the Project activities and outputs, he referred to the issues addressed below.

- i) Further TP-R dissemination to the FBO farmers in IVS in the four target districts and the follow-up of the supported FBOs after the Project was completed.
- ii) Accurate TP-R dissemination through the FFS facility nationwide.
- iii) Maximum utilization (employment-mobilization) of the "volunteer" extension workers the SRPP trained.

3. Comments and Discussions

After the Chief Advisor's presentation, Chairperson, while appreciating the Project's successful outcomes, especially the attainment of higher yield in IVS with the application of the TP-R, commented about the issue on the operation and management of the small farm machinery in response to the recommendation in the presentation. He wanted the Project to continue supporting the FBOs as the private sector on machinery maintenance. He also referred to the issue of the volunteers. The current recruitment focuses on the front-line extension workers whom SRPP has trained.

Chairperson expressed his desire that the JICA experts should stay for further dissemination of the TP-R nationwide, since the TP-R has been approved as the standard rice cultivation techniques in IVS in the country.

And then, he opened the floor for any views and comments from the participants and discussions. The main discussion points were summarized as follows.

- It is good that the small farmers trained with seed multiplication produce the seeds and sell them for procuring the fertilizer. But since they produce a small quantity of seed rice, they might lose the price competition with the giant seed companies. It was suggested that the Project work together with Sierra Leone Seed Certification Agency (SLeSCA) and the research institution to link the FBO farmers with the registered seed companies to sell seeds to these companies.
- To improve the TP-R further, Rokupr Agricultural Research Centre (RARC) is ready to work with JICA. RARC has been working with JICA for a long time and wants to continue collaboration since there are rooms to improve the TP-R further, such as the fertilizer application method, which will enhance its utilization efficiency.
- Does the Project support the women engaged in vegetable production?
 - Since this Project centers around rice production, as stipulated in the agreement between the Sierra Leone government and the Japanese government, the support on the vegetable production is not the task of SRPP.
- If the machinery has the problem, who will maintain it?
 - The machinery was provided by WFP and SRPP only collaborated in terms of capacity development of the machinery committee members including operators. The FBOs were trained on the operations and maintenance, and they are to procure the necessary spare parts by themselves. Once it came to the procurement issues, it was dealt by WFP and SRPP was not in the position to take part in this matter.

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- Why were there yield differences between the top 10 FBOs even the farmers applied the same technologies?
 - As explained by Chief Advisor (Page 10 in Appendix 2), many factors negatively affect rice performance. Therefore, the yield performances were different among the FBOs. Different natural environments of various IVSs, such as soil, water and other natural conditions should also be considered as the possible attributes.

In absence of A.O.B., Chairperson closed the meeting, expressing his gratitudes to the participants.

End

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Attachment 1 List of Atten

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**Attendance List of 6th Joint Coordinating Committee (JCC)
in Sustainable Rice Production Project**


Date: February 23, 2022

Place: MAF conference hall, Youyi building, Freetown

	Name	Designation	Organization	Mobile phone no.	e-mail address
1	Dr. Theresa T. Pida	DPVMAF	MAF		
2	Aicela J. Tugale	Director, Agrifish Dept	MAF		
3	Michael A.T. Kabirator	Deputy Director	MoA		
4	Simlu Manoth	Deputy Secretary	MAF		
5	Katsu Fushi Fushi # 260	JICA HQ.	JICA		
6	Kesuya Saoshu	JICA HQ	JICA		
7	Andrew A. Mansaray	DAO - Bombali	MoA		
8	Dennis P.Y. Yankson	Asst. Director of Crops	MAF		
9	Ismael T. Tarawali	Deputy Director	MOA/AED		
10	Dr. Adam S. Kanu	Director SLARR/ARCC	SLARR/ARCC		
11	B. J. Bangura	FBO expert	JICA-SRPP		
12	Yoji Savada	Participatory IYS Development	JICA-SRPP		
13	Lloyd Anbyani-Diifel	Deputy Secretary	MAF		
14	Allie Abdullahi Fofanah	DAO - Karamand-Pop	MAF		
15	Josephine O. Karefa	Production	SLARR/ARCC		

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**Attendance List of 6th Joint Coordinating Committee (JCC)
in Sustainable Rice Production Project**

