IFAD
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Rwanda

Rwanda Dairy Development Project

Mid Term Review report

Type of mission	Mid Term Review
Project Name	Rwanda Dairy Development Project
Country	Rwanda
Country programme manager	Francesco Rispoli
Name of Project Director	Alexis Njagijimana
Date of mission (month/year)	18-29 November 2019
Project Area:	12 districts in four provinces of Rwanda: East (Nyagatare, Rwamagana, and Kayonza districts), North (Gicumbi, Burera, and Musanze districts), West (Nyabihu, Rubavu and Rutsiro districts) and South (Nyanza, Huye, and Ruhango districts).
Days in the field	20 and 21 November 2019
Field sites visited	Burera, Musanze, Nyabihu, Rubavu, Rutsiro, Nyagatare, Kayonza, Rwamagana, Ruhango, Nyanza, and Huye Districts
Mission composition	Francesco Rispoli, IFAD Country Director, and Team Leader; Aimable Ntukanyagwe, Country Programme Officer, IFAD, Alban Bellinguez, Livestock Specialist and mission technical lead, IFAD Consultant; Eva Jordans, Community Empowerment Specialist, IFAD Consultant; Paul Picot, Access to Finance Specialist, IFAD consultant, King'ori Wathobio, Community Infrastructure Specialist; IFAD Consultant, Oscar Damen, M&E Specialist, IFAD Consultant; Giulia Pedone, Gender and Nutrition specialist, IFAD consultant; Frederick Kagaba, Procurement and Financial Management Specialist, IFAD Consultant; Marie Clarisse Chanoine, Natural Resources Management Specialist, IFAD consultant.

Mission Dates: 18-29 November 2019
Report Date: 08 January 2020
Project No: 2000001195
Report number: 5295-RW
East and Southern Africa
Programme Management Department

Abbreviations and acronyms

4P	Public Private Producers Partnership
AA	Authorized Allocation
AI	Artificial Insemination
AFS	Access to Finance Specialist
AHS	Animal Health Specialist
AMS	Access to Market Specialist
AOS	Annual Outcome Survey
APS	Animal Production Specialist
AWPB	Annual Work Plan and Budget
BDF	Business Development Fund
BDSP	Business Development Service Provider
BP	Business Plan
CAHW	Community Animal Health Worker
CIAT	International Center for Tropical Agriculture
CWS	Civil Works Specialist
ECCS	Environment and Climate Change Specialist
FA	Farm Assistant
FAO	Food and Agriculture Organization of the United Nations
FBDGs	Food Based Dietary Guidelines
FI	Financial Institutions
FRW	Rwandan Francs
FY	Financial Year
GALS	Gender Action Learning System
GHG	Greenhouse Gas
GLEAM	Global Livestock Environmental Assessment Model
GoR	Government of Rwanda
HI	Heifer International
IFAD	International Fund for Agricultural Development
IFMIS	Integrated Financial Management Information and System
ISM	Implementation Support Mission
KM	Knowledge Management
KWAMP	Kirehe Watershed Management Projects
L-FFS	Livestock–farmers Field School
M&E	Monitoring and Evaluation
MCC	Milk Collection Centre
MCP	Milk Collection Point
MG	Matching Grant
MINAGRI	Ministry of Agriculture and Animal Resources
MINALOC	Ministry of Local Government
MININFRA	Ministry of Infrastructure
MIS	Management Information System
MO	Ministerial Order
MoH	Ministry of Health
MoU	Memorandum of Understanding
MT	Master trainers
MTR	Mid Term Review

NAIS	National Agriculture Insurance Scheme
NGO	Non Governmental Organization
NO	No Objection
OM	Operations Manager
O&M	Operations and Maintenance
PASP	Post-Harvest and Agribusiness Support Project
PDO	Project Development Objective
PDR	Project Design Report
PHCRAB	Post-Harvest Climate Resilient Agribusiness
POG	Pass On the Gift
PP	Procurement Plan
RAB	Rwanda Agriculture Board
RALIS	Rwanda Agriculture Livestock Inspection and Certification Services
RCA	Rwanda Cooperative Agency
RCVD	Rwanda Council of Veterinary Doctors
REMA	Rwanda Environment Management Authority
RDDP	Rwanda Dairy Development Project
RNDP	Rwanda National Dairy Platform
RYAF	Rwanda Youth in Agribusiness Forum
RWF	Rwandan Francs
SACCO	Saving and Credit Cooperative
SDR	Special Drawing Rights
SECAP	Social, Environmental and Climate Assessment Procedures
SM	Sanitary Mandate
SME	Small & Medium Enterprise
SP	Service Provider
SPIU	Single Project Implementation Unit
SOE	Statement of Expenditures
TA	Technical Assistance
ToR	Terms of Reference
USD	Dollar of the United States
VBHCD	Value Based Holistic Community Development
VC	Value Chain
WA	Withdrawal Application
WEAI	Women Empowerment in Agriculture Index

A. Project Overview (auto-generated by the system)

Region:	East and Southern Africa Division		
Country:	Rwanda	Project at Risk Status:	Not at risk
Project Name:	Rwanda Dairy Development Project	Environmental and Social Category:	B
Project ID:	2000001195	Climate Risk Classification:	2
Project Type:	Agricultural Development	Executing Institution:	Ministry of Agriculture and Animal Resources
CPM:	Aimable Ntukanyagwe		
Project Director:	Alexis Ndagijimana	Implementing Institutions:	Ministry of Agriculture and Animal Resources
Project Area:	12 districts in four provinces of Rwanda: East (Nyagatare, Rwamagana, and Kayonza districts), North (Gicumbi, Burera, and Musanze districts), West (Nyabihu, Rubavu and Rutsiro districts) and South (Nyanza, Huye, and Ruhango districts).		

Approval Date:	22/09/2016		
Signing Date:	04/11/2016		
Entry into Force Date:	19/12/2016	Last audit receipt:	31/12/2018
Available for Disbursement Date:	08/02/2017	Date of Last SIS Mission:	29/11/2019
First Disbursement Date:	08/02/2017	Number of SIS Missions:	4
MTR Date:	18/11/2019	Number of extensions:	0
Original Completion Date:	31/12/2022	Effectiveness lag:	3 months
Current Completion Date:	31/12/2022		
Financial Closure:	not available yet		

Project total financing

IFAD Financing breakdown	IFAD	$43,618,800
	East and Southern Africa Division	$1,090,865
Domestic Financing breakdown	National Government	$3,863,900
	Domestic Financing Institutions	$6,567,100
	Beneficiaries	$5,931,800
Co-financing breakdown,	Heifer Project International	$3,996,900
Project total financing:		$65,069,365

B. Overall Assessment

Key SIS Indicator #1	ø Rating
Likelihood of Achieving the Development Objective	
Effectiveness and Developmental Focus	4
Effectiveness	4
Targeting and Outreach	4
Gender equality & women's participation	4
Agricultural Productivity	4
Nutrition	4
Adaptation to Climate Change	3
Sustainability and Scaling-up	4
Institutions and Policy Engagement	3
Partnership-building	4
Human and Social Capital and Empowerment	5
Quality of Beneficiary Participation	4
Responsiveness of Service Providers	5
Environment and Natural Resource Management	4
Exit Strategy	4
Potential for Scaling-up	4
Relevance 5	

Key SIS Indicator #2	ø Rating
Assessment of the Overall Implementation Performance	
Project Management	4
Quality of Project Management	3
Knowledge Management	4
Value for Money	4
Coherence between AWPB and Implementation	4
Performance of M&E System	4
Requirements of Social, Environmental and Climate Assessment Procedures (SECAP)	4
Financial Management and Execution	4
Acceptable Disbursement Rate	5
Quality of Financial Management	4
Quality and Timeliness of Audit	5
Counterparts Funds	2
Compliance with Loan Covenants	6
Procurement	4

C. ission Objectives and Key Conclusions

Background and main objective of the mission

The Mid Term Review (MTR) of RDDP was jointly conducted by an IFAD team[1] and the Single Project Implementation Unit (SPIU) of the Ministry of Agriculture and Animal Resources (MINAGRI) between 18 and 29 November 2019. The overall objective of the mission was to carry out an assessment on the implementation performance of the project and the attainment of its objectives in order to reorient the project strategy for the remaining implementation period, based on constraints faced and lessons learnt. More specifically, the mission focused on the following tasks:

(a) Provide a strategic review of the project in view of the evolution of government policies, the changes in the socio-economic context and the other ongoing initiatives;
(b) Assess project performance in relation to the stated outcomes and objectives;
(c) Review the project components structure and the detailed implementation arrangements;
(d) Examine the adequacy of the institutional, organizational and management arrangements;
(e) Analyse the main constraints during implementation and suggest the necessary corrective actions and adjustments that need to be made to the project design.

[1] Francesco Rispoli, IFAD Country Director, and Team Leader; Aimable Ntukanyagwe, Country Programme Officer, IFAD, Alban Bellinguez, Livestock Specialist, IFAD Consultant; Eva Jordans, Community Empowerment Specialist, IFAD Consultant; Paul Picot, Access to Finance Specialist, IFAD consultant, King'ori Wathobio, Community Infrastructure Specialist; IFAD Consultant, Oscar Damen, M&E Specialist, IFAD Consultant; Giulia Pedone, Gender and Nutrition specialist, IFAD consultant; Frederick Kagaba, Procurement and Financial Management Specialist, IFAD Consultant; Marie Clarisse Chanoine, Natural Resources Management Specialist, IFAD consultant.

The mission worked closely with the relevant staff from the Government of Rwanda/MINAGRI, local government authorities, service providers (SPs) and implementing partners, community representatives and other development partners. Field visits were organized in the following districts: Burera, Musanze, Nyabihu, Rubavu, Rutsiro, Nyagatare, Kayonza, Rwamagana, Ruhango, Nyanza, Huye. A workshop gathering all RDDP staff and the main implementing partners was organized on 25 November 2019 to discuss project results, the preliminary mission findings and draft recommendations, as well as the proposed changes in project design. A wrap-up meeting was held on 28 November 2019 under the leadership of the Deputy Director General of Rwanda Agriculture and Animal Resources Development Board (RAB), in charge of Animal Resources. A final workshop was organized with the SPIU on 29 November 2019 to agree on the way forward for the implementation of mission recommendations, and jointly revise the AWPB to align it with the MTR main conclusions.

Key mission agreements and Conclusions

The project is generally on track and is foreseen to meet its development objective. Levels of progress are however uneven and depend on components and domains. Activities targeting production are generally on target, as well as those supporting cooperatives and Milk Collecting Centers (MCC), but modest achievements have been recorded on market access, as well as on policy and institutional development.

As already highlighted during the previous Supervision and Implementation Support Mission (ISM), the Rwanda dairy value chain is now facing problems of market saturation and the project is yet to adjust its strategy to cope with this major change of context. The mission is of the opinion that market opportunities for affordable locally processed dairy products have not been sufficiently explored. Thus, the mission recommends allocating more efforts and resources to develop this segment of the dairy value chain, in terms of human resources, financial support, capacity building as well as re-aligning some of the existing project instruments. In this regard, the mission also proposed to revise the matching grant modalities to make it more coherent and more in line with the identified gaps and project priorities (market, youth).

Behavioural change strategies are also vital to build awareness of milk consumption. There is a need to increase awareness of health benefits of milk and dairy products. RDDP, in partnership with the private sector and the Rwanda National Dairy Platform (RNDP), can contribute to stimulate and increase demand for locally processed milk, leading to significant growth for the sector, increased income for smallholder farmers, new market opportunities for rural Small and Medium Enterprises (SME) and enhanced nutrition.

Another important issue that was stressed during the previous ISM is the limited efforts made by RDDP to mobilize the participation of the private sector and financial institutions, relying on matching grants as the sole access to finance mechanism. In addition, it was agreed that during the remaining implementation period the project should put more emphasis on the sustainability of the activities and investments promoted, which so far has not been a major concern, and becomes crucial as the end of the project is approaching.

The institutional and policy environment is another dimension that has been overlooked although it is part of the expected changes at outcome level, and instrumental to reinforce the impact and durability of project's interventions.

Synchronization and coordination of activities and service providers, has also been found to be insufficient, leading to duplication of efforts and waste of resources; SPIU will need to reinforce its coordination role to correct this.

The mission recognizes the relevance of additional activities proposed by SPIU for addition to the project implementation plans, for the development of the livestock sector in general. But it also takes note of the need to prioritize activities according to their contribution to the project outcomes and development objective. This prioritization also needs to consider the limited resources available, and the need to refocus the project based on the assessment of the performance to date.

D. Overview and Project Progress

Component 1: Climate smart dairy production intensification

SC 1.1 Training and capacity Building

Livestock Farmers Field School (L-FFS): the mission is impressed by the progress on L-FFS. So far, 515 facilitators have been trained, with another 250 to be trained soon. 1,028 L-FFS groups have been established comprising 25,095 participants (44% women), including 200 groups for Farm Assistants (FAs)[2]. In June 2020 the

[2] Source: midterm self-assessment report; 2019

first batch of farmers and FAs will graduate, to be replaced by new groups, with further graduation planned for 2021. The plan is to reach in total 3,075 groups for farmer L-FFS and 400 groups for FAs.

FAO support: It is recommended to organise the planned FAO backstopping mission as soon as possible to assess competence of Master Trainers (MT) and facilitators, methodology, curriculum and propose measures to further improve.

The Values Based Holistic Community Development (VBHCD) approach of Heifer International (HI) integrated in some L-FFS fosters members' cohesion and self-reliance. It is agreed to expand the approach to all L-FFS. The mission further recommends integrating the following topics in the L-FFS: (i) Gender Action Learning Systems (GALS) has proven to add value to L-FFS. (ii) practical "Farmer Market Schools" modules to enhance their marketing and business management skills, (iii) "Financial Literacy" modules; and (iv) Nutrition Education.

Research: Multiple research works in both animal health and production and milk quality have been undertaken in the scope of RDDP. The mission recommends pursuing this transfer of technology and capacity building on embryo transfer to cut cost on importation of bulls. The mission also reiterates a previous recommendation to enter into an MoU with the University of Rwanda to allow mobilization of students for specific research activities.

GALS: Consistent efforts have been made to introduce GALS in L-FFS curriculum. 31 L-FFS Master Trainers and 24 L-FFS groups have been trained, for a total of 96 trainees. It is estimated that, through the replication of the methodology by the trainees, 1,300 farmers have been already trained in GALS. To reach the expected 6,000 farmers, GALS methodology should be introduced into additional 200 groups during the following two years. This target is unlikely to be achieved with the human and technical capacities currently available at SPIU level. To ensure meeting the set target, the MTR has encouraged SPIU to hire service providers with proven capacities to deliver training in GALS.

SC 1.2 Sustainable access to livestock services

Feed and fodder: The project has installed 145 forage seeds multipliers. Considering the size of the market it is recommended to reduce the final target from 450 to 200 producers. RDDP plans to pilot 4 small-scale animal feed production units with L-FFS; if successful, the model will have to be upscaled through the matching grant. However, it is recommended to review the target for this activity from 25 to 12 units.

Support to private animal health services: Little progress has been achieved regarding the piloting of the Sanitary Mandate (SM). An exchange visit to Senegal has been implemented and the lessons need to be translated into a road map. Rwanda Council of Veterinary Doctors (RVCD) should be given the leading for piloting the SM and advancing the policy reform.

Community Animal Health Workers (CAHWs): 72 CAHWs have been trained and the project plans to train 150 more. CAHWs have shown to be very complementary with L-FFS. However, it is also recommended to work in parallel on the policy aspects to ensure that CAHWs are established in compliance with the national animal health legislation and international guidelines.

Support to public Veterinary Services: The project has been supporting vaccination in the 12 RDDP Districts and has overutilized the dedicated budget. There is need to reinforce the sustainability of this activity. A study on sustainability of animal health and AI services has been conducted and it is now urgent to share the outcome of this study, agree with the GoR and the Districts on a road map for its implementation, including cost sharing modalities. Based on the outcome of this exercise, a proposal for reallocation should be prepared by the project.

Genetic Resources: The same conclusion and recommendation as above applies for Artificial Insemination (AI) for which budget has been overused and targets exceeded. The end target should be thus be readjusted and set to 250,000. Finally, the SPIU proposal to finance a second liquid nitrogen production unit should not be considered as a priority considering its cost. The feasibility study for the relocation of the bull station is Rubona is ongoing, and the project will support part of this investment. The study on animal identification and performance recording, which was supposed to be implemented by FAO, should be reconsidered and entrusted to RAB, with the support of an international consultant contracted directly by SPIU.

SC 1.3 Assets building

Girinka: To date, RDDP has distributed, 3,347 dairy cows out of the 4,000 target. 30 "second generation" animals have also been distributed through the "Pass On the Gift" (POG) system. For the future, before considering increasing the 4,000 target by 2,000 additional animals, as proposed by RAB and SPIU, the mission recommends to assess the impact of the first wave, both from a macroeconomic point of view, and at household level (impact on poverty, nutrition, fertility, resilience, etc.).

Climate smart investments. As per design, the purpose of this activity was to provide incentives for climate-smart investments, including improved sheds with water harvesting systems and waste management, biogas,

solar-powered milk cooling devices, forage choppers, water facilities. In practice, only rainwater harvesting systems have been supported under this activity for 2,400 Girinka beneficiaries. This activity is implemented by HI and the required in-kind contribution is 20% (instead of 40% as per design). Therefore, this activity is only supporting a small portion of RDDP targeted beneficiaries. In order to target a more diversified set of technologies and reach a higher number of beneficiaries, it has been agreed to move the remaining budget to the BDF matching grant.

Actions	Responsibility	Deadline	Status
FAO support mission to L-FFS Follow-up with FAO Rwanda and make sure that the FAO mission to assess competence of MTs and facilitators, methodology, curriculum and propose measures to further improve is fielded asap	FAO, FFS specialist IFAD	March 2020	agreed
Additional L-FFS modules Develop modules on Business & Marketing and Financial Literacy – pilot test, review and improve. Once approved roll-out across all L-FFS	FFS spec. HI, Access to Market Specialist (AMS). Access to Finance spec. (AFS)	June 2020	agreed
Upscale L-FFS as national livestock extension approach L-FFS to be combined with “Farmer Promoters” to implement Twigire Mworozi and adopt as standard livestock extension approach in Rwanda. Prepare training materials in order to enable RAB to scale-up the approach to non RDDP districts.	RDDP team, RDDP Operations Manager (OM), RAB	June 2020	agreed
GALS Implementation Plan Prepare a GALS Implementation Plan until the end of the project: identify and hire service providers, revise and adjust, if necessary, the current outreach strategy.	SPIU Gender Specialist	March 2020	agreed
GALS roll out Roll out the GALS training (first phase) in the remaining 6 districts.	SPIU Gender Specialist	December 2020	agreed
Target for fodder seeds multipliers Reduce target for forage seeds multipliers from 450 to 200	Animal Production. spec. (APS)/ M&E spec.	Dec 2019	agreed
Small scale feed units Pilot 4 units through FFS and reduce final target to 12 (25 initially)	APS/ M&E spec.	Dec 2019	agreed
Sanitary mandate Draft a road map for piloting sanitary mandate and advancing policy reforms under leadership of RCVD	APS/ RCVD	March 2020	agreed
CAHWs Ensure that animal health legislation is revised to accommodate role of CAHWs and ensure compliance with international standards (OIE)	AHS	June 2020	agreed
Animal health infrastructures Reduce targets for proposed additional animal health infrastructures to one quarantine, 20 cattle crushes (+18 included in communal cowshed design) and 19 spray races (with boreholes), in the limits of available CW budget	OM; Civil Works Specialist (CWS)	June 2020	agreed
AI budget Revise budget and target for AI (supply of semen and training of AI technicians)	APS	Dec 2019	agreed
Girinka Assess impact of Girinka on RDDP beneficiaries and value chain before considering increasing the target by 2,000 heifers	APS; HI	June 2020	agreed
Embryo transfer and in vitro/molecular technologies Continue transfer of technology and capacity building on embryo transfer but do not engage in molecular technology and in vitro research	APS - RAB	Continuous	agreed
Communal cowsheds keep the target at 18 considering the challenges encountered to establish the first 11 units	APS - HI	Continuous	agreed
Water infrastructures Finance Gishwati water supply as a priority if risk of elite capture minored, finance valley dam in Kayonza under KIIWP	CWS	June 2020	agreed

Component 2: Producer Organization and value chain development

SC 2.1 Organization and Capacity Building of Dairy Cooperatives and other value chain players

Coordination of SPs: Dairy Cooperatives, Milk Collection Centers (MCCs) and other VC players are being supported by Rwanda Cooperative Agency (RCA), Rwanda Youth in Agribusiness Forum (RYAF), Rwanda Agriculture & Livestock Inspection Services (RALIS), HI and Rwanda National Dairy Platform (RNDP). However, there is at times overlap, and not enough clarity on the division of responsibilities. A working session needs to be organised with all SPs to discuss each SP's mandate, their comparative advantage and consequently a division of tasks and responsibilities needs to be agreed upon.

Capacity Building: Trainings conducted by RCA of dairy cooperatives/MCCs focus on cooperative Management, Organization, accounting and internal control. RCA also conducts 1 day on-the-job coaching, which is appreciated. RCA, in conjunction with RNDP, need to focus on further strengthening of Apex organisations and should initiate a restructuring of National Dairy Farmers Federation Rwanda and its unions of cooperatives.

RYAF: 46 RYAF consultants have been posted at MCC-level. It is important to define realistic tasks and plan for an exit strategy regarding their inputs.

HI: In order to increase benefits from the HI expertise on Hub development. HI's role in supporting MCCs should be redefined and focus on: (i) review and update of MCCs strategic plans (ii) support to implementation including training on Link Module, (iii) developing Business Plans (BP) in collaboration with Business Development Service Providers (BDSPs), and (iv) leverage the presence of RYAF staff for follow up.

RALIS: RALIS assesses compliance of VC actors with the Ministerial Order on collection, transformation and selling of milk. The last assessment shows that there are still gaps in terms of milk hygiene (only 25% of MCCs and less than 10 % of kiosks were rated over 70%).

RNDP: RNDP focused so far its capacity building on cooperatives of dairy transporters, collectors and processors. They would need to be more actively involved in the support to and restructuring of Unions and Federations, as well as activities under component 3.

Marketing: Market access is a serious issue. MCCs struggle to sell all their milk to processors. Some processors have reached the maximum that they are able to process, store and sell. A positive impact of RDDP is that the production in the dry season has increased substantially, creating a much more stable supply year-round. A few marketing activities have started, but delays limits impact. Very few matching grants have benefitted this group of chain actors. There is a need for a much more effective marketing strategy, especially related to the short value chain of locally processed and marketed products.

Marketing Expertise & Analysis: Current Marketing and Business Development expertise in RDDP is not sufficient. Expertise from the private sector should be engaged, including a Dairy Business consultant, BDSPs and Technical Assistance (TA) from RNE on Dairy VC. There is a need to fill gaps in recent dairy VC surveys, and develop a practical strategy for RDDP, assess current business opportunities and growing markets. This work to be carried out by above mentioned dairy business consultant.

Private Public Producers Partnerships (4Ps): Much more needs to be done to explore opportunities to develop the 4Ps. RDDP also needs to explore possibilities for private sector involvement in management of MCCs.

Market Innovations: RDDP should explore innovative marketing opportunities, especially in the "short-value chain" of locally processed milk, for example installing local level pasteurisers and milk ATM's.

RDDP Direct Support for upgrading MCCs into SMEs: The direct support for MCCs for processing and selling pasteurized milk is underway. The selection of eligible MCCs should be based on a needs analysis, MCC expressed interest and local market assessment. This support needs to be consistent with BDF MGs, i.e. the support, including equipment supplied not to exceed 50% of the total cost. Engagement and co-investment with private sector should be prioritized. The concept note needs to update and include clear selection criteria, and shared with MINAGRI and IFAD.

SC 2.2 Investment in milk collection and processing infrastructures

MCC rehabilitation and construction: 60 MCCs were planned for rehabilitation, out of which 22 have been completed and 18 provisionally handed over. Another 12 are complete but had defects which are to be rectified. For the remaining 26, lack of beneficiary contribution is delaying the issuing of the service order.

New MCCs: Six new MCCs were planned for construction but the high percentage of beneficiary contribution has been a challenge and so far, none has been started. As suggested by the SPIU, it is recommended to raise the project contribution from 40 % to 60%, and to consider using a simplified design to reduce the total investment cost.

SC 2.3 Leveraging financing for climate resilient dairy enterprises development

Focus of the project has been so far on provision of Matching Grants (MG) through Business Development Fund (BDF), mostly to finance production investments at farm level. Very few BPs have been funded for processing and marketing. It is recommended to refocus grants to support VC players for marketing, processing and service provision, with the overall rationale to support BPs that cannot be fully financed by Financial Institutions (FIs) and facilitate a graduation pathway for a sustainable linkage to the financial sector. A specific window to support youth enterprises along the VC should also be established. MG budget should be increased only if resources are available and on the basis of clear targets and implementation plan considering that all BPs should be fully implemented by project completion. It is also recommended that BDF focuses on grant management and monitoring, with support from staff seconded by SPIU, and to recruit service providers to develop BPs.

MG are only financing capital investments and capacity building, but various financial needs of the dairy VC actors also need to be addressed (savings, payments, loans, insurance) through linkage with the financial sector. While this linkage is key for the sustainability and development of the supported dairy enterprises, the mission noted with concern that not much has been done by the project in this area. Various initiatives to financially and technically support FIs with the development of adapted products for the VC actors, including small dairy farmers, are ongoing. These initiatives should be leveraged, noting that RDDP is contributing significantly to de-risk the financing of the value chain. There is also need to capacitate farmers and other VC actors to make them creditworthy and enhance trust in the financial sector.

A low cost access to finance strategy needs to be defined based on outcomes of a mapping exercise to identify relevant existing and prospective initiatives in the financial sector. Key elements of the strategy will be: (i) support to SACCOs (and possibly MFIs) to develop adapted financial products and (ii) organization of forums at district level to link farmers and VC actors to FIs.

Climate smart window in BDF MG: With the experience gained with the Climate Resilient and Agribusiness Project (PASP) through the Post-Harvest Climate Resilient Agribusiness (PHCRAB) matching grant, over the course of its implementation, RDDP adopted a new approach and has proposed to support individual farmers to reduce their vulnerability to effects of climate change, by creating a specific window for climate smart investments. To date, 938 BPs (52 %) out of 1,780 approved BPs have received a 60% grant through this window. Most of the investments consist of water tanks and few solar panels. The IFAD mission recommends enlarging the scope of this window, referring to the list of eligible climate smart investments mentioned in the PDR and in the last Implementation Support Mission (ISM) report.

