

付 属 資 料

1. 主要面談者一覧
2. 合同評価報告書（英文）

1. 主要面談者一覧

主要面談者一覧

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Mr. Norbert SENDEGE	Director General Crop Production

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Mr. Innocent	Deputy Director General
Mr. NDIKUMANA Innocent	Head, Rice Program Unit
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Mr. NDAGANO Jean Claude	Cooperative, Marketing & Post-harvest, Rice Program Unit
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Mr. Sidomono Jean President, KAOABATI/Abazamuranye
Cooperative

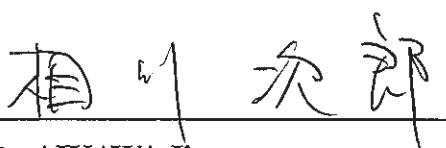
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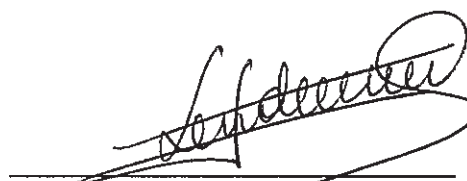
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Joint Terminal Evaluation Report
on
Project for Increasing Crop Production
with
Quality Extension Services
in
the Eastern Province

Kigali, 13 June 2013



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Abbreviations

CICA	Agricultural Information and Communication Centere
CIP	Crop Intensification Program
EDPRS	Economic Development and Poverty Reduction Strategy
FFS	Farmer Field School
GDP	Gross Domestic Product
GEL	Group Empowerment Level
GoJ	The Government of Japan
GoR	The Government of Rwanda
ISAR	Institut des Sciences Agronomiques du Rwanda
JCC	Joint Coordinating Committee
JICA	Japan International Cooperation Agency
LWH	Land Husbandry Water Harvesting and Hillside Irrigation
MINAGRI	Ministry of Agriculture and Animal Resources
MINALOC	Ministry of Local Government
M/M	Minutes of Meeting
NAEB	National Agricultural Export Development Board
NRDS	National Rice Development Strategy
ODA	Official Development Assistance
PDM	Project Design Matrix
PiCROPP	Project for Increasing Crop Production with Quality Extension Services in the Eastern Province
PSTA	Strategic Plan for the Transformation of Agriculture in Rwanda
PO	Plan of Operations
RAB	Rwanda Agriculture Board
RADA	Rwanda Agricultural Development Authority
RCA	Rwanda Cooperative Agency
R/D	Record of Discussions
RHODA	Rwanda Horticulture Development Authority
RSSP	Rural Sector Support Project
TC	Technical Committee
TOT	Training of Trainers

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1. Introduction

1-1 Objectives of the Terminal Evaluation

This terminal evaluation study (hereinafter referred to as “the Study”) on the Project for Increasing Crop Production with Quality Extension Services in the Eastern Province (PiCROPP, hereinafter referred to as “the Project”) is conducted:

- (1) To review and evaluate the inputs, activities and achievements of the Project, and to summarize the achievement.
- (2) To execute a comprehensive evaluation on the achievement of the Projects from the viewpoint of the five criteria of evaluation, namely “Relevance”, “Effectiveness”, “Efficiency”, “Impact” and “Sustainability”.
- (3) To make recommendations on future perspective of the Projects and draw lessons learned from the Projects in the same field of technical cooperation.

1-2 Member of the Joint Evaluation Team

1-2-1 Japanese Evaluation Team

Job Title	Name / Position
Leader	Dr. AIKAWA Jiro Senior Advisor on Agriculture and Rural Development, Japan International Cooperation Agency (JICA)
Evaluation	Ms. ITAGAKI Keiko Researcher, Social Development Department, Global Link Management, Inc.
Evaluation Planning	Mr. MATSUMOTO Kenichi Deputy Director, Arid and Semi-Arid Farming Area Division 2, Rural Development Department, JICA

1-2-2 Rwandan Evaluation Team

Job Title	Name / Position
Leader	Mr. SENDEGE Norbert Director General Crop Production, Ministry of Agriculture and Animal Resources (MINAGRI)
Member	Mr. NDAGANO Jean Claude Cooperative and Marketing Manager, Rice Special Program, Rwanda Agriculture Board (RAB)
Member	Ms. UFITNEMA Chantal Officer, Horticulture Production Support, National Agricultural Export Development Board (NAEB)

1-3 Schedule of Evaluation

The schedule is attached as Annex 1.

1-4 Methodology of the Evaluation

1-4-1 Method of Evaluation

The Project was evaluated jointly by the Rwandan and Japanese terminal evaluation teams (hereinafter referred to as “the Team”) based on materials showing the framework of the Project such as Project Design Matrix (PDM), Plan of Operations (PO) and the Record of Discussion (R/D). The evaluation activities including analysis on reports, field surveys, and interviews with staff of MINAGRI, RAB, NAEB, JICA experts, benefitted farmers and farmers groups in the Project’s targeted sites and other concerned personnel

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in the Project. This terminal evaluation was conducted based on the following Five Evaluation Criteria.

1-4-2 Evaluation Criteria (Five Evaluation Criteria)

(1) Relevance

Relevance refers to the validity of the Project Purpose and the Overall Goal in connection with the development policy of the authorities concerned of Rwanda as well as the needs of beneficiaries and assistance policy of Japan.

(2) Effectiveness

Effectiveness refers to the extent to which the expected benefits of the Project have been achieved as planned. It also examines whether these benefits have been brought about as a result of the Project.

(3) Efficiency

Efficiency refers to the productivity of the implementation process. It examines whether the inputs of the Project have been efficiently converted into outputs.

(4) Impact

Impact refers to direct and indirect, positive and negative impacts caused by the implementation of the Project, including the extent to which the overall goal has been attained.

(5) Sustainability

Sustainability refers to the extent to which the Project can be further developed by the authorities concerned of Rwanda and the extent to which the benefits generated by the Project can be sustained under national policies, technology, systems and financial state.

2. Outline of the Project

2-1 Background of the Project

The Republic of Rwanda has the highest population density of 380 persons /km² in sub-Saharan Africa, in which farmers are engaged in small-scale farming with averaged 0.76 ha per farmhouse hold. In addition, 80% of farmlands are 5 to 55 degree slanted. In the hilly area, low productivity and profitability are predominant because of limited irrigation water, dependency on rainfall, and ineffective farming system.

In lowland, where accessibility to irrigation water is relatively better compared with hilly areas, paddy farming has been practiced and has higher potential to increase productivity, if proper water management and farming techniques are introduced. Under the condition, it is necessary to promote agriculture with higher productivity and profitability in order to cope with increasing population pressure in late years. For that purpose, it is required to develop capacities of agricultural workers, however, existing organizational system in the field level is insufficient, although restructuring in the agricultural sector has been implemented such as structural reforming, organizing of farmers, and decentralization.

Under the circumstances, JICA had implemented the Development Study “The Study on Sustainable Rural and Agricultural Development in Bugesera District in Eastern Province, Rwanda” (hereinafter referred to as “the Development Study”) from February 2006 to January 2009. In this Development Study, action plans for poverty alleviation and food security were prepared based on the results of the verification study (pilot projects) implemented for livelihood improvement in the rural area, soil and forest conservation etc. It was confirmed that especially, 1) promotion of paddy cultivation in the low marsh lands, 2) small-scale irrigation development in the hilly areas, 3) distribution of cows were effective for improvement of living standard in the rural area.

In accordance with the said Development Study, the Government of Republic of Rwanda (GoR) requested the Government of Japan (GoJ) to implement the Technical Cooperation for increasing crop production with

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quality extension service in the eastern province focusing on the promotion of paddy cultivation in the low marsh areas. In response to the request, JICA had dispatched the Detailed Planning Survey Team on December 2009, and decided framework of the Project based on the discussion with MINAGRI and counterpart agency of Bugesera and Ngoma District Offices. Then this technical cooperation project started from June 2010 for the period of three years.

2-2 Summary of the Project

The framework of the project was decided in the R/D signed on July 2, 2010. The Project was modified and agreed as PDM version 2 in the fourth Joint Coordinating Committee (JCC) on February 7, 2012. The Project summary described in PDM version 2 is as follows (For more details, see Annex 2).

(1) Overall Goal

Rice production is increased in Bugesera District and Ngoma District of the Eastern Province.

Benefit of horticultural crop production cooperative is increased in Bugesera District and Ngoma District of the Eastern Province.

(2) Project Purpose

Targeted rice production cooperatives increase production and horticultural crop production cooperatives increase benefits with quality extension services.

(3) Outputs

Output 0: Project implementation plan is confirmed with the finalized PDM, PO and necessary arrangements.

Output 1: Rice cultivation technique of farmers' organizations targeted by the Project is improved.

Output 2: Horticulture cultivation technique of farmers' organizations targeted by the Project is improved.

Output 3: Management capacity of farmers' organization targeted by the Project is improved.

Output 4: Local government officers, agronomist and other people / supporters engaged in agricultural extension in the targeted area provide quality services.

3. Achievements and Implementation Processes of the Project

During the Study, the performances of the Project including inputs, activities and outputs, as well as the implementation processes were reviewed to assess the degree of achievements, the results of which are described in the following:

3-1 Inputs

The Team has confirmed that the Project has availed the following inputs along with the plan stated in PDM and PO i.e. attached as Annex 3.

(1) Japanese side

1) Dispatch of experts to Rwanda

A cumulative total of 10 experts in the 12 fields of expertise such as Farmer's Organization Strengthening, Rice Cultivation, Horticulture Cultivation, Water Management, Post Harvesting, Marketing, Training, Gender and so forth, have been dispatched to the Project. The total duration of their assignments by the end of April 2013 has been about 98 man/months, the details of which are shown in the Annex 4.

2) Provision of machinery and equipment

Machinery and equipment of a total value equivalent to 24,909 U.S. Dollars have been provided for the Project activities. The list of these machinery and equipment are shown in Annex 5.

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3) Training of counterpart personnel in Japan and the third countries

So far, 4 counterpart personnel were dispatched to Japan and Kenya for training on the subjects relevant to the scope of the Project, such as “ Horticultural Crop Cultivation and Extension for Africa,” “ Lowland Rice Cultivation Techniques for Small Scale and Extension for Africa,” and so forth. It should also be noted that 2 agronomists hired by the Project have participated in the field training by the Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP-UP), i.e. a JICA technical cooperation implemented in Kenya. The details of these training of counterpart personnel are found in Annex 6.

4) Bearing of local costs

A total amount of 1,071,594 US Dollars has been provided to supplement a portion of operational expenses for the Project activities by the end of April 2013, as indicated in the following Table 3-1.

Table 3-1: Local Expenses borne by the Japanese Side (US Dollars)

Fiscal Year ^{(*)1}	2010	2011	2012	2013	Total
Local Expenses	245,891	508,545	317,158 ^{(*)2}		1,071,594

Note *1: Japanese Fiscal Year (April – March). Note *2: Figures are based on the accounts settled by the end of April 2013.
Source: Documents prepared by the Project

(2) Rwandan side

1) Appointment of the counterpart personnel

There have been a cumulative total of 73 counterpart personnel assigned to the Project: 24 from Ministry of Agriculture and Animal Resources (MINAGRI), 29 from Bugesera District and 20 from Ngoma District, including the members of JCC and Technical Committees (TC). A list of the counterpart personnel is found in Annex 7.

2) Provision of facilities

The necessary office spaces with office equipment, water and electricity had initially been provided for the Project at MINAGRI from October 2010 to March 2013. From March 2013, a new office space is provided at the RAB National Headquarters which currently serves as the Project Office. The district governments have also provided office spaces for the activities of the Project at each target district compound, and allotted land to establish the dry-yards and storehouses for the target cooperatives.

3-2 Achievement of the Outputs

The Project has implemented its activities as per the plan stipulated in the PDM and PO with approved modification made at the time of the Mid-term Review held in February 2012. The Team reviewed the performance of the Project including inputs and output indicators to measure the achievement of the Project purpose as well as the implementation processes of the Project, the results of which are described in the following:

(1) Output 1

Description	Achievement
Rice cultivation technique of farmers' organizations targeted by the Project is improved.	High
<i>Indicators:</i>	
1-1 For more than 9 targeted rice producing cooperatives, more than half members practice the learnt cultivation techniques.	High
1-2 For more than 9 targeted rice producing cooperatives, more than half members practice the learnt post harvesting techniques.	High

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Activities and achievements:

The activities for the output 1 have been conducted targeting a total of 18 cooperatives, i.e. 4 core cooperatives that are provided with direct assistance by the Project, and 14 satellite cooperatives in the vicinity of the core cooperatives, the representatives of which are invited to the training and to observe the activities undertaken at the core cooperatives, but without the direct intervention by the Project. The basic information of these target cooperatives are shown in the Table 3-2 below.