Date: February 23, 2022

Place: MAF conference hall, Youyi building, Freetown

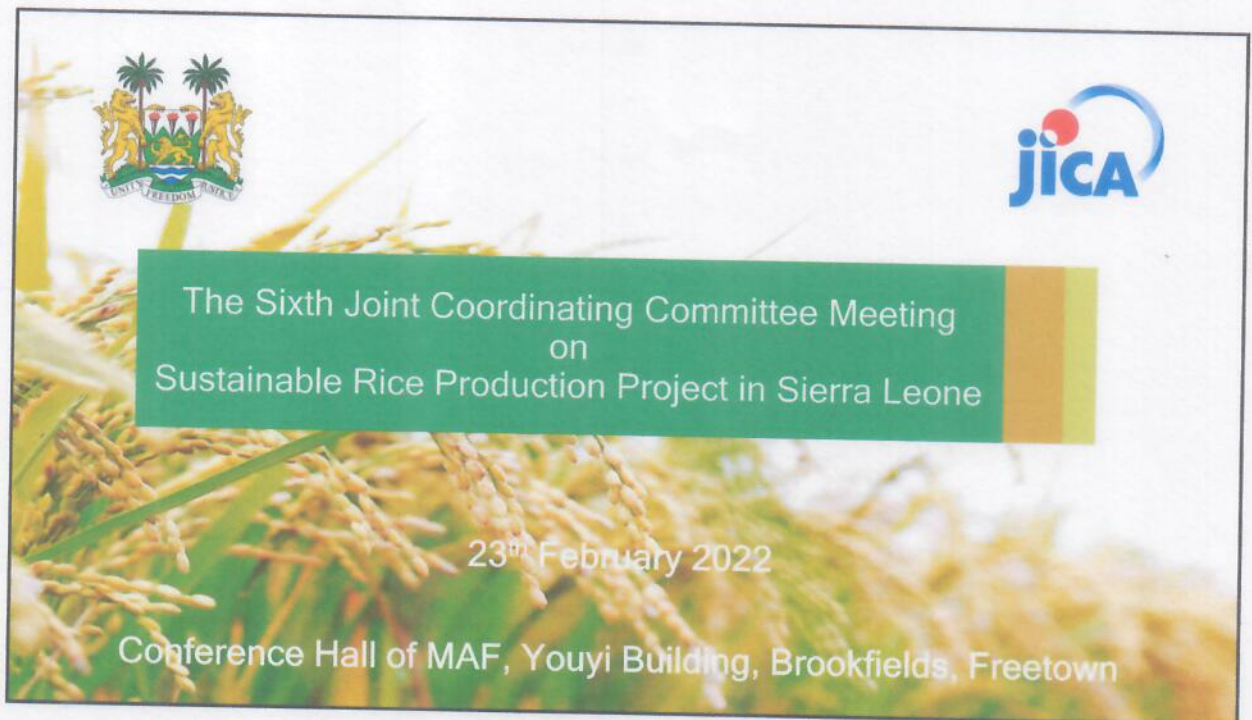
	Name	Designation	Organization	Mobile phone no.	e-mail address
16	Mariana M. Turay	Head of Women in Agric. & Nutrition	MAF		
17	Hito shi SATO	President Representative	JICA		
18	Alex s koroma	ICT Heat	MAF		
19	Akika Kurita	Logistic coordinator	JICA-SRPP		
20	Tamba Pessinger	Planning & Budgeting Officer	MAF		
21	Shunsuke Imsizumi	SRPP member	JICA - SRPP		
22	Keiko (TAGAKI)	Expert, JICA-SRPP	JICA-SRPP		
23	Takashi KIMIO/MA	Chief Advisor JICA-SRPP	JICA-SRPP		
24					
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The Sixth Joint Coordinating Committee Meeting
on
Sustainable Rice Production Project in Sierra Leone

23rd February 2022

Conference Hall of MAF, Youyi Building, Brookfields, Freetown

Agenda of the 6th JCC Meeting

1. Prayer
2. Introduction
3. Chairman's opening remarks
4. Presentation on the Project activities and results obtained during the last rainy season 2021
5. Proposed activities during the remaining Project period
6. Issues to be addressed
7. A.O.B.