Agreed actions component 2 and 3

Actions	Responsibility	Deadline	Status
Coordination of Service Providers Organise a working session with all SPs to discuss each SP's mandate, their relative strengths and consequently agree on a division of tasks and responsibilities to increase synergies and effectiveness.	SPIU, MINAGRI, RCA, RYAF, HI & RNDP	December 2019	agreed
Mapping/ranking of MCCs Analyse the detailed mapping/ranking of MCCs and dairy cooperatives, define specific interventions for improvement and update this information bi-annually to track progress.	SPIU, MINAGRI, RCA, RYAF	March 2020	agreed
New MCCs Raise the project contribution for the 6 new MCCs from 40 % to 60%, and consider using a simplified design to reduce the total investment cost	SPIU		agreed
Partnership with private sector Explore possibilities for private sector involvement in investment and management of MCCs – which may be a suitable option for some, provided there are private partners with an interest in this.	SPIU, BDSPs, RYAF	June 2020	agreed
Market access (i) RDDP to engage a Dairy Business Development consultant (50%) to support Market Analysis, Identification of Business Opportunities and supporting enterprises. (ii) BDSPs to be tasked to enhance market linkages and provide Business coaching. (iii)Processing expertise funded by RNE to be engaged.	RDDP team, Dairy Business Consultant, BDSPs	March 2020	agreed
Market analysis There is a need to fill gaps in existing dairy market studies and to conduct a practical assessment of business opportunities and assess growing markets.	Dairy business consultant,	March 2020	agreed

BDF MG modalities Review the MG eligibility criteria and conditions with focus on marketing / processing and service provision. No further financing of projects for production except projects in the pipeline at advanced stage that cannot be cancelled (BDF to be informed of this new arrangement immediately).	Access to Finance Specialist (AFS) / BDF	January 2020	agreed
Implementation plan for MG Develop an implementation plan for the MGs, with the rationale that all new Projects should be approved by end of 2020	AFS / BDF	January 2020	agreed
Recruitment of BDSPs Relaunch procurement of BDSPs for the development of the BPs	OM / AFS	January 2020	agreed
Staff secondment to BDF SPIU to second staff to BDF to assist in the grant management in collaboration with PASP and PRICE	OM / AFS	January 2020	agreed
Support to BDF for project monitoring Provide a budget to BDF for the monitoring of the Projects	AFS	Dec. 2019	agreed
MG reporting system Review reporting system to improve data on category of grantees, type of investment, profitability and impact of the investments	AFS / BDF	January 2020	agreed
Capacity building of grantees Make an assessment of capacity building needs of grantees, identify common needs and prepare a collective offering for the most common needs. If grant beneficiaries participate in joint capacity-building, they waive their grant portion	AFS, FO Specialist, BDF	March 2020	agreed
Harmonize project financial support Clarify targets and eligibility criteria of various grant modalities (direct financing or BDF MG) and harmonize conditions	OM, AFS	January 2020	agreed
Mapping of financial opportunities for dairy VC Conduct a mapping exercise to review and analyse current and prospective initiatives in the financial sector targeting dairy value chain. One consultant to be recruited to support the mapping study and design of the strategy	AFS / Consultant	February 2020	agreed
TA to SACCOs and MFIs Provide TA to SACCOs and if relevant MFIs to develop adapted financial products for dairy farmers and small enterprises. Revise ToRs already submitted by the Project	AFS / Service Provider	December 2019	agreed
Finance linkage fora Organize forum linkages for farmers / VC actors and selected FIs under District Dairy platforms	RNDP, AFS	April 2020	agreed
Staff training on Agri-finance Training of the AFS on Agri finance (e.g Boulder Rural and Agricultural Finance Program)	OM	July / August 2020	agreed
Climate-smart investments eligibility Clarify the modalities to access climate-smart and strategic investments under BDF MG and elaborate a comprehensive list of eligible climate smart and strategic investments	AFS and Environment and Climate Change specialists	March 2020	agreed
Inform on available climate smart technologies Organise a workshop to demonstrate available and tested (under PASP) climate smart technologies along the dairy value chain.	AFS and ECC specialists	March 2020	agreed
Climate smart window in BDF MG Clarify the modalities to access climate-smart and strategic investments; elaborate a comprehensive list of eligible investments along the VC and organise workshop to demonstrate available and tested (under PASP) climate smart technologies	AF and ECC specialists	Jan. 2020	agreed

Component 3: Institutional and Policy development

RDDP has so far managed to show only limited achievements in terms of policy formulation. Only the animal feed bill and related Ministerial Order has been formulated and adopted with RDDP support. There is no significant progress regarding other thematic strategies. The SPIU lacks capacities to ensure that the draft policy documents developed are adopted. It is thus recommended to recruit a high level and experienced policy advisor, who could help the project to develop a policy formulation strategy and provide backstopping for its implementation. RNDP

should also be given a more prominent role in policy dialogue. In practice much more needs to be done to get the activities under this component off the ground.
Activities under this sub-component have yet to be widely implemented. For example, the awareness campaign on benefits of milk consumption is about to start and activities to create District Dairy Platforms are underway, but more needs to be done in all Districts, with an active role of RNDP. Several constraints in the Dairy VC require an appropriate response at policy level, such as costly S-certification of dairy products, milk price control, more flexible MCC design, adoption of L-FFS as policy for livestock extension, and Girinka programme regulation regarding pass-on modalities.

Finally, although it is recognized that a livestock census would be useful for policy formulation, it is recommended for the project to focus on livestock identification which should in the end also provide data on total animal populations.

Actions	Responsibility	Deadline	Status
Recruitment of policy adviser Recruit policy adviser to develop policy action plan, support its implementation and ensure high level lobbying and advocacy	OM	March 2020	agreed
Foster policy dialogue (i)Support evidence-based formulation of thematic policies and strategies and adaptation of existing policies to address VC obstacles. (ii) Establish District Dairy VC Platforms in all project's districts. (ii)Use national and district platforms for policy dialogue and stakeholder consultation	SPIU, RNDP, MINAGRI	June 2020	agreed
Exchange visit on District VC platform Organise exchange visit to for example Tanzania to meet with District Dairy Platform, for example in Tanga District.	SPIU, RNDP	June 2020	agreed

E. Project implementation

i. Effectiveness and Development Focus

Development Effectiveness

Effectiveness **previous rating: 4** **Rating: 4**

Justification of rating
RDDP is on track to achieving project objectives. There is clear evidence that project interventions lead to desired outcomes, although more efforts are needed in some areas if end targets are to be met. Outcomes on milk production and organisational capacity are well advanced, followed by increasing processing capacity and milk quality. To achieve the target of increased profitability and competitiveness (the PDO), more efforts are needed especially regarding increasing consumption/demand, improved marketing channels and the policy framework.

Log-Frame Analysis & Main Issues of Effectiveness

In line with the shift of focus to higher level results at MTR, analysis of performance at outcome and PDO level was carried out with the project team and Service Providers. The theory of change was presented together with the logical framework (the results measurement framework), and higher-level results were discussed. The conclusion was that the project is most advanced with increasing production (outcome 1): productivity is increasing, milk production is up by almost 40% and milk quality has been improved, while increasing consumption needs further attention.

Reasonable achievements were noted regarding improved service delivery by MCCs and Cooperatives (outcome 2) through training and coaching: nearly 60% are judged to be performing well and serving targeted farmers. However, there is a need to ensure sustainability by phasing out external support such as the RYAF consultants. Relevant interventions have been introduced to make the value chain more climate-smart and farmers more resilient (outcome 5), for example through L-FSS and through the specific window for climate smart investments. Regarding the former, there is a need to uniformly promote climate smart practices at the L-FFS level, using easy, tested and affordable technologies and facilities. Regarding the latter, the investments have mainly been for rainwater harvesting systems that support a small portion of targeted beneficiaries, and there is a need to diversify and scale up these investments.

Outcome 3 on increased utilization of milk collection, processing and outlet facilities, as well as outcome 4 on an enhanced policy framework are behind relative to the other outcomes. Utilization of installed milk processing capacity is estimated to be around 60%. Positive results regarding product diversification (yogurt, cheese, butter, ghee) and new services (input supply) were observed, but on a small scale and with a need to ensure their viability. Rwanda is now facing problems of market saturation for milk and the project is yet to adjust its strategy to cope with this issue. Lack of progress in this area could put the development objective of increased profitability and competitiveness of the value chain at risk. During field visits, successful marketing initiatives were observed that can be replicated, but bottlenecks on the demand side and regarding market access were also identified; concerted efforts will be needed to address these. The same applies to several elements in the policy framework, such as the high cost of certificates for dairy products and uniform price controls for milk, which prevent private sector involvement in some parts of the country.

It is recommended to replace several indicators in the logical framework. For example, the indicator on financing gap of enterprise development is not well understood and difficult to track. It is recommended to replace it by an indicator on number of value chain actors funded by FIs (by category of VC actors: dairy farmers, VC enterprises). No financial service provider has been so far supported in delivering outreach strategy, financial products and services. The access to finance strategy to be defined will include activities to support SACCOs and possibly MFIs in this regard. It was however noted that HI is developing various innovative initiatives (digital profiling of farmers to access financial services, line of credit for financial institutions dedicated to dairy VC actors, insurance, impact investments). These benefit partly project's beneficiaries and should be further leveraged in consultation with HI and reported as an indirect output of the project.

Development Focus

Targeting and Outreach — previous rating: 4 — Rating: 4

Justification of rating

The project is well performing in terms of outreach and is delivering the proposed activities to the identified target groups. However, there are still some inconsistencies in the way target beneficiaries are reported in the M&E system, that should be amended to avoid misinterpretation. Women are still below the expected percentage of project's beneficiaries. Although efforts have been made to engage youth into project's initiatives, RDDP needs a structured strategy to engage them.

Main issues

At the time of the MTR, 88,383 resource-poor rural households (88% of the end target) have received services supported by the project, of whose 26.5% are headed by women (exceeding the end target of 20%). Following the recommendations of the last ISM, targeting mechanisms have been improved including data disaggregation on gender, age and economic category of LFF-S beneficiaries; today, women represent 41% of the L-FFS members at the community level (almost reaching the 50% end target) and 40% of facilitators, and youth 16% of members. RDDP aims to fill gap of women L-FFs facilitators to reach 50% in the next recruitment and will continue ensuring diversity in L-FFS groups regarding gender and youth.

The latest M&E data show that 30% of the persons receiving services supported by the project are women. The mission recommends including gender/ age disaggregation to all categories of project's beneficiaries (persons receiving project's services) and report accordingly in the project's Log-frame.

Direct targeting of the poorest households (from Ubudehe Category I) is being mostly achieved through the Girinka programme. Women have been directly targeted in the frame of L-FFS group formation at the community level and in the training of community facilitators (40%). Some activities are targeting youth directly, as the establishment of groups of Farm Assistants (2,600 youth trained) and the assignment of young graduates (46 RYAF consultants) to MCC in the provision of technical support to the cooperatives on production and animal husbandry issues. Although efforts have been made to engage youth into project's initiatives, RDDP still lacks a clear strategy. This should include the identification of exiting window of opportunities for youth (for example, youth financial inclusion, the creation of specific opportunities under RDDP matching grant, among others). A specific window to support youth enterprises along the value chains should also be established in complementarity with existing BDF scheme.

During the MTR, the geographical targeting of the project was revised and extended to include: (i) part of Ngororero district located within Gishwati dairy basin and; (ii) Gatsibo district, on the following activities: (a) eligibility for matching grants (for both processing and marketing); (b) MCC coaching and capacity building (through RYAF, RCA, RALIS and HI) as a follow-up of the 6 existing MCCs targeted by PASP, based on an assessment of their needs and coaching of other dairy cooperatives; (c) fodder seeds multiplication; (d) L-FFS,

including for Farm Assistants. In addition, commercialization of dairy products will be extended nationwide with focus on consumption basins (Kigali and other urban centers, border with DRC). Regarding additional field staff, the mission recommends that in Ngororero, Nyabihu district staff will be responsible. For Gatsibo district the mission recommends that the current PASP District Field staff takes up this responsibility after completing PASP. Furthermore, some outreach targets at design are deemed too high and following the request from SPIU were reduced as follows: from 80,000 farmers (3,200 groups) to 76,875 (3,075 groups) for L-FFS and from 16,640 (1,280 groups) to 5,200 (400 groups) for L-FFS farm assistants.

Actions	Responsibility	Deadline	Status
Prepare a Youth Strategy Prepare a youth strategy, including the expected target (beneficiaries) and identification of exiting window of opportunities for youth.	SPIU Gender Specialist; SPIU	March/ 2020	Agreed

Gender equality & women's participation previous rating: 4 Rating: 4

Justification of rating

Improvements have been made to expand women's economic empowerment and decision-making power at the household and group level and, in general, to increase women's participation into project's activities. This has been accomplished especially in L-FFS, where women account for 41% of beneficiaries and where GALS and the Heifer International' s VBHCD approach have been introduced. Gender-related impacts achieved by introducing these methodologies are likely to be sustainable. However, GALS implementation is still below the expected target and will need to be strengthened. Sex and age- disaggregating performance is not always monitored.

Main issues

The SPIU Gender Specialist is devoting the most of his time (80%) in support to RDDP gender-related activities. During the past months, consistent efforts have been made to introduce GALS in L-FFS curriculum, in order to promote behavioural change of farmers and household members. The methodology has proven to be effective in transforming gender relations, especially in fostering equal participation of women in decision-making in the households and in dairy activities. At the time of the MTR, 31 L-FFS Master Trainers (on 32) and 24 L-FFS groups have been trained, for a total of 96 trainees in 6 districts. It is estimated that, through the replication of the methodology by the trainees, 1,300 farmers have been already trained in GALS. To reach the expected 6,000 farmers, GALS methodology should be introduced into additional 200 groups during the following two years. As the experience from the field has shown, this target is unlikely to be achieved with the human and technical capacities currently available at SPIU level. Therefore, to ensure meeting the set target without compromising the expected results, the mission has encouraged RDDP to hire service providers (international or national NGO) with proven capacities to deliver training in GALS methodology. RDDP, through the SPIU Gender Specialist, would coordinate and supervise the delivering of GALS trainings, ensuring the quality of the services and providing direct support in the follow-up process. The project will be also responsible to coordinate with other on-going initiatives involving GALS implementation. Among those, through an IFAD grant, Oxfam Novib is currently supporting the scaling up of households' methodologies at regional level, reinforcing networking and knowledge sharing. In this context, RDDP can explore opportunities to link with the grant and leverage its support. In light of the implementation arrangements set for the delivery of GALS, the final outreach of farmers beneficiaries might be adjusted, if necessary.

During field visits, the mission could appreciate that the VBHCD approach promoted by HI and GALS methodology are highly compatible and can mutually reinforce. Synergies between VBHCD and GALS might be explored, looking at the complementarity of the methodologies and tools employed. For example, some of the GALS analytical and planning tools (e.g. vision journey) may be adapted to be also applied at the group level to promote community participatory planning.

Women's participation in project's activities has been strengthened, especially in L-FFS. Today, 40% of Community Facilitators are women. Other sectors, on the contrary, continue to be male dominated: at SPIU level, none of the 8 technical staff under RDDP is a female, while at beneficiary level the majority of technical experts (e.g. veterinary) are male.

A specific gender baseline study, including a first assessment of the GALS implementation, was due at the time of the MTR. The draft study has not been yet finalized and it is expected to be delivered by the consultant before the end of the year. The study will identify existing gender gaps in the dairy value chain and help to orient the implementation of the project's gender-related activities.

RDDP is supporting the Women Empowerment in Agriculture Index (WEAI) survey launched by MINAGRI at the national level, allocating resources for this exercise; the SPIU Gender Specialist is part of the WEAI Technical Committee. The first draft of the WEAI's results will be presented in December 2019.

Actions	Responsibility	Deadline	Status
Prepare a GALS Implementation Plan Prepare a GALS Implementation Plan until the end of the project: prepare ToRs, launch the open call, identify and hire service providers (NGO).	SPIU Gender Specialist	March/2020	Agreed
Delivery of GALS training Roll out the GALS training (first phase) in the remaining 6 districts.	SPIU Gender Specialist	December/ 2020	Agreed

Agricultural Productivity (if relevant) previous rating: 4 Rating: 4

Justification of rating

A number of converging indicators tend to confirm the assumption that project activities are leading to a good increase in milk productivity and milk production in the project target area. However, such increase has not been measured, quantified and documented, and it is difficult at this stage to confirm if it meets the targets.

Main issues

Most of the projects efforts have so far been dedicated to improving production and productivity; here after are the main activities that should result in increased animal productivity and in particular in higher milk productivity:

- 114,000 AI have been executed so far; this is massive and represents 16% of the 715,000 cows present in the project area that have been inseminated by the project. Considering that a crossbreed produces 206% more milk per lactation than a local breed, and that a pure breed produces 87% more milk than a crossbreed (source: PDR), this activity alone should lead in theory to an increase in milk productivity of around 5% (37,050 females born from AI, producing at minimum 100% more than their mothers, which is a low assumption). The impact of these AI on productivity should even be higher since males from AI will also sometimes be used for natural mating and will contribute to a wider dissemination of improved genes.
- 3,286 ha of incremental cultivated fodder has been planted by targeted farmers as a consequence of the dissemination of seeds and capacity building activities undertaken under L-FFS. Fodder trees have also been planted in abundance by L-FFS members on anti-erosive lines. This will lead to significant improvement of feeding rations, in particular in dry season, which automatically results in increased and more regular productivity.
- The project has been supporting massive vaccination campaigns against Foot and Mouth Disease, Lumpy Skin Disease, Brucellosis, Black Quarter, Rift Valley Fever, East Coast fever, East Coast Fever in the 12 RDDP Districts. Considering the potential impact of these diseases on dairy production in case of outbreak, it is also obvious that this has significantly contributed to improve animal productivity or at least to prevents collapse of production during outbreaks.
- The impact of the distribution of the 4,000 Girinka cows is probably not as significant as the impact of the above mentioned activities, since they represent only 0.5% of the total cow population in the 12 Districts. The Girinka being all either crossbreeds or almost pure exotic, the impact on milk productivity at project area level should be around +1%.

Improvement of milk productivity should be the most significant impact of these activities; however, meat productivity has inevitably been improved as well since crossed animals are heavier, and all animals are now better fed and in better health. Impact on soil fertility is also expected to be significant: improved cowshed and adoption of zero grazing techniques contribute to better collection and utilization of manure, and cultivation of fodder grasses and trees on anti-erosive lines contributes to protect soil against erosion and loss of nutrients.

However, these assumptions, even if they are scientifically grounded, would need to be confirmed by a proper monitoring of animal performance and productivity. The milk productivity per day and per cows is so far estimated through proxies such as the quantities collected at MCC level; considering that a substantial part (the majority in some areas) part of the milk is sold in the unformal market, this source cannot be considered as reliable. There is a need to measure daily milk yield on a sample of farms, which will now be done in the scope of the annual outcome survey (The baseline survey interviewed beneficiaries in 12 districts and control group farmers in four districts). It will be critical to measure as well the inter-calving interval and lactation duration, which in some cases can have as much or more influence on the milk productivity per cow per year, than the daily milk yield during lactation.

Nutrition (if relevant) previous rating: 4 Rating: 4

Justification of rating

Nutrition-sensitive activities are being gradually introduced into RDDP. Nutrition education and Behaviour Change Communication (BCC) activities have separated budget lines and the SPIU counts with a Nutrition Specialist. Progresses have been made in training local government authorities and community members in nutrition. However, improvements in milk consumption are still quite limited. BBC activities have just started to be implemented while nutrition education has not been fully integrated into L-FFS curriculum yet. It is expected that, during the second half of the project's life, RDDP will further enhance its focus towards mainstreaming nutrition into project's activities.

Main issues

During the first half of the project's life, RDDP primarily focused on increasing dairy farming productivity and developing farmers' capacities in quality milk production practices, thus improving good quality milk availability. During the field visits, the mission noticed that increasing in milk production is being gradually translated into increase in milk consumption at the household level, where milk often represents the only source of animal protein consumed. However, the overall increase in milk consumption is still quite low (the average consumption of milk at household level, increased from 64 to 68L/per person/year, against the expected average of 100L/per person/y as end target). This depends on a variety of reasons, including the accessibility of safe milk in the proximity, price's affordability and, more in general, on dietary habits. Along with improving market strategy for dairy products, there is the need to enhance the project's focus on nutrition (both at producers and consumers level) and increasing awareness on health benefits of consuming safe milk. To this aim, nutrition education and BCC on nutrition were planned to promote milk consumption as well as healthy balanced diet.

So far, training on nutrition (two-days training session) has been carried out in 3 districts involving 735 participants from L-FFS groups, local government and extension teams. The training should be extended to the remaining 9 districts and scaled down to the sector level. Nutrition education has been introduced in the curriculum of those L-FFS supported by Heifer International as part of the VBHCD approach. It is therefore recommended to integrate nutrition education modules to all L-FFS groups. Beside producers, RDDP intends promoting milk consumption among the overall project's beneficiaries. Nutrition sensitization among consumers is planned as part of the national milk consumption awareness campaign, which is being organized in partnership with MINAGRI with the support from Social Cluster Ministries and allied institutions, dairy processors, international organizations and Non-Governmental Organizations (NGOs). SPIU/RAB prepared a concept note for the campaign, which started at end of October and is planned to be held in all districts of the country. The main objective of the campaign is to increase public awareness on consuming safe milk in association with other foods to have healthy balanced diets, and to promote measures to increase milk consumption across the country. RDDP is contributing to the campaign financially and technically (elaboration of nutrition messages for target population). It is important that RDDP builds upon the awareness campaign in order to broaden out the nutrition message among its target groups. The project should also support the private sector and RNDP to undertake awareness and marketing campaigns to stimulate market demand.

As part of its nutrition-sensitive activities, RDDP should promote the dissemination of Food Based Dietary Guidelines (FBDGs), as soon as they will be published, with the sectors where it operates and make them available within the L-FFS.

Finally, there is room to reinforce the linkage between women's social and economic empowerment and nutrition, particularly in the frame of GALS, addressing those intra-household dynamics (decision-making) that, beyond food, may compromise improvements in diets at the household level (e.g. intra-household food distribution, choices on the use of family's income, decision making on the food consumed, etc.). Collaboration between the SPIU Nutrition Specialist and the Gender Specialist is encouraged in this sense.

Actions	Responsibility	Deadline	Status
Nutrition education in L-FFS Introduce Nutrition Education modules in L-FFS curriculum	SPIU Nutrition Specialist and L-FFS Specialist	March / 2020	Agreed
Nutrition education at district level/sector levels Nutrition training extended to the remaining 9 districts and at the sector level.	SPIU Nutrition Specialist	December/ 2020	Agreed
Support to the national milk awareness campaign Elaboration of nutrition messages and dissemination among project's target groups	SPIU Nutrition Specialist	March 2020	Agreed

Adaptation to Climate Change **Previous rating: 4** **Rating: 3**

Justification of rating

The project activities targeting adaptation to climate change are integrated in the annual work plan and budget. However, the SPIU Environment and Climate specialist (ECC) has only started recently to support project interventions. As a result of the MTR, it is required to steer project interventions towards comprehensive climate risks management along the whole dairy value chain. All relevant project stakeholders (e.g. project staff, service providers and L-FFS facilitators, etc.) should also be better informed on climate change adaptation and mitigation along the dairy value chain so as to ensure a smooth implementation of interventions promoted by RDDP. The project shall capitalise on lessons learned and technologies supported by PASP.

Main issues

In Rwanda, dairy farming contributes to Greenhouse Gas (GHG) emissions through to cow metabolism, emissions from manure, changes in land use, milk collection, processing and transportation. It is also affected by climate change and variability (availability of animal feed, climate related diseases, etc.). This is why, as per the initial design, the project intended to promote "climate smart dairy production intensification systems" defined as resilient systems in which households have access to sustainable forage production (e.g. improved forage varieties tolerant to drought or/and flood or agroforestry fodder species for improving and diversifying livestock diet), as well as access to quality water throughout the year.

At the stage of the MTR, the project has successfully promoted some adaptation measures such as interventions related to promotion of flood and drought tolerant and diversified forage varieties (including agroforestry species) through L-FFS groups, as well improved water management practices through rainwater harvesting facilities and equipment.
The project includes a climate smart financial window designed to support L-FFS and Girinka beneficiaries. With the experiences gained with the PASP PHCRAB, RDDP has expanded the matching grant to all beneficiaries, with different financing modalities. However, supported investments have mainly focused so far on production stage, especially addressing water shortage, while climate constraints are recorded along the whole dairy value chain. Therefore, it was agreed during the MTR that the remaining budget line under sub-component 1.3 related to "Assets building and climate smart productivity of poor households" should be moved to subcomponent 2.3 on "Leveraging financing for climate resilient dairy enterprises development". This should allow better mainstreaming of climate risk management along the whole dairy value chain and also contribute to a more equitable access to climate smart technologies for all beneficiaries. Climate smart investments should encompass the following technologies: improved sheds with water harvesting systems and waste management, biogas plants, solar-powered milk cooling devices (fridge, tanks, water heater, etc.), small-scale forage choppers, community investments addressing water shortages in drought-prone areas (boreholes, watering points), adoption of climate proof construction techniques in dairy infrastructures (such as introduction of proper ventilation and use of translucent sheets to optimize internal lighting during the day, etc.).

It was also noted that climate smart practices are not uniformly promoted through L-FFS level. In addition, the understanding of climate adaptation practices and related investments is not consistent among the SPIU staff. The mission would like to reiterate to further involve the SPIU Environment and Climate specialist in the RDDP activities so as to emphasize locally based solutions through L-FFS and promote easy, tested (e.g. through IFAD and other donor-funded projects, especially PASP) and affordable technologies and facilities.

Actions	Responsibility	Deadline	Status
Steering project towards comprehensive climate risk management To further involve the SPIU Environment and Climate specialist in the RDDP activities so as to emphasize locally based solutions through L-FFS and promote easy, tested (e.g. through IFAD and donor funded project, especially PASP) and affordable technologies and facilities.	OM, ECCS	12/2019	Agreed

ii. Sustainability and Scaling-up

Institutions and Policy Engagement (if relevant) previous rating: 3 Rating: 3

Justification of rating

The project has so far had limited influence on the policy or institutional framework through the enhancement of smallholder participation in policy processes, the production or utilization of evidence in policy processes and the increased policy capacity of the Rwanda Government to design policies, notably the National Dairy policy and the other regulations and thematic strategies, which will be required by the sector, and discussion on constraints in the implementation.