Table 3-2: List of the target cooperatives for rice component of the Project

District	Name of Cooperatives	Sector	Cultivated Area (ha.)	Membership		
				Total	Male	Female
CORE COOPERATIVES						
Bugesera	Jambere Nyarugenge	Nyarugenge	25	307	191	116
	Corinyaburiba	Ruhuha	52	491	268	223
Ngoma	Duhuzimbaraga	Kazo	22	86	47	39
	Coperige	Remera	75	400	250	150
SATELLITE COOPERATIVES						
Bugesera	Coprerim	Mwogo	105	20	14	6
	Koterwa	Mareba	96	704	357	347
	Corivarwi	Mareba	75	656	293	363
	Inkingi Y'ubuhinzi	Ruhuha	40	948	361	587
	Twizamure	Ruhuha	42	513	276	237
	Kopauki	Ruhuha	18	190	98	92
	Cogiriru	Shyara	108	626	302	324
	Kopatwieki	Ngeruka	32	350	184	216
Ngoma	Corimi	Sake	202	1,198	832	366
	Cocurigi	Rurenge	120	366	213	153
	Coprimwa	Rurenge	82	598	351	247
	Copamunya	Mutenderi	57	729	239	370
	Kigagarama	Kazo	85	771	501	270
	Cocurire	Remera	38	216	116	100

Source: Document Prepared by the Project

The Project organized at its initial stage an introductory group training and kick-off workshops in the target areas. Then the Project has conducted a series of training, seminars and workshops for the targeted rice cooperatives and relevant officers in the field. The major part of the training on rice cultivation and water management have been conducted through the series of Farmer Field School (FFS), which were divided into four sessions per one cropping season with a step-by-step approach, i.e. FFS 1 on nursery management, FFS 2 on transplanting and water management, FFS 3 on top dressing, and FFS 4 on harvesting and post harvest. (The detailed contents of the FFS are as shown in the Annex 8). These FFS sessions have so far been conducted for 72 times over three cropping seasons, i.e. 2012A, 2012B and 2013A, which was attended by a cumulative total of 3,869 participants, composed of 3,744 farmers from target cooperatives and 125 sector officers.

Aside from these FFS, the Project has also organized Study tours for the cooperative members, a rice seminar for RAB staff and district agronomists, and monitoring workshops to jointly review the performance of the production activities of the cooperatives.

Through these activities, the farmer members of the targeted cooperatives have improved their rice cultivation, water management and post harvest techniques. The Project have conducted a questionnaire survey to grasp the degree of application of the technology package of the Project that consists of 34 components from seed treatment to harvest, the result of which are summarized in the following Table 3-4 .

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Table 3-4: Application of the learnt rice cultivation techniques

District	Name of Cooperatives	Category	No. of respondents	% of application
Bugesera	Jambere Nyarugenge	Core	15	86.1
	Corinyaburiba		23	84.4
	Coprerim	Satellite	n.a. ^(*)	n.a. ^(*)
	Koterwa		16	89.7
	Corivarwi		19	93.3
	Inkingi Y'ubuhinzi		38	88.1
	Twizamure		18	90.1
	Kopauki		21	93.3
	Cogiriri		21	84.9
	Kopatwieki		24	88.7
	Sub-total		195	88.3
Ngoma	Duhuzimbaraga	Core	20	82.5
	Coperige		22	90.2
	Corimi	Satellite	32	91.3
	Cocurigi		24	94.5
	Coprimwa		24	93.1
	Copamunya		24	85.6
	Kigagara		22	84.4
	Cocurire		24	93.0
	Sub-total		192	89.6
Grand Total			387	88.9

Note *1: Due to the water problems, this cooperative had not so far been able to cultivate.

Source: Document prepared by the Project

The rate of application of learnt techniques ranges from 82.5% to 94.5%, with the average of 88.3% in Bugesera District and 89.6% in Ngoma District. It is therefore confirmed the target figure of the indicator 1-1 has already been achieved.

As for the post harvest techniques, the Project has organized training for the representatives of the cooperatives and sector agronomists through Training of Trainers (TOT) to enable the future dissemination of the practical rice post-harvest technologies to rice producing farmers in the target areas in general. Major contents of the training included the topics such as milled rice quality including the Rwandan Rice Standard, paddy quality, quality losses or deterioration, improvement of the paddy quality by farmer's good practice, and so forth. The Project has organized these training for 26 times, which were attended by a cumulative total of 783 participants, composed of 719 cooperative members and 64 sector officers. As the results, the post harvest treatment practices among the target cooperatives have been improved, which is reflected in the results of the aforementioned questionnaire survey on the application of these techniques as summarized in the following Table 3-5.

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Table 3-5: Application of the learnt post harvest techniques

District	Name of Cooperatives	Category	No. of respondents	% of application
Bugesera	Jambere Nyarugenge	Core	15	86.7
	Corinyaburiba		23	94.9
	Coperirim	Satellite	n.a. ^(*)	n.a. ^(*)
	Koterwa		16	84.4
	Corivarwi		19	83.3
	Inkingi Y'ubuhinzi		38	95.6
	Twizamure		18	90.7
	Kopauki		21	91.3
	Cogiriru		21	82.5
	Kopatwieki		24	91.7
Sub-total			195	89.9
Ngoma	Duhuzimbaraga	Core	20	92.5
	Coperige		22	78.8
	Corimi	Satellite	32	95.3
	Cocurigi		24	97.2
	Coprimwa		24	84.0
	Copamunya		24	100.0
	Kigagarama		22	87.1
	Cocurire		24	95.8
Sub-total			197	91.7
Grand Total			387	90.8

Note *1: Due to the water problems, this cooperative had not so far been able to cultivate.
Source: Document Prepared by the Project

The rate of application of the learnt techniques ranges from 78.8% to 100%, with the average of 89.9% in Bugesera District and 91.7% in Ngoma District, and aggregated average of 90.8%. It is therefore confirmed the target figure of the indicator 1-2 has also been achieved.

Based on the confirmation above, it is evaluated that the output 1 has properly been achieved.

(2) Output 2

Description	Achievement
Horticulture cultivation technique of farmers' organizations targeted by the Project is improved	High
<i>Indicator:</i> For more than 2/3 members of targeted core horticultural crop production cooperatives practice the learnt cultivation techniques.	High

Activities and achievements:

The activities for the output 2 have been conducted targeting a total of 43 cooperatives, i.e. 10 core cooperatives, and 33 satellite cooperatives as shown in the following Table 3-6. They are categorized into 3 batches, depending on the period of the Project intervention; the 1st batch from May 2011, the 2nd batch from December 2012, and the 3rd batch from April 2013.

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Table 3-6: List of the target cooperatives for horticulture component of the Project

Sl.	Name of Cooperatives	District	Sector	Category	Batch	Crops	Member Ship ^(*)
1	Kopubiga	Bugesera	Gashora	Core	1	Vegetables	150
2	Coparwe		Rweru	Core	1	Vegetables	21
3	Cocuabi		Mwogo	Core	1	Pineapple	25
4	Koaigr		Gashora	Satellite	1	Vegetables	124
5	Witinya		Rilima	Satellite	1	Vegetables	72
6	Kodeproae		Mayange	Satellite	1	Vegetables	104
7	Abakundamahoro		Rilima	Satellite	1	Pineapple	70
8	Kodubiju		Juru	Satellite	1	Pineapple	45
9	Coivi		Juru	Satellite	1	Pineapple	31
10	Kopizu		Nyamata	Satellite	1	Pineapple	70
11	Copaimwo		Mwogo	Core	2	Vegetables	25
12	Tutofaco		Mayange	Satellite	2	Vegetables	22
13	Abiru		Mwogo	Satellite	2	Vegetables	14
14	Ejo Heza		Nyamata	Satellite	2	Vegetables	32
15	Imperirwa Gutebuka		Nyamata	Satellite	2	Vegetables	58
16	Ingabo Ikingira Ubukene		Nyamata	Satellite	2	Vegetables	89
17	Kouabu		Nyamata	Satellite	2	Vegetables	52
18	Kotmar		Rilima	Satellite	2	Vegetables	56
19	Kotemu		Mareba	Core	3	Vegetables	56
20	Abahinzi b'imboga ba burenge		Kamabuye	Satellite	3	Vegetables	114
21	Kotwir		Ngeruka	Satellite	3	Vegetables	24
22	Kotaru		Ruhuha	Satellite	3	Vegetables	97
23	Terimbere		Ruhuha	Satellite	3	Vegetables	15
24	Imbaraga	Ngoma	Mutenderi	Core	1	Vegetables	147
25	Dukore		Zaza	Core	1	Vegetables	28
26	Korandebe		Karemba	Core	1	Pineapple	23
27	Abakundamahoro		Karemba	Satellite	1	Vegetables	75
28	Imiriremyiza		Mugesera	Satellite	1	Vegetables	56
29	Terimbere Mhinzi		Mutenderi	Satellite	1	Vegetables	15
30	Duhumurizanye		Rukumberi	Satellite	1	Vegetables	60
31	Koaika		Kazo	Satellite	1	Pineapple	48
32	Koabanamu		Mugesera	Satellite	1	Pineapple	183
33	Copanas		Sake	Satellite	1	Pineapple	484
34	Abunzubumwe		Zaza	Satellite	1	Pineapple	71
35	Turebekure		Murama	Core	2	Vegetables	65
36	Ibanga Ry'ubuhinzi Ubuworzi		Murama	Satellite	2	Vegetables	19
37	Kombak		Murama	Satellite	2	Vegetables	150
38	Tuzamurane		Rukira	Satellite	2	Vegetables	200
39	Tuzamurane Mahango		Kibungo	Core	3	Vegetables	12
40	Jyambere Rubyiruko		Mutenderi	Satellite	3	Vegetables	150
41	Twitwimbere Nyagisozi		Mutenderi	Satellite	3	Vegetables	30
42	Imbereheza Kibungo		Kibungo	Satellite	3	Vegetables	25
43	Abakoranamurava		Gashanda	Satellite	3	Vegetables	46

Note *1: At the time when they started working with the Project

Source: Document Prepared by the Project

Similar to the rice component, the Project has initially organized a series of kick-off meetings with a total of 37 representatives of the 1st batch of the cooperatives, and then conducted extensive training on horticulture cultivation techniques through FFS sessions over each cropping season, the detailed contents of which are shown in the Annex 9. These FFS sessions have so far been conducted for 74 times which was attended by a cumulative total of 2,056 participants, composed of 1,904 farmers from target cooperative, 97 sector officers, 28 RAB officers and 27 NAEB officers. Aside from these FFS session, the Project has also organized the study

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tours and post production training, which were attended by 146 participants.

Through these activities, the farmer members of the targeted cooperatives have improved their cultivation techniques. The Project have conducted a questionnaire survey to grasp the degree of application of the learnt technology by the core cooperatives, the result of which are summarized in the following Table 3-7.

Table 3-7: Application of the learnt techniques by the 1st batch of core horticulture cooperatives ^(*)

District	Name of Cooperatives	No. of respondents	% of application at the common plots	% of application at the individual plots
Bugesera	Kopubiga	100	100	76.6
	Coparwe	17	100	100
Ngoma	Dukore	20	100	73.4
	Imbaraga	23	97.1	72.0
Total		160	99.3	78.0

Note *1: Only the 1st batch of core cooperatives have experienced more than one year of production after the training by the Project, thus the 2nd and 3rd batch of core cooperatives are not covered in this survey.

Source: Document prepared by the Project

As for the common plots that cooperative members jointly cultivate, rate of application of techniques reach as high as 99.3%. The rate of application at the individual plots is 78.0%, understandably lower than application at the common plots, which still exceeds the target figure of the indicator 2-1.

It is thus confirmed that the output 2 has satisfactorily been achieved by the time of the Study.

(3) Output 3

Description	Achievement
Management capacity of farmers' organization targeted by the Project is improved.	High
<i>Indicators:</i>	
3-1 More than 5 targeted cooperatives is leveled up by at least one grade of Group Empowerment Level/GEL.	High
3-2 More than 50% of cooperative members are satisfied with equal water distribution.	High
3-3 More than 2/3 targeted core horticulture production cooperatives formulate sales plans	High

Activities and achievements:

Along with the improvement of the cultivation techniques of rice and horticulture crops, the Project has also supported the target cooperatives in their organizational and management capacities. As for the organizational strengthening and gender mainstreaming, the Project has conducted the TOT for the district/sector officers for 45 times, the participants of which have then served as the trainers / lectures in the training for the cooperative members. The general training for the cooperative members was designed in accordance with the rules and regulations set by Rwanda Cooperative Agency (RCA), composed of the topics such as cooperative management, leadership, accounting, business plan formulation, auditing and inspections, and gender mainstreaming. The Project has organized these training for all of the target cooperatives with a cumulative total of 14,741 participants. Aside from these general training, additional training on accounting and business plan formulation for selected officials such as board members of the 10 core cooperatives have been organized.

For the horticulture cooperatives, the Project has provided training on marketing, which is composed of three programs, i.e. kick-off meetings, basic marketing skill training, participatory market survey workshops and matching meetings. In addition, the Project has also organized TOT for value chain officers of NAEB, the participants of which have served as trainers in the training in the later course of Project implementation. The Table 3-8 below summarizes the training on marketing for horticultural cooperatives by the end of May 2013.]