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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

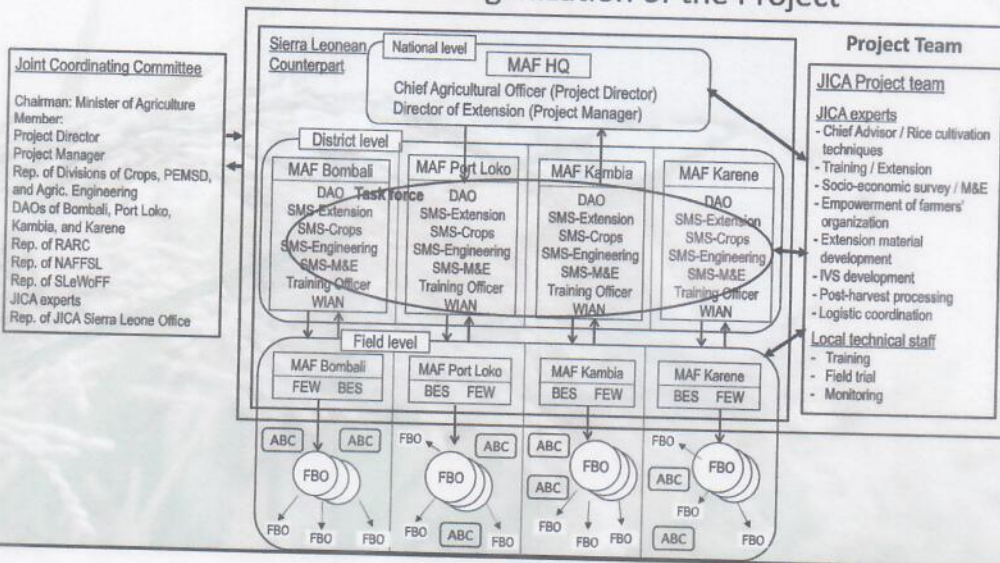
Project Purpose

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 Results Obtained (Cont'd)

Implementation organization of the Project



4. Project Activities and Results Obtained (Cont'd)

No. Main activities implemented during this reporting period

4.1 Training of Trainers (TOT) on the dissemination of the TP-R

4.2 Implementation of the Support Programme for the Dissemination of the TP-R to FBO farmers (FFS, and Support to the "graduate FBOs")

4.3 Training of trainers (TOT) for nationwide dissemination of the TP-R*

4.4 Training on the survey techniques for the IVS development

4.5 Monitoring of the operation and management of the small farm machineries introduced by WFP in 2019 to three FBOs*

* 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 Trainers on the Dissemination of TP-R

TOT for FFS on the TP-R conducted in 2021

(BESs and the selected FEWs in the target districts)

No.	Type	Theme	Month
1	Classroom	FFS on the TP-R (TOT part I)	July 2021
2	Classroom	Monitoring with mobile application (only for the selected FEWs)	July 2021
3	On-site	Transplanting	August 2021
4	On-site	Identification of panicle initiation	October 2021
5	Classroom	Harvesting, post-harvest handling, and review of the FFS (TOT part II)	October 2021
6	Classroom	Season end review meeting	February 2022

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

Number of 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
Rainy season 2020									
Bombali	4	1	5	3	3	6	7	4	11
Karene	2	0	2	4	0	4	6	0	6
Port Loko	4	1	5	3	2	5	7	3	10
Kambia	4	0	4	4	1	5	8	1	9
Total	14	2	16	14	6	20	28	8	36
Rainy season 2021									
Bombali	5	1	6	4	3	7	9	4	13
Karene	5	0	5	4	0	4	9	0	9
Port Loko	4	1	5	5	2	7	9	3	12
Kambia	4	0	4	3	1	4	7	1	8
Total	18	2	20	16	6	22	34	8	42

4. Project Activities and Results Obtained (Cont'd)

No. Main activities implemented during this reporting period

4.1 Training of Trainers (TOT) on the dissemination of the TP-R

**Implementation of the Support Programme for the
4.2 Dissemination of the TP-R to FBO farmers (FFS, and Support to
the "graduate FBOs")**