Main issues

There are some limited achievements in terms of policy formulation so far. Only the animal feed bill and related Ministerial Order has been formulated and adopted with the support of the project. There is no significant progress regarding the breeding strategy, the animal identification strategy, the animal health legislation and specific disease strategies. The SPIU so far as been reluctant to engage in policy formulation because it lacks capacities to ensure that the draft policy documents developed are adopted. To address this problem, it is recommended to recruit a high level and experienced policy advisor (local, with experience in governmental institutions), who could help the project to develop a policy strategy and provide backstopping for its implementation.

RNDP should also be given a more prominent role in policy dialogue. The amendment of the MoU with RNDP, assigns them wider functions in policy development and policy dialogue under component 3, as well as market promotion and consumers awareness-raising. However, in practice much more needs to be done to get the activities under this component off the ground. The Dairy Platform Law, which will provide a clear mandate for RNDP's role, however it is still under review at MINAGRI, after which it should be ratified.

District Dairy VC Platforms: At the moment there is limited formal and regular consultation between Dairy VC actors at District level. Several previous ISMs recommended the establishment of District Dairy VC Platforms, to identify VC problems, define solutions, and organize actors at local level to address these problems, and also monitor MCCs. RDDP has made some initial progress with forming these platforms in some districts, but this needs to be strengthened and expanded in all Districts, with an active role of RNDP.

In addition to the identified need for new policies, the mission noticed several constraints in the dairy VC that would require an appropriate response at policy level, either the adaptation of existing policies, or adding elements to existing policies. These issues include the following:

- The need for an S-certificate (quality certification) for each dairy product at the cost of USD 700 per year is difficult to pay for SMEs – it would require an adaptation of certificate costs as per size of business, or a waiver in initial years of a start-up company;
- Government price control: the fixed milk price is keeping traders from buying from farmers in some remote locations where transport costs are high and then others come in and pay less. Stakeholder consultation is needed, that could probably result in diversified prices according to location;
- There is a standard MCC design, which is very comprehensive, but is very costly to build. It would be good if there would be flexibility, and minimum MCC requirements would be set (for example to contain just a cooling tank and a place for testing);
- Twigire Mworozi would need to be adopted as the official policy for livestock extension, including the L-FFS;
- Girinka – there is a need to include in the policy provisions for pass-on modalities, both for cows and cowshed building materials.

Partnership-building	**Previous rating: 4**	**Rating: 4**

Justification of rating

Overall the project is meeting most expectations in terms of potential partners and areas of collaboration and is making efforts to improve, though the project does not necessarily have a specific strategy for leveraging those partnerships. Public institutions are well involved in project activities. They are consulted in decision-making processes and express overall satisfaction regarding their partnership with the project. Limited results have been generated in terms of partnerships with private sector and few private sector partnerships are benefitting the project target groups. Partnership and coordination with other projects to some extent exist (e.g. PASP), it is however limited and project team should allocate more time and efforts to get involved in formal coordination mechanisms or processes. Particularly remarkable is the partnership with HI, which has proven to be strategic and has allowed to introduce several innovative approaches in RDDP, including the digitalization of MCC, the profiling of smallholders for their enhanced access to financial services (with support from Mastercard Foundation). Capitalizing on the successful partnership with HI in RDDP, similar partnerships arrangements have been included in the recently approved PRISM, which will focus on the development of the small livestock VCs.

Main issues

The project has established multiple partnerships with public institutions (RAB, RALIS, RYAF, RNDP, RCA, RCVD) which often play different roles simultaneously in project implementation: service provider, implementing partner, but also beneficiary, since many of them receive support from the project, both in terms of capacity building, equipment and infrastructures.
The partnership with these public institutions has so far been fruitful, and they have contributed significantly to the achievements of the project outputs. The partnership with Districts is also key for RDDP since all animal health and AI activities in the field are being implemented by District staff. A Project Officer is based in each district and reports to the Vice mayor in charge of Economic Affairs in order to ensure proper coordination mechanisms between RDDP interventions and the District

All these partnerships are governed by Memorandums of Understanding (MoU), which are annual and are renewed every year based on performance. The annual renewal of MoUs is however often subject to delays which consecutively lead to delays in payments and affects implementation. The project could consider entering into multi annual MoUs and amend it every year according to the approved AWPB, but the benefits of such a simplified procedure in terms of time are not certain and need to be assessed.

The previous implementation support and supervision mission as well as the current MTR noted significant delays in the implementation of the MoU between FAO and RDDP with regard to the L-FFS. Both parties delayed agreeing on the content of the MoU but it has been signed since August 2019 and RDDP processed the first instalment of the required budget. The RDDP team will have to do a proper follow-up in order to ensure the experts to implement this activity are place on time. Revision of the MoU and targets could be proposed if necessary.

The partnership between RDDP and HI is a specific case. HI is an implementing partner and it contributes to the project financing. HI is a very experienced and qualified partner, and it adds value to the project implementation by providing expertise and know how, methodologies and approaches (VBHCD, POG). It also smoothens and simplifies project implementation thanks to its straightforward implementation modalities. This partnership adds a considerable value to project implementation.

If partnerships with public entities is quite successful, the situation is very different with the private sector with which RDDP has so far has had only limited success in modalities of working and delivering results together. This is probably partly due to the background and the work culture of the project staff, which is mostly related to public service.

Therefore, the project has recorded limited success in establishing successful partnerships between private sector players, including financial institutions, and cooperatives (in the scope of 4Ps for instance); Support to cooperatives mostly relies on project means including in particular matching grants, which does not guarantee project sustainability.

Regarding access to finance, the Project is partnering with BDF for the provision of MGs for Project beneficiaries, with overall commendable results (1 780 grants approved, mostly for dairy farmers), although there is need to refocus and prioritize grants to marketing / processing VC actors. Additional support needs however to be provided to BDF to increase efficiency of the grant management and monitoring of grantees investments, with the same modalities that for other IFAD funded Projects partnering with BDF for grant management (PASP and PRICE). The Project is also partnering with the National Agriculture Insurance Scheme (NAIS) to facilitate access to insurance by the dairy farmers, which is instrumental to improve resilience of the farmers and creditworthiness for the financial sector. Partnerships with FIs need to be developed to ensure sustainable access to finance for the Project beneficiaries: this will be specified in the access to finance strategy to be designed.

Actions	Responsibility	Deadline	Status
MoUs with partners Consider entering in multi annual MoUs with partners to smoothen project implementation	OM	March/ 2020	agreed

Human and Social Capital and empowerment Previous rating: 4 Rating: 5

Justification of rating

The capacities of poor rural women and men, and of their organizations, have so far been substantially strengthened. They have gained some control over economic relations and institutions, such as their L-FFS groups, MCCs or cooperatives, and actively participate in local decision-making processes. They are now in a better position to gain access to essential social and productive services. L-FFFs prove to be effective in building capacity of people to make choices and decisions that ultimately lead to increased uptake of agricultural innovations, access to services, and market access as well as collective action. The integration with the Values Based Holistic Community Development (VBHCD) of Heifer International further fosters members' cohesion and self-reliance.

Main issues

Since last mission, there is an improvement in both human and social capital and empowerment. Capacity development (e.g. managerial capacities, technical capacities, organizational capacities, educational capacities, etc.) and the social capital of poor women and men, individually (empowerment and human capital) and collectively (empowerment and organisational development) are being addressed through the cooperative development capacity building activities, through the L-FFS and the VBHCD. Within the FFS and VBHCD the activities of HI on building social capital are effective and will be scaled-up across all FFS. The mission noted several examples of social responsibility within groups, for example L-FFS members to distribute sheep and

chickens to most needy members. In addition, some L-FFS groups are transforming into cooperatives and have started doing business together, including milk selling.

To strengthen further empowerment in the next few years, the engagement of RYAF consultants should include an exit strategy to increase sustainability, including capacity building of Cooperative members, and a proper hand-over should be implemented.

In order to improve business development of Project beneficiaries (dairy farmers and cooperative and enterprises along the value chain) need to be further supported in terms of financial management and financial literacy to enhance their business skills and capacity to make the right decisions for the development of their businesses. Based on the successful example of the savings groups established under VBCHD, training should address adapted savings strategies as a way to reduce debt financing

Quality of beneficiary participation	Previous rating: 4	Rating: 4

Justification of rating

Beneficiaries' views are only partially reflected in the project activities planning. The project M&E does not yet include participatory methods. Progress has been made with the baseline study now completed, beneficiaries are now monitoring their milk production and the amount of milk sold per day, and this information is reported to the project field support staff. Beneficiaries' contribute (in cash or in kind) less than the degree envisaged at the final design, affecting sustainability. This is also partly caused by the need for a proper system to value and record these contributions. Appropriate action is being taken to address the issues.

Main issues

The project has completed the baseline study earlier this year. In some districts detailed data on Ubudehe categories is available and vulnerable groups are being supported through for example the Girinka programme and the L-FFS. However, there is more scope to use participatory approaches in establishing diverse needs of beneficiaries and farmer groups. In this respect the VBHCD approach, implemented by HI in the L-FFS groups, is based on 12 cornerstones or core values. When groups start, they analyse their situation and then they choose 4 of these as priority values to improve. After 6 months they evaluate, and if sufficient progress had been made regarding some values they choose other ones to strive towards. Since there is evidence in the HI supported groups that this approach fosters members' cohesion and self-reliance, RDDP will expand the approach to all L-FFS.

The project M&E does collect data through SP reports, sector level monitoring (which include information collected directly from beneficiaries) and MINAGRI data. However, there is scope to collect more participatory M&E data, through for example the L-FFS, different SPs and the District level VC platforms once these are established.

Participation of beneficiaries in the management of infrastructures could be improved and this would reinforce their durability and sustainability. The sustainability of infrastructure is dependent on effective Operations and Maintenance (O&M). The key infrastructures in the milk production are the water supply infrastructure: boreholes and pipeline systems. These are expected to be managed on a day-to-day basis by the users, who are the livestock owners, with support from the District. For the users to effectively manage the O&M, the need for them to be capacity built for this role – which capacity building is yet to be done. The O&M of the MCCs is the responsibility of the cooperatives, whose members also require being capacity build in O&M, including support to develop an O&M plan for each MCC. The boreholes are meant to be handed over to the District as the asset holder/owner, while the users are responsible for the day-to-day operations and maintenance of the installations.

Responsiveness of service providers	Previous rating: 4	Rating: 5

Justification of rating

Service providers are composed of public institutions, stakeholder organizations, consultancy companies and contractors. Services are generally of good quality; they are delivered on time and on budget. Service providers' reports are fairly comprehensive, informative and delivered not more than one month late. Services provided respond in general terms to the demands of the rural clientele.

Main issues

Public institutions mobilized under component 1 to provide training and research have been extremely responsive and efficient and have achieved most of the targets allocated to them.

Under component 2, the multiple service providers providing capacity building and backstopping to MCCs and Cooperatives are delivering as per their terms of reference, but their support sometimes overlap which generates some level of confusion and leads to waste of resources. This situation is however mostly due to the lack of leadership and coordination of the project rather than to the capacities or responsiveness of the service providers themselves. Some service providers, like HI are particularly responsive and proactive is suggesting cost-effective solutions to improve the delivery of services.
RNDP and RCVD, which are national stakeholder organizations, are used by the project mostly to provide capacity-building activities, which is indeed part of their mandate, but are not utilized to push the policy agenda of the project. These organizations have the mandate for this and could be given a more prominent role in policy issues (e.g. leading the sanitary mandate reforms for RCVD, convening policy dialogue events for RNDP).

The progress reports submitted by service providers are generally of very good quality; they are highly detailed and descriptive but often lack an analytical part, which could be useful to improve partnership modalities and project effectiveness. Regarding the BDF matching grant, considering the high number of BPs to be financed through the MG scheme, some delays have been noted at BDF level in the grant management process. This is why it is recommended that BDF focuses on grant management and monitoring, with support from staff seconded by SPIU, and to recruit service providers to develop BPs. At BDF request a budget will be provided to cover cost of the monitoring of the grantees, which should result in improved reporting on grantees performance and impact of the investments.

Contractors and service providers recruited for infrastructures and construction generally perform well and so far allowed the project to meet its deadlines in terms of infrastructures.

Environment and natural resource management **Previous rating: 4** **Rating: 4**

Justification of rating

The project is promoting the cultivation of forage and agro-forestry species through L-FFS with a large variety of forage and fodder crops which has a positive impact on the natural resources base in project targeted areas. In drought prone areas (i.e. Eastern Province), the project is promoting conservation of forages during the rainy season in order to increase the supply of feed during the dry season and reduce pressure on the grazing lands. The project should further emphasize on good agricultural practices related to manure and waste management at all level of the dairy value chains.

Main issues

In project targeted areas, the natural resource base is fragile due to pressure exerted by a large and rapidly growing population on a limited available land which has to accommodate farming, livestock raising and production of timber for both building and fuel, resulting in a very fragile balance between resources and needs. The project aims at promoting a sustainable dairy farming approach that allows at the same time preservation of natural resources, increasing animal productivity, and optimization of use of resources along the entire dairy value chain.

To date, 3,286 ha of land were cultivated and planted with different forage varieties in the 12 Districts targeted by RDDP. The forage seeds were direct supplied from beneficiaries and pass-on to new beneficiaries, which ensure sustainability of project interventions. Several varieties of fodder trees were also disseminated through L-FFS which will contribute to combat erosion and soil degradation. Forage grasses distributed include grasses, legumes and fodder trees. In addition, 108 seed multipliers were trained on improved technologies and practices for on farm seeds multiplication, post-harvest seeds conditioning, and seed quality control and certification. They were also supported in acquiring different forage seeds and vegetative materials to establish new sites for multiplication.

To increase resilience of farmers affected by shortage of animal feed during the dry season, the project had planned the construction of 220 forage storage facilities hangars in Nyagatare and Kayonza Districts. To date, 110 forage storage facilities (Hangars) have been constructed in Nyagatare (70) and Kayonza (40) Districts. During the field visits, the IFAD mission observed that not all hangars were used optimally. It was therefore recommended to suspend further construction until the SPIU has conducted a full analysis of the current low usage of the existing facilities.

International Center for Tropical Agriculture (CIAT) has received a grant from IFAD for "Climate-smart dairy systems in East Africa through improved forages and feeding strategies: enhancing productivity and adaptive capacity while mitigating GHG emissions" implemented in Tanzania and Rwanda. The goal of the grant is to promote climate smart dairy production through improved forages and feeding strategies. The grant entered into force in 2017 and its implemented in collaboration with RAB. However, during the MTR mission, it was noticed that although it is targeting RDDP beneficiaries, activities are implemented in parallel by RDDP and the CIAT grant project (e.g. roll out of FEAST) in certain cases. It is thus recommended to strengthen the linkages and

cohesion between both interventions and improve communication channel between CIAT/RAB team and RDDP staff.

The project also aims at contributing to the reduction of other externalities concomitant to dairy production and processing (e.g. manure management, recycling of solid waste and wastewater, etc.) by adopting measures to tackle environmental pollution, soil erosion, loss of biodiversity and greenhouse gas emissions. With regard to climate change mitigation measures, the project has supported renewable energy such as solar panels, pastureland management, promotion of agro-forestry for increasing soil carbon sequestration and reducing soil erosion and manure and waste management.

Actions	Responsibility	Deadline	Status
Construction of remaining 110 forage storage facilities Conduct an analysis of low usage of the already constructed 110 hangars in Nyagatare et Kayonza districts	Prod Specialist	Jan 2020	Agreed
Collaboration with IFAD Grant to CIAT on Climate Smart dairy Systems Strengthen the linkages and cohesion between both interventions and improve communication channel between CIAT/RAB team and RDDP staff	Prod and ECC Specialists	March/ 2020	Agreed

Exit Strategy — Previous rating: 4 — Rating: 4

Justification of rating

RDDP does not yet have an exit strategy but is aware of its importance and committed to focus on it. Various project-supported activities can and should be mainstreamed in national institutions, including MINAGRI and Service Providers involved in the project. From MTR onwards, the project must give more attention to the sustainability of project interventions: a shift in emphasis, for example, from matching grants to sustainable financial services. A first version of an exit strategy should be prepared during the remainder of this financial year (2019/20).

Main issues

Sustainability and mainstreaming will become increasingly important over the next three years. The SPIU should prepare an exit strategy that outlines which project interventions have priority; what institution would continue to implement or support each intervention after project completion; and what actions are needed to facilitate the transition, such as harmonizing approaches and prepare guidelines. The PASP exit strategy is a good example and should be used as guidance.

An example of a project intervention that is a clear candidate for mainstreaming is the Livestock Farmer Field School (L-FFS), which can become an important pillar of Rwanda's national livestock extension services. L-FFS would be integrated in national livestock extension approach, but before this can be done the approach needs to be fully developed, by further integrating marketing aspects, financial literacy and GALS, and by harmonizing the different approaches currently used by multiple service providers. Guidelines and training materials would also have to be developed, for which the Knowledge Management Specialist should take the lead with the support from other technical specialists in the SPIU. The organizational assessment and rating of Cooperatives/MCCs is another example of an activity that should be mainstreamed, which again will involve harmonizing current approaches by RCA and RYAF, and also determining which is the most appropriate institution.

Sustainability is an issue for a variety of project interventions. Vaccination against several livestock diseases in the RDDP Districts depends heavily on financing by the project, and the same is true for AI services. It is now necessary to think about a mechanism whereby beneficiaries and districts could contribute to these costs, to guarantee continuation of these activities after project withdrawal. To ensure sustainability of the supported dairy enterprises, it is also crucial that the project escalates its efforts to link project beneficiaries to the private sector and financial sector (see paragraph below) for access to durable co-financing. Staff positions that are financed by the project, for example RYAF consultants in MCCs, should also be phased out or integrated in the institutions that they support. Guidelines and capacity building for operation and maintenance of infrastructure and facilities will also require attention.

Access to financial services is a very important element of sustainability. In order to ensure sustainable access to financial services by the Project beneficiaries, exit strategy should include the design and implementation of an access to finance strategy focusing on: (i) enhancing Project beneficiaries creditworthiness through financial management and financial literacy training, (ii) providing support to SACCOs and MFIs to develop adapted financial products for the dairy VC actors, and (iii) facilitate linkages between Project beneficiaries, including the beneficiaries of the MG scheme, and the financial sector through organization of linkages forums at district level, under the Dairy district platforms. The Project will leverage the various ongoing initiatives in the Rwandan

financial sector to develop adapted financial services for the dairy VC actors, in many cases with technical and / or financial (line of credit, guarantee mechanisms, …) support from development organizations. The mapping study to be conducted beginning of 2020 will allow to identify current and prospective initiatives, and relevant FIs (banks, MFIs and SACCOs) for linkages with Project beneficiaries.
The strategy will also include TA when relevant to facilitate the design of co-investment arrangements between Coop / MCC and private sector. The mission observed that there might be mistrust between the private sector and the cooperative sector, based in some cases on bad past experience, and RDDP may therefore play a positive role through this TA to alleviate this mistrust.

Actions	Responsibility	Deadline	Status
Exit strategy Prepare an action plan for sustainability and mainstreaming of selected project interventions.	OM & Specialists	Mar/ 2020	agreed
Road map for AI and AH services Share study on sustainability and cost sharing of AI and AH services and agree on road map and cost sharing modalities with GoR and districts	AH spec. / RAB / Districts	Jun/ 2020	agreed

Potential for Scaling-Up **Previous rating: 4** **Rating: 4**

Justification of rating

GoR and development partners have shown some interest in selected project initiatives that have potential for scaling-up in the country, notably the L-FFS approach, the privatization of veterinary services and piloting of CAHWs and sanitary mandate, the use of alternative rations including the use of by-products to feed cows, and the establishment of District Dairy Platforms. RDDP can provide some evidence to support scaling up. Efforts are being made to more consistently document elements with scaling up potential.

Main issues

There is a potential to ensure sustainability and scaling up of the L-FFS across Rwanda: L-FFS would need to become the nation-wide livestock extension approach (at policy and field level). Start has been made to discuss this with RAB/MINAGRI, to replicate the Twigire Muhinzi (national extension approach for crops) methodology for livestock extension, to be called Twigire Mworozi. This requires integration and training of village level “Farmer Promoters”, some of whom could possibly be CAHWs or private vets.

In the area of animal health, the piloting of arrangements between public veterinary authority and the private sector, whereby the government delegates some of its public missions to private veterinarians (the so called “sanitary mandate”) will guide policy formulation related to privatization of veterinary services and will have a very high potential for scaling up, even at regional level. The same applies to the establishment of networks of CAHWs, for which there is a potential for scaling up at national level. To ensure this, there will be a need to harmonize with other community based animal health systems promoted by HI and Vétérinaires Sans Frontières Belgium in particular, and to ensure that the national regulatory framework provides room these types of arrangements.

Other on-going pilots which are expected to generate scaling up potential are: i) agricultural by-product utilization for feeding of dairy cows; (ii) small scale animal feed production units managed by cooperatives (currently piloted under L-FFS) and ii) Establishment of District VC platforms: if this system shows to be successful, it could be applied to other value chains.

iii. Project Management

Quality of Project Management **Previous rating: 4** **Rating: 4**

Justification of rating

Project management is generally reactive in addressing implementation issues, and the limited problems experienced. Project Steering Committee fulfils only its statutory requirements, providing assistance in resolving problems and/or guidance on Implementation issues. Coordination of service providers and implementing partners needs to be strengthened.

Main issues

RDDP's implementation arrangements are aligned to the existing practices under MINAGRI and its implementing agencies. MINAGRI has put in place a Project Steering Committee (chaired by the Permanent Secretary at MINAGRI) that meets at least twice per year in order to provide overall guidance to the project management team. Based on the successful experience of the IFAD portfolio, RDDP is also implemented through the existing Single Project Implementation Unit (SPIU) responsible for the implementation of all IFAD-funded projects in Rwanda. The SPIU is strategically positioned to manage ongoing as well as future projects identified. It contributes to better coordination of activities, peer learning and creation of synergies among ongoing projects' teams. The SPIU model has also contributed to reduce staff turnover and increase institutional memory.

RDDP staffing was completed with all key positions filled at project's start-up. However, the Programme Manager has been appointed as the Acting SPIU Coordinator since one year and was replaced by another senior staff member (Farmers' Organization Specialist). The situation has resulted into a workload for the concerned staff and requires appropriate/corrective measures in order to better focus on the implementation of the project. To this effect, it is important to speed-up the recruitment of the SPIU Coordinator and ensure that the Programme Manager is fully dedicated only to the overall management of RDDPs operations.

As already mentioned earlier, the main weakness of RDDP project management is its capacity to coordinate, synchronize, align and build synergies between its multiple service providers and implementing partners, in particular those providing support to dairy cooperatives. This should be addressed, and specific coordination mechanisms should be put in place as recommended earlier.

Knowledge Management **Previous rating: 4** **Rating: 4**

Justification of rating

The project has a Knowledge Management (KM) Plan that forms the basis for the project's KM and communication activities. The activities are clearly defined in the AWPB and are implemented accordingly, using multiple channels to deliver information on project activities and results, such as stories from the field, website articles, short videos, posters and radio talk shows. In line with the general shift in focus from the MTR onward, attention should now shift to more analytical activities, including compilation of lessons learned, analysis of how project effects and impacts are achieved, and knowledge products that will facilitate sustainability and mainstreaming.

Main issues

RDDP has a comprehensive KM plan aligned with the broader KM and communication strategy of MINAGRI. The focus until now has been on audio-visual products and delivery channels, including stories from the field, videos, brochures and posters, and radio shows on radio Rwanda and community radios, related to milk production, milk consumption and milk quality.

RDDP KM has made an important contribution during the preparation of MINAGRI's campaign for milk promotion, due to start in December 2019. This campaign will focus on stimulating consumption and demand for milk, which at this juncture is of critical importance for RDDP and further development of the value chain.

Capturing and acting on lessons learned is not yet institutionalized, and it is recommended to establish a 'register of lessons learned', which will be regularly updated by the KM Specialist in dialogue with technical specialists in the SPIU. The lessons learned should be reviewed during management meetings, and they should feed into an analytical section of annual reports that covers performance analysis, lessons learned and the way forward.

KM will play a key role in mainstreaming over the next three years, for which knowledge products of a more analytical nature are needed, as well as training materials, procedural guidelines and operation & maintenance manuals. Examples are guidelines and training materials for L-FFS, to be integrated in the national extension system; guidelines for the organizational assessment and rating of dairy cooperatives and MCCs; and guidelines and tools for testing and certification of milk and milk outlets. It is recommended to add a section to the KM plan on manuals, analytical tools and other products that need to be developed, to help ensure the sustainability and mainstreaming of selected project interventions.

Actions	Responsibility	Deadline	Status
Lessons learned Establish a 'register of lessons learned', to be regularly updated, for management meetings, learning and sharing.	KM Specialist	Jan/ 2020	agreed
Update KM manual Add a section to the KM manual on knowledge products to ensure the sustainability and mainstreaming of project interventions.	KM Specialist & SPIU specialists	Mar/ 2020	agreed

Value for Money **Previous rating: 4** **Rating: 4**

Justification of rating

In line with the shift in focus at MTR from outputs to higher-level results, an attempt has been made to judge value for money using key outcome and PDO indicators, and comparing progress towards achieving end targets with total disbursement for RDDP. The findings suggest that value for money at higher levels is broadly in line with what can be expected at mid-term and given the level of disbursement; but also that the project still has a long way to go to achieve its end targets.

Value for Money Review

Assessment of value for money at input-output level requires compatibility of systems for physical progress tracking (M&E) and expenditure tracking (financial management system). RDDP uses the government recommended Integrated Financial Management & Information System (IFMIS), which is a highly structured system aimed at effective government financial reporting and budget monitoring. However, the IFMIS chart of accounts does not entirely meet the project's needs regarding expenditure classification. To generate expenditure reports by component, category and financier the project resorts to use of Excel. This is cumbersome, susceptible to error, and does not facilitate monitoring of financial against physical achievements. In order to mitigate this, use of TOMPRO as a parallel system was adopted but this approach failed due to lack of staff capacity. At outcome and PDO level, financial analysis of supported enterprises (farm-level and value chain enterprises) would give insight into the value for money for support to individual enterprises, but such analyses have not yet taken place.

Available data allows for a general comparison of overall expenditure with indicator results at outcome and PDO level. Overall disbursement for the IFAD Loan has reached nearly 49%. When other financing sources are included (GoR, HI, private sector, beneficiaries), the overall disbursement rate is 32% - but the beneficiary and private sector contributions are underestimated due to lack of data.