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Table 3-8: Training on marketing for horticulture cooperatives

Training	No. of sessions	No. of participants			
		Coop. members	Sector officers	Market stake-holders	Total
Kick-off meeting	6	88	6		94
Basic marketing skills	14	403	14		417
Participatory market survey workshop	8	313	39		352
Matching meeting	7	289	61	318	669
Sub-total	35	1,094	120	318	1,532
TOT for NAEB value chain officers	2		34		34
Grand Total	37	1,094	154	318	1,566

Source: Document Prepared by the Project

As the results of these training and involvement in the Project activities, management and organizational capacities of the target cooperatives have been enhanced. To measure the capacity development, the Project improvise a measurement called as Group Empowerment Level (GEL), which looks into the aspects of (a) Leadership, (b) Collaboration, (c) Gender, (d) Accounting, and overall performance of the organization with the rating scale from 0 to 5. In the aspect of accounting for example, book keeping is not done and cooperative members do not have accounting skill at the level 1, while income and expenditure are recorded properly at the level 2, and Profit of cooperative is calculated and recorded properly at the level 3 (the detailed definitions of GEL is indicated in Annex 10). The latest GEL assessment was conducted in May 2013, the results of which are shown in the Table 3-9 below.

Table 3-9: Result of the GEL assessment

Category	District	Name of Cooperatives	Crop	GEL before the Project ^(*)					GEL in the 3 rd year of the Project				
				Overall	(a)	(b)	(c)	(d)	Overall	(a)	(b)	(c)	(d)
Core	Bugesera	Jambere	Rice	2	2	2	2	1	3.5	4	3.5	4	3
		Nyarugenge		3	4	3	3	3	4	4	4	4	4
		Corinyaburiba	Vegetables	3	4	4	4	1	4	4	3	5	4
		Kopubiga		3	4	4	3	2	3.75	3.5	4	4	3
		Coparwe		3	4	3	4	2	4	4	4	5	4
	Cocuabi	Pineapple	2	2	2	3	2	4	4	4	4	4	
	Ngoma	Coperige	Rice	3	2	3	3	2	4	4	5	4	4
		Duhuzimbaraga		3	4	4	4	1	4	4	3	4	3
		Dukore	Vegetables	2	4	4	4	1	3	4	3	5	2
		Imbaraga		3	4	3	4	2	4	4	4	5	4
Korandebe		Pineapple		2	2	2	2	1	3	3	3	4	3
Satellite	Bugesera	Coperim	Rice	3	3	2	2	3	4	4	3	4	4
		Koterwa		2	1	2	3	1	4	4	3	4	5
		Corivarwi		2	2	2	3	2	3	3	3	4	3
		Inkingi		3	3	3	3	2	4	4	4	4	2
		Y'ubuhinzi		2	1	3	4	1	3	3	4	4	3
		Twizamure		2	2	2	1	1	4	3.5	4	4.5	3
		Kopauki		1	1	2	2	1	2	3	3	3	3
		Cogiriru		2.5	4	2.5	3	2.5	4.5	4.5	5	5	4
		Kopatwieki		2	2	4	1	1	4	4	5	3	2
		Wintinya		1	2	1	1	1	3	4	4	4	3
	Ngoma	Abakundamahoro	Pineapple	2	1	2	3	1	3	3	3	4	2
		Kopizu	Rice	2	2	4	4	1	3	3	4	4	2
		Copamunya		3	3	4	3	2	3.5	4	4	3	2
		Imiriremyiza	Vegetables	1	1	1	1	0.5	4	4	3	4	4
		Kodeproae		2	2	2	3	1	3	3	4	4	3
		Abakundamahoro		2	3	4	4	1	3	4	4	5	3
		Terimberemuhinzi	Pineapple	1	1	2	1	1	3	3	2	4	2
		Koaika		2	2	2	2	2	3	3	3	4	3
Abunzumbumwe		1	1	2	1	1	3	3	2	4	2		
Average				2.2	2.5	2.7	2.8	1.5	3.5	3.7	3.7	4.1	3.1

Note *1: The assessment was conducted in February 2011, and the baseline date were retrospectively gathered at that time.

Source: Document Prepared by the Project

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Out of the total of 28 target cooperative from which the GEL assessment data are obtained by the time of the Study, the GEL of the 25 cooperatives (89.3%) have leveled up 1 point or more. Their overall GEL increased by 1.3 point on average and notably higher degree of improvement is observed in the accounting capacity. It is confirmed that the indicator 3-1 on the GEL has properly been achieved.

As the indicator to measure the improvement of organizational management among the rice cooperatives, members' satisfaction in terms of equal water distribution is looked at. The Project have conducted interviews to the cooperative presidents and association leaders in April 2013, and found that in 14 out of 18 rice cooperatives, i.e. about 78%, the cases of conflicts among members due to the water distribution have been decreased, with introduction of rotation system, compared to the time before the Project intervention. Although concrete final assessment by the general members is yet to be conducted before the termination of the Project, it is generally assumed that more than 50% of the rice cooperative members also appreciate the improvement of water distribution, thus the indicator 3-2 would quite likely be achieved.

In terms of the organizational capacity of the horticulture cooperatives, the Project has emphasized market oriented approach and encouraged the target cooperatives to engage in the cultivation based on the marketing survey and planning in accordance with the market demands. In the series of marketing training, leaders and members of the target cooperatives have learnt how to analyze the situation and problems, to select the target crops as well as the timing of production with higher sales potentials, and to formulate the production calendar that incorporates all of those concerns. So far, all of the 43 target cooperatives have duly prepared their "cooperative action plan", which is composed of situation and problem analysis, "crop selection sheet" and crop calendar in each cultivation season.

With confirmation on these indicators above, it is assessed that the output 3 has mostly been achieved.

(4) Output 4

Description	Achievement
Local government officers, agronomist and other people / supporters engaged in agricultural extension in the targeted area provide quality services.	High
<i>Indicators:</i>	
4-1 More than 70% of District/Sector officers practice more than 60% of what they learned by the Project.	High
4-2 More than 80% of Agronomists hired by the target cooperatives practice more than 80% of what they learned by the Project.	High
4-3 RAB and NAEB staff understand more than 50% of what they learned by the Project.	High
4-4 All Agronomists hired by the Project practice more than 90% of what they learned by the Project.	High
4-5 PiCROPP extension package is formulated.	High

Activities and achievements:

Along with the activities mentioned in the previous sections to achieve the output 1, 2, and 3, the Project has mobilized the relevant government staff as well as other supporters engaged in agricultural extension to involve them in the Project activities. As for the marketing, organizational strengthening and gender training for cooperative members, the Project has organized TOT to foster the capacities of the value chain officers of NAEB stationed at district levels, district agronomists, cooperative development officers and gender officers, Sector agronomists and cooperative development officers.

The degree of utilization of the learning by the district / sector officer is examined through the questionnaire survey in May 2013. In total, about 80% of the officers against the target of 70% are practicing what they have learnt from the Project, as shown in the Table 3-10 below, thus the indicator 4-1 have already been achieved.

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Table 3-10: Utilization of the learning by district / sector officers

Project Component	No. of respondents	Respondents who practice more than 60% of the learning	
		No.	%
Rice	13	12	92.3
Horticulture (Production & Marketing)	27	21	77.8
Organizational strengthening & gender mainstreaming	42	32	76.2
Total	82	65	79.3

Source: Document Prepared by the Project

There are several agronomists hired by the target rice cooperatives, who have also been participated in the rice cultivation training conducted by the Project. The Project interviewed 4 of these agronomists to grasp the degree of utilization of the learning by them. All of them (100%) have practiced the 32 out of the 35 rice cultivation techniques (91%), while the remaining 3 techniques are not applied by one each of these agronomists.

The Project also gathered information on the understanding among the RAB and NAEB officers who have participated in the training of the Project. As indicated in the following Table 3-11, all participating officers from RAB and NAEB responded that they understands more than 50% of the learning, thus it is confirmed that the indicator 4-3 is assessed has been achieved.

Table 3-11: Understanding on the learning among RAB / NAEB officers

Project Component	No. of respondents	Respondents who understand more than 50% of the learning		Remarks
		No.	%	
Rice	5	5	100.0	RAB officers only
Horticulture	5	5	100.0	Both RAB and NAEB officers
Marketing	2	2	100.0	
Total	12	12	100.0	

Source: Document Prepared by the Project

In order to facilitate the field activities of the Project related to the cultivation techniques, the Project has hired 10 agronomists, i.e. 5 each for rice and horticulture component, who have worked closely with the Japanese experts and target cooperatives. In the interview by the Project, all of these agronomists (100%) responded that they have been practicing more than 90% of what they have learnt from the Project in their daily activities, hence the indicator 4-4 has properly been achieved.

As to the indicator 4-5, a draft of "PiCROPP extension package" has already been formulated, which is currently in the final stage of compilation with extensive discussion among relevant stakeholders and authorities concerned. There will be separate extension packages for rice and for horticulture crops, both of which include the training materials and comprehensive explanatory flow chart of activities to be undertaken with clear demarcation of responsibilities among all relevant stakeholders. It is anticipated that these packages would adequately be finalized and then provided to the relevant institutions for their future utilization.

With confirmation on these indicators above, it is expected that the output 4 would duly be achieved by the end of the Project.

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4-3 Achievement of the Project Purpose

Description	Achievement
Targeted rice production cooperatives increase production and horticultural crop production cooperatives increase benefits with quality extension services	High
<i>Indicators:</i>	
1. More than 50% of targeted rice production cooperatives increase their yields by 10% in Bugesera District.	High
2. More than 50% of targeted rice production cooperatives increase their yields by 15% in Ngoma District.	High
3. More than 2/3 of targeted core horticulture crop production cooperatives increase their benefit by 15%.	High

Achievements:

As for the increase of yield performances of rice, i.e. indicators 1 and 2, the Project has conducted the yield evaluation study in the target rice cooperatives, the results of which are summarized in the following Table 3-11.

Table 3-11: Summary of Yields Performance in Target Rice Cooperatives

District	Name of Cooperatives	Category	Baseline		2012A		2012B		2013A	
			2010A Yield (ton/ha)	2010B Yield (ton/ha)	Yield (ton/ha)	Increase against baseline (%)	Yield (ton/ha)	Increase against baseline (%)	Yield (ton/ha)	Increase against baseline (%)
Bugesera (*1)	Jambere Nyarugenge	Core	2.6	3.9	7.1	173.1	6.0	53.8	6.4	146.2
	Corinyaburiba		7.0	4.0	6.8	-2.9	7.1	77.5	7.7	10.0
	Koterwa	Satellite	6.5	7.5	5.9	-9.2	5.9	-21.3	8.0	23.1
	Corivarwi		6.5	8.0	5.8	-10.8	4.3	-46.3	7.8	20.0
	Inkingi Y'ubuhinzi		7.0	8.0	5.3	-24.3	8.9	11.3	6.2	-11.4
	Twizamure		4.0	5.0	4.8	20.0	6.5	30.0	5.9	47.5
	Kopauki		4.0	5.0	5.3	32.5	4.2	-16.0	6.4	60.0
	Cogiriru		6.0	8.0	5.8	-3.3	5.8	-27.5	8.3	38.3
	Kopatwieki		2.9	6.3	7.6	162.1	4.2	-33.3	4.7	62.1
Average in Bugesera			5.2	6.2	6.0	17.0	5.9	-5.0	6.8	32.0
Ngoma	Duhuzimbaraga	Core	5.5	6.0	4.9	-10.9	6.3	5.0	6.7	21.8
	Coperige		4.0	5.8	6.0	50.0	7.4	27.6	7.9	97.5
	Corimi	Satellite	5.3	4.9	5.3	0.0	6.4	30.6	6.6	24.5
	Cocurigi		4.5	4.0	5.5	22.2	8.3	107.5	8.3	84.4
	Coprimwa		4.0	3.5	8.6	115.0	6.3	80.0	6.6	65.0
	Copamunya		6.0	6.0	3.9	-35.0	6.9	15.0	6.1	1.7
	Kigagarama		4.5	3.5	4.8	6.7	7.2	105.7	6.5	44.4
	Cocurire		4.0	3.5	6.0	50.0	7.6	117.1	7.1	77.5
Average in Ngoma			4.7	4.7	5.6	19.0	7.1	51.6	7.0	47.6
Average Total			4.9	5.4	5.8	18.0	6.5	19.3	6.9	39.5

Note *1: In one of the satellite cooperative, i.e. Copeirm, farmers could not cultivate rice for these three seasons, which is not included in this calculation.

Source: Document prepared by the Project

In Bugesera District, in both 1st and 2nd cropping seasons (2012 A and B), only 4 among 9 target cooperatives (44%) could achieved the target increase, i.e. more than 10%. In the 3rd cropping season (2013A), however, 7 cooperatives (78%) could achieve the targeted increase. In Ngoma District, only 4 out of the 8 cooperatives (50%) could achieve the target increase i.e. 15% in 2012A season, but, their yield performances have been improved in 2012B and 2013A, when 7 cooperatives (88 %) could achieve the target increase. This gradual improvement may be attributed to the general tendency of the farmers that they hesitated to apply the new techniques in their farmlands for the first time, and that they gradually accept them once they are convinced with usefulness of the new techniques, for example, by means of the demonstration farms.

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As for the increased benefit from horticulture production among the targeted cooperatives, the net income of the 1st batch of core cooperatives for the period June 2012 to May 2013 is compared with the baseline figures for the period from June 2010 to May 2011, as presented in the Table 3-12 below. It should be noted that the analysis is limited to the 1st batch of core cooperatives, because the impact of Project intervention may not yet be observed in the 2nd and 3rd batch of cooperatives.