4.3 Training of trainers (TOT) for nationwide dissemination of the TP-R*

4.4 Training on the survey techniques for the IVS development

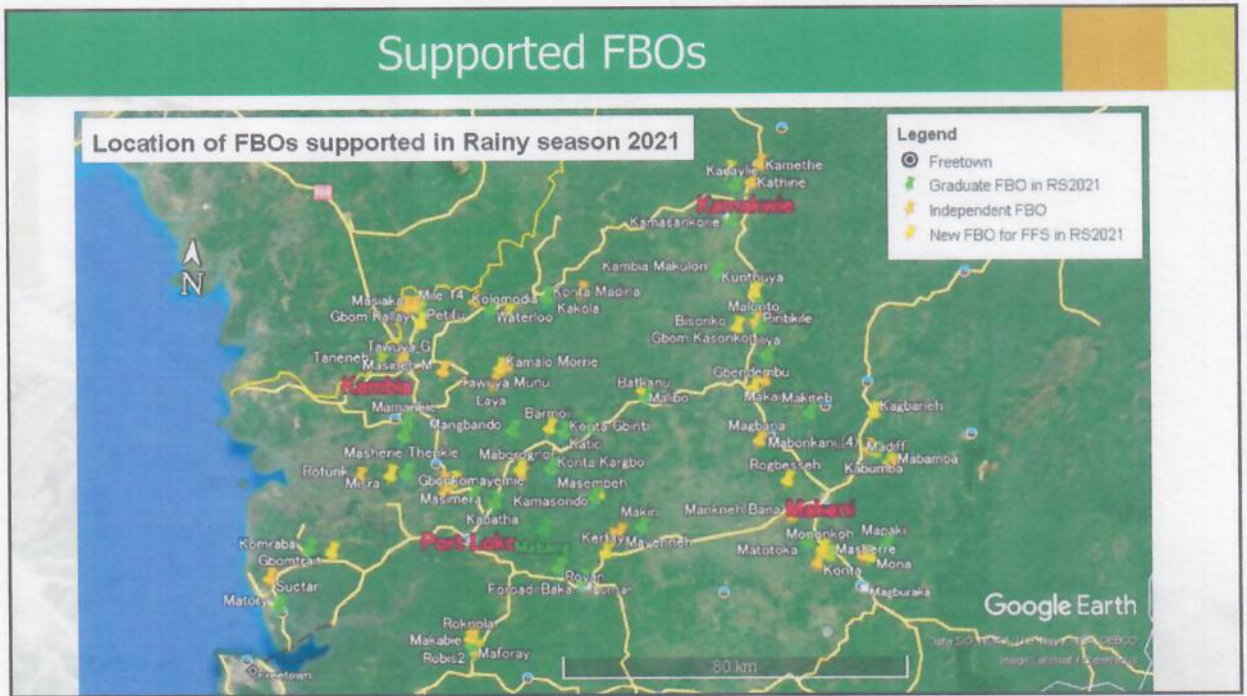
4.5 Monitoring of the operation and management of the small farm
machineries introduced by WFP in 2019 to three FBOs*

* 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. Project Activities and Results Obtained (Cont'd)

FBOs supported by SRPP				
	Year 1 FFS	(Year 2) (Follow-up FFS)	Year 2 (or 3) (Graduate FBO)	Year 3 (or 4) & onward (Independent FBO)
Technical Support	FFS on the TP-R	FFS on the TP-R	<ul style="list-style-type: none"> Follow-up guidance on the TP-R Seed multiplication 	Follow-up monitoring (by SRPP during the project period and by MAF after completion of SRPP)
Input Support from SRPP	Farming tools, seed, fertilizer, leveling boards, tarpaulin sheets, rice bags etc. for demo plots	Seed and fertilizer for demo plots	Seed, fertilizer, additional leveling boards for the demonstration farm (maximum of 1 acre)	 No input support
FBOs' Obligations	<ul style="list-style-type: none"> To attend the FFS to learn the TP-R To apply the TP-R in the members' individual plots 	<ul style="list-style-type: none"> To attend the FFS to learn the TP-R To apply the TP-R in the members' individual plots 	<ul style="list-style-type: none"> To cultivate rice by applying the TP-R in demonstration farm (in their group farm) To promote application of the TP-R among the FBO members To disseminate the TP-R to the neighboring FBO 	<ul style="list-style-type: none"> To continue applying and demonstrating the TP-R To facilitate the FBO members to apply the TP-R in their individual farms To continue dissemination of the TP-R to the neighboring FBO

Supported FBOs



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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 (cont'd)

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	September
8	Top dressing and water management	October
9	Prevention / control of pests and diseases	October
10	Harvesting and post-harvest handling	November
11	Evaluation of the TP-R	December/ January

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

List of the selected FBOs supported through FFS in the rainy season 2021

District	Number of FBO supported	Number of FBO Members		
		Male	Female	Total
Bombali	9	132	91	223
Port Loko	5	81	52	133
Karene	5	83	54	137
Kambia	5	89	54	143
Total	24	385	251	636

Note: The number Includes 4 FBOs who failed to complete the FFS in the last season.