Data for key indicators on production, marketing and sales at mid-term, shown below, suggest that value for money at higher levels is broadly in line with what can be expected at mid-term and given the level of disbursement.

indicator	baseline	end target	achievement at MTR	achievement / target **
milk produced per cow per day during one lactation period (kg) *	4.0	8.0	5.6	38%
Average consumption of milk at household level increased (litre)	64	100	68	11%
Dairy farmers using a formal milk collection system (%)	30%	80%	46%	32%
Installed capacity of milk collection and processing facilities functional and utilized (%)	45%	80%	60%	43%
MCCs serving targeted farmers (number)	5	58	38	62%
Volume of milk sold from targeted small-holder dairy farmers annually (ton)	43560	95040	60050	32%
Value of milk sold from targeted smallholder dairy farmers annually (USD '000)	9300	22800	13500	31%
* weighted average for local breed, cross breed and pure breed ** achievement/target is calculated as (achievement at MTR - baseline) / (end target - baseline)				

Coherence btw. AWPB and implementation **Previous rating: 4** **Rating: 4**

Justification of rating

The AWPB for the fiscal year 2019/20 is based on an extensive planning process involving implementing partners, and is of acceptable quality. Lead service providers and districts are provided with their section of the AWPB and implement accordingly. The self-assessment report prepared for the MTR analysed deliverables compared to targets set and concluded that project performance in terms of expected deliverables to meet the objectives stands at 45%. Overall, implementation of production-related activities (component 1) is well ahead of market-related activities (component 2), while developing and operationalizing policies is progressing slowly. The project is in the fourth year of implementation and the disbursement rate for the IFAD Loan has reached nearly 49%.

AWPB Review

The AWPB for 2019/20 has been prepared in Excel and consists of activity descriptions by sub-component, with quantities to be achieved by quarter and budget details (categories, financiers). Responsibility for the implementation of each activity is allocated to an implementing agency, based on which each institution is provided with its own work plan. While this provides a good basis for implementation, columns for activity progress (achievement compared to planned quantities, activity status, comments) which would facilitate systematic monitoring of the AWPB have not been added.

As at 30 November 2019, after five months of implementation, the 2019/20 AWPB had reached approximately 20% completion according to the physical progress table. The actual budget execution is 9.5%, broken down per component as: Climate-smart Dairy Production Intensification (5.5%); Producer organization and value chain development (8.3%); Institutional and Policy Development (34.6%), and Project Management and Coordination (24%). In addition, there are commitments ready for payment which raise AWPB financial execution to nearly 30%. Nevertheless, this suggests that the 2019/20 AWPB may only reach a level of completion between 60-75% and there is a need to accelerate implementation of activities.

AWPB implementation is overall on track regarding BDF MG scheme, although some delay has been noted in the grant management process and disbursement to the grantees. Activities related to promoting sustainable linkages with the financial sector have been put on hold until the MTR mission except for the linkage with the NAIS insurance scheme.

Performance of M&E System	**Previous rating: 4**	**Rating: 4**

Justification of rating

In spite its shortcomings, M&E is able to deliver the necessary data on AWPB implementation, output-level results and some higher-level results. Planning and reporting processes are well structured. An acceptable baseline survey report has been produced, which will be followed by Annual Outcome Surveys (AOS). However, the project does not have an M&E plan or an effective M&E system, while performance analysis in SPIU annual reports needs to be improved. RDDP should take the lead in establishing an M&E system that can serve all IFAD projects, building on the MIS in MINAGRI. Such a system could significantly improve data quality, make data collection, processing and reporting more efficient, and contribute to better reports.

M&E system Review

M&E is able to deliver the necessary data on AWPB implementation, output-level results and some higher-level results, although data are not always consistent with progress reports and accuracy is hard to judge.

RDDP does not have a comprehensive M&E plan, yet planning and monitoring activities are well structured. M&E data are submitted by District Field Officers and Services Providers, based on their MOUs. Findings are discussed during weekly management meetings and monthly meetings with all staff and Service Providers. Part of the data are disaggregated by sex and age group, but collecting accurate disaggregated data is difficult and there is scope for improvement. Capturing environmental and climate-change data has not started, and TA support is needed on this aspect.

The project does not have an effective M&E system. This makes data collection and processing time consuming and affects the accessibility and accuracy of data. At activity level, the Excel-based AWPB should be used consistently as a monitoring tool, by adding ‘monitoring data’ after each planned activity. Data related to indicators are kept in a multitude of files and are understood and accessible only by the Head of MIS. The lack of a system makes reporting complicated and prone to errors. To establish an M&E system, the SPIU needs to prepare a conceptual design specifying which reports are needed, followed by system implementation by a consultant (TA). The system should be able to serve all IFAD projects, as the basic requirements are the same especially for indicator reporting. The system would build on the MINAGRI MIS platform which is already used to collect agricultural data. The project that supports this system is ending and it will be handed over to MINAGRI in December 2019.

An acceptable baseline survey report has been prepared. It should be analysed to identify specific data that will be used for comparison during future surveys. TOR for the first of such surveys, an AOS, have been prepared but are very broad. Three such surveys should be conducted during 2020, 2021 and 2022, to provide data to properly assess achievements under the project outcomes and PDO. The surveys should focus on a small set of key outcome/PDO indicators. To the extent possible, the proposed first survey that has already been advertised should be scaled down and brought in line with the AOS approach.

Annual reports by Service Providers are informative; more consistent report formats could lead to further improvement. However, the overall RDDP annual report (2018/19) lacks an analytical section, which is indispensable at this stage of the project. Such a section should be added, covering performance analysis (institutions and components); lessons learned; progress made towards objectives; and review of the strategic

focus (where more or less efforts are needed). In general, the focus of data collection and reporting must now shift to include project outcomes and the development objective.

Actions	Responsibility	Deadline	Status
Baseline survey analysis Analyse the baseline survey report and highlight the specific data that will be used to compare during future surveys.	Head of MIS	Jan/ 2020	agreed
AOS Conduct three AOSs during 2020, 2021 and 2022, in line with AOS guidelines. Align the proposed first survey that has already been advertised with the AOS approach.	SPIU Head of MIS	Jan/ 2020	agreed
MIS preparation Prepare the conceptual design of a Management Information System (MIS) for RDDP /IFAD projects.	SPIU	Feb/ 2020	agreed
MIS design Recruit short-term TA for MIS implementation, integrated with the MINAGRI MIS platform.	SPIU	After handover to MINAGRI	agreed
Improve annual report Add an analytical section to the RDDP Annual Report (performance analysis, progress made towards objectives, review of strategic focus).	SPIU OM, Head of MIS	Jul/ 2020	agreed

Requirements of SECAP[3] **Previous rating: 4** **Rating: 4**

Justification of rating

The project is implementing activities to promote climate smart activities, notably at production stage. The adaptation and mitigation measures are partially integrated in the AWBP. At midterm, the study on GHG emissions which was supposed to take place during the first half of the project, was not undertaken. As per design, this task should have been undertaken by FAO. The significant administrative delays in the signing of Letters of Agreement with FAO for other assignments undermined the process for the GHG' study. The SPIU could have more proactively identified alternative solutions.

SECAP Review

The environmental category remains B as the project actively promotes climate smart technologies (i.e. improved feed and fodder varieties, agro-forestry species, solar energy and rainwater harvesting technologies). The climate risks category remains medium to high as the country has experienced severe droughts in the Eastern province that have affected vulnerable households as well as livestock. Water shortage remains a crucial issue in the eastern province and Gishwati area. Through the climate smart matching grant and civil works, the project has well supported investments in access to water (boreholes, water tanks, etc.). Other climate smart investments include small scale choppers and solar panels.

As of now, the project has supported 24,225 persons to access technologies that sequester carbon or reduce greenhouse gas emissions. Since the end target is 80,000 persons, the project has only reached a third of total targeted beneficiaries. With the enlargement of the climate smart matching grant window, the project shall improve its targeting strategy with a more diversified set of climate smart technologies to propose, as well as an increased number of beneficiaries.

In addition, the project interventions have mainly focused on production stage while climate risk management is a cross-cutting issues as climate risks are observed at each node of the dairy value chain. A further emphasis should be given to a better understanding of climate risks along the whole dairy value chain and promotion of appropriate adaptation and mitigation measures. Relevant information has been provided in the previous ISM report as well as the SECAP review note.

Monitoring and Evaluation. The dairy sector is a critical sector with regard to Greenhouse Gas (GHG) emissions and therefore, the project activities should aim at ensuring that dairy production intensification would not result in a higher GHG production. At design stage, it was proposed to assess GHG emissions at baseline, MTR and completion. Nothing has been initiated so far on this aspect and it is urgent to assess impact of project interventions on GHG emissions in order to measure the attainment of targets for reducing both direct and

[3] *Social, Environmental and Climate Assessment Procedures (SECAP)*

indirect GHG emissions along the dairy value chain. As stated in the previous ISM, IFAD recommends hiring a Global Livestock Environmental Assessment Model (GLEAM-i) expert to train SPIU and RAB relevant staff on the use of the GLEAM-i tools in order to assess progress made by the project in terms of mitigation of the impact of the dairy value chain.

Actions	Responsibility	Deadline	Status
Measuring project impact on GHG emissions Recruit a GLEAM-i expert to train SPIU and RAB relevant staff on the use of the GLEAM-I tools in order to assess progress made by the project in terms of mitigation of the impact of the dairy value chain	RDDP manager and ECC specialist	March/2020	Agreed

iv. Financial Management and Execution

Disbursement Rate

Acceptable Disbursement Rate **Previous rating: 4** **Rating:** **auto-calculated**

Justification of rating

The project is in its 4th year of implementation and the disbursement rate for Loan No.200000164200 is 46.68% while Grant No. 200000164100 is at 60.79%. Pending WA 27 for approximately SDR 0.7 million, raises the disbursement rate to 48.93%. Other financing sources have been disbursed as; GoR 9% (USD 0.347.54 of 3.8 million), HI is 55% (USD 2.3 of 3.9 million), private sector contribution 0% (of the planned USD 6.5 million), and beneficiary contribution 0.23% (USD 0.013 of 5.9 million), resulting into an overall disbursement of 35%. This is also due to the fact that private sector, beneficiaries and GoR in kind contribution has not been calculated.

Main issues

The beneficiary and private sector contribution is underestimated since it has not been fully evaluated by the project. Data received from technical departments indicates that, currently, private sector contribution is estimated at USD 268,887 (FRW 248.7 million), and beneficiary cash contribution at USD 880,668.89 (FRW 814.6 million). There is need therefore, for the technical departments to provide the related support documents to the accounting department for verification/evaluation and presentation to the external auditors for certification. Such contribution will appear as a disclosure to the audited financial statements.

Funds flow, and Statement of Expenditures (SoEs) review. Given the funds flow requirements for the project, the Authorized Allocation (AA) of USD 2.5 million seems inadequate to facilitate smooth activity implementation. As at 31st October 2019 the designated and operation accounts had a combined cash balance of USD 0.6 million (27%). At the time, there was a WA (25) in the pipeline of USD 862,923, and by the time it was paid (value date 14/11/19), the project bank accounts had a combined cash balance of USD 0.3 million - while invoices and requests for payment to suppliers/service providers by end November 2019 amounted to approximately USD 2.4 million. The likelihood for cashflow constraints presents a risk of delayed activity implementation, and IFAD ought to consider increase of the AA. To this effect, the project submitted a cashflow forecast indicating a requirement for an increase of the AA to USD 4.0M.

Treasury status. The post MTR period has an estimated combined cash balance of USD 24.3 million (IFAD Loan USD 23.9 and 0.43 million for the grant). Funds that are already committed are estimated at USD 3.2 million, resulting into approximately USD 23.1 million as the balance carried forward for the post MTR period. A set of activities to be undertaken have been presented to the mission but the estimated cost is above the estimated fund balance. Together with the MTR mission, an agreement has been reached on the activities that can be implemented during the post MTR period. Before such activities are confirmed, and a new set of cost tables drawn, a clear assessment of the available cash balance relative to the proposed activities should be done. This will be followed by generation of cost tables, and a request for re-allocation of resources amongst expenditure categories.

During RDDP design, the expenditure category for salaries and allowances did not cater for the recruitment of 12 field staff. As a result, the expenditure category is now drawn at 40% and stands a risk of being overdrawn during project implementation. The proposed post MTR project activities should provide an allocation for the 12 field staff.

HI Disbursement. There is a disproportionate execution by HI amongst components. Against appraisal targets, component one (1) was allocated USD 0.988 million of which USD 2.04 million has been spent (representing 205%), and component two (2) was allocated USD 2.99 million of which USD 0.142 million has been spent (representing 5%). The explanation for the disproportionate execution amongst components is that activities in component two are being implemented by other actors in the Diary sector, and that there was no need for

duplicating similar activities. This MTR therefore, will re-allocate financing by HI amongst components, and this will be reflected in the post MTR cost tables.

Actions	Responsibility	Deadline	Status
Funds flow IFAD to consider increase of the AA to USD 4 million to avoid cashflow constraints that may arise	IFAD	Feb 2019	Agreed
Project cost tables: An assessment of the available cash balance, relative to the proposed activities should be done before cost tables are drawn, and the proposed post MTR project activities should provide an allocation for the 12 field staff	IFAD Rwanda ICO	Dec 2019	Agreed
Beneficiary, GOR and private sector contribution Project to evaluate beneficiary and private sector contribution	SPIU	June 2020	Agreed

Fiduciary Aspects

Quality of financial management **Previous rating: 4** **Rating: 4**

Justification of rating
The project is using the government recommended IFMIS, but the IFMIS set-up does not entirely facilitate expenditure classification that will result in additional disclosures to the financial reports required by the project/IFAD. In order to generate expenditure reports by component/category/financier and SoEs, the project resorts to use of excel. The IFMIS possesses 'reporting analysis tools' that can be used to help automated generation of the required project additional disclosures to financial reports, but the Ministry of Finance has not helped configure these within the system. The approach of using parallel systems too has failed and can only be possible if a temporary accountant is hired to capture financial data into TOMPRO.

Main issues

Financial management system (FMS). RDDP uses the government recommended Integrated Financial Management Information System (IFMIS), which is specifically designed to assist government to compile central and general Government Financial Statistics in a coherent manner. The IFIMIS is a highly structured FMS, and entails careful assignment of responsibilities and approval processes, thus ensuring effective internal control processes, government financial reporting, budget monitoring, and commitment control. However, the 5 segments of the IFMIS Chart of Accounts do not entirely facilitate expenditure classification that will result in additional disclosures to the financial reports required by the project/IFAD. In order to generate expenditure reports by component/category/financier and SoEs, the project resorts to use of excel. This process is cumbersome, susceptible to error, and does not facilitate timely monitoring of financial against physical achievements.

In order to mitigate the above challenge, use of parallel systems (TOMPRO & IFMIS) had been adopted, but this approach has failed since the project has one accountant responsible for RDDP, and individually handling both systems to ensure real time accounting is practically impossible. The approach of parallel systems would have been possible if the two were compatible to allow import and export of financial data. Now that import and export is not possible, the only available option is to recruit a part time accountant to record transactions into TOMPRO and reconcile them to the General Ledger in IFMIS. Through such an arrangement, financial reports according to IFAD requirements could be generated on a real time basis.

Since it is a government requirement, during the post MTR period, RDDP will continue to use IFMIS. The IFMIS possesses 'reporting analysis tools' that can be used to help automated generation of the required project/IFAD additional disclosures to financial reports, but the Ministry of Finance has not helped configure these into the system. The implementing agency (RAB) or the parent Ministry (MINAGRI) should request for a high level meeting with the Ministry of Finance to find a permanent solution to this issue – since all other upcoming IFAD projects will be using IFMIS. In the meantime, a part-time accountant should be recruited to capture/reconcile financial data into TOMPRO.

Internal controls. The Summary of fixed and intangible assets presented in draft financial statements (FY 2018/19) and the project fixed assets' register do not tally. The balance per financial statements is FRW 4.1 billion while the balance per assets register is FRW 2.5. The main reason for this difference is that the capitalization policy for the project is not elaborated, e.g treatment of equipment purchased by the project and distributed to beneficiaries be treated? Which purchase value of an item qualifies to be considered an asset? Etc. The SPIU PIM (to be revised) should define the capitalization policy for purposes of updating the asset register.

AWPB. The actual execution against AWPB 2019/20 is 9.5% (FRW 1.1 billion of 11.5 billion), broken down per component as; Climate-smart Dairy Production Intensification (5.5%); Producer organization and value chain development (8.3%); Institutional and Policy Development (34.6%), and Project Management and Coordination (24%). At five months of implementation, this performance is rated low, and highly unlikely that it will improve by financial year end. However, there are commitments ready for payment (invoices and requests submitted) amounting to FRW 2.3 billion which if factored in raise AWPB execution to 29.5%.

Actions	Responsibility	Deadline	Status
IFMIS The implementing agency (RAB) together with the parent Ministry (MINAGRI) should request for a high level meeting with the Ministry of Finance to find a permanent solution to help automated generation of the required IFAD additional disclosures for financial reports	RAB/MINAGRI	Continuous	Agreed
Reconciliation of fixed asset register Reconcile the fixed movement schedule to the asset register, and the SPIU PIM should define the capitalization policy to enable constant update the asset register.	FC	June 2020	Agreed
Increased AA IFAD to consider increase of the AA to USD 4 million to avoid cashflow constraints that may arise	IFAD	Continuous	Proposed
Recruitment of temporary accountant Recruit a temporary accountant to capture/reconcile financial data into TOMPRO	SPIU	Feb 2020	Proposed

Quality and timeliness of audit — Previous rating: 5 — Rating: -

Narrative and rating for audit is derived directly from the audit review, which is performed by the finance officer in ARTS.

Counterpart funds — Previous rating: 2 — Rating: 3

Justification of rating
The funds provided by GoR annually to meet taxes and duties are not as per the AWPB projections. Since project inception GoR has provided 9% against appraisal targets. In kind contribution from government has not been quantified and reported upon. However, there is an improvement in cash disbursed, where the 2017/18 AWPB had a variance of -77% between the funds requested by the SPIU and what was disbursed, while the 2018/19 AWPB had a variance of -37.4%, which is a positive and encouraging improvement.

Main issues
From project inception to-date GoR has contributed USD equivalent 0.347.54 (FRW 275 million) of the planned USD 3.8 million representing 9% of appraisal targets. GoR contribution is still low and given that infrastructure related activities which have a tax element have increased, annual cash contribution by government might not be sufficient to cover taxes. It has been observed that cash disbursed is always below AWPB projections. This might affect the cashflows of the project since, in order to meet Rwanda Revenue Authority tax return deadlines, and avoid penalties, the project might resort to borrowing from IFAD special account. There is also an element of GoR in-kind contribution (e.g; office rent and RAB/MINAGRI staff, that should be appraised to form GoR contribution). IFAD has provided guidance on the quantification and reporting of in-kind contribution that is yet to be done.

AWPB Vs ACTUAL DISBURSED BY GoR				
Planned as per the AWPB	**AWPB (FRW)**	**Disbursed (FRW)**	**Variance (FRW)**	% Variance
2016-2017	0	46,470,418	-46,470,418	
2017-2018	327,224,000	75,000,000	-252,224,000	-77.08%
2018-2019	319,798,000	200,000,000	-119,798,000	-37.46%
2019-2020	0	0	0	
Total	**647,022,000**	**321,470,418**	**-418,492,418**	**-64.68%**
USD	**699,483**	**347,536**	**351,948**	

Actions	Responsibility	Deadline	Status

Government contribution GoR to provide sufficient funds to cover taxes, and SPIU to appraise in-kind contribution.	RAB/SPIU	Continuous	Agreed

Compliance with loan covenants **Previous rating: 5** **Rating: 6**

Justification of rating
The Project is being implemented in compliance with the financing agreement except for beneficiary and private sector contribution which has not been evaluated.

Main issues
A summary of compliance status is shown at appendix 3.

Procurement Review

Procurement **Previous rating: 4** **Rating: 4**

Justification of rating
Implementation of the 2019/20 PP in terms of procurement processes launched is impressive, but still low in terms of fully complete processes with contracts duly signed. RDDP is registered onto the E-procurement system (UMUCYO), and as per Rwanda Law, all procurement processes and the related PP are supposed to be published 'OMUCYO'. It was observed that the excel based PP, used to monitor implementation progress is different from the one uploaded onto 'UMUCYO', and that there are activities whose procurement processes have been conducted outside the system. This contravenes government guidelines on procurement. It is also important that all documents pertaining to the execution of a contract are kept on file to facilitate review of contract execution processes up to contract closure.

Procurement Review

Procurement plan: The progress on the implementation of the 2019/2020 PP is impressive in terms of procurement processes so far launched, but low in terms of fully complete processes with contracts duly signed. In total, the project planned to undertake forty three (43) procurement processes, and as of November 2019, twenty two (22) processes had been launched and published (51%), and twenty one (21) had not been launched (49%). Of the procurement processes so far launched, only thirteen 13 (30% of the planned) are fully complete and contracts signed. Overall, this presents a low performance on the implementation of the PP, and this is mainly because the PP for FY 2019/20 was uploaded onto the E-procurement system in September. At close to mid financial year, there is risk that some activities may not be implemented within the relevant FY.

RDDP is registered on the 'Rwanda E-procurement system (UMUCYO)', and by Law (circular No. 010/2018/2019-2884/RPPA), all procurement processes and the related PP are supposed to be published onto 'UMUCYO'. It has been observed that the excel based PP (for which a No objection was provided by IFAD) used to monitor implementation progress is different from the one uploaded onto 'UMUCYO', and that there are activities whose procurement processes have been conducted outside the system. The explanation provided for this anomaly is that, the activities were omitted by error and will be rectified, and that there are activities that are cross-cutting which if published by one of the IFAD projects in the SPIU, will be left by the other. Since the whole concept of E-procurement is new, RPPA should continuously build capacity of project staff on the use of the system. Not using the E-procurement system contravenes the public procurement Law and may have an effect on the 'Compliance Audit' conducted by the Auditor General annually.

Procurement processes: The SPIU properly keeps all documents regarding a particular procurement case under one file, making it easy for reference and review. A representative sample of 30% of procurement actions undertaken indicates that the documents pertaining to bidding processes, and bid evaluation reports are of good quality, and that there is overall compliance with government procurement regulations and IFAD guidelines.

Contract Management: This function is the responsibility of the Procurement Unit (PU) and the user department. A contract manager is appointed for every contract, and the PU keeps records of correspondences related to the contract. However, the entire process of completing all tasks and terms that are mentioned as deliverable in the contract, in order to determine whether a contract has been ultimately and conclusively closed, are missing on file. And indeed, the contract register too does not show whether a contract is still ongoing or has been closed. It is important that all documents pertaining to the execution of a contract are kept on file to facilitate review of contract execution processes up to contract closure.

Actions	Responsibility	Deadline	Status
Procurement Plan Request for No objection from IFAD timely to avoid late start of procurement processes	SPIU	Continuous	Agreed

E-procurement system Use E-procurement system as per government Law. Rectify the PP that has been uploaded onto 'UMUCYO'	SPIU	Continuous	Agreed
Filing contract execution documents Documents pertaining to the execution of a contract should be kept on file to facilitate review of contract execution processes up to contract closure	SPIU	Continuous	Agreed

v. Key SIS Indicators

 # 1: Overall implementation performance calculated **Rating: auto-**

 # 2: Likelihood of achieving the development objective calculated **Rating: auto-**

vi. Additional Aspects

F. Relevance

Relevance **Previous rating: NA** **Rating: 5**

Justification of rating
The current design is mostly consistent with the needs of the target groups as well as IFAD and Government policies and national priorities. Proposed interventions and implementation modalities are highly relevant and largely appropriate given the context and the internal project logic is coherent. Necessary adaptations have been adopted in order to reflect changes in the environment.

Main issues

The design of RDDP was very well thought and, thanks in particular to the active participation of the Government in the formulation, it has taken into account most of the challenges of the sector and has been very well aligned on government priorities and policy frameworks.
The project approach was very comprehensive with three components addressing respectively the production, the access to market, and the policy environment. These three components and their expected outcomes remain fully relevant at this stage and no substantial changes in the project structure are thus required.

However, the problem of market saturation is a very important change in the context, that had been envisaged at design and for which measures had even been identified and included in the action plan: support to small scale production, awareness campaigns to increase consumption and market demand were already foreseen in the design. Unfortunately, the project has not been able to shift from an approach essentially focused on production, towards a more comprehensive value chain approach addressing as well the demand side. This is mostly due to the difficulty and complexity of tasks (supporting production is more straightforward and easy to implement), but also to the background and capacities of RDDP team, which lack private sector and business skills.

Considering recent evolution of the financial sector and its growing interest to finance agribusiness including the dairy value chain, there is need for the Project to put more focus on linkages of the Project beneficiaries with the financial sector, and to redesign the MG scheme to support investments that cannot be fully financed by the financial institutions, as a graduation pathway for grantees to access finance from the financial sector.

G. Project Modification

Modifications		
Reallocation among categories	***Yes***	☒
Some activities had been overbudgeted (notably L-FFS and GALS) while others will need additional budget allocation to cater for the changes in design (need to allocate resources for water availability, as recommended by the first ISM), or additional activities that have been suggested by SPIU (mostly infrastructures). The BDF MG will also require additional allocation. A proposal for budget allocation is being prepared by the SPIU, in line with these missions agreements, and will be submitted to IFAD in the coming weeks. The project cost tables could be amended after approval of this budget amendment.		

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Logical framework	***Yes***	☒
The logical framework captures the interdependence of project deliverables and the intervention logic of the project quite well. The results hierarchy is unchanged. However, some important results, in particular market access, need more emphasis, while some indicators are not well understood, difficult to measure or lacking in baseline data. Proposed modifications have been discussed by the MTR team and with the SPIU, and include adding eight new indicators, removing seven existing indicators, as well as minor rewording of three outputs/outcomes. The proposed changes should be entered in the logframe (ORMS) and included in data collection efforts.		
Project area	***Yes***	☒
The geographical targeting of the project was revised and extended to include: (i) part of Ngororero district located within Gishwati dairy basin and; (ii) Gatsibo district, on the following activities: (a) eligibility for matching grants (for both processing and marketing); (b) coaching and capacity building (through RYAF, RALIS, RCA and HI) of those MCCs not already targeted by PASP; (c) fodder seeds multiplication. In addition, commercialization of dairy products will be extended nationwide with focus on consumption basins (Kigali and other urban centers, border with DRC).		