Table 3-12: Increase of the net income of core horticulture cooperatives

Name of cooperatives	Crop	Baseline net income for Jun. 2010-May 2011 (RWF)	Net income for Jun. 2012 – May 2013 (RWF)	Increase against the baseline (%)
Coparse	Vegetables	68,100	3,439,450	4,951
Kopubiga		3,305,000	4,572,800	38
Dukere		227,800	655,750	188
Imbaraga		48,750	152,240	212
Cocuabi	Pineapple (*1)	-110,000	290,270	364
Korendebe		-5,609,600	680,620	112
Average		-2,069,950	9,791,130	573

Note *1: This perennial crop needs to be re-planted in every 4 years, and does not bear fruits in the 1st year, which brings considerable fluctuations of income. As Korendebe started planting in the baseline year, their net income was on the minus account.

Source: Document prepared by the Project

All of the 1st batch of the core cooperatives have achieved increase of benefit much more than 15%. Some extraordinarily high rate of increase may be attributed to the performances of the cooperatives whose baseline net income was on minus accounts. Although fluctuations of the annual net income have been observed, gradual but steady trend of improvement have been recognized and confirmed in terms of increase of yield performance per unit areas and reduction of production costs, which positively contributes to the increase of benefits .

With confirmation on the achievement of the indicators above, the Team assured that the Project purpose would satisfactorily be attained by the end of the cooperation period.

3-4 Prospects of Achievement of the Overall Goal

Description	Prospect of Achievement
Rice production is increased in Bugesera District and Ngoma District of the Eastern Province. Benefit of horticultural crop production cooperative is increased in Bugesera District and Ngoma District of the Eastern Province	Moderate
<i>Indicators:</i> Rice: Production in Bugesera District and Ngoma District is increased by 15%. Horticultural crops: Benefit of more than 2/3 of target cooperatives in Bugesera District and Ngoma District is increased by more than 30%.	Moderate

As for the overall goal on rice production, the Team could not obtain liable district-wise statistical data during the Study, thus relied a rough estimation based on the actual performance of the target cooperatives during the Project period. As examined in the previous section, all of the target rice cooperatives of the Project have increased their production by more than 10% and 15% in Bugesera district and Ngoma district, respectively. On the annual average over 2012B and 2013A seasons, the mean rate of increase is 28.9%, with 11.8% in Bugesera and 49.6% in Ngoma district, as indicated in the following Table 3-13. As the yield performances in season A tend to be less than in season B, the Team also tried to compare the yield in 2012A and 2013A with the 2010A baseline, and the mean rates of increase is 26.2%, with 20.5% in Bugesera and 33.3% in Ngoma district as indicated in the Table 3-14 below.

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Table 3-13: Increase of annual yield among the target rice cooperatives

District	Baseline			2012B		2013A		Annual average	
	2010A Yield (ton/ha)	2010B Yield (ton/ha)	Annual average	Yield (ton/ha)	Increase against baseline (%)	Yield (ton/ha)	Increase against baseline (%)	Yield (ton/ha)	Increase against baseline (%)
Bugesera	5.2	6.2	5.7	5.9	-5.0	6.8	32.0	6.4	11.8
Ngoma	4.7	4.7	4.2	7.1	51.6	7.0	47.6	7.0	49.6
Average	4.9	5.4	5.2	6.5	19.3	6.9	39.5	6.7	28.9

Source: Re-calculation of the figures in Table 3-11

Table 3-14: Increase of yield in Season A among the target rice cooperatives

District	Baseline 2010A Yield (ton/ha)	2012A		2013A		Average in Season A	
		Yield (ton/ha)	Increase against baseline (%)	Yield (ton/ha)	Increase against baseline (%)	Yield (ton/ha)	Increase against baseline (%)
Bugesera	5.2	6.0	17.0	6.8	32.0	6.4	20.5
Ngoma	4.7	5.6	19.0	7.0	47.6	6.3	33.3
Average	4.9	5.8	18.0	6.9	39.5	6.4	26.2

Source: Re-calculation of the figures in Table 3-11

Based on the experiences of these target cooperatives during the Project, it is generally assumed that the overall goal is achievable, if the similar technical as well as organizational supports would be provided to the other rice producing cooperatives in the target districts.

As for the horticulture cooperatives, the target indicator is set on the increased benefits of the target cooperatives including the satellite cooperatives. The data on the trend of the net income of the horticulture cooperatives are summarized in the following Table 3-15. It should again be noted that the analysis is limited to the 1st batch of core cooperatives, because the impact of Project intervention may not yet be observed in the 2nd and 3rd batch of cooperatives.

Table 3-15: Increase of the net income of target horticulture cooperatives

Crops	District	Name of cooperatives	Baseline net income for Jun 2010 -May 2011 (RWF)	Net income for Jun 2012 - May 2013 (RWF)	Increase against the baseline (%)
Vegetables	Bugesera	Coparse	68,100	3,439,450	4,951
		Kopubiga	3,305,000	4,572,800	38
		Kodeproae	-3,500	706,000	20,271
		Koaigr	7,000,000	500,000	-93
		Witinya	-618,280	227,300	137
	Ngoma	Dukere	227,800	655,750	188
		Imbaraga	48,750	152,240	212
		Duhumurizanye	130,250	72,000	26
		Kundumurimo	23,200	290,000	421
		Duterimbere	15,000	71,000	-27
		Impabara Assoc	31,000	141,600	162
		Abakundamahoro	293,500	621,800	83
		Terimberemuhinzi	14,000	98,860	2
Vegetable coop. average			2,177,499	1,784,670	-18.0
Pineapple (*1)	Bugesera	Cocuabi	-110,000	290,270	364
		Coivi	0	337,000	2,507
		Kodubiju	-286,900	970,000	2,556
		Abakundamahoro	33,000	200,000	50
	Ngoma	Kopizu	-30,000	150,000	400
		Korendebe	-5,609,600	680,620	112
		Copanasa	0	3,122,160	71
		Koabanamu	2,700,000	18,000,000	260
		Koaika	75,000	186,000	17
	Pineapple coop. average			-807,125	5,984,013
Total Average			685,187	3,884,341	466.9

Note *1: Several cooperatives reported no income or the minus accounts at baseline, which is attributed to the nature of production of this perennial crop that needs to be re-planted in every 4 years, and does not bear fruits in the 1st year.

Source: Document prepared by the Project

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Although there are cooperatives whose net incomes at in the latest year are less than those in the baseline year, there have been a general trend of considerable increase in the net income of these cooperatives. In total, 17 out of 22 horticulture cooperatives of the 1st batch (77.3%) have already achieved the increase of more than 30%. Nonetheless, it is still questionable at this stage whether the similar trend would continuously be observed in these cooperatives, or may be observed even in the 2nd and the 3rd batch of target cooperatives.

As far as these figures derived from the performance of the target cooperatives of the Project are concerned, the possibility of achieving the overall goal seems to be fair enough, but with the condition that continuous guidance would be provided, and similar interventions will be extended to other rice cooperatives in the target districts. Concrete modality to render continuous support to the cooperatives in the target districts by the relevant institutions after the completion of the Project has not yet been identified or agreed upon at the time of the Study, which casts some uncertainty in the feasibility of these estimations above. Therefore, the Team assessed that the prospect of attainment of the overall goal is moderate.

3-5 Implementation Processes of the Project

(1) Decision making and monitoring mechanism

The JCC, which is the decision-making authority of the Project, has so far been held 5 times to review the progress of Project activities, to endorse the plans for the upcoming period, and to make decisions on the issues related to the Project implementation. Initially, the Project has also established the Technical Committee in each district as the platform to monitor the activities at field level and to discuss the operational issues in support of the Project implementation, which is composed of district mayors, district / sector agronomists, cooperative development officers and gender officers. But the Team regret that the TC have not been functional after the first year of the Project, due to various difficulties such as relatively short and intermitted assignments of the Japanese experts, involvement of personnel from different command lines, availability of ever multi-tasked technical staff at local level, and so forth, which has somewhat weakened the monitoring functions at the field level, although it did not create crucial problems in the overall implementation of the Project.

(2) Communication among the relevant stakeholders of the Project

Despite of the scattered locations of the target cooperatives across two districts, the Project has been able to communicate well with respective district and sector technical staff as well as the counterpart personnel at RAB and NAEB head offices in Kigali. During the interviews, the counterpart personnel acknowledged with appreciation the efforts made by the Japanese experts in their respective fields to keep them informed about the Project activities in the field. It should be noted that the Project also took into account the importance of making arrangement in advance to ensure the involvement of the Project personnel in the activities of the respective components of the Project. Interviewed counterpart personnel reported to the Team that they had little problems in their working together with Japanese experts, because of the planning and scheduling of activities upon prior consultations.

3-6 Measures taken to address the Recommendations made at the Mid-term Review

At the time of the Mid-term Review conducted in February 2012, there were 7 issues raised as recommendations for the Project to address in order to ensure smooth and effective implementation of the Project activities for the rest of the cooperation period, encompassing from technical to managerial aspects of the Project. The Team confirmed that the Project has made efforts to take various measures to respond to these recommendations, the details of which are shown in the Annex 11.

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4. Results of the Evaluation based on the Five Criteria

Through the Study, the relevance, effectiveness, efficiency, impact and sustainability of the Project were assessed, the major findings of which are described in the section below.

4-1 Relevance

The relevance of the Project is evaluated as high based on the following confirmations:

(1) Relevance to the development policies and sector programs of GoR

In the Rwanda Vision 2020, the overall, medium and long-term framework of the national development, “Productive high value and market oriented agriculture” is regarded as one of the development pillars of the country. The Economic Development and Poverty Reduction Strategy (EDPRS: 2008-2012) as well as the Strategic Plan for the Transformation of Agriculture in Rwanda - Phase II (PSTA II: 2009-2012) have been formulated, both of which emphasize the importance of intensification of sustainable production systems, technical and organizational capacity building of farmers, promotion of commodity chains and agribusiness, and strengthening the institutional framework of the sector at central and local level. There has not been any notable change in these major thrusts of agricultural development which are still relevant to the scope of the Project. The rice component of the Project also support the policy directions stipulated in the National Rice Development Strategy (NRDS) formulated in 2011 that aims to attain self-sufficiency in rice production by 2018. The Project is thus considered to be very much consistent with these policy directions of GoR.

(2) Consistency with the ODA policies of GoJ

In the Country Assistance Policy for the Republic of Rwanda of GoJ formulated in April 2012, agricultural development is set as one of its four priority areas. Also, GoJ has continued its commitment to support the initiatives to increase rice production in Africa within the framework of the Coalition for African Rice Development (CARD). Accordingly, the current Rolling Plan puts its emphasis on the promotion of market oriented and value added agriculture, with the program for Promotion of Value Added Agriculture and Business, and the Project is recognized as one of the centerpieces of the program. From these viewpoints, it is assessed that the relevance of the Project to the Japanese aid policies is secured.

(3) Relevance to the needs of target beneficiaries

Although the beneficiary smallholders in the target area have had experiences in cultivation of rice and horticulture crops, most of them had not been given much opportunities to learn about improved cultivation techniques. Especially for the horticulture crop producing cooperatives, the market oriented approach of the Project has been a totally new perspectives, and they have found it very beneficial. The district and sector agronomists, cooperative development officers as well as the officers of RAB and NAEB appreciate the intensive and practical training at the field level to be more effective in comparisoned with the conventional method of technical dissemination under their regular programs. It is therefore understood that the contents and focus of the Project have adequately addressed the needs of the beneficiaries.

4-2 Effectiveness

The effectiveness of the Project is assessed as high though the following observation:

(1) Achievement of the Project purpose

The Project purpose is to increase the production by the rice producing cooperatives and the benefits of horticulture crop producing cooperatives. Through the training activities of the Project on cultivation techniques, marketing, and organizational management, application of improved techniques and fair increase of yield of rice as well as the increased benefits of the horticulture cooperatives have been reported from the

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target areas of the Project, and the Project purpose would satisfactorily be achieved by the end of the cooperation period.

(2) Contribution of outputs to the achievement of the Project purpose

The Project purpose is two-fold, namely, to increase the production by the rice producing cooperatives, and to increase the benefits of horticulture crop producing cooperatives. The improvement of rice cultivation technique, i.e. output 1, is mainly for the former part of the Project purpose, while the improvement of horticulture cultivation technique with marketing knowledge and skills, i.e. output 2, is to address the latter part. Technical enhancement through these two outputs is further to be ensured through strengthening the organizational capacities of these target cooperatives, which is addressed by the output 3. As it is stipulated that the improvement of the performances of the target cooperatives is to be attained through the quality extension services, assurance of quality extension service by the service providers and supporters is set as another essential part of the Project, i.e. incorporated in the design of the Project as the output 4. With confirmation on due achievements of these outputs as described in the previous section, the Team considers that all of these outputs has adequately contributed to the achievement of the Project purpose and that the logical sequence between the outputs and Project purpose is appropriate.