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



TOT part I: Classroom session, Port Loko
FFS session on nursery, Karene



On-site TOT: Transplanting, Bombali
FFS session on uprooting, Bombali



On-site TOT: Panicle initiation, Port Loko
FFS session on weeding, Port Loko



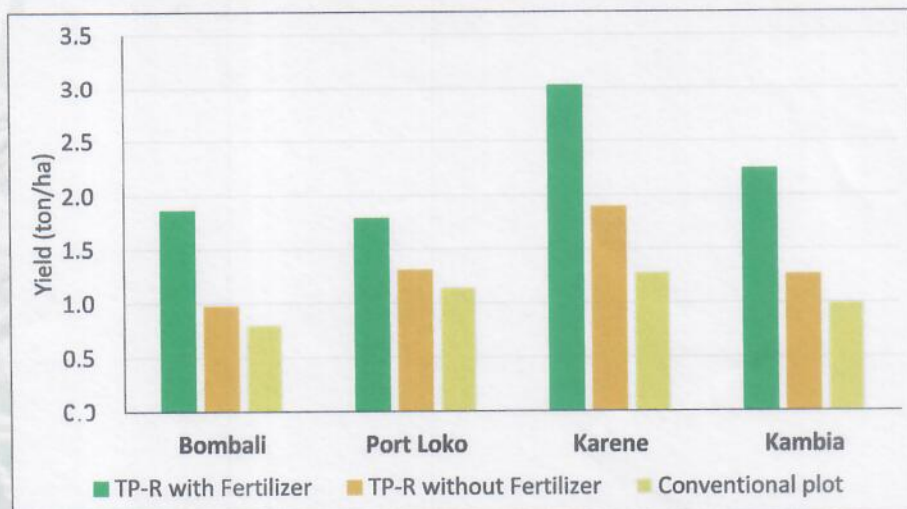
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4.2 Dissemination of the TP-R (cont'd)



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

Rice yield in the FFS plots under different treatments by district



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

Top 10 highest yield in the FFS plot with fertilizer

District	Extension Block	Name of Village	Yield (t/ha)
Port Loko	3	Roknola	4.03
Karene	1	Kamagbengkaray	3.75
Karene	5	Maborognor	3.55
Bombali	2	Rogbesseh	3.01
Kambia	2	Gbom Kallay	2.86
Karene	3	Bisonko	2.84
Karene	4	Malibo	2.75
Kambia	2	Taneneh	2.50
Kambia	3	Kamalo Morie	2.45
Bombali	5	Madiff	2.44

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

Factors negatively affecting rice yield in IVS

1. Flood just after transplanting (wash out fertilizer and damage seedlings)
2. Soil fertility (sandy soils, organic soils)
3. Seepage water inside the plot (water flow)
4. Iron toxicity (aggravated under poor drainage condition and poor nutrition status)
5. Damage by Insect and pest (case worm, rice bug, rats, birds)
6. Cultural practices (delay in weeding, inadequate water management, bird scaring conducted by children)

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

2. Support to the "Graduate FBOs" from FFS in the rainy season 2021

- (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)

"Graduate FBOs" supported in the rainy season 2021

District	Number of FBO supported	Number of FBO Members		
		Male	Female	Total
Bombali	6	108	79	187
Port Loko	8	118	88	206
Karene	10	177	110	287
Kambia	6	113	56	169
Total	30	516	333	849

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

Demonstration plots of "Graduate" FBOs



Mafinda, Port Loko



Gbom Kasonko, Karene



Kadaylie, Karene

Seed multiplication plots of "Graduate" FBOs



Maforay, Port Loko



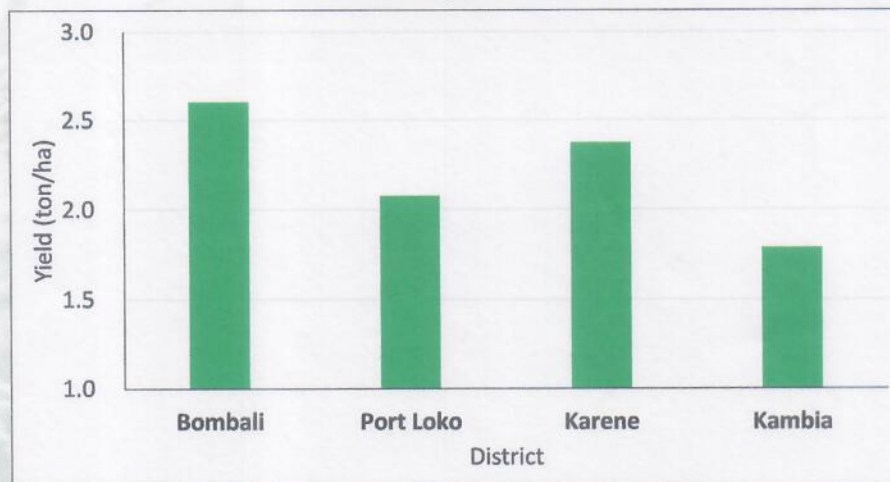
Masembeh, Karene



Matotoka, Bombali

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

Average Rice yield in the Demonstration Farms of the Graduate FBOs by District



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

Top 10 highest yield in the demonstration farm of the "Graduate FBOs"