H. Lessons Learned

1. The use of Livestock - Farmer Field School (L-FFS) to deliver Extension Services.

Project	☐	Country	☐	Region	☐	Multiple-region	☒
Tag(s)	**Coordination & Engagement**						

Well-known for crop extension in Rwanda, RDDP is piloting the FFS approach as a means to disseminate production enhancing knowledge and technologies in dairy production. L-FFFs prove to be not only cost effective, but also accelerate the adoption of production enhancing technologies and best practices. The results and impact generated so far led to an increase in milk production, especially in the dry season, mostly due to increased fodder availability. Another impact of L-FFS is that it builds capacity of local people to make choices and make decisions that ultimately lead to increased uptake of agricultural innovations, access to services, and market access as well as collective action. The integration with the Values Based Holistic Community Development (VBHCD) of Heifer International further fosters members' cohesion and self-reliance.

2. The Pass on the Gift methodology reinforces the sustainability of Girinka and should be embedded in national policy.

Project	☐	Country	☐	Region	☐	Multiple-region	☒
Tag(s)	**Coordination & Engagement**						

The usual Girinka approach foresees free distribution of construction materials for the cowshed for all Girinka beneficiaries. The way HI approaches this aspect is a bit peculiar since the first generation of beneficiaries have to "pass on" both the heifer and the cowshed to a second generation of beneficiaries, and so on, in the scope of the VBHCD pathway. Although it can be seen as a deviation to the Girinka modalities, this mechanism seems to contribute to the sustainability of the process. The pilots implemented by Heifer in the scope of RDDP should be documented and assessed. Its application could then be recommended for adoption at national level and inclusion in the national Girinka policy.

3. Training by RCA provided to Cooperative Executive Committees and some cooperative members together

Project	☐	Country	☐	Region	☐	Multiple-region	☒
Tag(s)	**Coordination & Engagement, Governance & Politics**						

Based on ISM's recommendation, RCA has broadened the participants beyond the executive committees, and now routinely invites 20 members from each cooperative. This has demonstrated to result in greater transparency and accountability. There are examples of members becoming aware of their rights, and demanding transparency from their Executive Committee. Also, there are several cooperatives where Executive committee members were replaced after the training as a result of greater transparency and awareness on roles and responsibilities. It also enhances follow-up monitoring and will ultimately enhance sustainability. RCA likewise states that "It is very important that these cooperatives commit to train the acquired knowledge/skills to cooperative members after attending training especially on cooperative law and code of conduct, good governance and internal control. This would help all farmers in a cooperative to have the same level of understanding in regard to milk production and quality, governance, conflict resolution and equal opportunities especially in leadership."

4. Improving Dairy Value chain requires focus on production and marketing aspects

	Project	☐	Country	☐	Region	☐	Multiple-region	☒
Tag(s)	**Project Design; Coordination & Engagement**							

RDDP's implementation progress is uneven: activities targeting production are generally on track and showing impact, as well as those supporting cooperatives and MCCs, but only modest achievements have been recorded on the foreseen market access, as well as on policy and institutional development. The Rwanda dairy value chain is now facing problems of large processors' market saturation and the project is yet to adjust its strategy to cope with this major change of context. Though it was envisaged at design, market opportunities for affordable locally processed dairy products have not yet been sufficiently explored. In a VC project the aspects of production and marketing need thus to receive equal attention from the start and be implemented in parallel.

5. Integrating the GALS methodology into agricultural extension services

	Project	☐	Country	☐	Region	☒	Multiple-region	☐
Tag(s)	**Social and cultural**							

GALS is a flexible approach that can be integrated in a variety of technical interventions: it is very effective for planning at the household level, to build group's cohesion, and to facilitate participatory planning at community level. Farmer-to-farmer extension methodologies (e.g. through farmers school) demonstrated to be appropriate to promote GALS in agricultural extension; both approaches are based on peer-to-peer learning and can mutually reinforce. However, GALS methodology is not always fully understood and considered a priority from extension workers; the transfer of GALS through Master Trainers, for instance, has been challenging (focus given to productivity issues). The methodology is often regarded as a stand-alone component, instead of an integrated approach to project's activities. Therefore, there is the need to highlight GALS's impact towards increasing efficiency of agricultural extension services, showing the inter-linkages with other project's activities and valorise its contribution towards accelerating project's achievements.

6. Strengthening the linkage between women's empowerment and improved nutrition

	Project	☐	Country	☐	Region	☒	Multiple-region	☐
Tag(s)	**Social and cultural**							

Increasing food production alone doesn't necessarily translate into improved nutrition among the target population. In the project area, the increase in the production of safe, good quality milk, has not been translated into a significant increase in milk consumption yet. Although this may depend on a set of interrelated factors (such as, milk availability in rural market, affordability of dairy products by the local population), the link between women's empowerment and improved nutrition should be further explored by the project. Men and women within a household often have different preferences for allocation of resources and distribute these differently based on their negotiating power within the household. This is why women's empowerment is considered crucial for improving nutrition outcomes. Since women are often primary caregivers, they can influence their children's nutrition indirectly through their own nutritional status, as well as directly through childcare practices. Greater empowerment of women (decision making power, economic empowerment, education and intra-household status) are often associated with a greater dietary diversity and food security among their children. In this context, GALS methodology can greatly help to address the linkages between women's empowerment and improved nutrition.

7. Matching grants should be designed as part of an overall strategy to promote sustainable access to finance for Project beneficiaries

	Project	☐	Country	☒	Region	☐	Multiple-region	☐
Tag(s)	**Coordination and engagement**						

Focus of the Project has been on provision of Matching Grants (MG) through BDF. MG are only financing capital investments and capacity building, but various financial needs of the dairy VC actors also need to be addressed (savings, payments, loans, insurance) through linkage with the financial sector, including for asset financing since the BDF grant budget cannot cover all their financial needs.

While linkages with the financial sector is key for the sustainability and development of the supported dairy enterprises and therefore of Project outcomes, not much has been done by the Project to facilitate these linkages, except for linking dairy farmers to NAIS insurance scheme which is partially subsidizing insurance premiums. MG scheme has moreover only marginally resulted in linkages between grantees and the financial sector, contribution by the grantees being in most cases mobilized through their own resources, and rarely through bank loan.

The mission noted that the financial sector has a growing interest to finance agribusiness, including the dairy VC, with various initiatives to financially and technically support development of adapted products for the VC actors, including small dairy farmers. These initiatives should be leveraged, noting that the Project is contributing significantly to de-risk the financing of the value chain through supports on production and marketing sides, as well as business management skills of the beneficiaries, which should facilitate linkages to financial institutions. In view of this context, the MG scheme should be designed with the following overall principle and rationale: support projects that cannot be fully financed by the financial sector (due to the status of the beneficiary and / or nature of the investment), and facilitate a graduation pathway for a sustainable linkage to the financial sector, which means for instance that a beneficiary should only access one grant and then access loans from existing financial intuitions for additional needs.

8. Policy work requires adequate and experienced human resources

	Project	☐	Country	☐	Region	☐	Multiple-region	☒
Tag(s)	**Coordination and engagement; Governance & Politics**						

RDDP has encountered challenges in pushing its policy agenda mostly because its human resources are not equipped for this task. Engaging in policy formulation, dialogue and reforms require staff who are familiar with the policy process in the country, and with the key institutions at stake and decision makers. These staff need to meet these key decision makers to raise their awareness on the need for policy change, and make things moving. The risk if the project does not engage in this active lobbying stage is that draft policies, strategies and laws can always be formulated, but remain at draft stage and are never adopted. In the case of RDDP, the solution identified by the MTR to address this challenge is to recruit a part time experienced policy adviser, who could be for instance a former high level civil servant familiar with livestock related policy processes.

I. Logical Framework

Appendix 1: Financial: actual financial performance by financier; by component and disbursements by category

Table 1A: Financial performance by financier

Financier	Appraisal (USD '000)	Disbursements (USD '000)	Percent disbursed
IFAD loan	43,619	19,541	45%
IFAD grant	1,091	674	62%
Heifer International	3,997	2,185	55%
Private/Banks	6,567	0	0%
Beneficiaries	5,932	13.68	0%
GoR	3,864	347.54	9%
Total	**65,070**	**22,761**	**35%**

Table 1B: Financial performance by financier by component (USD '000')

CUMULATIVE EXPENDITURE BY COMPONENT as at October 2019																					
	IFAD & LOAN			IFAD GRANT			HPI			GOR			BENEFICIARY			Private sector			Total		
	Allocation	Actual	%ge	Allocation	Actual	%ge	Allocation	Actual	%ge	Allocation	Actual	%ge	Allocation	Actual	%ge	Allocation	Actual	%ge	Allocation	Actual	%ge
A. Climate-smart Dairy Production	**21,543**	**10,205**	**47%**	**536**	**452**	**84%**	**998**	**2,043**	**205%**	**2,256**	**98**	**4%**	**604**	**-**	**0%**	**1,700**	**-**	**0%**	**27,637**	**12,799**	**46%**
1. Knowledge, Attitudes and Behaviour	8,974	2,004	22%		204		-	-		840	42	5%	-				-		9,814	2,250	23%
2. Sustainable Access to Public and Private Livestock Services	6,485	4,213	65%	536	248	46%	404.0	1,358	336%	790	19	2%	604		0%	116		0%	8,934	5,838	65%
3. Asset Building and Climate-Smart Productivity	6,084	3,988	66%		-		594.0	685	115%	626	37	6%	-			1,585		0%	8,889	4,711	53%
Subtotal Climate-smart Dairy Production																			-	-	
B. Producer Organization and Value Chain Development	**14,750**	**6,088**	**41%**	**345**	**170**	**49%**	**2,998.9**	**142**	**5%**	**1,332**	**170**	**13%**	**5,328**	**13.7**	**0%**	**4,867**		**0%**	**29,621**	**6,583**	**22%**
1. Organization and Capacity Building of Farmer Cooperatives and other VC players	4,236	1,553	37%		-		2,908.7	-	0%	284	9	3%	-			-			7,428	1,562	21%
2. Investment in Milk Collection and Processing Infrastructure	3,146	3,877	123%	345	170	49%	90.2	-	0%	1,037	145	14%	928		0%	-			5,546	4,191	76%
3. Financing for Dairy Enterprise Development	7,368	658	9%		-		-	142		12	16	138%	4,400	13.7	0%	4,867		0%	16,646	830	5%
Subtotal Producer Organization and Value Chain Development																			-	-	
C. Policy and Institutional Strengthening	**1,471**	**763**	**52%**	**210**	**30**	**14%**				**186**	**21**	**11%**	**-**			**-**			**1,868**	**813**	**44%**
1. Policy Formulation	332	11	3%		-			-		4	0	1%							336	11	3%
2. Policy Implementation and Institutional Strengthening	1,073	424	39%		30			-		141	2	2%							1,214	456	38%
3. Policy Related knowledge management	66	328	498%	210	-	0%				41	18	44%							317	346	109%
Subtotal Policy and Institutional Strengthening																			-	-	
D. Project Coordination and Management	**5,854**	**2,485**	**42%**		**22**					**89**	**59**	**66%**							**5,943**	**2,566**	**43%**
1. Project Management																			-	-	
Total	**43,619**	**19,541**	**45%**	**1,091**	**674**	**62%**	**3,996.88**	**2,185**	**55%**	**3,864**	**348**	**9%**	**5,932**	**13.68**	**0.23%**	**6,567**		**0%**	**65,069**	**22,761**	**35%**

Table 1C: IFAD loan disbursements (SDR, as at 18 -11-2019)

Category Description	Original Allocation	Revised Allocated	Disbursement	W/A pending (27)	Available Balance	%
200003 Works	330,000	3,830,000	896,745.54		2,933,254.46	23%
200008 Consultancies	3,700,000	3,700,000	2,401,462.32	329,743.97	968,793.71	74%
200012 Grants and subsidies	5,030,000	5,030,000	1,276,792.41	312,451.55	3,440,756.04	32%
200013 Goods, services and inputs	9,700,000	8,090,000	6,449,053.54	13,928.32	1,627,018.14	80%
200016 Operating costs	780,000	780,000	124,447.28		655,552.72	16%
200018 Salaries and allowances	2,420,000	2,420,000	1,080,868.89	40,504.87	1,298,626.24	46%
200019 Training and workshops	6,300,000	6,300,000	761,126.97	8,839.58	5,530,033.45	12%
250001 Advance account startup cost	-		99,752.23		-99,752.23	
270001 Authorized allocation	-		1,544,412.05		-1,544,412.05	
290001 Unallocated	3,090,000	1,200,000			1,200,000.00	
TOTAL:	**31,350,000**	**31,350,000**	**14,634,661.23**	**705,468.28**	**16,009,870.49**	**48.93%**

Table 1D: IFAD grant disbursements (SDR as at 18-11-2019)

Category Description	Original Allocation	Revised Allocated	Disbursement	W/A pending (27)	Available Balance	%
200008 Consultancies	350,000	350,000	201,944		148,056	58%
200013 Goods, services and inputs	370,000	370,000	135,280		234,720	37%
270001 Authorized allocation	-	-	**143,023**		**(143,023)**	
290001 Unallocated	70,000	70,000			70,000	
TOTAL:	**790,000**	**790,000**	**480,246**		**309,754**	**60.79%**

Figure 1: IFAD loan/grant disbursement, comparisons between original and revised allocations and actual disbursement

Category	Category Description	Original Allocation	Revised Allocation	Disbursement	Balance	Per cent disbursed
200003	Works	330,000	3,830,000	896,745.54	2,933,254.46	23%
200008	Consultancies	4,050,000	4,050,000	2,603,406.07	1,446,593.93	64%
200012	Grants and Subsidies	5,030,000	5,030,000	1,276,792.41	3,753,207.59	25%
200013	Goods, Services and Inputs	10,070,000	8,460,000	6,584,333.19	1,875,666.81	78%
200016	Operating Costs	780,000	780,000	124,447.28	655,552.72	16%
200018	Salaries and Allowances	2,420,000	2,420,000	1,080,868.89	1,339,131.11	45%
200019	Training and Workshops	6,300,000	6,300,000	761,126.97	5,538,873.03	12%
250001	Advance Account	0	0	99,752.23	-99,752.23	
270001	Authorised Allocation	0	0	1,687,434.69	-1,687,434.69	
290001	Unallocated	3,160,000	1,270,000	0	1,270,000.00	0%
	Total	**32,140,000**	**32,140,000**	**15,114,907.27**	**17,025,092.73**	**47%**

Appendix 2: Physical progress measured against AWP&B

Period: July 2019 - November 2019

Indicator	Unit	AWP&B FY 2019/20	Actual at 30/11/2019	%	Cumulative Actual	Appraisal Target	%
Component 1: Climate-smart Dairy Production Intensification							
Sub comp 1.1: Training and capacity building of smallholder dairy farmers							
Training of L-FFS Master trainers	Number	0	0	0	27	25	108
L-FFS facilitators selected and trained	Number	200	0	0	515	640	80
Male	Number	100	0	0	314	320	98
Female	Number	100	0	0	201	320	63
L-FFS groups for farmers established	Number	700	58	8	830	3,200	26
Training of farmers through L-FFS	Number	18,000	1,740	10	25,181	80,000	31
Male	Number	12,600	957	8	14,913	56,000	27
Female	Number	5,400	783	15	10,268	24,000	43
L-FFS groups for farm assistants established	Number	100	40	40	240	1280	19
Milking machine	Number	0	0	0	12	12	100
Forage choppers	Number	0	0	0	145	145	100
Hay baling machines and tractors	Number	0	0	0	4	4	100
Households (HHs) trained on GALS methodology	Number	1,000	16	2	1,363	6,000	23
Acquisition of bicycles for L-FFS Facilitators	Number	200	0	0	515	715	72
Establishment of L-FFS techn. & coord. committee	Number	2	1	50	3	6	50
Sub–component 1.2: Sustainable access to public and private livestock services							
Seed multipliers trained	Number	50	0	0	145	450	32
Forage seed multiplied and planted	Ha	1500	881	59	3,298	6,000	55

Indicator	Unit	AWP&B FY 2019/20	Actual at 30/11/2019	%	Cumulative Actual	Appraisal Target	%
Construction of Forage storage facilities (Hangars)	Number	110	0	0	110	220	50
Construction and install borehole	Number	14	0	0	5	19	26
Training of new AI technicians	Number	50	0	0	178	400	45
Cows vaccinated against Brucellosis	Number	51,634	32,000	62	32,000	51,634	62
Cows vaccinated against Lumpy Skin Disease (LSD)	Number	400,000	267,500	67	267,500	400,000	67
Cows vaccinated against Black Quarter (BQ)	Number	350,000	200,000	57	200,000	350,000	57
Cows vaccinated against East Cost Fever (ECF)	Number	10,000	1,193	12	4,193	10,000	42
Cows vaccinated against Foot Mouth Disease (FMD)	Number	130,000	0	0	45,093	130,000	35
Cows vaccinated against Rift Valley Fever (RVF)	Number	120,000	29,307	24	29,307	120,000	24
Rehabilitation of Veterinary satellite laboratories	Number	4	4	100	4	4	100
Construction of a facility for the new Nitrogen Plant	Number	0	0	0	1	1	100
Purchase and install of a new liquid Nitrogen Plant	Number	0	0	0	1	1	100
Establishment of Committee for Dairy Research	Number	0	0	0	1	1	100
Acquisition of high genetic merit bulls	Number	4	0	0	4	10	40
Training of vet techn. (animal diseases & surgery)	Number	175	0	0	175	175	100
Quantity of bovine semen purchased and distributed	Dose	50,063	27,901	56	113,698	300,000	38
Quantity of hormones purchased & distributed	Dose	7,600	0	0	13,000	42,000	31
Cows to be inseminated (AI)	Number	50,063	14,727	29	113,698	300,000	38
Rehabilitation of Bull Station	Number	1	0	0	0	1	0
Sub component 1.3: Asset Building and Climate-Smart Productivity							
Equipment for Rubilizi and Satellites Laboratories	Number	0	0	0	1	1	100
Reagents & consumables for Rubilizi & satellites Lab	Number	1	0	0	1	1	100
Prevalence study & strategy to eradicate Brucellosis	Number	0	0	0	1	1	100
TA for dossier for process of FMD OIE Pathway	Number	0	0	0	1	1	100

Indicator	Unit	AWP&B FY 2019/20	Actual at 30/11/2019	%	Cumulative Actual	Appraisal Target	%
Inspection and validation of lists of beneficiaries	Number	1,000	56	6	3,403	4,000	85
Cows distributed to the beneficiaries	Number	1,000	56	6	3,403	4,000	85
Construction Sprayrace	Number	5	0	0	5	10	50
Construction of metalic cattle cruches	Number	24	0	0	0	50	0
Component 2: Producer Organization & Value Chain Development							
Sub Component 2.1. Organization and capacity building of dairy cooperatives and other VC players							
Number of dairy coops trained on cooperative management, governance and leadership, etc;	Number	20	0	0	24	65	37
Number of dairy cooperatives to be audited	Number	10	0	0	15	40	38
Number of Federation and Union leaders trained	Number	10	0	0	9	12	75
Number of milk sellers' cooperatives trained	Number	18	0	0	18	NA	
Number of milk collectors/transporters cooperatives trained	Number	10	0	0	10	NA	
Number of processors on specific themes on diversification of dairy products	Number	100	0	0	60	NA	
Post-placement training of farmers on Animal husbandry	Number	1,000	0	0	3,347	6,000	56
Sub-component 2.2. Investment in milk collection and processing infrastructure							
Rehabilitation of Milk Collection Centres	Number	26	0	0	34	60	57
Electrification of MCCs to 3 phase electricity	Number	10	0	0	5	15	33
Construction of new Milk Collection Points	Number	50	0	0	0	200	0
Construction of new Milk Collection Centres	Number	0	0	0	0	5	0
Improvement of access road to MCCs facilities	Km	1.1	0	0	0	5	0
Sub-component 2.3. Leveraging financing for climate resilient dairy enterprise development							
Number of business plans developed and approved	Number	500	425	85	1,780	2,500	71

Indicator	Unit	AWP&B FY 2019/20	Actual at 30/11/2019	%	Cumulative Actual	Appraisal Target	%
Number of business plans financed & implemented	Number	500	50	10	420	1,500	28
Component 3: Institutional and Policy Development							
Pilot milk distribution to 36 schools	litre	0	0	0	324,869	260,000	125
Pupils benefited on One cup of Milk per child program	Number	0	0	0	20,396	12,170	168
Number of national policies (laws and regulations) developed to strengthen dairy industry	Number	2	1	50	2	5	40
Number of MCCs assessed against compliance with regulations and standards	Number	65	0	0	61	67	91
Number of nutrition champions trained on nutrition at District level	Number	30	0	0	167	100	167
Number of MCCs, milk kiosks and SMEs managers trained/coached on milk quality testing	Number	30	20	67	30	67	45
Component 4: Project Management and Coordination							
Baseline survey conducted	Number	1	1	100	1	1	100
Baseline Study for Gender conducted	Number	1	0.2	20		1	0
Outcome survey conducted	Number	1	0	0	0	0	0
Study on Finacial sustainability of RCVD and income generating activities	Number	1	1	100	1		0
Impact survey conducted	Number	0	0	0	0	1	0
Project Completion Report conducted	Number	0	0	0	0	1	0
Women's empowerment in agriculture index (WEAI) conducted	Number	1	1	100	1	1	100

Appendix 3: Compliance with legal covenants: status of implementation

Section	Covenant		Target/Action Due Date	Compliance Status/Date	Remarks
Section B, Par 6	One designated account opened in the National Bank of Rwanda where the proceeds of the financing will be channeled	Withdrawal condition	Compliant		
Section B, Par 8	The Borrower/Recipient shall provide counterpart financing for the project in an approximate amount of USD 3,863,900. The counterpart financing provided by the Borrower/Recipient shall cover the payment of duties and taxes related to the financing	Ongoing	Partially compliant	Funds not provided as per planned AWPB	
G.C - Section 7.01 (b)	(i) Projects shall be implemented on the basis of an Annual Workplan and Budget (AWPB). The Lead Project Agency shall prepare a draft Project AWPB for each Project based, to the extent appropriate, on the draft AWPBs prepared by the various Project Parties. Each draft Project AWPB shall include, among other things, a detailed description of planned Project activities during the coming Project Year, a Procurement Plan, and the sources and uses of funds. (ii) Before each Project Year, the Lead Project Agency shall, if required, submit the draft Project AWPB to the oversight body designated by the Borrower/Recipient for its review. When so reviewed, the Lead Project Agency shall submit the draft Project AWPB to the Fund for comments no later than sixty (60) days before the beginning of the relevant Project Year. If the Fund does not comment on the draft Project AWPB within thirty (30) days of receipt, the AWPB shall be deemed acceptable to the Fund. (iii) The Lead Project Agency shall adopt the Project AWPB in the form accepted by the Fund. (iv) The Lead Project Agency may propose adjustments in the Project AWPB during the relevant Project Year, which shall become effective after acceptance by the Fund		Ongoing	Compliant	
G.C - Section 7.03	Availability of Additional Resources. (a) In addition to the proceeds of the Financing, the Borrower/Recipient shall make available to the Project Parties such funds, facilities, services and other resources as may be required to carry out the Project in accordance with Section 7.01. (b) In addition to the proceeds of the Financing, the Financing Agreement may provide that the Borrower/Recipient shall make available to the Project Parties during the Project Implementation Period counterpart funds from its own resources in accordance with its customary national procedures for development assistance.		Ongoing	Partially Compliant	GoR contribution low
G.C -Section 7.05	Procurement. (a) Procurement of goods, works and services financed by the Financing shall be carried out in accordance with the provisions of the Borrower/Recipient's procurement regulations, to the extent such are consistent with the IFAD Procurement Guidelines. Each Procurement Plan shall identify procedures which must be implemented by the Borrower/Recipient in order to ensure consistency with the IFAD Procurement Guidelines. (b) By notice to the Borrower/ Recipient, the Fund may require that all bidding documents and contracts for procurement of goods, works and services financed by the Financing include provisions requiring bidders, suppliers, contractors, sub-contractors and consultants to: (i) allow full inspection by the Fund of all bid documentation and related records; (ii) maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and		Ongoing	Compliant	

Section	Covenant	Target/Action Due Date	Compliance Status/Date	Remarks
	(iii) Cooperate with agents or representatives of the Fund carrying out an audit or investigation.			
GC -Section 7.11	The Borrower/Recipient or the Lead Project Agency shall appoint the Project Director and all other key Project personnel in the manner specified in the Agreement or otherwise approved by the Fund. All key Project personnel shall have qualifications and experience specified in the Agreement or otherwise approved by the Fund. The Borrower/Recipient shall exercise best efforts to ensure continuity in key Project personnel throughout the Project Implementation Period. The Borrower/ Recipient or the Lead Project Agency shall insure key Project personnel against health and accident risks to the extent consistent with sound commercial practice or its customary practice in respect of its national civil service, whichever is appropriate	Entry into force	Compliant	
G.C -Section 7.16	Project Completion. The Borrower/Recipient shall ensure that the Project Parties complete the implementation of the Project by the Project Completion Date. The Fund and the Borrower/Recipient shall agree on the disposition of the assets of the Project upon its completion.	31 December, 2022	Not yet due	
G.C - Section 8.01	Implementation Records. The Borrower/Recipient shall ensure that the Project Parties maintain records and documents adequate to reflect their operations in implementing the Project (including, but not limited to, copies or originals of all correspondence, minutes of meetings and all documents relating to procurement) until the Project Completion Date, and shall retain such records and documents for at least ten (10) years thereafter.	Ongoing	Not yet due	
Article 8 **Section 8.3 (b)** **MTR**	If specified in an Agreement, the Lead Project Agency and the Fund shall jointly carry out a review of Project implementation no later than the midpoint of the Project Implementation Period (the "Mid-Term Review") based on terms of reference prepared by the Lead Project Agency and approved by the Fund. Among other things, the Mid-Term Review shall consider the achievement of Project objectives and the constraints thereon and recommend such reorientation as may be required to achieve such objectives and remove such constraints.	Compliant		
Article 8 **Section 8.3 (c)** **MTR**	The Borrower/Recipient shall ensure that the recommendations resulting from the Mid-Term Review are implemented within the specified time therefore and to the satisfaction of the Fund. Such recommendations may result in modifications to the Agreement or cancellation of the Financing.	Ongoing		
G.C - Section 9.03 (a)	Each Fiscal Year, have the accounts relating to the Project audited in accordance with auditing standards acceptable to the Fund and the Fund's *Guidelines on Project Audits (for Borrowers' Use)* by independent auditors acceptable to the Fund (Auditor General);		Compliant	
G.C - Section 9.03 (b)	Within six (6) months of the end of each Fiscal Year, furnish to the Fund a certified copy of the audit report. The Borrower/Recipient shall submit to the Fund the reply to the management letter of the auditors within one month of receipt thereof;	Compliant		

Appendix 4: Technical background analysis

Appendix 4.1. Working paper – Analysis and recommendations for the implementation of animal health and production activities

Appendix 4.2. Working paper – Community Empowerment and Marketing

Appendix 4.3. Working paper: Development of a Youth Strategy for RDDP

Appendix 4.4. Working paper: Access to finance

Appendix 4.5. Planning, Monitoring & Evaluation and Knowledge Management

Appendix 4.6. Community Infrastructure

Appendix 4.7. Environment and Climate Change

Appendix 4.8. Financial management

Appendix 4.1. Working paper – Analysis and recommendations for the implementation of animal health and production activities

I. INTRODUCTION

This document has been produced in the scope of Mid Term Review mission of RDDP, which was jointly conducted by an IFAD team and the Single Project Implementation Unit (SPIU) of the Ministry of Agriculture and Animal Resources (MINAGRI) between 18 and 29 November 2019. The overall objective of the mission was to carry out an assessment on the implementation performance of the project and the attainment of its objectives in order to reorient the project strategy for the remaining implementation period, based on constraints faced and lessons learnt.