(3) Analysis of factors

1) Promoting factors

With the restructuring of MINAGRI that took place in 2011, the value chain officers of NAEB are newly attached to the district level, mandated to deal with various responsibilities of NAEB related to the horticultural production and marketing within the areas of their jurisdiction. Since then, the value chain officers in the target districts have closely worked with the Project. Their involvement was vital to the Project especially for marketing aspects of the horticulture component, as it was practically difficult for the officers from NAEB head office to take part in the Project activities. The value chain officers have become one of the important target of the TOT, and could serve as trainers and facilitators in marketing training, participatory market survey workshops, and matching meeting. These roles are essential for not only for the implementation of the Project activities but also in view of future sustainability, the assignment and involvement of the value chain officer should be appreciated as a promoting factor to the Project.

2) Hampering factors

Initially, the Project was planning to introduce rice processing technologies to the target rice cooperatives, aiming to improve the quality of the produce as well as to facilitate better income for them. However, the Instruction of the Ministry of Trade and Industry (No.19 of November 3rd, 2012) on Rice Processing and Trade allows only the registered millers to process the paddy, limiting the possibility of rice processing activities by the cooperatives. Although this directive did not critically “hamper” the Project because the Project then had not yet conducted the post-harvest training, neither had provided any substantial assistance related to the processing, it is still to be noted that the change of the policy had required the Project to re-design the contents of the post harvest training to a certain extent.

(4) Important assumptions

There has not been any notable influence caused by the changes of the important assumptions.

4-3 Efficiency

The efficiency of the Project is assessed as fair, based on the following examinations:

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(1) Japanese experts

The Japanese experts in the relevant fields of expertise have properly played their expected roles in the course of the implementation of the Project, which have been appreciated by the counterpart personnel as well as by the members of the target cooperatives. However, some Project personnel regret that the assignment of the Japanese experts has generally been short at a time and intermitted, thus it has relatively been difficult for them to work as one cohesive team with mutual sharing and consultation, which might have affected in terms of linkage among the different components of the Project.

(2) Machinery and equipment

The machinery and equipment required for the Project activities and technical transfer have duly been provided and kept in good conditions. These machinery and equipment are fully utilized in training, regular monitoring activities and management of the Project.

(3) Training of the counterpart personnel in Japan and the third country

Those who have attended the overseas training under the arrangement of the Project generally assess that the timing, duration and subjects of these training were adequate. The ex-training participants unanimously appreciate that their learning from the training were very useful and reported that they have applied them in carrying out both the activities of the Project and the regular activities of their responsibilities. As these training participants obtained the basis for comparison between the farming conditions of Japan and Rwanda, they could provide useful insights to Japanese experts, especially in selecting the horticulture crop cultivation techniques to be disseminated.

(4) Inputs from the Rwandan side

The counterpart personnel were assigned from MINAGRI, RAB, NAEB and respective districts to participate in the Project activities. It should not be denied, however, that the degree of their involvement has by any means been limited, although the problem has been the given condition in the existing organizational setup. The allocation of limited number of officers and their multiple responsibilities made it difficult for the Project to mobilize the full participation of the counterpart personnel both at RAB and NAEB, as well as at the district and sectors, particularly in the Project activities at the field level.

The provision of the office spaces with basic equipment and facilities for the Project, initially at MINAGRI and then at RAB, has contributed to the smooth management of the Project, while those in the target districts have facilitated the field operations of the Project personnel to be efficient.

(5) Approach and coverage of the Project activities

The Project has applied a cascade approach in their field activities: the “core cooperatives” are provided with direct support and close monitoring by the Project, which serve as a venue for training and demonstration site for the “satellite cooperatives,” i.e. several cooperatives per one core cooperative, selected from the vicinity of the core cooperatives, the representatives of which are invited to the training and to observe the activities undertaken at the core cooperatives, but without the direct guidance from the Project. By applying this mechanism, the Project could reach a number of cooperatives at a time, which has contributed to the efficient operation of the activities of the Project.

Not a small number of interviewed stakeholders, however, still expressed their feelings that the coverage of the Project should have been wider. They appreciate the tangible and notable degree of improvement observed among the target cooperatives of the Project, which, however in their opinions, was unfortunately too concentrated on the limited number of beneficiaries against the entire target population.

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4-4 Impact

It is assessed that the Project would bring about high and positive impacts, in view of the following aspects:

(1) Impact on the overall goal level

As examined in the previous section, both technical and organizational capacities of the target cooperatives have been improved, with the involvement of the relevant officers from districts, sectors, RAB and NAEB in the Project. The rice production and benefits from horticulture production have been increased in both core and satellite cooperatives. They would be able to continue their activities and even to disseminate their experiences to the other farmers in the vicinities. Therefore, positive impacts of the Project are anticipated on the attainment of the overall goal, given that the necessary interventions for further dissemination and scale up of achievements of the Project would continuously be extended through the future efforts by GoR.

(2) Positive impacts

With increased production and better facilitation with local markets, the members of the target cooperatives, both the rice and horticulture producing cooperative, can earn more income, which have brought about tangible improvement in their livelihood and household economy. During the interviews, the Team was informed that some farmers could renovate the house; that they no longer face difficulties to pay school fees of children; and that some can even purchase additional piece of land to cultivate. Aside from those direct and tangible benefits, social and behavioral changes were also noted by the beneficiaries such as increased trust among the members, mutually beneficial linkage with traders, closer and better relationship with sector officers, and favorable recognition by and increased supports from local authorities, which should also be noted as a part of positive impacts derived from the implementation of the Project.

There have also been ripple effects reported by the traders who participated in the matching meetings organized by the Project. According to the results of the follow-up survey conducted by the Project in April 2013, about 60% of the ex-participant traders have actually had business with the cooperatives whom they met at the matching meeting, and nearly 90% among them have continuously been having business with the same cooperatives afterward.

(3) Negative impacts

There has not been any negative impact of notable degree observed or reported during the Study.

4-5 Sustainability

The sustainability of the Project is assessed as moderate, because the Team could expect high sustainability in some aspects, but some other aspects need further reinforcement, as described in the following:

(1) Policy and institutional sustainability

The Project is implemented in line with the current national development plan and agricultural sector programs of the GoR, such as EDPRS, PSTA-II, and NRDS. Although the former two policies have come to the end of planned period, the succeeding plans and programs, i.e. EDPRS-II and PSTA-III, have currently been drafted, without any drastic shift of priorities that may be contradictory to the directions of the Project. In view of those policies, it is assumed that the policy support would continuously be secured for the coming years. As to the institutional aspects, RAB and NAEB are the due functionaries of MINAGRI on crop production and promotion of commodities for export, including the horticultural crops. The activities of the Project have been carried out in line with their mandates, thus the institutional sustainability is also assessed as high.

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(2) Organizational and Financial sustainability

It has generally been observed that both human and financial resources allocated by the GoR for the agricultural extension at the field level have still been very much limited. Although the PiCROPP extension packages are being designed to be financially efficient by limiting the external inputs and maximizing the beneficiaries' contributions, the interventions after the Project by MINAGRI and district governments would inevitably be of much smaller scale than the Project inputs. It is necessary for the relevant officers to further try out the implementation of the proposed extension packages under the existing conditions by their own to further examine their applicability to their context. Therefore the Team observes that the organizational and financial sustainability for the part of the implementing agencies has not yet been secured, and it would also depend on the way how the agricultural extension, including the recent approach of "proximity extension," which mobilizes progressive farmers as "farmer promoters", could effectively be institutionalized.

On the other hand, the target cooperatives have improved their technical and organizational management capacities through intensive involvement in the Project activities. With better income from improved production techniques, improved financial and accounting skills, and would continue or even further promote the activities of the cooperatives in the future. It is thus considered that the organizational and financial sustainability at the level of target cooperatives would be secured to a certain extent.

(3) Technical sustainability

The rice and horticulture crop cultivation techniques introduced by the Project are the basic techniques that have been proven to bring positive results in the productivity, which have been selected with careful consideration so as not to require much of the external and expensive inputs. Considerably high level of adoption of improved cultivation techniques has so far been observed among the members of the target cooperatives, which also draws the attention and interests of other farmers thus the spontaneous diffusion may be anticipated in the future. The leaders of the interviewed cooperatives during the Study unanimously expressed their eagerness and confidence to continue applying what they have learnt from the Project. Therefore, a fair technical sustainability is expected at the level of the target cooperatives.

For the part of the government officers, the levels of technical sustainability vary among the subject which they deal with. The technical officers at the target districts and sectors who have been trained as trainers through TOT on marketing, organizational strengthening and gender mainstreaming by the Project have already acquired knowledge and skills to provide the relevant guidance to the farmers together with practical experiences to train the members of cooperatives. On the other hand, the technical learning derived and accumulated through the Project on the rice and horticulture crop production among the relevant officers at the district and sectors had been somewhat limited compared to those in the fields of activities mentioned above, which may need to be further reinforced so as to ensure the technical sustainability.

5. Conclusion

The Team has confirmed that the expected outputs have largely been achieved without any critical problem or notable delay in the implementation of the Project. It was also assumed that the Project would successfully achieve its purpose within the cooperation period. The Team thus concluded that the Project will be terminated as stipulated in the R/D.

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6. Recommendations

6-1. Recommendations for the Remaining Period of the Project

(1) Thorough examination in the process of finalization of the “PiCROPP extension packages”

The Project is currently in the stage of finalizing the “PiCROPP extension packages,” which would jointly be utilized by the implementing agencies in the future. Since these packages would include mutually inter-linked components, careful examination on the practical feasibility of the proposed demarcation of responsibilities and coordination mechanism to implement the packages is deemed to be essential. It is therefore requested to the Project, especially for the part of the implementing agencies, to scrutinize the contents of the proposed draft in terms of necessary resources, operational modalities, consistency with the existing organizational setup, and so forth, in the future course of discussions to finalize the PiCROPP extension packages, in order to ensure the effectiveness and workability of the said packages.

(2) Wide dissemination of the achievement of the Project

The Project has conducted the various activities including the technical and organizational training for the target cooperatives as well as to the officers of districts, sectors, RAB and NAEB. Through these activities, the first-hand experiences in working directly with the cooperatives have been accumulated. The Team strongly believes that sharing of the experiences of the Project, that have directly been obtained from the activities at the field level with full involvement of the beneficiary farmers would provide useful insights for any institutions and entities who are involved in the agricultural extension for the farmers. Since the Project is planning to organize the final workshop before its termination, it is recommended to the Project to invite not only the implementing agencies i.e. MINAGRI, RAB and NAEB but wider range of relevant parties, such as other technical agencies under MINAGRI and donor agencies working in the similar sphere of activities, so as to disseminate and publicize the accomplishment of the Project.

6-2. Recommendation for the Future (after the Completion of the Project)

(1) Efforts of the implementing agencies to scale up the achievement of the Project

Although it is generally appreciated among the relevant stakeholders that the Project has been successful in improving the technical and organizational capacities of the target cooperatives, many of them also pointed out with regrets that the intervention of the Project has yet been too concentrated on the limited areas. Since the tangible outputs including the comprehensive “PiCROPP extension packages” would readily be available by the end of the Project, it is now expected that the relevant institutions of GoR, i.e. primarily the RAB and NAEB, will take over the responsibility. It is therefore requested to the implementing agencies to accelerate their efforts to secure resources necessary to continue, further expand and scale up the Project accomplishments. In relation to that, the institutional arrangements of agricultural extension should properly be streamlined to provide quality service to the farmers.

7. Lessons Learnt

(1) Monitoring of projects with any components contributing both project purpose and overall goal

The Project is designed to achieve 4 outputs, i.e. the output 1 and 2 of to improve production techniques on different crops, the output 3 is to strengthen the organizational capacities regardless of the crops they grow, and the output 4 is to facilitate the entire process of capacity development pertaining to the output 1, 2, and 3. It should not be overlooked however the achievement of the output 4 is also essential to ensure the contribution of Project purpose to the overall goal level. In cases of projects with such framework, it is important to carefully examine not only the direct attributes to the Project purpose, but also the indirect

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impacts on the overall goal level upon monitoring the degree of achievement of such facilitating outputs.