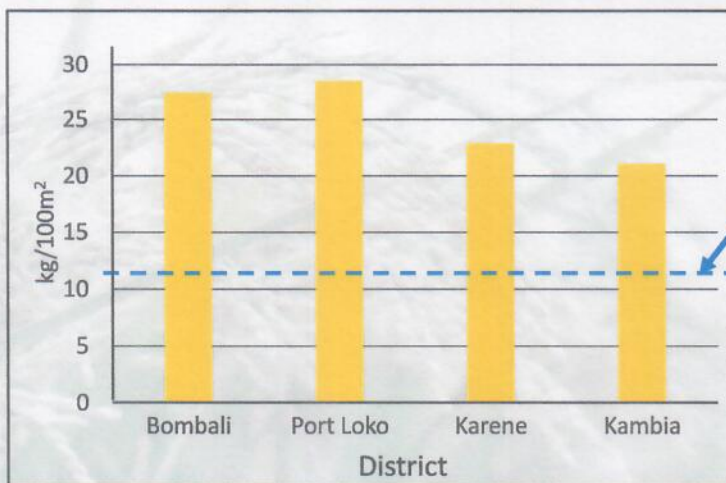
District	Extension Block	Name of Village	Area (m ²)	Yield (t/ha)	Yield at FFS (t/ha)
Port Loko	3	Mafinda	3,550	3.56	2.66
Bombali	4	Liliya	3,600	3.35	3.24
Karene	3	Gbom Kasonko	3,200	3.21	2.88
Karene	1	Kadaylie	3,980	3.15	2.66
Karene	4	Batkanu	1,110	2.93	2.91
Bombali	3	Matotoka	2,670	2.63	2.08
Karene	1	Kamasankorie	1,890	2.59	2.07
Port Loko	3	Maforay	4,050	2.47*	3.19
Bombali	1	Mapaki	1,350	2.45**	2.75
Bombali	6	Pintikile	3,400	2.41	2.95

*: Affected with the water stagnation due to the construction work of a bridge across the IVS in the downstream.

** : The demonstration farm was changed due to land tenure problem.

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

Yield in the Seed Multiplication Plot of the Graduate FBOs by District



Amount to cultivate one acre.

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

Top 10 highest yield in the demonstration farm of the "Independent FBOs"

District	Extension Block	Name of Village	Area (m ²)	Yield (t/ha)	
				Yr 2021	Yr 2020
Port Loko	1	Manghatta	8,930	3.11	2.89
Karene	6	Mayenneh	3,900	2.99	1.66*
Port Loko	1	Bangkro	2,040	2.88	2.11
Kambia	2	Masimbo	4,650	2.74	2.00
Karene	1	Kathirie	2,790	2.61	2.03
Karene	1	Kamethe	3,990	2.57**	3.74
Port Loko	2	Suctarr	2,510	2.55	2.09
Bombali	2	Mankneh Bana	4,160	2.50	2.46
Karene	3	Malonto	2,390	2.16	2.09
Kambia	4	Mile 14	3,900	2.13	2.04

*: Underestimated figure probably due to the stealing occurred during the threshing and winnowing processes.

** : Cultivation site changed to different location due to land tenure problem.

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

Video: Voice of the Farmers

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4. Project Activities and Results Obtained (Cont'd)

No. Main activities implemented during this reporting period

- 4.1 Training of Trainers (TOT) on the dissemination of the TP-R
- 4.2 Implementation of the Support Programme for the Dissemination of the TP-R to FBO farmers (FFS, and Support to the "graduate FBOs")
- 4.3 Training of trainers (TOT) for nationwide dissemination of the TP-R***
- 4.4 Training on the survey techniques for the IVS development
- 4.5 Monitoring of the operation and management of the small farm machineries introduced by WFP in 2019 to three FBOs*

* 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.

4.3 Follow up TOT for Nationwide Dissemination of the TP-R

Objectives of the Follow up TOT:

To refresh the memory of SMS extension on the TP-R for further dissemination, and, to prepare action plan on TP-R dissemination in the respective district.