The specific purpose of this working paper is to compile detailed observations on implementation of component 1: Climate-smart Dairy Production Intensification, with a focus on sub-component 1.2 (sustainable access to public and private livestock services). The conclusions and recommendations should in particular guide the review and the implementation of the 2019-20 Annual Work Plan and Budget (AWPB), which is under implementation, but also the consecutive AWPBs.

SUB-COMPONENT 1.1: TRAINING AND CAPACITY BUILDING OF SMALLHOLDER DAIRY FARMERS

II. Support for short and medium-term research

A. Achievements and observations

Research in animal health: multiple research works animal health have been undertaken in the scope of RDDP: study on mastitis in Gishwati, studies on prevalence of brucellosis in 2017, on Foot and Mouth Disease (FMD) from 2017 to 2019, and study on trypanosomiasis and tsetse fly prevalence recently. These studies will be instrumental in guiding the government's strategies to control these diseases. They can therefore be considered as an input for component 3.

A research on acaricide resistance will be conducted by ILRI and RAB in the scope of the recently signed MoU between these two institutions. Finally, a research on anti-microbial residues has been launched, as recommended by the last ISM mission, as this issue is becoming a major impediment for the industry and for public health.

Research in genetics and reproduction technologies: RDDP has been supporting capacity building and transfer of technologies on embryo transfer since 2017. The beneficiaries of this activity are RAB personnel. Practical trainings sessions have taken place in Songa and Kinigi RAB stations and surrounding farms. 128 embryos have been collected and 48 were transferred. This activity was not foreseen in the initial design and was added in the course of implementation. This activity seems fully relevant since it will enable RAB to cut cost on importation of live bulls in the future (replaced by importation of embryos). It should also be instrumental for conserving the endangered Ankole cattle, whose survival is threatened by the generalized crossbreeding.

SPIU and RAB have expressed the wish to add another research activity to this component at the occasion of the MTR. RAB would like to establish a new laboratory for in vitro and molecular technology research. Although it is recognized that it could be useful for the Country and RAB in particular, it cannot be considered as an absolute priority, considering the costs implied.

(i) Suggested way-forward and recommendations

Previous ISM had already recommended to use university students to assist RDDP in specific research works that are needed in the scope of project activities. This would also contribute to reinforce capacities of young graduates in dairy related matters. This has not taken place yet but RDDP is now envisaging entering into an MoU with the University of Rwanda to enable these internships to take place, and this initiative is highly commended.

The mission recommends pursuing the already initiated transfer of technology in embryo transfer but, considering the budget availabilities and costs implied, the mission does not consider as a priority to engage in molecular technologies and in vitro research as suggested by SPIU and RAB.

SUB-COMPONENT 1.2: SUSTAINABLE ACCESS TO PUBLIC AND PRIVATE LIVESTOCK SERVICES

I. Improved animal nutrition and access to quality feed and fodder

A. Achievements and observations:

Fodder production: the project has so far installed 145 forage seeds multipliers (out of a final target of 450). 50 new producers have been identified and a total of 200 should be established by the end of the FY. The MTR mission did not have the opportunity to meet some of these seed multipliers to assess if their business was profitable, and to understand who their customers are. The final target of 450 producers however seems to be too ambitious considering the size of the market.

RDDP has also supported RAB to conduct in-station research on fodder and production of parental seeds. The relationship between this activity and the installation is not clear although it is clear that this research should in theory contribute to disseminate more performant, adapted and climate prone fodder varieties, and that this dissemination should follow the channel of the seeds producers.

The planned study on feed and fodder availability that was supposed to be undertaken through FAO (together with the study on GHG emission) doesn't need to be implemented anymore since the FEAST tool being rolled out with ILRI already. FEAST addresses these aspects of feed and fodder availability and requirements. The challenges faced in implementing studies with FAO also call for alternative solutions and the study on GHG emission, which is still highly needed, could probably be undertaken using local and international independent expertise.

3,286 ha of cultivated fodder has also been planted by targeted farmers as a consequence of the dissemination of seeds and capacity building activities undertaken under L-FFS. Fodder trees have also been planted in abundance by L-FFS members on anti-erosive lines. This will lead to significant improvement of feeding rations, in particular in dry season.

Fodder conservation: In eastern Uganda where the dry spell affects dairy production more severely, RDDP has dedicated efforts to develop fodder conservation, in particular hay making. Balers have been

procured and are being used in the scope of L-FFS. The management system and its performance should be assessed during a subsequent mission.

The project has also constructed 110 hay storage hangars; however, the utilization of these facilities doesn't seem to be optimum and it would be critical to understand why they are not used (not needed, design inadequate?).

An aspect on which the project is lagging behind is the establishment of small-scale animal feed production units: the project plans to pilot 4 units with FFS groups; these groups will have to graduate into cooperatives to manage these feed units. These pilots will be financed at 100% by the project. If they are conclusive, the model will have to be upscaled through the matching grant. However, one could wonder if the solution of a cooperative management was the most relevant choice. Feed processing is usually performing better under private management and this option, or a hybrid option (4P type) could also have been considered.

Feed analysis: The project building capacities of RAB and RALIS to perform feed analysis (qualitative aspects for RAB, sanitary aspects including aflatoxin and other feed contaminants for RALIS). Laboratory equipment for feed quality control has been procured and is being handed over to RAB.

B. Suggested way-forward and recommendations

Considering the size of the seed market it is to reduce the final target of seed producers from 450 to 200.

The output of the research work on fodder should be rolled out in the field. Tested and approved varieties should be disseminated through the multipliers and L-FFS.

The feed manufacturing pilots should be monitored closely since viability of such businesses, especially under cooperative management, is not guaranteed. Alternative management mechanisms such as 4Ps should be envisaged. The final target for this activity should be reduced from 25 units to 12.

III. Enhanced public and private animal health services

A. Achievements and observations:

Sanitary Mandate: little progress has been achieved regarding the piloting of the sanitary mandate (delegation of veterinary public health mission to the private sector). An exchange visit to Senegal has been implemented as recommended by previous ISM and the lessons need to be translated in a practical action plan. The project should at the same time pilot the sanitary mandate in the field in the scope of the activities it support (vaccination supported by the project could be delegated to private veterinarians, which would be a "sanitary mandate type" arrangement), but in parallel, the regulatory framework for animal health should be revised to accommodate this new principle. The RDDP Animal Health specialist may not be in position to push this policy reform, and other sources of supports should be mobilized.

Community Animal Health Workers (CAHWs): 72 CHAWs have been trained in Nyagatare and the project plans to train 150 more in Huye before the end of this FY. This is above the initial project targets that foresaw the training of 72 CAHWs in total; this change will thus require budget adjustments. CAHWs have shown to be very complementary with L-FFS which doesn't mean that all L-FFS facilitators should be trained as CAHWs, both roles being different. As for the sanitary mandate, and as per project design, piloting in the filed should be done in parallel with policy work at national level, and the regulatory framework should be revised to ensure that the animal health legislation contains clear provisions on CAHWs. These

provisions should be compliant to the recently published OIE international guidelines on CAHWs, which define the type of animal health care services that CHAWs could be allowed to perform and require in particular that all CAHWs should work under the supervision of a veterinarian.

Support to vaccination: the project has been supporting vaccination against FMD[4], LSD[5], Brucellosis, BQ[6], RVF[7], ECF[8] in the 12 RDDP Districts and has overutilized the dedicated budget (1.5 M USD out of 1.840). There is therefore a need to reallocate resources to this budget line but also to reinforce the sustainability of this activity, which is so far entirely financed by the project (The GoR does not allocate budget for vaccination in RDDP covered Districts, assuming that RDDP could cover all these costs during its entire duration, which has not been budgeted for). A study on sustainability of animal health and AI services has been conducted as previously recommended to address this problem. This study is expected to have identified some practical solutions to ensure the sustainability of vaccinations, through in particular the formulation of cost sharing mechanisms (involving GoR, Districts and beneficiaries).The draft report has just been released and has not been shared yet.

The 4 targeted regional veterinary laboratories have been rehabilitated and are being handed over to RAB. Under the MoU with ILRI, RAB trainers have also been trained in ILRI Nairobi and will need to roll out the training programme with their colleagues in the country as initially planned. As part of the new activities proposed at MTR, it was suggested by RAB to also support the rehabilitation of the national laboratory, but considering the cost of this investment (around 200,000 USD), and since this rehabilitation is already budgeted for under PRISM/ENABEL, there should be no need for such amendment.

B. Suggested way-forward and recommendations

RVCD should be given the leading for piloting the sanitary mandate and advancing the policy reform that will be needed in parallel. The recruitment of an experienced policy adviser to support the implementation of component 3 will also be instrumental in advancing on this topic.

On CAHWs, it is recommended as per project design, in parallel to the pilots implemented in the field, to work on the policy aspects to ensure that CAHWs are established in compliance with the national animal health legislation, the international guidelines developed by the OIE, and in particular that they work under the supervision of veterinarians.

Cost sharing for vaccination: It is now urgent to share the outcome of this study, agree with the Government and the Districts on a road map for its implementation, including cost sharing modalities, and start its implementation. Based on the outcome of this exercise, a proposal for reallocation should be prepared by the project. In any case, RDDP should stop financing the totality of the vaccination costs in the 12 Districts, starting from FY 2020-2021.

Three types of animal health infrastructures have been proposed by SPIU to be added to project activities: spray races, quarantine stations, and cattle crushes for veterinary care and AI:

a) Regarding the proposed 160 proposed spray races, the mission recommendation is to construct them only where boreholes have been constructed, as they are dependent on availably of water

[4] Foot and Mouth Disease
[5] Lumpy Skin Disease
[6] Black quarter
[7] Rift Valley Fever
[8] East Coast fever

and energy. Spray races should not be constructed in every communal cowshed as proposed since these equipments require a large number of animals to be cost effective and should only be used in areas with large inventories of cattle. A cattle crush should be sufficient in communal cowshed and more sustainable too.

b) Regarding the proposal for Rehabilitation of 3 quarantine stations, the mission recommends supporting only one in Nyagatare if budget allows; others could be supported under PRISM and one is not in RDDP area.
c) As for the proposed 120 cattle crushes, it is proposed to limit to 20 units with focus on Eastern Province. The 18 communal cowsheds should also all include a cattle crush in the design.

For the three types of infrastructures, SPIU and RAB will also need to ensure that a sustainable management system is established. All these civil works should be implemented only if budget is available in this cost category.

IV. Improved access to genetic resources

A. Achievements and observations:

Artificial insemination: As for vaccination, RDDP entirely supports all AI District led activities in the 12 targeted Districts, and the government does not allocate any public budget. This has led to an overconsumption of financial resources and to exceeding targets (114,000 cows inseminated against a final target of 36,000!). This is massive and will certainly lead to a very significant impact on animal productivity in the next years. As for vaccination, the budget will need to be amended to accommodate these additional costs, but sustainability and cost sharing need also to be looked at, considering that unlike vaccination, AI should be considered as a private good. The participation of beneficiaries should thus be significant, even if the government chooses to subsidize the cost of AI to foster adoption of the technology, which entirely makes sense. Because of the unexpected demand for AI services, the budget for training AI technicians (initial and refresher) and their equipment has also been overused and should be reconsidered.

Among the additional investments suggested by SPIU and RAB at MTR was the proposed construction of a third liquid nitrogen production unit to be installed in Eastern Rwanda (one is located in the Bull station in Masaka but has some technical issues, the second has been financed by the project, is located in Rubona and is fully operational). However, considering the cost of this investment (around 700,000 USD), it will be very difficulty to accommodate it in the remaining civil works budget. It also does not appear as a high-level priority considering the size of the country, the cost of the investment and the fact that two units are already operational.

4 high quality merit bulls for production of AI semen have already been imported and 4 more are being procured through HI. 2 additional bulls should be procured before the end of the project to reach the target of 10. However, considering that part of the bull budget has been used to finance transfer of technology on embryo transfer, and that embryos have been imported under this activity, the relevance of importing the two last bulls can be questioned.

The feasibility study for the relocation of the bull station is Rubona is ongoing. The total amount of the investment is not yet known but it may be over 2 million USD which largely exceeds the financial capacities of the project. 350,000 USD have been put aside on RDDP budget and the project should not participate to the cost of the investment by more than this amount. The project participation should focus on the bull holding facility and the semen laboratory, but other sources of financing will have to be mobilized by the Government.

The study on animal identification and performance recording, and its piloting, which was supposed to be implemented by FAO, should be reconsidered in light of the implementation challenges met with FAO, and of the work already conducted by RAB on this topic. Since this study is not part of the MoU finally signed between RDDP and FAO, another option could be envisaged such as entrusting this study to RAB, with the support of an international consultant contracted directly by SPIU.

B. Suggested way-forward and recommendations

The end target for AI performed with project support should be readjusted and set to 250,000 by the end of the project.

The recommendations from the study on sustainability should be translated into a road map agreed upon with RAB and Districts and implemented. As for vaccination, the project should stop financing 100% of vaccination costs starting from FY 2020-2021. Since AI is a private good, a participation from beneficiaries should be required, even if it has an impact on the number of AI done.

The project cost tables do not allocate any budget for the purchase of AI straw which is supposed to be entirely financed by beneficiaries. This is not in line with the project description which foresees a project participation and is probably an oversight. The costab will need to be revised to accommodate the costs incurred up to now and those expected, taking into account the planned new financing rule.

The study on animal identification and traceability should be entrusted to RAB, with the support of an international consultant contracted directly by SPIU or by RAB.

SUB-COMPONENT 1.3: ASSET BUILDING AND CLIMATE SMART PRODUCTIVITY

II. Girinka – Heifer placement

To date, RDDP has distributed, 3,347 dairy cows out the 4,000 animals targeted. The final target should be achieved by the end of the current FY since the implementation challenges faced at the beginning of the project have now been sorted out. On top of this, 30 “second generation” animals have been distributed through the “Pass On the Gift” (POG) system. Heifer International, is the implementing partner in charge of this activity and has integrated the Girinka activities in the VBHCD approach mentioned above, which certainly strengthens the impact, the ownership, and sustainability of the mechanism. 86 of these animals have been distributed to the beneficiaries of the 11 communal cowsheds constructed so far. Considering the challenges encountered to establish these 11 communal cowsheds, it is recommended to stick to the target of 18 units for the time being.

For the future, before considering increasing the 4,000 target by 2,000 additional animals as proposed by SPIU and RAB, the mission is of the opinion that it would be useful to assess the impact of the first wave, both from a macroeconomic point of view, and at household level (impact on poverty, nutrition, fertility of soils, resilience of livelihoods). The outcome of the market assessment should also indicate if there is room for additional production units. This additional wave of Girinka would also attract a substantial cost of around 4 M USD which is at this stage out of the financial capacities of RDDP.

The usual Girinka approach foresees free distribution of construction materials for the cowshed for all Girinka beneficiaries. The way HI approaches this aspect is a bit different since the first generation of beneficiaries have to “pass on” both the heifer and the cowshed (at least the material required for its construction) to a second generation of beneficiaries, and so on, in the scope of the VBHCD pathway. Although it can be seen as a deviation to the Girinka modalities, the mission recommends maintaining this mechanism that guarantees sustainability, and to assess its relevance in the scope of the above-mentioned assessment.

Appendix 4.2. Working paper – Community Empowerment and Marketing

This technical Annex first covers the Livestock Farmer Field Schools, 4Ps and marketing in dairy VC. The Annex contains ToR for a Dairy Business Consultant.

A. Livestock Farmer Field Schools – L- FFS

By working with farmers and other stakeholders to identify and resolve livestock production constraints - whether they are of a technical, institutional or policy nature - and to demonstrate ways of increasing milk production, RDDP aims to open the way for improved productivity and broader food access. Working with farmers to understand and, where possible, solve the problems that prevent them from producing more milk - is considered crucial.

L-FFS in other IFAD funded projects in the region:

Zanzibar:
The Agricultural Sector Development Programme-Livestock Programme in Zanzibar used the Farmer Field School Approach (FFS[9]). As a response to the often top-down approach to agricultural extension, the FFS was developed as a "bottom-up" approach to extension with a focus on participatory, experiential and reflective learning to improve the problem-solving capacity of farmers and livestock keepers (Anderson & Feder, 2007)[10]. The FFS as an approach for extension services delivery was introduced in Zanzibar in 1997 by the Zanzibar Plant Protection Division (PPD) through the Strengthening Project Plant Protection Division (SPPDL/TCP) supported by the Dutch Government. The approach was used mainly for crops production, namely; rice, cassava, banana and vegetables to enhance farmers' active involvement in development and adoption of improved practices through Integrated Pest Management (IPM) project.

Farmer Field School (FFS). In ASSP/ASDP-L a FFS generally consisted of 20 members from as many households who formed a group based on their interest in learning about crop or livestock. The group selected its own leaders: Chairman, Secretary and Treasurer.
The FFS provided opportunities for learning by doing. It taught basic agricultural and management skills that made farmers experts in their own farms. FFS was a forum where farmers and trainers debated observations, experiences and new information, and it included sensitization on gender, HIV and nutrition. Practical training methods included a demonstration plot that served as a 'classroom' for testing the new methods. In some cases, a control plot was also established, to be able to compare new practices with traditional practices. Farmers could immediately apply the new methods to their own fields or await the results of the demonstration.

1. The **rationale for FFS** includes the following:

- Empowering farmers with knowledge and skills
- Making farmers experts in their own fields
- Sharpening the farmers' ability to make critical and informed decisions
- Sensitizing farmers in new ways of thinking and problem solving

[9] The Farmer Field School concept was originally developed by FAO to promote integrated pest management among Indonesian rice farmers in the late 1980s, but since then has spread to many countries. Since then it has been so widely adopted and locally adapted that there is no longer a single model for either its technical content or the educational format (van den Berg & Jiggins, 2007).
[10] The Programme initially faced resistance to the use of the FFS approach as most of the groups had previously been supported by the Participatory Agricultural Development and Empowerment Programme (PADEP) a WB project where groups were given physical benefits such as livestock, machinery, seed stock, etc.. In some areas of Pemba sensitization had to be done for more than three times to convince people of the importance of empowerment associated with FFS.

- Helping farmers learn how to organize themselves and their communities.

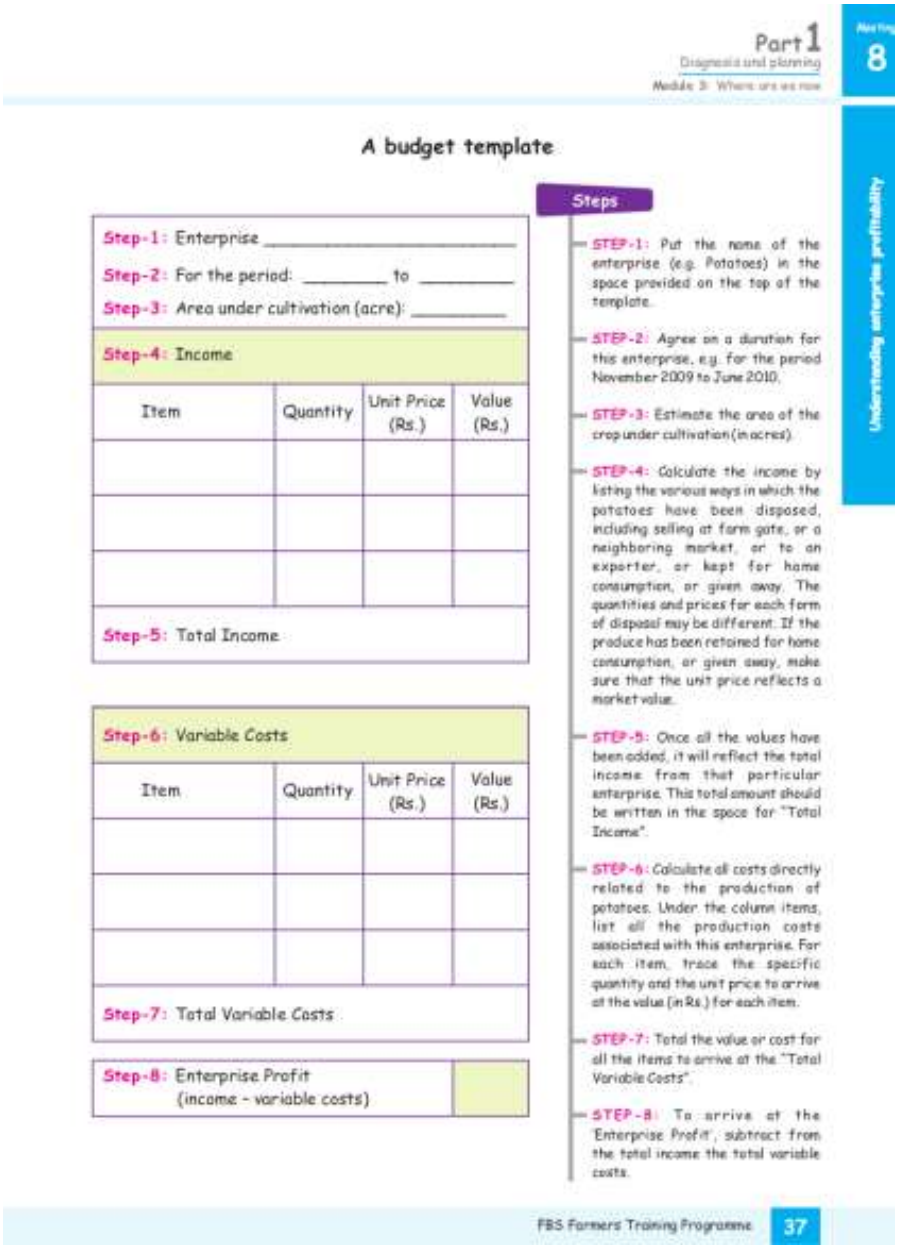
FFS graduation process. After the initial Participatory Diagnostic Assessment (PDA), the first Extension led FFS season was led by the public extension worker, in this case the Block Extension worker (BEO) with help of the Programme District Officer (PDO). Once the farmers knew what to do the extension workers only offered guidance when needed. A Farmer Facilitator (FF) with the requisite skills and expertise was selected and conducted the FFS sessions in the following two Farmer led seasons. The whole process as shown in the graph thus took three years.

Marketing – Farmer Market School

It is recommended to include in the L-FFS practical "Farmer Market Schools" modules in L-FFS to enhance their marketing and business management skills (basic bookkeeping, financial statement, analyse profitability), and (iii) "Financial Literacy" modules in L-FFS and also Nutrition. This will enable each farmer to have a better understanding of production according to market demands such as quality criteria, quantity, required post-harvest practices, as well as to understand simplified gross margin calculations to assess profitability, and last not least to get an understanding of improved marketing arrangements with traders and processors through joint production and marketing. The rationale of offering business skills in FFS is to enable farmers to judge for themselves the advantages and drawbacks of certain agricultural enterprises as well as the opportunities and challenges of forming producer and marketing groups. It will also focus on keeping records of production costs, simple bookkeeping skills and the importance of savings.

In developing this module use could be made of existing training materials in the region (for example in Malawi (RLEEP and PRIDE projects), as well as for example the Farm Business School handbook: Training of farmers programme for South Asia that can be downloaded at http://www.fao.org/3/i2137e/i2137e00.htm

See below an example of a page from this training manual:



Part 1
Diagnosis and planning
Module 3: Where are we now

Meeting 8
Understanding enterprise profitability

A budget template

Step-1: Enterprise _____

Step-2: For the period: _____ to _____

Step-3: Area under cultivation (acre): _____

Step-4: Income

Item	Quantity	Unit Price (Rs.)	Value (Rs.)

Step-5: Total Income

Step-6: Variable Costs

Item	Quantity	Unit Price (Rs.)	Value (Rs.)

Step-7: Total Variable Costs

Step-8: Enterprise Profit (income - variable costs)

Steps

STEP-1: Put the name of the enterprise (e.g. Potatoes) in the space provided on the top of the template.

STEP-2: Agree on a duration for this enterprise, e.g. for the period November 2009 to June 2010.

STEP-3: Estimate the area of the crop under cultivation (in acres).

STEP-4: Calculate the income by listing the various ways in which the potatoes have been disposed, including selling at farm gate, or a neighboring market, or to an exporter, or kept for home consumption, or given away. The quantities and prices for each form of disposal may be different. If the produce has been retained for home consumption, or given away, make sure that the unit price reflects a market value.

STEP-5: Once all the values have been added, it will reflect the total income from that particular enterprise. This total amount should be written in the space for "Total Income".

STEP-6: Calculate all costs directly related to the production of potatoes. Under the column items, list all the production costs associated with this enterprise. For each item, trace the specific quantity and the unit price to arrive at the value (in Rs.) for each item.

STEP-7: Total the value or cost for all the items to arrive at the "Total Variable Costs".

STEP-8: To arrive at the 'Enterprise Profit', subtract from the total income the total variable costs.

FBS Farmers Training Programme 37

Value Based Holistic Community Development (VBHCD)

Heifer's Value Based Holistic Community Development (VBHCD) model greatly contributes to the sustainable development of farmer groups. Project partners need to embrace this model to know their role in supporting farmer groups to grow. Therefore training was organized by HI and brought together participants from four partner institutions including:
- RDDP/SPIU Field Officers,
- District Animal Resources Officers,
- RAB L-FFS Master Trainers & Candidate Master Trainers,
- RCVD L-FFS Candidate Master Trainers.

The training on VBHCD covered the following themes;

• Self Help Groups formation,
• Heifer's Cornerstones for Just and Sustainable Development,
• Personal Leadership
• Participatory Self Review and Planning (PSRP).