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ANNEXES

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Annex 1: Schedule of the Terminal Evaluation

Date		Japanese Team Members				Rwandan Team Members (Mr. Sendege Norbert, Mr. Ndagano Jean Claude, Ms. Ufitinema Chantal)	
		JICA Mission members (Dr. Aikawa Jiro & Mr. Maisumoto Kenichi)		Consultant member (Ms. Itagaki Keiko)		Time	Schedule
		Time	Schedule	Time	Schedule		
30-May	Thu			22:30	Dep. Narita		
31-May	Fri			13:50	Arr. Kigali		
				16:30	Meeting at JICA Rwanda Office		
1-Jun	Sat			9:00	Interview to PICROPP Experts		
2-Jun	Sun				Preparation of questionnaire, data analysis & report preparation		
3-Jun	Mon			7:30	Dep. Kigali for Bugesera		
				8:30	Field visit and interview to COCUABI (Pineapple core cooperative) in Mwogo sector in Bugesera		
				10:30	Field visit on Gender Training for KOTWIR (Vegetable satellite cooperative in 3rd batch) in Ngeruka sector in Bugesera (by sector cooperative dev't officer)		
				13:00	Interview to Bugesera District Agronomist, Sector Agronomists (Cashora & Mayange Sector) & NAEB Value Chain Officer at Bugesera district		
				16:00	Interview to RAB extension section at Kigali Head Office		
4-Jun	Tue			7:30	Dep. Kigali for Ngoma		
				10:30	Field visit and interview to TUREBEKURE (Vegetable core cooperative in 2nd batch) in Murama sector in Ngoma		
				13:30	Field visit and interview to IMBARAGA (Vegetable core cooperative in 1st batch) in Mutenderi sector in Ngoma		
				15:30	Field visit and interview to TERIMBERE MUHINZI (Vegetable satellite cooperative in 1st batch) in Mutenderi sector in Ngoma		
					Stay at Kibungo		
5-Jun	Wed			8:00	Visit Kibungo market to interview to market retailer & middleman		
				10:00	Field visit and interview to DUHUZIMBARAGA (Rice core cooperative) in Kazo sector in Ngoma		
				13:00	Field visit and interview to COPAMUNYA (Rice rice satellite cooperative in Ngoma)		
				15:00	Dep. Ngoma for Kigali		
6-Jun	Thu			8:00	DDG Extension, RAB		
				9:00	Jean Batista, Rice Program, RAB		
7-Jun	Fri			8:00	DDG Production, NAEB		
				10:00	Edith, Cooperative, RAB		
8-Jun	Sat			9:00	Interview to PICROPP Experts		
9-Jun	Sun	22:30	Dep. Narita		Data analysis & report preparation		
10-Jun	Mon	13:50	Arr. Kigali	9:00	Bonny, Domestic Marketing, NAEB		
		16:00	Meeting at JICA Rwanda office				
		16:30	Internal meeting on final	16:30	Internal meeting on final evaluation		
11-Jun	Tue	8:00	Head of Horticulture Division, NAEB				
		8:30	DG NAEB				
12-Jun	Wed	10:00	Meeting among Rwandan and Japanese Evaluation Team Members				
			Finalizing Evaluation Report				
			Preparation for JCC Presentation				
13-Jun	Thu		Signing on Eva Report between Rwandan and Japanese Team Leaders				
			Preparation for JCC Presentation				
14-Jun	Fri		JCC & signing on MM				

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Annex 2: Project Design Matrix (PDM) Version2

Project Title:	Project for Increasing Crop Production with Quality Extension Services in the Eastern Province
Period:	3years (2010.10 – 2013.10)
Target Area:	Bugesera District and Ngoma District in Eastern Province, Rwanda
Implementing Organizations	MINAGRI, Bugesera District and Ngoma District
Target Group:	Group A- Rice producing farmers and horticulture producing farmers, farmers' organization, cooperative, and unions in the project area Group B/Supporters- Local government officers at Districts, Sectors, and other parties engaged in agricultural extension at cooperatives in the targeted area
Partner organizations	RAB, NAEB, RCA

PDM Version 2 As of 2012.02.07			
Narratives Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal Rice production is increased in Bugesera District and Ngoma District of the Eastern Province. Benefit of horticultural crop production cooperative is increased in Bugesera District and Ngoma District of the Eastern Province.	Rice: Production in Bugesera District and Ngoma District is increased by 15%. Horticultural crops: Benefit of more than 2/3 of targeted cooperatives in Bugesera District and Ngoma District is increased by more than 30%.	<ul style="list-style-type: none"> Statistics of agricultural production Questionnaire and interviews to the parties concerned Questionnaire and interviews to the farmers' organizations 	
Project Purpose	By the end of the Project,		
1 Targeted rice production cooperatives increase production and horticultural crop production cooperatives increase benefits with quality extension services.	1 More than 50% of targeted rice production cooperatives increase their yields by 10% in Bugesera District. 2 More than 50% of targeted rice production cooperatives increase their yields by 15% in Ngoma District. 3 More than 2/3 of targeted core horticulture crop production cooperatives increase their benefit by 15%.	<ul style="list-style-type: none"> Monitoring reports of the Project Monitoring reports of the Project Monitoring reports of the Project 	<ul style="list-style-type: none"> Policy of Rwandan agricultural extension system doesn't change extremely. Severe climate change such as drought doesn't affect agricultural production.
Outputs			
0 Project implementation plan is confirmed with the finalized PDM, PO and necessary arrangements.	Project implementation plan is approved by JCC in March 2011.		<ul style="list-style-type: none"> Local government officers and agronomists trained by the Project continue to work in the area. Agronomists and engineers of cooperatives, NGOs and other service providers trained by the Project continue to work in the area. Policy of Rwandan agricultural extension system doesn't change extremely. The number of local government officers engaged in agriculture doesn't reduce.
1 Rice cultivation technique of farmers' organizations targeted by the Project is improved.	1-1 For more than 9 targeted rice producing cooperatives, more than half members practice the learnt cultivation techniques. 1-2 For more than 9 targeted rice producing cooperatives, more than half members practice the learnt post harvesting techniques.	<ul style="list-style-type: none"> Project and expert report Questionnaire for farmers Project and expert report Questionnaire for farmers 	
2 Horticulture cultivation technique of farmers' organizations targeted by the Project is improved.	2-1 For more than 2/3 members of targeted core horticultural crop production cooperatives practice the learnt cultivation techniques.	<ul style="list-style-type: none"> Project and expert report Questionnaire for farmers 	
3 Management capacity of farmers' organization targeted by the Project is improved.	3-1 More than 5 targeted cooperatives is leveled up by at least one grade of Group Empowerment Level/GEL. 3-2 More than 50% of cooperative members are satisfied with equal water distribution. 3-3 More than 2/3 targeted core horticulture production cooperatives formulate sales plans	<ul style="list-style-type: none"> Project and expert report Questionnaire for farmers Project and expert report Questionnaire and interview for farmers and district/sector agronomist 	

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Outputs		Inputs		Important Assumptions	
4	Local government officers, agronomist and other people / supporters engaged in agricultural extension in the targeted area provide quality services.	4-1 More than 70% of District/Sector officers practice more than 60% of what they learned by the Project.	<p>RWANDA SIDE</p> <p><u>Counterpart personnel:</u></p> <ul style="list-style-type: none"> Member of Technical Committee Lecturers of trainings Officers of RAB and NAEB <p>*It will be considered, if anybody from NAEB is assigned to the Bugesera and Ngoma Districts.</p> <p><u>Project offices:</u></p> <ul style="list-style-type: none"> MINAGRI (Kigali) Bugesera District (Nyamata) Ngoma District (Kibungo) 	<ul style="list-style-type: none"> Project report Training report 	
		4-2 More than 80% of Agronomists hired by the target cooperatives practice more than 80% of what they learned by the Project.	<p>JAPAN SIDE</p> <p>JICA Expert</p> <p><u>Long-term Experts:</u></p> <ul style="list-style-type: none"> Chief adviser/Farmers' organization strengthening Co-chief adviser/Rice cultivation Horticulture cultivation(1) Horticulture cultivation(2) Water management Post-harvest Marketing Gender Project coordinator/Training <p><u>Provision of equipment</u></p> <ul style="list-style-type: none"> Vehicles Other necessary equipments <p><u>Local cost</u></p> <ul style="list-style-type: none"> Training activities <p><u>Trainings in Japan and third countries</u></p>	<ul style="list-style-type: none"> Questionnaire and interview to concerned people Questionnaire and interview for farmers' organization 	
Activities					
0-1	To conduct baseline surveys, select target cooperatives and prepare necessary arrangement to produce Output 1, 2, 3 and 4 of the Project.				
0-2	To set up a Technical Committee				
0-3	To establish Project offices				
1-1	To develop rice cultivation training plans for farmers and supporters (FFS & ToT) To set targeted technical goals of trainings and the mode of M&E To develop curriculum and training materials To arrange lecturers/trainers, demonstration farms, study tours, etc.				
1-2	To implement and monitor trainings				
1-3	To evaluate the results and review the trainings				
1-4	To plan and implement follow-up activities				
1-5	To collect and analyze data and information on rice production				
1-2-1	To develop post harvesting training plans for farmers and supporters (FFS & ToT)				
1-2-2	To implement and monitor trainings				
1-2-3	To evaluate the results and review the trainings				
1-2-4	To plan and implement follow-up activities				
1-2-5	To collect and analyze data and information on post harvesting				
2-1	To develop horticulture cultivation training plans for farmers and supporters (FFS & ToT)				
2-2	To implement and monitor trainings				
2-3	To evaluate the results and review the trainings				
2-4	To plan and implement follow-up activities				
2-5	To collect and analyze data and information on horticulture production				
3-1-1	To develop management capacity training plans for farmers and supporters (ToT)				
3-1-2	To implement and monitor trainings				
3-1-3	To evaluate the results and review the trainings				
3-1-4	To plan and implement follow-up activities				
3-1-5	To collect and analyze data and information on management capacity of cooperatives.				
3-1-6	To develop gender issue training plans for farmers and supporters (ToT)				

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Activities		Inputs		Important Assumptions
3-1-7	To implement and monitor trainings			
3-1-8	To evaluate the results and review the trainings			
3-1-9	To plan and implement follow-up activities			
3-1-10	To collect and analyze data and information on gender issue			
3-2-1	To develop water management training plans for farmers and supporters (FFS & ToT)			
3-2-3	To evaluate the results and review the trainings			
3-2-4	To plan and implement follow-up activities			
3-2-5	To collect and analyze data and information on water management capacity of farmers' organization			
3-3-1	To develop marketing training plans for horticulture producing farmers and supporters (FFS & ToT)			
3-3-2	To implement and monitor trainings			
3-3-3	To evaluate the results and review the trainings			
3-3-4	To plan and implement follow-up activities			
3-3-5	To collect and analyze data and information on marketing of horticulture cultivation			
4-1-1	To implement and monitor TOT trainings on rice cultivation			Pre-conditions
4-1-2	To evaluate the results and review the trainings			• Counterpart personnel are properly allocated.
4-1-3	To plan and implement follow-up activities			• All related organizations understand their rolls in the Project. (MINAGRI, Bugesera District, Ngoma District, RADA, ISAR, RHODA and RCA)
4-2-1	To implement and monitor TOT trainings on horticulture cultivation			• Security conditions in the targeted area are maintained
4-2-2	To evaluate the results and review the trainings			
4-2-3	To plan and implement follow-up activities			
4-3-1	To implement and monitor TOT trainings on management capacity and water management			
4-3-2	To evaluate the results and review the trainings			
4-3-3	To plan and implement follow-up activities			
4-4	To develop extension package			

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			2010		2011								2012								2013												
			1st Year				2nd Year				3rd Year				3rd Year				3rd Year														
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Output-3: Management capacity of farmers' organization targeted by the Project is improved.																																	
3-1-1	To develop management capacity training plans for farmers and supporters (ToT)	Original Plan																															
		Actual																															
	• To set targeted technical goals of trainings and the mode of M&E	Original Plan																															
		Actual																															
	• To develop curriculum and training materials	Original Plan																															
		Actual																															
3-1-2	To implement and monitor trainings	Original Plan																															
		Actual																															
3-1-3	To evaluate the results and review the trainings	Original Plan																															
		Actual																															
3-1-4	To plan and implement follow-up activities	Original Plan																															
		Actual																															
3-1-5	To collect and analyze data and information on management capacity of farmers' organizations.	Original Plan																															
		Actual																															
3-1-6	To develop gender issue training plans for farmers and supporters (ToT)	Original Plan																															
		Actual																															
3-1-7	To implement and monitor trainings	Original Plan																															
		Actual																															
3-1-8	To evaluate the results and review the trainings	Original Plan																															
		Actual																															
3-1-9	To plan and implement follow-up activities	Original Plan																															
		Actual																															
3-1-10	To collect and analyze data and information on gender issue	Original Plan																															
		Actual																															

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Annex 4: List of Japanese Experts