Date	Venue	Participating districts	No. of participants		
			Male	Female	Total
16 th and 17 th February, 2022	New Brook Fields Hotel, Freetown	All the districts except Falaba district	13	1	14

Main Agenda of the Follow up TOT

No.	Agenda
1.	Preparation of the FFS on the TP-R
2.	How to conduct FFS sessions
3.	Monitoring of the FFS on the TP-R
4.	Formulation of action plan to implement the FFS on the TP-R

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

Implementation of FFS after the TOT in 2019

No	District	No. of FFS established in 2019				No. of FFS established in 2020				No. of FFS established in 2021				No. of FFS planned in 2022			
		MAF/ Council	AVDP	WFP	Others (specify)	MAF/ Council	AVDP	WFP	Others (specify)	MAF/ Council	AVDP	WFP	Others (specify)	MAF/ Council	AVDP	WFP	Others (specify)
1	Bo	2	4	0	0	0	4	0	0	0	4	0	0	0	0	0	0
2	Bombali	2	0	0	0	3	2	0	0	3	2	0	0	3	2	0	0
3	Bonthe	2	0	0	0	5	0	0	0	0	5	2	0	0	0	0	0
4	Falaba	No data															
5	Kallahun	5	5	3	0	5	4	0	0	5	3	0	0	5	0	0	0
6	Kambia	2	8	0	0	2	9	10	0	2	8	10	3	2	8	10	4
7	Karene	1	1	0	0	1	1	0	0	2	0	0	0	5	0	0	0
8	Kenema	6	3	10	0	6	3	8	0	6	3	10	0	6	0	10	0
9	Koinadugu	6	0	0	0	0	2	0	0	0	2	7	0	0	0	7	0
10	Kono	3	2	0	0	5	2	0	0	5	2	0	0	5	0	0	0
11	Moyamba	4	2	18	0	4	2	24	0	4	2	26	0	3	2	30	0
12	Port Loko	3	7	0	0	2	7	0	0	3	7	0	0	5	7	0	0
13	Pujehun	0	2	13	0	0	0	20	0	0	2	30	0	0	0	70	0
14	Tonkolili	3	1	0	0	1	1	0	25	5	1	13	10	5	1	13	5
15	WARD	3	0	0	0	3	1	0	0	2	1	0	0	0	0	0	0
Total		42	35	44	0	37	38	62	25	37	42	98	13	39	20	140	9

Source: Data obtained through the follow-up TOT organized in February 2022

Others: Kambia: Africa Rice Value Chain; Tonkolili: Concern Worldwide.

4. Project Activities and Results Obtained (Cont'd)

No. Main activities implemented during this reporting period

4.1 Training of Trainers (TOT) on the dissemination of the TP-R

4.2 Implementation of the Support Programme for the Dissemination of the TP-R to FBO farmers (FFS, and Support to the "graduate FBOs")

4.3 Training of trainers (TOT) for nationwide dissemination of the TP-R*

4.4 Participatory IVS development

4.5 Monitoring of the operation and management of the small farm machineries introduced by WFP in 2019 to three FBOs*

* 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.

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4.4 Participatory IVS Development

Training on Topographic Survey for IVS Development Planning

Dates of training: 14th – 18th June 2021

Venue: District Agricultural Office in Port Loko and IVS at Mafinda village

Target: Staff of the Agric. Engineering Section in the District Agricultural Office of Karene

Contents of the training: (1) To learn the levelling survey method; (2) To learn the calculation method of levelling survey results, and; (3) To learn the plane survey method.



Practice of levelling survey



Calculation of survey results



Drawing of paddy lot

4.4 Participatory IVS Development (Cont'd)

IVS Site Survey and Issues of IVS Development

- (1) Breakage of concrete weir or head bund due to inadequate planning and design, or lack of supervision,
- (2) Lack of discharge capacity of the main drainage due to inadequate planning or maintenance,
- (3) Reduction of discharge volume of peripheral canal due to lack of maintenance, and,
- (4) Collapse of canal embankment due to unsuitable texture of soil .



Concrete Weir (Spillway)

Water Leakage and Sand Spout (Suction)



Main Drainage

Overflow of Flood Water in Rainy Season



Peripheral Canal

Sedimentation & Water Weed

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4.4 Participatory IVS Development (Cont'd)

Contents to Supplement the Existing IVS Development Manual

- (1) Case study of existing irrigation facilities in IVSs: Problems identified in the existing facilities and proposed solutions.
- (2) Procedure of participatory IVS development and maintenance of facilities involving the beneficiary farmers.
- (3) Planning and design for irrigation facilities: Calculation of flood discharge, determination of maximum allowable velocity, hydraulic calculation of canal, and design of weir etc.
- (4) Construction plan: Analysis of work volume and work efficiency, construction schedule, mobilization plan of work force, and proper construction methods etc.