After the training of the Community Facilitators on the VBHCD, they are also expected to train members of the SHGs with facilitation from the project. The project purchased training materials for all Community Facilitators across the project area which they used to train members of the SHGs in:
♦ Heifer cornerstones and values and how they are applied in the farmers' daily activities,
♦ Personal leadership,
♦ Participatory Self Review and Planning (PSRP),
♦ Group formation and management,
♦ Group savings and credit.

Heifer 12 Cornerstones[11]

The cornerstones are:
1.Passing on the Gift 2. Accountability 3. Sharing and Caring 4. Sustainability and Self-Reliance 5. Improved Animal and Resource Management 6. Nutrition and Income 7. Gender and Family Focus 8. Genuine Need and Justice 9. Improving the Environment 10. Full Participation 11. Training &Education 12. Spirituality

HI's overall vision is that a dairy cow alone will not bring people out of poverty. It is considered a gradual process, whereby small livestock also is important, and also the aim is to increase the size of land cultivated. The group saving and credit schemes, and also the small livestock, help with covering small investments or covering unexpected costs. On average groups have been able to save between 5,000 – 50,000 RWF. Very short-term loans are given by the group to group members at 12% monthly interest rate.

In Hue District 3-LFFS groups were formed close to each other, and they have now together formed a cooperative. They have several businesses, such as selling milk in a small shop in the village. They

[11] See: https://www.heifer.org/our-work/our-model/community-mobilization/cornerstones.html

currently sell 20 litres per day, but they think they could sell 300 litres per day to a nearby school, the health clinic and the police post (out of the 1000 litre per day produced) if they would have better equipment and a fridge. They are also producing fodder saplings and mushrooms. They also took a loan from SACCOS, with Imbaraga Farmer Organisation providing the guarantee. The loan was for a pig and a small shed for each member, with a pay-back period of 7 months, with currently only one more month to go. The repayment is deducted from the group savings.

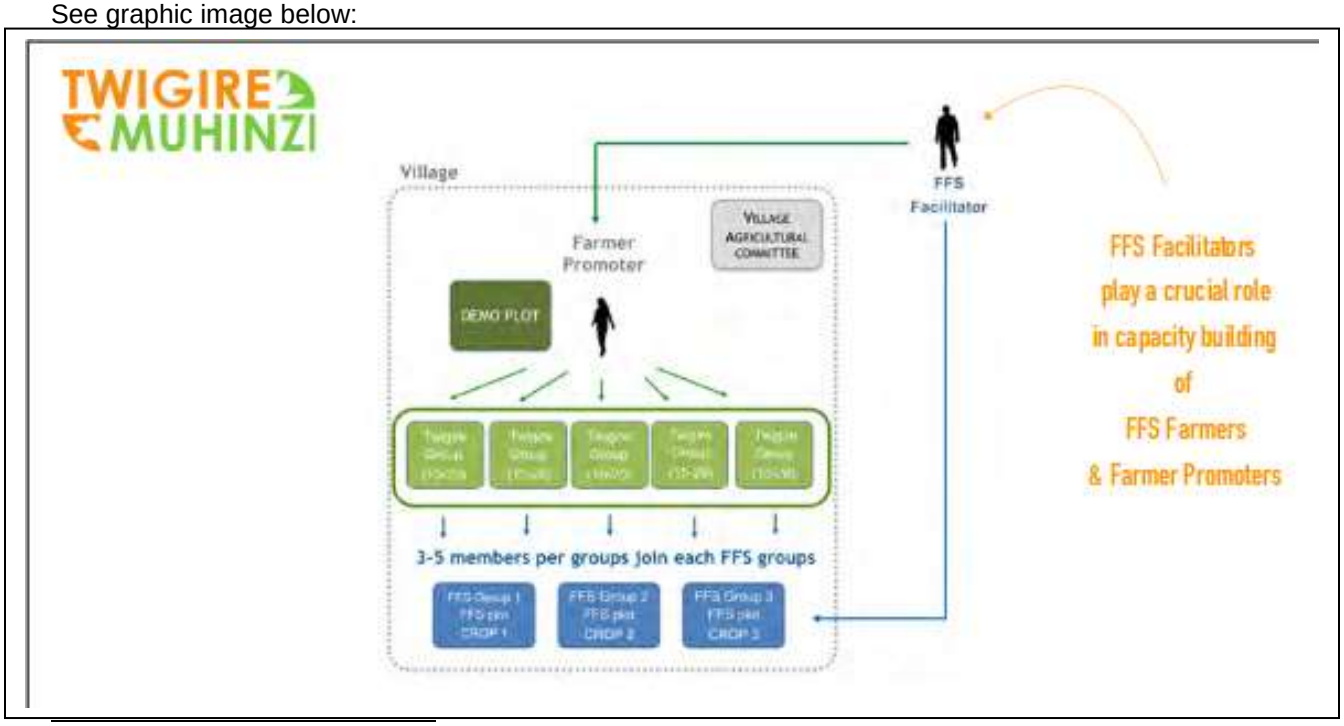
Twigire Mworozi

The Twigire Muhinzi Extension system[12]

TWIGIRE extension system has adopted two key approaches of farmer field schools (FFS) and Farmer Promoters (FPs). In the FFS, the plant is the teacher and the FFS plot is the school. The FFS approach builds the skills and capacity of farmers to identify and analyze problems, to conduct experiments aiming at developing local solutions appropriate to local specific challenges. Based on the principle "Learning by doing" farmers truly develop their decision making skills which helps them to handle current and future challenges effectively and thus farmers become progressively managers of their own economic activities. The results are a significant increase in productivity and income. Each FFS group needs a competent facilitator (with strong technical and facilitation skills) to lead FFS group members through the hands-on learning process. A pool of 2500 FFS facilitators has graduated from season long training courses and are ready to work with FFS groups with member drawn from village based farmers groups.

The farmers are organized into farmer groups to serve as the entry point for extension services Organization of farmers into strong groups enhances farmer-to-farmer knowledge transfer model with a view of making the farmers totally involved in the production process. Each village identifies one farmer promoter through a participatory exercise based on criteria participatory developed. The extension system builds capacity of the farmer promoters so as to widen their knowledge on the current technologies and organization of extension activities. They in turn become extension agents and are responsible for dissemination of extension packages to the farmers.

See graphic image below:



[12] Based on concept note Twigire Muhinzi Extension system, RAB, October 2014

approach for crops) methodology for livestock extension, to be called Twigire Mworozi. This requires integration and training of village level "Farmer Promoters", some of whom could possibly be CAHWs or private vets.

Public-Private-Producers Partnerships - 4Ps

In 2016 IFAD prepared a concept note on **Public-Private-Producers Partnerships (4Ps**) in value chain development projects in Rwanda. Paragraph 12 states that IFAD has long recognized the key role of smallholder institutions (farmers' organizations, cooperatives, self-help groups, water users' associations, indigenous people organizations, etc…) as entities with their own specificities and requiring the adequate capacity, organizational level and scale to be able to defend their own interests in negotiating with the public sector or with the corporate private sector. Focusing on this "Producers Sector" will allow to take IFAD development opportunities to the next level by recognizing their potential contribution to scaling up results and demonstrate that poverty has market solutions while making sure that our main clients, the smallholders, participate fairly in the process.

The main objective of the 4P funding mechanism is to increase small producers' access to markets and improving their livelihoods sustainably through the promotion of private sector investments in the smallholder agricultural sector.

Rural dwellers are highly differentiated in their access to capital (social, financial, and physical), assets, organization, technology, and infrastructure. Aspirations and entrepreneurial attitudes differ across and among different segments of rural populations. The figure below lays out the pyramid of the estimated 500 million smallholder family farms in the world representing some 2 to 2.5 billion people. Smallholders can be broadly classified into three groups on a pyramid:

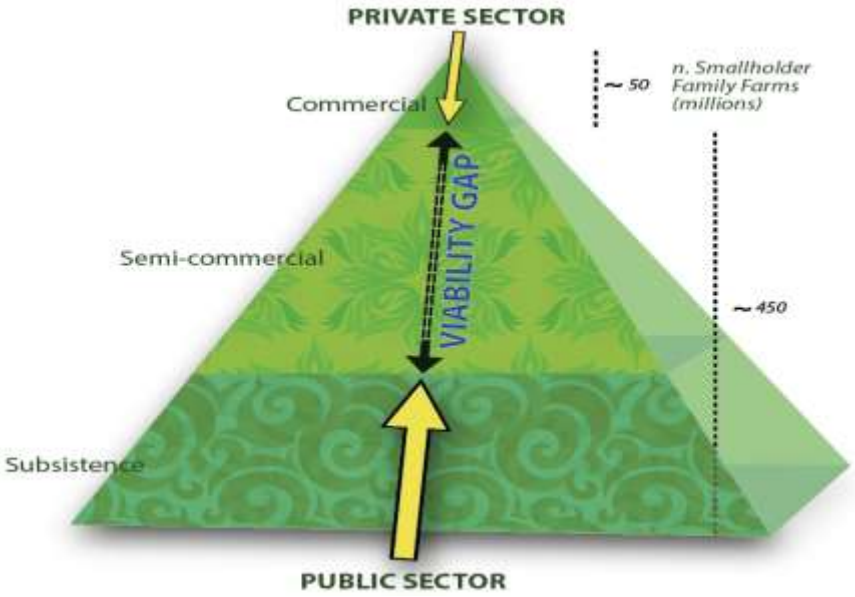
- Commercial. At the top of the pyramid is a relatively small subset of "commercial" small-scale producers, better organised and with access to finance, productive assets, know-how and information. They already participate fairly effectively in value chains and are connected to the private sector and markets. In this case we could talk of *private – producers partnership* and such situation does not require much government involvement if it wasn't for a policy environment conducive to private investments.

- Subsistence. The base of the pyramid is made of the poorer segments of the rural populations (e.g. those with least assets or skills; landless, youth, widows, ethnic minorities, etc.) who generally depend on off-farm and wage labour opportunities, or informal/formal social welfare programs. This large segment of the pyramid is composed of small-scale farmers who are less formally organised, tend to be subsistence producers with little marketable surplus usually sold in local or informal markets. There is little involvement of private agribusinesses and most development efforts are provided through the public sector. IFAD will continue to work in this segment to create the conditions for higher productivity and better market access.

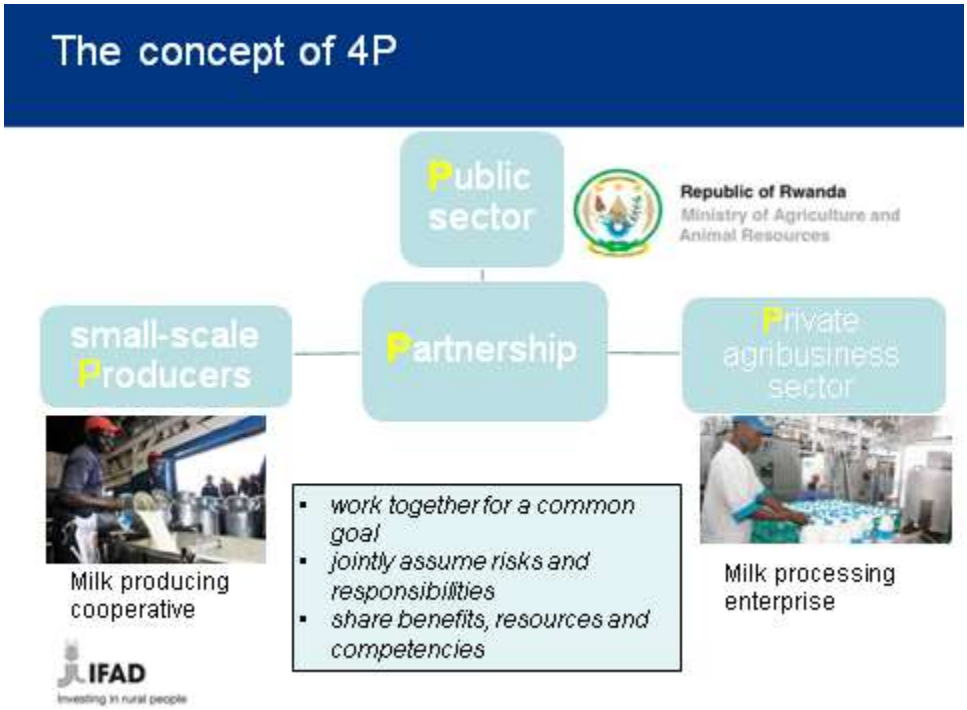
- Semi-commercial small-scale producers within the middle segment of the pyramid show the greatest potential to become a reliable partner for the private sector in long-term business relationships. They offer the greatest opportunities for productivity increases and for going to scale provided that they can have access to the production factors, markets, technology and the level of internal organization required. As a matter of fact, an increasing number of private companies, both at international and national level have started targeting this segment as part of their business strategies and to expand their supply base. That's where *Public-Private-Producers partnerships* would be most useful so as to create the incentives to transform this segment into a viable market. For doing so it would be most effective for the government and its development partners such as IFAD to address the viability gap by reducing the transaction costs of doing business with smallholder farmers through the financing of the public and semi-public goods required to make a specific business plan or value chain financing viable.

In this context, Public-Private-Producers Partnerships along agricultural value chains can be a powerful tool to attract private sector investments to the smallholder sector and in market segments which would not be profitable to private companies without public support and/or concessional donor financing. Public or donor resources are used to provide incentives to the private sector to reach out to small-scale farmers as suppliers of primary products or as bottom of the pyramid rural consumers. Public or donor funds can be used through a competitive "pull" process to finance business plans jointly submitted by private companies and farmers organizations in which they propose to enter into a partnership agreement where both parties take risks, invest and share the benefits. Public funds could be made available through two possible approaches: i) a "leveraging" system based on a competitive process where private-producers joint ventures bid for public resources for the financing of certain type of goods (see below) on specific value chains or ii) a criteria based system (in situations where there isn't a sufficiently vibrant private sector that would make competition possible) that would assess the eligibility of business plan proposals.

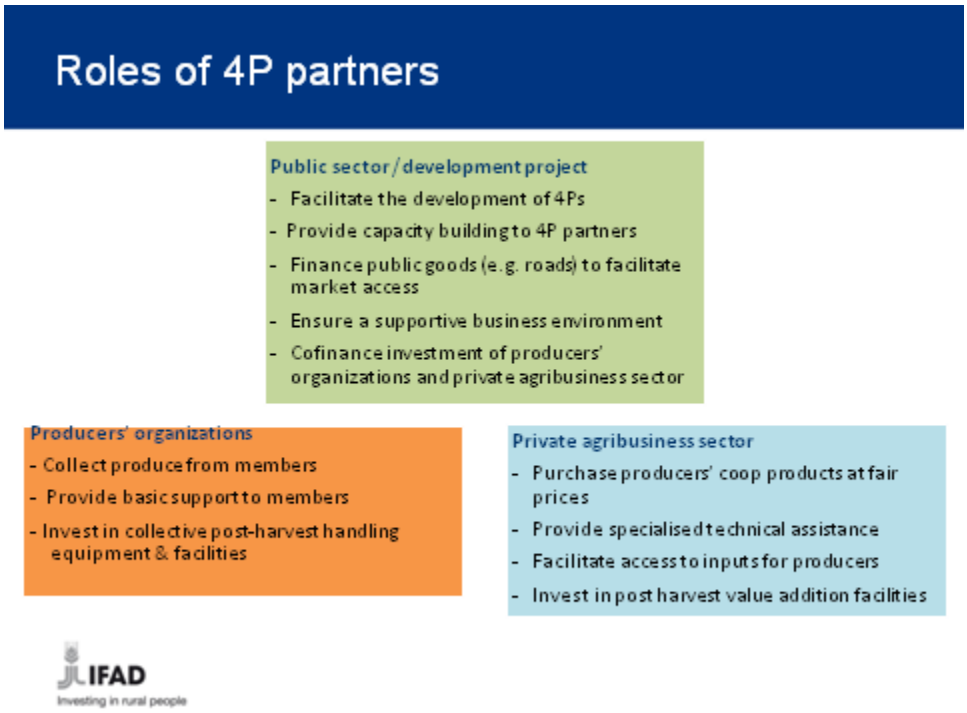
As a general principle, public/donor funds are provided as a grant to kick-start and fill the financing gap of viable business plans focusing on the public or semi-public goods that will not be funded by the private sector company otherwise. Using public resources is justified on the ground that the aim of the 4P investment funds is to address a "market failure" where the perceived high risks and transaction costs of working with small producers are preventing private companies from forging market-based business relationships with them. Grants are needed to finance the initial start-up costs of such partnerships and for making an explicit link between the delivery of certain type of goods and a particular business plan. The availability of a business plan with clear product purchase agreement and investment commitments by all parties (public, private, and producers) would represent an important tool to leverage additional credit from banks, potentially coupled with (micro) insurance or guarantee schemes as well as possible interest from equity investors.



The concept of 4P is illustrated in below slide for the milk value chain in Rwanda.



Roles of the different partners are described in below slide:



B. Dairy Marketing

Market access is a serious issue. MCCs struggle to sell all their milk to processors, and as a result do not collect more milk. Some processors have reached the maximum that they are able to process, store and sell. For example, Inyange Industries informed the mission of the challenge, and will not be able to buy more than the 200.000 litres per day they buy at the moment. As a result, part of milk produced is wasted, affecting profitability, even though milk consumption is only 68L/per person/year (much lower than 110 L/per person/year in Kenya). A positive impact of RDDP is that the production in the dry season has increased substantially, creating a much more stable supply throughout the year.

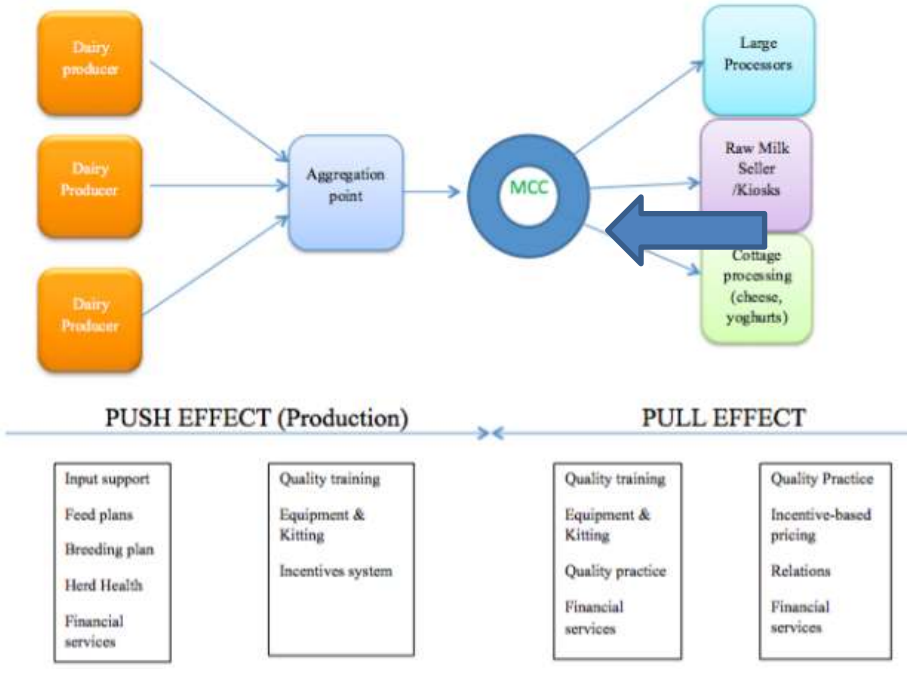
Project activities under sub-component 2.1 to support collectors, traders and processors have started, but implementation delays and small number of activities limits impact. About 35 cooperatives of both milk traders and transporters have so far been formed. RNDP also assisted in the entire process of registration to obtain legal status which is provided by RCA. All districts were covered.

VC actors thus include:
1) SMEs - private sector businesses
2) Newly formed cooperatives of Milk sellers (processors) and transporter (who collect the milk from farmers by bike or motorbike and bring it to the MCCs). Also L-FFS groups are forming new cooperatives, which have various businesses including milk selling
3) MCCs - collection/aggregation facilities - MCPs are yet to be constructed, but the idea is that these would be satellites of the MCCs

What can be noted is a change in VC actors and their roles - more diverse and new groups enter the VC - and also in the short Value chain we see a departure from the traditional role of the MCCs as the center of the collection as other aggregation points and milk zones are established.

Very few matching grants have benefitted this group of chain actors. There is a need for a much more comprehensive and effective RDDP marketing strategy and implementation, especially related to the **short value chain** of locally processed and marketed products, especially milk zones/kiosks. All processors met by the mission report a healthy market demand and indicate they could expand production with more processing equipment.

Figure 1. RDCP II Interventions across the Dairy VC[5]



Source: Land O'Lakes. In: *Cost-Benefit Analysis of Rwanda's Dairy Value Chains*, 2017, sponsored by USAID, evaluating the recent Feed the Future activities implemented under the Rwanda Dairy Competitiveness Program II (RDCP II).

Way forward

RDDP should explore marketing opportunities beyond MCCs selling their milk to large dairy processors (the light blue box on the right top side). Instead "short-value chain" of locally processed milk needs to be more at the centre of RDDP marketing efforts (indicated by the arrow on the right side). In this respect, RDDP to test a model of MCC or MCP combined with milk zone/kiosk, installing pasteurisers and milk ATM's (see picture below) at local levels since increase in the sale of pasteurized milk in milk zones is a very promising milk market, also at local level. The combination of MCC/MCP and Milk Kiosks has been implemented under the IFAD funded Smallholder Dairy Commercialization Programme (SDCP) in Kenya and could serve as a model of a milk dispenser or milk ATM. Milk collectors/ transporters should also benefit from project innovations such as the solar powered can cooler (Sundanzer).

MCC Hub Development

Below is a graph depicting the different roles a MCC could perform in the dairy VC. This hub model was developed by HI. While working with Dairy Cooperatives and MCCs it can however be decided that some of these roles are better performed by separate private enterprises, who work in close collaboration with the MCC in a 4P arrangement.

HI conducted training on Link Methodology which targeted committee members of 12 cooperatives who operate Hubs/MCC, which centered on the following topics:
- Value Chain Mapping,
- Business Model canvas,
- New business Principles,
- Business Prototypes (finding solutions to identified areas of weaknesses).

After the training on Link methodology, coaching and assessment of Hubs on the application and implementation of Link methodology was carried out for 13 hubs and MCCs which are operational in the project area. The purpose of the coaching was:
(i)To orient and support hubs to work towards inclusivity in their business dealings
(ii)To support the implementation of the applicable tools of the business model
(iii)To guide the executive team through the journey of building stronger and sustainable relationships in business.

The MTR mission has proposed to re-assess the distribution of roles and responsibilities so that all MCCs benefit from this training.

RDDP Direct Support for upgrading MCCs into SMEs: The activity supporting MCCs for upgrading into SMEs processing and selling pasteurized milk is underway (procurement of equipment ongoing). The mission is concerned by the capacities of cooperatives to engage into processing and marketing, which require additional business management skills. The selection of eligible cooperatives should be based on a needs analysis and local market assessment - BDSPs role in this is crucial. It should be based on MCC expressed interest and proven capacity to start engaging in processing, as well as sufficient market demand. It is crucial that this support is consistent to the cooperative led business windows under BDF MG, in order to avoid unequal treatment and ensure coherent approach. The direct support provided by RDDP under this activity, including equipment supplied,

should thus not exceed 50% of the total cost of the project. Beneficiaries should also be supported to develop a business plan for this specific project, including a market analysis which would demonstrate the viability of their business and identify the key milestones in implementation. Engagement of and co-investment with private sector should be prioritized and encouraged. The mission recommends updating the concept note for this activity including the selection criteria, taking into account the comments above and Government's set criteria (big processors absent or over-capacity, existing market), and share it with MINAGRI Senior management and IFAD. The total costs for this activity need to be reviewed and assessed against total budget available.

Appendix 4.3. Working paper: Development of a Youth Strategy for RDDP

Youth is defined in Rwanda as population aged 16 to 30 years[13]. According to the EICV5 (2016/2017), 77.2% of rural youth are workers, mostly engaged as independent farmers. Among young people working in agriculture, the proportion of male decreases for older age groups from 64.5% (16–20 years old) to 46.5 % (26–30 years old); young males are gradually engaged in other working activities, such as construction or repair of motorcycles and vehicles. This pattern reverses for female as the proportion increases in older age groups from 52.2% (16–20 years old) to 62.2% (26–30 years old).

Young people are most amongst the most vulnerable sectors of the population: almost 30% of young people (16-30) live in households that are below poverty line, while the rate of extreme poverty among youth is 11.3% compared to the 16% at the national level for all ages. More females were found extremely poor (12%) compared to males (10,4%) in 2016/2017[14].

The major causes of problems in regard to youth's access to market and challenges to youth entrepreneurship and business development include lack of technical skills, limited access to information and opportunities, inadequate access to resources (land and capital) insufficient support services, business and management skills, among others. Precarious forms of employment with low level of earning is the main employment problem for the youth.

RDDP focuses on youth as one of its target groups. In particular:

- **15,400 young farm assistants** aged 15 to 24[15] working as wage labourers (mainly male) in many dairy farms, especially in female-headed households with no male adults. They are typically from very poor families (*Ubudehe* Categories I and II), with little or no education and a very limited skills base.
- **5,400 rural women**, aged 15-35 (child-bearing age), will benefit from new economic opportunities and creation of small off-farm business opportunities.
- **RYAF** consultants posted at MCC-level. Most have an animal production or veterinary background.

The project aims to create employment opportunities for young people along the diary value chains. So far, efforts have been made to engage youth into project's initiatives and some activities are targeting youth directly, as the establishment of groups of Farm Assistants (2,600 youth trained until November 2019) and the assignment of young graduates (46 RYAF consultants) to MCC in the provision of technical support to the cooperatives on production and animal husbandry issues. However, RDDP still lacks a clear strategy to engage young people.