Sl.	Name	Field	Assignment Duration
1	Kensuke IRIYA		4 th Nov. - 30 th Dec.2010
2	Tatsuya IEIZUMI	Team Leader / Farmer's Organization Strengthening	11 th Jan. - 20 th March 2011 9 th May - 8 th July 2011 17 th Aug. - 14 th Oct. 2011 4 th Jan. 2012-3 rd March 2012 12 th May-10 th July 2012 13 th Nov. 2012-25 th Dec. 2012 15 th Jan. 2013-15 th March 2013 29 th March-27 th April 2013
3	Zetsugaku KURITA	Sub-Team Leader / Rice Cultivation	4 th Nov. 2010- 20 th March 2011 9 th May - 9 th Sep. 2011 1 st Nov. - 28 th Feb. 2012 9 th May-14 th Sep. 2012 10 th Nov. 2012-14 th March 2013
4	Makoto ISHIZUKA	Horticulture Cultivation (1)	4 th Nov. - 23 rd Dec.2010 4 th Jan.-20 th March 2011 15 th May - 13 th June 2011
5	Kunio INOUE		16 th June - 14 th Aug. 2011 3 rd Feb.-3 rd March 2012
6	Tomoki NAKAMURA	Horticulture Cultivation (2)	8 th Aug. - 6 th Oct. 2011 18 th Oct. - 22 nd Dec. 2011 23 rd May-11 th Aug. 2012 6 th Sep.2012-28 th March 2013
7	Fusataka ARAKAWA	Water Management	19 th Feb. - 20 th March 2011 9 th July - 22 nd Aug. 2011 24 th Oct. - 7 th Dec. 2011 7 th Jan.-20 th Feb.2012 11 th Aug.-18 th Sep. 2012
8	Harunobu YOSHINO	Post Harvesting	14 th Jan. - 20 th March 2011 1 st Nov. - 15 th Dec. 2011 23 rd May-21 st June 2012 15 th Nov.-13 th Dec 2012 15 th April-14 th May 2013
9	Masaya FUKUMOTO	Marketing/Coordinator/Training	13 th Jan. - 20 th March 2011 9 th May - 7 th June 2011 18 th July - 31 st August 2011 10 th Sep. - 14 th Oct. 2011 19 th Dec.-3 rd March 2012 12 th May-29 th June 2012 6 th Aug.-25 th Aug. 2012 19 th Sep.-17 th Dec. 2012 15 th Jan. 2013- 5 th March 2013 8 th April-28 th June 2013
10	Rie KITAO	Gender	4 th Nov. - 23 rd Dec.2010 9 th May - 8 th July 2011 5 th Jan. 2012-3 rd March 2012 11 th June-25 th July 2012 9 th Sep.-23 rd Oct. 2012

Note: Data is as of 30 April 2013

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Annex 5: List of Machinery and Equipment

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No	Acquisition Date	Name of Machinery	Quantity	Manufacturer	Price (US\$)	Installation Place	Current condition	Frequency of utilization *
1.	Nov. 2010	Personal computer	1	HP	1,563	HQ of MINAGRI	Good	A
2.	Nov. 2010	Printer	1	HP	1,240	HQ of MINAGRI	Good	A
3.	Nov. 2010	Copy machine	1	Canon	4,797	HQ of MINAGRI	Good	A
4.	Dec. 2010	Digital camera	1	-	227	HQ of MINAGRI	Good	A
5.	Dec. 2010	Personal computer	1	HP	1,563	Bugesera District office	Good	A
6.	Dec. 2010	Printer	1	HP	1,240	Bugesera District office	Good	A
7.	Dec. 2010	Copy machine	1	Canon	4,797	Bugesera District office	Good	A
8.	Dec. 2010	Digital camera	1	-	227	Bugesera District office	Good	A
9.	Dec. 2010	Projector	1	Sony	714	Bugesera District office	Good	A
10.	Dec. 2010	Personal computer	1	HP	1,563	Ngoma District office	Good	A
11.	Dec. 2010	Printer	1	HP	1,240	Ngoma District office	Good	A
12.	Dec. 2010	Copy machine	1	Canon	4,797	Ngoma District office	Good	A
13.	Dec. 2010	Digital camera	1	-	227	Ngoma District office	Good	A
14.	Dec. 2010	Projector	1	Sony	714	Ngoma District office	Good	A
Total					24,909			

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*** Classification of the frequency of utilization**

A: used frequently (almost daily)

B: used well (1-3 times per week)

C: used in specific season(s) only

D: not so much used (3-11 times per year) (needs reasons)

E: not used by specific reason (needs reasons)

Annex 6: Details of Counterpart Training in Japan and the Third Countries

Sl.	Name	Position	Duration	Field/Name of the course	Country	Training Institution
1	Mr. Jean de Dieu NKENZIGABO	District Agronomist, Bugesera District	8 th May-10 th Sep., 2011	Horticultural Crop Cultivation and Extension for Africa 2011	Japan	JICA
			11 th Sep. – 17 th Sep. , 2011		Kenya	SHEP
2	Mr. RUTASIYIRE Gilbert	District Agronomist, Ngoma District	April 15 th – Sept 15 th 2012	Horticultural Crop Cultivation and Extension for Africa 2012	Japan	JICA
			Sept 16 th – Sept 27 th		Kenya	SHEP
3	Ms. MUKESHIMANA Esperance	DCO-Coop Officer	8 th May-14 th July, 2012	Horticultural Crop Cultivation and Extension for Africa 2011	Japan	JICA
4	Mr. RUKUNDO Aimable	Rice Program/ Extension officer	15 th March – Sept., 2013	Rice Training course in Tsukuba International Training Center	Japan	JICA

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Annex 7: List of Counterpart Personnel (C/Ps)

(1) Counterpart personnel assigned from MINAGRI , RAB and NAEB

Sl.	Name	Position	Field of Expertise	Assigned period in PiCROPP		Remarks
				From	To	
1	Mr. Innocent MUSABYIMANA	Program 1 Manager, MINAGRI	Agriculture	Nov. 2010	Mar. 2011	JCC chairperson
		Deputy Director General-Extension RAB	Agriculture	Feb. 2012	Present	JCC chairperson
2	Ms. Jolly DUSABE	Coordinator of RSSP/LWH	Agriculture	Mar. 2011	Feb. 2012	JCC chairperson
3	Mr. NDIKUMANA Innocent	Head/Rice Special Program, RAB	Agriculture	Nov. 2010	Present	JCC member
4	Mr. HAKIZIMANA Chrispin	Researcher/Rice Program, RAB	Agriculture	Nov. 2010	Present	JCC member
5	Mr. HAGENIMANA Gregoire	Research Horticulture, RAB	Agriculture	Nov. 2010	Present	JCC member
6	Mr. NTVUGURUZA Telesphore	Export Crops in charge, MINAGRI	Agriculture	Nov. 2010	Present	JCC member
7	Ms GICHUKI Hannah W	Horticulture Specialist, LWH/RSSP	Agriculture	Nov. 2010	Present	JCC member
8	Mr. TUMUSABEMUNGU J.D Mr. NZABONIMANA Jules	DHVCO Bugesera, NAEB	Agriculture	Feb. 2012	Present	JCC member
		Ass. to Irrigation Advisor, MINAGRI				
9	Mr. TUMUSABEMUNGU J.D Mr. NZABONIMANA Jules	DHVCO Bugesera, NAEB	Agriculture	Feb. 2012	Present	JCC member
		Ass. to Irrigation Advisor, MINAGRI				
10	Ms. Chantal UFITINEMA	Horticulture Production Section, NAEB Head Office	Agriculture Production	Dec. 2012	Present	JCC member
11	Mr. Justin RUSANDAZANGABO	Post Harvest Handling & Storage Taskforce	Storage & Quality	Nov. 2010	Present	
12	Ms RUZIGANA Pamela	Post Harvest Handling & Storage Taskforce	Eastern Province Field Coordinator	Nov. 2010	Mar. 2013	
13	Ms. UMUTONI Mediatrice	Post Harvest Handling & Storage Taskforce	Eastern Province Field Coordinator	Apr. 2013	Present	
14	Mr NDAGANO Jean Claude	RAB	Cooperatives and Rice Post-harvest & Marketing Specialist	Nov. 2012	Present	
15	Mr. Jean Marie Vianney Munyaneza	Horticulture International Marketing Officer of NAEB	Marketing	Jul. 2012	Present	
16	Ms. Uwera Boni	Horticulture Domestic Marketing Officer of NAEB	Marketing	Jul. 2012	Present	
17	Mr. Jean de Dieu TUMUSABEYEZU	Value Chain Officer in Bugesera district, NAEB	Agriculture Production & Marketing	May 2012	Present	
18	Mr. Silvere NZEYIMANA	Value Chain Officer in Ngoma district, NAEB	Agriculture Production & Marketing	May 2012	Present	
19	Mr. MANIRAGUHA Jean Baptiste	Rice Extensionist/RAB Nyagatare Station	Rice	Jan., 2013	Present	Mentor
20	Mr. Martin BUSOBOZI	Research Section, Karama Research Center, RAB	Agriculture Production	May 2012	Present	
21	Ms. Clementine NYIRARUKUNDO	Extension Section, RAB Head Office	Agriculture Production	Dec. 2012	Present	
22	Ms. Kagwela Edith	Extension Section, RAB Head Office	Cooperative Development	Apr. 2013	Present	Mentor

Sl.	Name	Position	Field of Expertise	Assigned period in PiCROPP		Remarks
				From	To	
23	Mr. Cyuma Cyubahiro	Extension Section, RAB Head Office	Agricultural extension	Apr. 2013	Present	Mentor
24	Mr. Nkanika Perre	Extension Section, RAB Head Office	Agricultural extension	Apr. 2013	Present	Mentor

(2) Counterpart personnel assigned from Bugesera District

Sl.	Name	Position	Field of Expertise	Assigned period in PiCROPP		Remarks
				From	To	
1	Mr. Jean de Dieu NKENZIGABO	District Agronomist	Agriculture	Nov. 2010	Present	JCC member / TC member
2	Mr. RUGEMA Jean Luc	Acting District Agronomist	Agriculture	May 2011	Sep. 2011	JCC member / TC member
3	Ms. MUKESHIMANA Esperance	DCO-Coop Officer	Cooperative management	Nov. 2010	Present	JCC member / TC member
4	Ms. BAMURANGE Appolinare	Gender Officer of District	Gender	Nov. 2010	Present	TC member
5	Mr. MUTABAZI Alfred	Agronomist of Ruhuha Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Musenzi Sector		Apr. 2012	Mar. 2013	
		Ruwenzu Sector		Apr. 2013	Present	
6	Mr. RUGABIRE Daniel	Agronomist of Gashora Sector	Agriculture	Nov. 2010	Present	TC member
7	Mr. RUDAHANGARWA Ignace	Agronomist of Rwenzu Sector	Agriculture	Nov. 2010	Present	TC member
8	Mr. NZABONITEGEKA Ildéphonse	Agronomist of Nyarugenge Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Ruhuha Sector		Apr. 2012	Present	
9	Mr. MAZINA Etienne	Agronomist of Nyarugenge Sector	Agriculture	Nov. 2010	Present	TC member
10	Mr. HAKIZIMANA Bonaventure	Executive Secretary of Cell in Mwogo Sector	Agriculture	Nov. 2010	Present	TC member
11	Mr. MUNYINYA Theodore	Agronomist of Mareba Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Manyange Sector		Apr. 2012	Present	
12	Mr. NIYONZIMA J Paul	Agronomist of Rilima Sector	Agriculture	Nov. 2010	Present	TC member
13	Ms. UWIMANA Jeane d'Arc	Agronomist of Mayange Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Mareba Sector		Apr. 2012	Present	
14	Mr. HABYAREMYE F. Xavier	Agronomist of Juru Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Ngenka Sector		Apr. 2012	Present	
15	Ms. NYIRAMBONIGABA Agnes	Agronomist of Nyamata Sector	Agriculture	Nov. 2010	Mar. 2012	TC member

Sl.	Name	Position	Field of Expertise	Assigned period in PiCROPP		Remarks
				From	To	
				Apr. 2012	Aug. 2012	
		Shyrya Sector		Jan 2013	Present	
		Museni Sector				
16	Mr. NTAKIRUTIMANA Salvator	Agronomist of Junu Sector	Agriculture	Nov. 2010	Present	TC member
17	Mr. NKUSI Francis Xavier	Agronomist of Nyamata Sector	Agriculture	Nov. 2010	Present	TC member
18	Ms. INGABIRE Grace	Cooperative officer of Ruhuha Sector	Coop management	Apr. 2012	Present	TC member
19	Mr. GASANGWA Jackson (resignation)	Cooperative officer of Nyarugenge Sector	Coop management	Apr. 2012	June 2012	TC member
20	Ms. UWAMAHOLO M. Ange	Cooperative officer of Mareba Sector	Coop management	Apr. 2012	(passed away)	TC member
21	Ms. MUKANDAYSAB Alphonsine	Cooperative officer of Mwogo Sector	Coop management	Apr. 2012	Present	TC member
22	Mr. BAMBONE Jean Baptist	Cooperative officer of Ngeruka Sector	Coop management	Apr. 2012	Present	TC member
23	Mr. SERUBIBI Theoneste	Cooperative officer of Shyrya Sector	Coop management	Apr. 2012	Present	TC member
24	Ms. NYIRABASINGA Esperance	Cooperative officer of Gashora Sector	Coop management	Apr. 2012	Present	TC member
25	Ms. NIYOYAMPAYE Elmerda	Cooperative officer of Rweru Sector	Coop management	Apr. 2012	Present	TC member
26	Ms. UWAMARIYA Jane	Cooperative officer of Rilima Sector	Coop management	Apr. 2012	Present	TC member
27	Mr. NGARAMBE Jean Paul	Cooperative officer of Mayange Sector	Coop management	Apr. 2012	Present	TC member
28	Mr. NZABAMWITA Vincent de Paul	Cooperative officer of Junu Sector	Coop management	Apr. 2012	Present	TC member
29	Ms. UWIZEYIMANA Clemantine	Cooperative officer of Nyamata Sector	Coop management	Apr. 2012	Present	TC member

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(3) Counterpart personnel assigned from Ngoma District