4. Project Activities and Results Obtained (Cont'd)

No.	Main activities implemented during this reporting period
4.1	Training of Trainers (TOT) on the dissemination of the TP-R
4.2	Implementation of the Support Programme for the Dissemination of the TP-R to FBO farmers (FFS, and Support to the "graduate FBOs")
4.3	Training of trainers (TOT) for nationwide dissemination of the TP-R*
4.4	Participatory IVS development
4.5	Monitoring of the operation and management of the small farm machineries introduced by WFP in 2019 to three FBOs*

* 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.

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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	March 2020	12 November 2019
Gbarray Saar/ Port Loko	08 -12 July 2019	March 2020	26 November 2019

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

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	9	3	12	16	4	20
Masineh / Kambia	10	2	12	10	2	12	16	6	22

Duration of the training: 5 days for power tiller, and 1 day each for rice mill and thresher



Practice of plowing (Kambia)



Thresher operation (Port Loko)



Rice mill installation (Bambali)

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

Participants of the training on record keeping

Village / District	Date of training	Male	Female	Total
Mabonkani / Bombali	2 days in Dec. 2021	3	1	4
Gbaray Sarr / Port Loko	19 th Dec. 2021, 20 th Jan. 2020	3	1	4
Masineh / Kambia	19 th Dec. 2021, 17 th Jan. 2020	3	1	4



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

Performance and current situation on O&M of machineries and record keeping

Items	Mabonkani	Masineh	Gbaray Sarr
O&M of power tiller (PT)	<ul style="list-style-type: none"> Functioning Ploughed 3 acres only in 2021 (under utilized) 	<ul style="list-style-type: none"> Not functioning Gearbox broken one year ago 	<ul style="list-style-type: none"> Not functioning Utilized for transportation
O&M of thresher	<ul style="list-style-type: none"> Not functioning since 2021 	<ul style="list-style-type: none"> Functioning without problem 	<ul style="list-style-type: none"> Not functioning Fan belts cut
O&M of rice mill	<ul style="list-style-type: none"> Not functioning 	<ul style="list-style-type: none"> Not functioning A crankshaft broken 	<ul style="list-style-type: none"> Not functioning All fan belts cut
Record keeping	<ul style="list-style-type: none"> The operation records were kept for rice mill only. 	<ul style="list-style-type: none"> The records were kept during the period from Jul.2019 to Nov. 2020 only. 	<ul style="list-style-type: none"> The records were kept until Feb. 2021 Machineries under-utilized

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

Major findings

1. Many machines are out of order. Since the mechanics to repair the machines or spare parts are not easily available in the rural area, it is difficult for the farmers to find them, which makes machinery left broken for long.
2. Since the operation record is not properly kept, adequate maintenance can not be done, which often result in the breakdown of the machines.
3. As the FBOs are supposed to run a business with these machineries, bookkeeping is an essential requirement for sustainable O&M. However, the accounting books are not maintained, and the balance is found inaccurate. This is a challenge in transparency and hence in sustainability.

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

Discussion:

Based on the above findings, it is quite difficult for the FBOs to operate and manage the small farm machineries. Private sector may be the drive for the promotion of small farm mechanization, which is in line with the Government policy. To attract private sector in the area of small farm mechanization, the following would better be considered.

1. To improve the environment for the machinery to operate easily such as development of access road to the farm, construction of small bridge to pass the drainage canal, etc., and,
2. To provide the private sectors with opportunities to build the capacity in the machinery maintenance and repair, and bookkeeping.

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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.



5. Proposed Activities for the Remaining Project Period

No.	Proposed Activities
1	Revision of the manual and the guidelines for disseminating TP-R
2	Compilation of the improved TP-R and extension materials
3	Preparation of the end-line survey report (the survey completed in February 2022)
4	Preparation of materials to incorporate into the existing manual on "the IVS development"
5	Preparation of the recommendations for introduction of small machineries to the farmers organizations based on the monitoring
6	Organizing the final seminar (second week of May)
7	Organizing the seventh JCC meeting (after the final seminar)
8	Preparation and submission of the completion report of the Project

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5. Proposed Activities for the Remaining Project Period (Cont'd)

Video clip of the extension materials

6. Issues to be addressed

- Further dissemination of the TP-R to the FBO farmers in IVS in the four districts (Bombali, Port Loko, Karene, Kambia) as well as the follow up of the FBOs who have been supported by the SRPP after the Project has been completed.
- Accurate TP-R dissemination through the FFS facilities nationwide.
- Maximum utilization (employment-mobilization) of the "volunteer" extension workers who have been trained by the SRPP.

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