Sl.	Name	Position	Field of Expertise	Assigned period in PiCROPP		Remarks
				From	To	
1	Mr. RUTASIYIRE Gilbert	Agronomist of District	Agriculture	Nov. 2010	Sep. 2012	JCC member / TC member In South Sudan since Oct. 2012
2	Ms. FURAHA Yvette	DCO-Coop Officer	Cooperative management	Nov. 2010	Present	JCC member / TC member
3	Ms. MUKAMIZERO Bellancile	Gender Officer of District	Gender	Nov. 2010	Present	TC member
4	Mr. NSEKANABO Stanislas	Agronomist of Kazo Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Muenderi Sector		Apr. 2012	Present	

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Sl.	Name	Position	Field of Expertise	Assigned period in PiCROPP		Remarks
				From	To	
5	Mr. NGIRUMUHIRE J Baptiste	Agronomist of Mutenderi Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Kazo Sector		Apr. 2012	Present	
6	Mr. MUDENGE Agaba	Agronomist of Remera Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Kazo-Mutenderi Sector		Apr. 2012	Present	
7	Ms. TWISUNGEMARIYA Fortunee	Agronomist of Zaza Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Sake-Sector		Apr. 2012	Present	
8	Mr. BIZIMANA Charles	Agronomist of Karemba Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Zaza Sector		Apr. 2012	Present	
9	Ms. NIYONSENGA Alice	Cooperative officer of Karemba-Gashanda Sector	Cooperative management	Nov. 2010	Sep. 2011	TC member
10	Ms. UMUTONI Ernestine	Cooperative officer of Kazo-Mutenderi	Cooperative management	Nov. 2010	Present	TC member
11	Ms. UMURERWA Donathile	Cooperative officer of Remera Sector	Cooperative management	Nov. 2010	Mar. 2012	TC member
		Kibungo Sector		Apr. 2012	Present	
12	Ms. INGABIRE Beata	Cooperative officer of Zaza-Mugesera Sector	Cooperative management	Nov. 2010	Present	TC member
13	Mr. NZABONIMPA Eraste	Agronomist of Rurenge Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Agronomist of Karemba Sector		Apr. 2012	Present	
14	Mr. HABYARIMANA Alexis Flavier	Agronomist of Mugesera Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Rukumberi Sector		Apr. 2012	Present	
15	Mr. NSORO Patrick	Cooperative officer of Remera Sector	Cooperative management	Apr. 2012	Present	TC member
16	Mr. NZABARINDA Damien	Agronomist of Rurenge Sector	Agriculture	Nov. 2010	Mar. 2012	TC member
		Agronomist of Sake Sector		Apr. 2012	Present	
17	Mr. MURAMA Justin	Cooperative officer of Sake Sector	Cooperative management	Apr. 2012	Present	TC member
18	Ms. NKENUYE N. KAVANGE	Cooperative officer of Karemba Sector	Cooperative management	Apr. 2012	Present	TC member
19	Mr. BITEGETSIMANA MWIMA	Agronomist of Mugesera Sector	Agriculture	Nov. 2010	Feb. 2013	TC member
		Kazo Sector		Mar. 2013	Present	
20	Mr. NKUNDA David	Coop officer of Rukumberi Sector	Cooperative management	Apr. 2012	Present	TC member

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Annex 8: Detailed Contents of FFS Sessions on Rice Production

FFS Subject	Outline of the Training program
FFS-1: Nursery Management	<ul style="list-style-type: none"> • Seed treatment (selection of good seed via water, soaking, dressing of seed with chemicals) • Preparation of proper nursery bed • Sowing seeds on nursery bed • Mulching nursery bed by locally available organic matter
FFS-2 (1): Transplanting FFS-2 (2): Water Management	<ul style="list-style-type: none"> • Paddling and leveling practice on main plot • Making guide rope for line planting • Uprooting of seedlings (3 weeks seedling) • Application of basal dressing (NPK: timing, amount, and application method) • Demonstration of Rotary Weeder for weeding practice • Water management
FFS-3: Top dressing	<ul style="list-style-type: none"> • Urea application (timing, amount, and application method) • Weeding practice by using rotary weeder • Diagnosis of disease and pest, and chemical control method • Roguing operation • Water management
FFS-4: Harvesting and Post-harvest	<ul style="list-style-type: none"> • How to judge harvest time on rice plant • Reaping rice plant • Threshing rice grain by using foot pedal thresher • Winnowing paddy by using winnowing machine • Evaluation of paddy yield/ha by using balance • Drying paddy on concrete drying yard

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Annex 9: Detailed Contents of FFS Sessions on Horticulture Crop Production

Title of Training	Contents
1st Tomato Cultivation Training (1st Season)	<ul style="list-style-type: none"> • General Guidance for the Training of Vegetable Cultivation • Visit of D-T Farm Site for the 1st Trial Production
2nd Tomato Cultivation Training (1st Season)	<ul style="list-style-type: none"> • Raising Seedlings of Tomato and Main Field Plowing
1st Cabbage and Onion Cultivation Training (1st Season)	<ul style="list-style-type: none"> • Raising Seedlings of Cabbage and Onion and Plowing of Main Field
3rd Tomato Cultivation Training (1st Season)	<ul style="list-style-type: none"> • Tomato Transplanting and Cultivation Management
2nd Cabbage and Onion Cultivation Training (1st Season)	<ul style="list-style-type: none"> • Cabbage Transplanting and Cultivation Management
4th Tomato Cultivation Training (1st Season)	<ul style="list-style-type: none"> • Tomato Cultivation Management • Preparation of support pole and training, Pruning, and Measuring of fertilizer and top dressing
3rd Cabbage and Onion Cultivation Training (1st Season)	<ul style="list-style-type: none"> • Onion Transplanting and Cultivation Management • Top Dressing of Cabbage • Analysis of Soil pH
1st Pineapple FFS	<ul style="list-style-type: none"> • Land Preparation and Planting Pineapple Sucker • Analysis of Soil pH
2nd Pineapple FFS	<ul style="list-style-type: none"> • Top Dressing • Plantation of Hedgerow in the Field as Soil Erosion Mitigation Method
1st Vegetable FFS (2nd Season)	<ul style="list-style-type: none"> • Review of the result of problem analysis and market survey • Planning of training content and schedule • Sowing of solanaceae crops (tomato, eggplant & sweet pepper) • Sowing of leek which will be transplanted as companion plant
2nd Vegetable FFS (2nd Season)	<ul style="list-style-type: none"> • Making nursery and sowing of cabbage & onion • Making nursery pot and sowing of water melon • Measuring of field and layout
3rd Vegetable FFS (2nd Season)	<ul style="list-style-type: none"> • Transplanting of tomato • Integrated pest and disease management
4th Vegetable FFS (2nd Season)	<ul style="list-style-type: none"> • Transplanting of eggplant • Transplanting of sweet pepper • Transplanting of water melon • Transplanting of cabbage • Integrated pest and disease management
5th Vegetable FFS (2nd Season)	<ul style="list-style-type: none"> • Transplanting of onion • 1st top dressing to sweet pepper, tomato, eggplant, cabbage and water melon
6th Vegetable FFS (2nd Season)	<ul style="list-style-type: none"> • Making Compost
1st Vegetable FFS (3rd Season)	<ul style="list-style-type: none"> • Cropping Plan • Sowing
2nd Vegetable FFS (3rd Season)	<ul style="list-style-type: none"> • Transplanting of Cabbage • Transplanting of Watermelon
3rd Vegetable FFS (3rd Season)	<ul style="list-style-type: none"> • Transplanting of Tomato, Sweet pepper and Onion • Top Dressing to Cabbages • Pinching Top Vine of Watermelon • Integrated Pest and Disease Management (IPM)
4th Vegetable FFS (3rd Season)	<ul style="list-style-type: none"> • Transplanting of Eggplant • Transplanting of Sweet Pepper • Making Compost
3rd Pineapple FFS	<ul style="list-style-type: none"> • Mulching Application • Top Dressing • Pinching of Crown Bud • Protection from Sun Scald • Harvesting • Making Compost

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Annex 10: Detailed Definition of Group Empowerment Levels (GEL)

Leadership

Level	Contents
1	Leaders are selected by undemocratic way. Leaders do not know their rights and responsibilities.
2	Leaders are selected by democratic way. Leaders understand their rights and responsibilities.
3	Leaders provide necessary information to all members
4	Leaders consider interest of all members.
5	Change of leaders does not give negative impact for cooperative management.

Cooperation

Level	Contents
1	Coop members do not understand their rights and responsibilities.
2	Coop members understand their rights and responsibilities.
3	Collective farm input purchase and production sale are done. Members actively participate in coop activities
4	Members acquire enough bargaining power against buyers. Conflict management is done properly.
5	Cooperative interacts with other organizations to solve problems.

Gender

Level	Contents
1	Coop members are not aware of importance of gender mainstreaming There are some works shouldered by men or women only. Women feel they are inferior to men.
2	Coop members understand importance of gender mainstreaming.
3	There is at least one female board member. All farming activities are shouldered by both men and women.
4	Women can express their opinions and ideas in coop meetings. Women are well motivated in coop activities.
5	Members spontaneously promote gender awareness for those who do not belong to cooperative.

Accounting

Level	Contents
1	Book keeping is not done. Coop members do not have accounting skill.
2	Income and expenditure are recorded properly.
3	Profit of cooperative is calculated and recorded properly.
4	Financial status is disclosed at general assembly.
5	Cooperative holds a meeting to decide how to utilize profit

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Annex 11: Measures taken to address the Recommendations made by the Mid-Term Review

Recommendations	Measures taken by the Project
<p>(1) Rice Production</p> <p>The cooperatives under the project have experienced an increase of rice production through the project techniques. The techniques are adapted to farmers and utilized not only cooperatives' farms but also individual farms. As for expansion of the productive rice cultivation, it's important to identify the essential techniques based on the reaction of target farmers and field performances, which all farmers can share the basic but effective knowledge on rice production.</p>	<p>Out of the series of FFS sessions conducted over three cropping seasons, the essential techniques have already been identified, which are incorporated in the "PiCROPP extension package" on rice production.</p>
<p>(2) Horticulture Production</p> <p>The project introduces market-oriented crop production. Farmers are getting to be sensitive to the market demands and planning the cropping calendar. Through the project trainings (crop cultivation techniques, marketing, etc.), the cooperatives' members have increased their incomes. It is important for the farmers to have access to and analyze the information to promote the competitive business agriculture as a Rwandan policy. Therefore it is recommended that the project encourages the farmers to be more sensitive and close to the market for their horticulture cultivation.</p>	<p>Various activities in the sphere of marketing, such as basic marketing skills training, matching meeting with traders, and participatory market survey workshops have been organized. The value chain officers of NAEB at the districts have also actively taken part in those activities to foster their skills to provide the market related guidance to the farmers.</p>
<p>(3) Development of Extension Package</p> <p>For the further expansion of techniques of both rice and horticulture cultivation, it is important to select the essential contents. More farmers can access and utilize the techniques and raise their production efficiently and effectively throughout Rwanda. The team recommends that the project puts its priority to pick out the essential techniques based on its experience and practices in the fields and establish the essential technical packages for both rice and horticulture production through the latter half of the project period.</p>	<p>The drafts of "PiCROPP extension packages" on rice and horticulture crops have already been formulated based on the consultation between the Japanese experts and counterpart personnel, which is to be presented in the coming JCC meeting for extensive discussion among relevant stakeholders and authorities concerned.</p>
<p>(4) Strength of PiCROPP</p> <p>One of the most important approach and strength of PiCROPP is that capacity of Rwandan agronomists and farmers are developed through Japanese experts in the fields. Direct training and transferring techniques from Japanese experts encourage farmers to adapt new techniques and increase crop production at the same time. For the further expansion of the cultivation techniques, more discussions between Rwandan and Japanese side are recommended to share the reality of the fields and ideas of further expansion strategy.</p>	<p>The Project has tried to facilitate the staff of RAB and NAEB to directly involve in the field activities through various occasions. Extensive discussions on the reports from the Project have also been held in every JCC meetings. The Project is planning to organize the final seminar before its termination, which would serve as another opportunity for discussions on the experiences and achievements of the Project.</p>
<p>(5) Allocation of Counterpart</p> <p>The Rwandan side has proposed the allocation of counterparts from RAB to the project (counterpart for each expert). The Team supports the proposal and thinks it important for the sustainability of project outputs and dissemination in Rwanda.</p>	<p>The proposal has already been approved by the 4th JCC meeting held on February 7th, 2012.</p>
<p>(6) Revision of the Project Design Matrix (PDM)</p> <p>The project proposed the revised version of PDM and the Team agreed on it.</p>	<p>The proposal has already been approved by the 4th JCC meeting held on February 7th, 2012.</p>
<p>(7) Dissemination of the Project outputs</p> <p>Rwandan side regards it as important and necessary to expand the proper technique nationwide. The outputs of the project such as teaching materials should be shared with Agricultural Information and Communication Center (CICA), and other organizations. Since the project will develop the extension package within the project period as mentioned above, Rwandan side proposed JICA to disseminate the extension package as a successor technical cooperation project. Synergies with other existing government's, other donors' or NGOs' projects are also recommended.</p>	<p>The GoR had already submitted official requests for nationwide expansion of improved cultivation techniques through due process, for which the detailed planning survey is being dispatched in June 2013. It is expected that further discussion would be held between the Rwandan and Japanese sides to come up with the agreed framework on the successor technical cooperation project.</p>

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