Designing a Youth Strategy. It is therefore recommended that the project define a Youth Strategy to orient its actions towards increasing youth's economic and social empowerment. The **Youth Strategy should address the following issues**:

a. Analysis at the national and project level.
   - Overview of the national youth policies and strategic frameworks in place.
   - Define youth age according to the country and the project context.
   - Analyze the situation of rural youth in the framework of RDDP's area of intervention: identify and profile the main youth groups the project is reaching (for instance, RYAF consultants, Farm Assistants, youth in the cooperatives/farmers' groups), including educational level, food security and nutrition status, occupational profile.
   - Describe the different youth target groups' priorities and needs and explain how the project is contributing to address them (challenges and opportunities by youth groups). Different

[13] In Rwanda youth was defined as the population aged from 14 to 35 years before 2015. Since then, the new national youth policy revised youth age range to be 16 to 30 years.
[14] EICV5, 2016/2017, Thematic Report, Youth.
[15] UN definition of youth: 15-24 years old.

youth groups have diverse educational and economic background and different priorities/needs. The Strategy should specify what the main issues for young rural people are and clarify how the project can best contribute to address them. A differentiation between young male and young female's needs should be also highlighted.

b. Analysis of the main commodities/ business with potential for youth employment along the dairy value chain.
   - Identify and analyze the main business opportunities for young men and women along the diary value chain and explain where the main opportunities for youth's employment are located.

c. Profile rural youth organizations and other key partners.
   - Describe rural youth organizations already collaborating with the project (e.g. RYAF), their role and kind of support provided. Identify which other partners should be prioritized to advance youth interests, including public, private and non-governmental sectors. New window of opportunities for youth should be reported here.

d. Make recommendations for financing and human resources to deliver on youth commitments.

The Youth Strategy should also include:

- Outreach disaggregated by age (and by sex): specify the number/percentage of youth to be reached by project as a whole and disaggregate youth from other target groups.
- Youth employment included into project's objectives and activities: target youth through specific activities.
- Specific funds allocated for youth activities.

Monitoring the implementation of the Youth Strategy. Once the Youth Strategy has been designed and specific activities for young people put in place, the project will monitor its progresses against the youth commitments and expected results. In particular, the project will:

a. Ensure that the financial resources required to deliver on the Youth Strategy/ youth commitments are in place.

b. Regularly review progresses on youth commitments. The SPIU Gender and Youth Specialist will be responsible to monitor the progresses, in close collaboration with the M&E Specialist, RDDP coordinator and other SPIU/RDDP officers.

c. Document and disseminate youth-related learning and successes.

Useful Resources:

IFAD. 2019. IFAD Rural Youth Action Plan 2019-2021. Empowering rural young women and men to shape the rural economies of tomorrow. This is a summary of the Rural Youth Action Plan 2019 – 2021.
https://webapps.ifad.org/members/eb/125/docs/EB-2018-125-R-11.pdf

Republic of Rwanda. 2015. National Youth Policy.
http://muhanga.gov.rw/fileadmin/user_upload/National_Youth_Policy_2015.pdf

EICV5. 2018. Thematic Report on Youth.
http://www.statistics.gov.rw/publication/eicv5thematic-reportyouth

Appendix 4.4. Working paper: Access to finance

This technical annex provides inputs for the design of the Access to finance strategy and includes the revised BDF Matching grants modalities.

C. Access to finance strategy

1) Background and rationale

No clear strategy by the Project to link Project beneficiaries to the financial sector for sustainability of the supported enterprises, and a Matching grant scheme not aligned with the offer of the financial sector

Focus of the Project has been so far on provision of Matching Grants (MG) through Business Development Fund (BDF). Most of the Projects are to finance production investments at farm level, and very few Projects have been funded for cooperatives / MCC and private sector for processing and marketing. MG are only financing capital investments and capacity building, but various financial needs of the dairy value chain actors also need to be addressed (savings, payments, loans, insurance) through linkage with the financial sector, including for asset financing since the BDF grant budget cannot cover all their financial needs. It was also noted that the Grant mechanism is not resulting in linkages with the financial sector, contributions of the beneficiaries being usually mobilized from their own resources.

While linkages with the financial sector is key for the sustainability and development of the supported dairy enterprises, the mission noted with concern that not much has been done by the Project to facilitate these linkages, except for linking dairy farmers to National Agriculture Insurance Scheme (NAIS) which is partially subsidizing insurance premiums. It is assumed that in some cases, grants have been provided to beneficiaries that could have been financed by Financial Institutions (FI), while rationale for the grant scheme should be to fill gaps in access to finance from the financial sector. It was however acknowledged various innovative initiatives of Heifer International (HI) in this area, although not reported under RDDP but benefiting Project's beneficiaries (digital profiling of farmers to access financial services, line of credit for financial institutions dedicated to dairy VC actors, insurance, impact investments).

Various ongoing initiatives in the financial sector to finance agribusiness, including dairy VC and smallholder farmers, that should be leveraged

The financial sector has a growing interest to finance the dairy VC, with various initiatives to financially (lines of credit, guarantees, …) and technically support development of adapted products for the VC actors, including small dairy farmers (HI, IMSAR / DFID, IFC, AFR, probably others to be further investigated during the proposed mapping exercise). These initiatives should be leveraged, noting that the Project is contributing significantly to de-risk the financing of the value chain, which should facilitate linkages of Project beneficiaries to financial institutions. While banks and some MFIs are already receiving support to develop agri-finance portfolio, there is need to support SACCOs in this area, considering their high penetration rate in the Country and their geographical coverage (at least one SACCO per sector).

RDDP should therefore refocus its efforts until completion to facilitate linkages between project beneficiaries and the financial sector, to ensure sustainability of the supported enterprises and Project's outcomes. In order to achieve this, an access to finance strategy needs to be defined to specify areas of support by the Project, based on outcomes of a mapping exercise, which will allow to identify relevant existing and prospective initiatives in the financial sector specifically targeting dairy value chain. The strategy should include a clear action plan with expected outcomes and implementation modalities. Main areas of support, to be specified by the strategy, will include: (i) support to SACCOs (and possibly MFIs) to develop adapted financial products and delivery mechanisms and (ii) support organization of forums at district level to proactively link dairy farmers and other VC actors to selected FIs having an adapted offer of financial products. It will also include TA when required for the design of co-investment arrangements between cooperatives and private sector. HI ongoing activities and expertise in these areas should be leveraged for the development of the strategy.

There is however also need to capacitate farmers and other VC actors to make them creditworthy and enhance understanding of and trust in the financial sector, through business management and financial literacy training (as proposed under other components / subcomponents than sub component 2.3).

Key features of financial literacy training

Financial literacy (or financial education) is an element of overall financial management training that also include training in bookkeeping and simple financial statements, assets and stock management, etc. Its key objective is to provide people and entrepreneurs with the knowledge and tools to make informed financial decisions and improve their lives. This includes business and household budget management, knowledge and understanding of the financial services on offer, how to make well informed decision on which financial products to use (savings, loans, payment, insurance), for instance comparing respective advantages of savings against loans, insurance against savings, how to compare interest rates and terms between different financial institutions, etc. It is expected to alleviate mistrust towards the financial institutions, especially by clarifying rationale for the conditions set to access services.

Modules should be adapted to the specificities of the different enterprises along the dairy value chain, nature and financial needs of the enterprises being specific for each category and size of actor (small dairy producer, marketing or processing cooperative or enterprise, veterinary and AI service providers)

To ensure adequate implementation of this crucial element of the Project and strengthen the SPIU capacity, it is also recommended to support the participation of the Access to finance specialist in a high level training on agricultural finance (e.g., Boulder Rural and Agricultural Finance Programme).

2) Specifications for the main elements of the access to finance strategy

a) Mapping study

Objective of the study will be to review and analyse current and prospective initiatives in the financial sector targeting dairy value chain, including identifying SACCOs and MFIs for provision of Technical assistance and generally which FIs should be approached to participate in the linkage forums to be organized by the Project. 2 to 3 weeks will be required for this study, beginning of 2020, with the main following activities:

- Meetings with the National Bank of Rwanda, Rwanda Bankers associations, MFIs association, Rwanda Cooperative Agency (RCA) and other relevant informants to identify current and prospective initiatives in the financial sector to support development of agricultural finance, specifically for the dairy value chain. This will also allow to collect relevant documentation for desk review.

- Meeting with selected FIs and other actors based on outcomes of the first step, to get a thorough understanding on current and prospective offer of financial services for the dairy value chain and constraints faced by the Financial Institutions.

This should allow to identify Financial Institutions to be invited to the linkage forums, and SACCOs and MFIs for TA. It will also allow to specify which categories of VC actors and investments cannot be fully financed by the financial sector, and therefore eligible for the Matching Grants.

The study will be conducted by RDDP Access to finance specialist, with support from an international expert for the design of the ToRs of the study, including guidelines for the meetings with the different actors to be met, and to analyse outcomes of the meetings and desk review.

Study should be updated once a year by the Access to finance specialist, considering rapid evolution of the financial sector.

b) Technical assistance to SACCOs (and possibly MFIs)

Objective will be to provide TA to SACCOs (and possibly MFIs, to be confirmed by the mapping study) operating in the areas of operation of the Project, to raise their appetite for the dairy value chain financing and to enable them to develop adapted financial products (savings and loans) and delivery mechanism for

dairy farmers and micro and small enterprises operating along the dairy value chain (loan amount for SACCO and MFI are regulatory capped which usually restrict their financing to small actors).

TA will be provided by a specialized service provider, with relevant national and international exposure and experience in agricultural value chain financing. Training sessions will be organized at district level, with on-site post training follow up and support for each FI. Main outlines of the ToRs for this TA are provided in annex.

c) Organization of linkage forums at district level

The Project will support organization of forums at district level to proactively link dairy farmers and other VC actors to selected FIs having an adapted offer of financial products (selection will be informed by the mapping study). Forums will be organized by the district dairy platforms to be established by the Rwanda National Dairy Platform, with support by RDDP Access to finance specialist and Project staff at district level for invitations. A small budget will be provided by the Project to cover logistics costs, the participants being expected to cover their own costs. One forum per district will be organized each year, to account for the rapid evolution of the financial sector and new offer of financial services that may emerge.

d) TA for the design of co-investment arrangements between cooperatives and private sector

Co-investment between cooperatives and private sector through joint ventures is one of the modalities envisaged to support efficient development and management of marketing and processing activities. However, it was observed that there might be mistrust between the private sector and the cooperative sector, based on bad past experience, and the Project may therefore play a positive role through this TA to alleviate this mistrust. RDDP Access to finance and Market specialists should lead this activity, and RNDP and district dairy platforms should be mobilized to facilitate discussion and negotiations between the cooperatives and private sector. Relevance to recruit service provider for provision of the TA is yet to be confirmed.

e) Principles guiding BDF Matching grant scheme

BDF matching grant scheme should be refocussed to support cooperatives and private sector players for marketing, processing and service provision (veterinary and AI services, animal feed). Grants eligibility and conditions should be reviewed with the overall rationale to support Projects that cannot be fully financed by the financial sector, and facilitate a graduation pathway for a sustainable linkage to the financial sector. Proposed revised modalities are presented in section B).

D. Revised BDF matching grants modalities

General principle: overall rationale is to support Projects that cannot be fully financed by the financial sector, and facilitate a graduation pathway for a sustainable linkage to the financial sector, which means for instance that a beneficiary should only access one grant and then access loans from existing financial intuitions for additional needs.

One of the outcomes of the mapping study will be to get comprehensive information on the financial products on offer (eligible borrowers and investments) to assist RDDP and BDF to specify which application is eligible.

Capacity building: Modalities of capacity building support will be reviewed for higher cost efficiency, through a collective offering for the most common capacity building needs.

Grants for dairy primary production in the pipeline: current conditions under micro project window apply. No new applications for dairy production will be collected by BDF.

For all windows, grant for working capital is ineligible.

The table below describes the proposed revised windows and modalities, highlighting in grey modifications compared to current modalities:

Current windows and modalities				**Proposed revised windows and modalities (**modifications highlighted in grey**)**			
I. Private agribusiness-led Business Plan				**Eligible grantees**	**Private enterprise having contractual relations with Cooperative / MCC**		
Type activities to be funded for 4P partners	**Sources of funding**	**% Project contribution**	**Ceiling project contribution**	**Type activities to be funded**	**Sources of funding**	**% Project contribution**	**Ceiling project contribution**
Investments on processing infrastructure and equipment for storage and value addition	- Private sector own resources (equity) - Loan from FIs	Up to 30% of total investment	USD 100 per coop member engaged in contractual relationship with a maximum amount of USD 40,000	Investments on: - Marketing and processing infrastructure and equipment for increased milk collection, storage and value addition - Animal feed	- Private sector own resources (equity) - Loan from FIs	Up to 40% of total investment	USD 200 per coop member engaged in contractual relationship with a maximum amount of USD 100,000
Capacity building for private sector (e.g. quality standards, certification from RSB)	Private sector own resources	Up to 30%	USD 2,000	Capacity building for private enterprise (e.g. quality standards, certification from RSB)	Private sector own resources	Up to 30%	USD 2,000
Capacity building on technical (extension), organisational (e.g.coop governance) and management (e.g. accounting, business	Coop own resources	Up to 80%	No ceiling	Capacity building of Coop / MCC on technical (extension), organisational (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	Coop own resources	Up to 80%	USD 5 000

Current windows and modalities				Proposed revised windows and modalities (modifications highlighted in grey)			
planning, marketing) issues							
II. Cooperative led business plan				**Eligible grantees**	**Cooperative along the dairy value chain (MCC, animal feed, veterinary services, …)**		
Investments on processing infrastructure and equipment for storage and value addition	- Coop own resources (equity) - Loan from FIs	Up to 50%	No ceiling	Investments on processing infrastructure and equipment for storage and value addition	- Coop own resources (equity) - Loan from FIs	Up to 50%	USD 200 per coop member engaged in contractual relationship with a maximum amount of USD 100,000
Capacity building for the coop to manage the infrastructure (e.g. quality standards, certification from RSB) Capacity building on technical (extension), organizational (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	Coop own resources	Up to 80%	No ceiling	Capacity building for the coop to manage the infrastructure (e.g. quality standards, certification from RSB) Capacity building on technical (extension), organizational (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	Coop own resources	Up to 80%	5 000 USD
Investments on 4P private sector partner's assets (e.g. transportation, inputs distribution)	- Private sector own resources (equity) - Loan from FIs	Up to 30%	3 000 USD	Investments on 4P private sector partner's assets (e.g. transportation, inputs distribution)	- Private sector own resources (equity) - Loan from FIs	Up to 30%	3 000 USD
Capacity building for private sector (e.g. quality standards, certification from RSB)	- Private sector own resources	Up to 30%	2 000 USD	Capacity building for private sector (e.g. quality standards, certification from RSB)	Private sector own resources	Up to 30%	2 000 USD

Current windows and modalities				**Proposed revised windows and modalities (**modifications highlighted in grey**)**			
III. Joint venture between producers' coop(s) and private sector				**Eligible grantees**	**Coop / MCC and private sector enterprise**		
Cooperative Joint investments on processing infrastructure and equipment for storage and value addition by the cooperative	- Coop own resources (equity) - Loan from FIs	Up to 40%	USD 100 per coop member engaged as shareholder and in contractual relationship	Joint investments on processing infrastructure and equipment for storage and value addition	- Coop own resources (equity) Loan from FIs - Private sector own resources (equity) - Loan from FIs	Total grant Max 60% Up to 40% for Coop Up to 20% for private sector	USD 200 per coop member engaged as shareholder and in contractual relationship with a maximum of 200 000 USD
Private sector Joint investments on processing infrastructure and equipment for storage and value addition by the 4P private sector partner	- Private sector own resources (equity) - Loan from FIs	Up to 20%	USD 100 per coop member engaged as shareholder and in contractual relationship				
Capacity building for the coop to manage the infrastructure (e.g. quality standards, certification from RSB) Capacity building on technical (extension), organizational (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	Coop own resources	Up to 80%	No ceiling	Capacity building to manage the infrastructure (e.g. quality standards, certification from RSB) Capacity building on technical (extension), organizational (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	Coop own resources Private sector own resources Coop own resources	Up to 80% for coop Up to 30% for private sector Up to 80% for cooperative	2 000 USD 5 000 USD
Capacity building for private sector (e.g. quality standards, certification from RSB)	Private sector own resources	Up to 30%	No ceiling				

Current windows and modalities				**Proposed revised windows and modalities (**modifications highlighted in grey**)**			
IV. Business Driven Cooperative Development Plan (Between weak producers' coop(s) and private sector agribusiness partner)				**Eligible grantees**	**Start-up cooperatives in marketing, processing and services (veterinary, AI, …)**		
Investments on processing infrastructure and equipment for storage and value addition for the weaker cooperatives in small dairy primary production investments in equipment and small collective milk infrastructures, Surgical kits, Vaccines, AI kits, Motorbikes, Curative cares (Pharmacy) etc	- Coop own resources - Loan from FIs	Up to 70% of total investment	10 000 USD	Investments in infrastructure and equipment	- Coop own resources - Loan from FIs	Up to 70% of total investment	20 000 USD
Capacity building on technical (extension), organizational (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	- Coop own resources	Up to 80%	No ceiling	Capacity building on technical (extension), organizational (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	- Coop own resources	Up to 80%	5 000 USD
V. Grant for climate smart and strategic investments				**Eligible Grantee**	**Cooperative and SMEs in production, marketing, processing and services**		
Rainwater harvesting (Water Tanks, Gutters, Dam sheets, bore halls, Dairy watering system (e.g. water pumps), plastic sheets	- Coop or Private sector own resources (equity) - Loan from FIs	Up to 60% of total investment	No ceiling	Rainwater harvesting systems (Solar system, biogas, etc.), Waste water management and treatment systems at Milk processing unit, Simple Milk equipment washing facilities	- Coop or SMEs own resources (equity) - Loan from FIs	Up to 60% of total investment	60 000 USD

Current windows and modalities				Proposed revised windows and modalities (modifications highlighted in grey)			
				associated with solar water heater, climate proof components, Milk processing unit infrastructures. With clear climate risk management plan			
VI. Grant for Dairy micro projects				**Eligible grantee**	**Private veterinary/AI technicians, Small businesses in marketing, processing, animal feed, transport, … (dairy farmers not eligible anymore)**		
Individual farmers, Private veterinary/AI technicians for small collective milk infrastructures, Surgical kits, Vaccines, AI kits, Motorbikes, Curative cares (Pharmacy) etc	- Individual, Private sector own resources (equity) - Loan from FIs	Up to 50% of total investment	5 000 USD	Investments for small business in veterinary / AI, processing, marketing, animal feeds	- Individual, Private sector own resources (equity) - Loan from FIs	Up to 50% of total investment Up to 70% for youth	10 000 USD
Capacity building on technical (extension), private vet/technician, Individual farmer (e.g.coop governance) and management (e.g. accounting, business planning, marketing) issues	Individual or Coop own resources	Up to 80%	No ceiling	Capacity building depending on business nature	Business own resources	Up to 80%	2 000 USD
VII. Youth window for innovation (new)				**Eligible grantee**	**Youth (between 16-30 years old) enterprise, Youth in cooperative**		
				Investments for Youth innovations in dairy value chain: . Intensified Milk production using climate smart technologies,	- Enterprise or coop own resources - Loan from FI	Up to 70% of total investment	10 000 USD for individual enterprise 20 000 USD for cooperative

Current windows and modalities				Proposed revised windows and modalities (modifications highlighted in grey)			
				. Milk value addition and processing, . Innovations in inputs and equipment, . Innovations in farm management ICT tools, . Innovations targeting market expansion and new consumers creation			
				Capacity building depending on business nature	- Enterprise or coop own resources	Up to 80%	5 000 USD

Annexe 1 to appendix 4.4: Main outlines of the Terms of reference for provision of Technical assistance to SACCOs and MFIs

1. Background

The Rwanda Dairy Development Project (RDDP) is a project of the Ministry of Agriculture and Animal resources which aims to increase competitiveness and profitability of the dairy sector for the provision of quality products from small-scale producers to domestic and regional consumers, thus improving their livelihoods, food security and nutrition whilst building overall resilience.

The Project operates in 14 districts: Eastern Province (Nyagatare, Rwamagana, Kayonza and Gatsibo), Northern Province (Gicumbi, Burera and Musanze), Western Province (Nyabihu, Rubavu, Rutsiro and Ngororero (part of the district located within Gishwati dairy basin)) and Southern Province (Nyanza, Huye, and Ruhango).

One of the objectives of the Project is to promote access to finance for the Project beneficiaries (small dairy farmers, cooperatives and private enterprises operating along the dairy value chain). One of the modalities is to provide matching grants for enterprises and / or investments that cannot be fully financed by the financial sector, to facilitate a graduation pathway for a sustainable linkage to the financial sector. The focus and exit strategy of the Project is however to facilitate sustainable access to financial services to Project beneficiaries, and an Access to finance strategy has been designed in this purpose building on an analysis of the Rwandan financial sector and of its appetite for agricultural finance.

This analysis has highlighted that the Rwandan financial sector has a growing interest to finance agribusiness, with various initiatives to financially (lines of credit, guarantees, …) and technically support development of adapted products for the VC actors, including small dairy farmers. These initiatives should be leveraged, noting that RDDP is contributing significantly to de-risk the financing of the value chain, which should facilitate linkages of Project beneficiaries to financial institutions. While several banks and MFIs are already receiving support to develop agrifinance portfolio, there is need to support SACCOs in this area, considering their high penetration rate in the Country and their geographical coverage (at least one Umurenge SACCO per sector).

There is also need to capacitate farmers and other value chain actors to make them creditworthy and enhance understanding of and trust in the financial sector, through business management and financial literacy training, which is done by RDDP.

Main elements of the Access to finance strategy are, in addition to financial management and financial literacy training of Project beneficiaries: (i) support to SACCOs (and possibly MFIs) to develop adapted financial products and delivery mechanisms and (ii) support organization of forums at district level to proactively link dairy farmers and other value chain actors to selected FIs having an adapted offer of financial products.

A mapping study will be conducted by RDDP beginning of 2020 to review and analyse current and prospective initiatives in the financial sector targeting dairy value chain, including identification of SACCOs and MFIs for provision of Technical assistance object of this assignment and generally of FIs to be approached to participate in the linkage forums to be organized by the Project.

2. Objective of the assignment

The objective is to raise appetite of the SACCOs and possibly MFIs (to be determined by the mapping study) for dairy value chain financing and enable them to develop and deliver adapted financial products (savings, loans, payments) targeting small dairy farmers and small enterprises operating along the dairy value chain (loan amount for SACCO and MFI is capped (regulatory requirement), which usually restricts their financing to small players).

3. Scope of the assignment

Technical support will be provided to interested Umerenge SACCO operating in the geographical sectors of intervention of RDDP, and to a limited number of MFIs (less than 5, targeted MFIs to be confirmed by the mapping study).

The consultant is expected to implement the following main activities:

a) Analysis of the capacity building needs of SACCOs for the development of an agrifinance portfolio, with focus on small dairy farmers and small enterprises along the dairy value chain. This will be done through desk review of relevant documents and reports and meetings with key SACCO sector stakeholders. In case MFIs are selected for support, the consultant will assess their capacity building needs.

b) Dairy value chain mapping and analysis with focus on the financial needs of the targeted beneficiaries and analysis of financing risk mitigating strategies.

c) Training sessions for representatives of SACCOs and MFIs (at least one board member and one staff) for each district of intervention of RDDP. Training is expected to last a maximum of 3 days. The training module will be designed based on outcomes of steps a) and b), and should address at least the following topics:

   a. Presentation of the dairy value chain mapping and analysis, including financing needs of the targeted beneficiaries and risk analysis.

   b. Features of the financial products to be delivered. It is expected that the products will be designed using the agricultural value chain financing approach, building on linkages between value chain actors, especially but not exclusively linkages promoted by RDDP.

   c. Delivery mechanisms, including internal organization, and human resource, operational, internal control and risk management policies and procedures / processes.

   d. Update of the MIS to ensure that financing of the dairy value chain actors is adequately reported and monitored.

   e. Action plan for the development and delivery of the financial products, with realistic timelines and targets in terms of number of clients and volume of savings mobilized and loan portfolio.

d) Two on site post training follow up and support for each SACCO or MFI having attended the training, with objective to ensure adequate implementation of knowledge and tools acquired during the training, through customized support.

Information on the training will be done with support from RDDP local staff. It is expected that at least 80& of the Umurenge SACCO will express interest for the training. SACCOs and MFIs will be expected to cover transportation costs for their representatives, other costs being supported by RDDP.

4. Deliverables

Deliverable	**Indicative timelines**
SACCO sector analysis and Dairy value chain mapping and analysis	3 weeks after signature of the contract
Training module	4 weeks after signature of the contract
Intermediary report on the training sessions	1 week after the end of the training sessions (timeline to be proposed by the consultant in its offer)
Final report including post training support.	Timeline to be proposed by the consultant in its offer

Training module will be submitted for comments to RDDP Access to finance specialist for finalization before the training sessions.

Contents of the reports will be agreed upon in consultation with RDDP (based on proposal made by the consultant in its offer).

5. Profile of the consultant

The consultant must be an NGO or firm with relevant national and international experience in supporting financial institutions to develop agrifinance strategies and products. At least 3 relevant references for similar assignments implemented in Sub Saharan Africa in the last 3 years must be provided.

Experience in capacity building of SACCOs will be an added advantage.

6. Technical and financial proposal

The applicants must submit a technical proposal including:

- Understanding and comments on the Terms of Reference (max 1 page).

- Profile of the applicant, with relevant experience and references for similar assignments (max 5 pages).

- Detailed description of the methodology and implementation plan for the assignment, including reporting modalities (max 10 pages).

- Profile and respective responsibilities of the staff to be assigned for the assignment (with short profile and detailed CV). Max 2 pages not including CVs to be annexed to the proposal.

The applicants must provide a financial proposal with breakdown for fees, allowance for the staff, training costs, and other operational costs, with clear assumptions for the calculation of each item.

Appendix 4.5. Planning, Monitoring & Evaluation and Knowledge Management

I. Introduction

In this annex, Planning, Monitoring and Evaluation (PM&E) and Knowledge Managed (KM) under the Rwanda Dairy Development Project (RDDP) will be discussed. Their principal role is to provide:

(i) information that will help project management and implementing partners to make informed decisions about resource allocation, responsibilities for implementation, constraints that must be addressed, and the need for modifications to the project strategy and implementation approach;
(ii) facts and figures on progress made and results achieved compared to what was planned, to prepare good quality reports that accurately present the project's status, with analysis of strengths, weaknesses and the way forward.

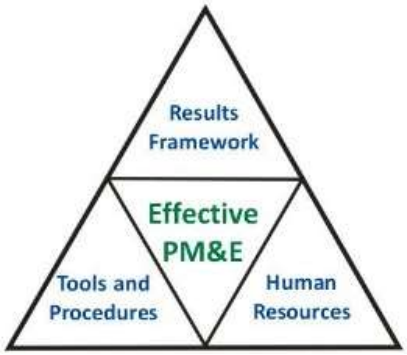
PM&E has a mostly operational focus, on implementation and measuring results. KM has a more analytical focus: interpretation and lessons learned that can be used to improve the strategy of RDDP, and ensure long-term sustainability beyond the life of the project. PM&E and KM both focus on physical progress, which is complemented by financial progress and the financial management system.

Effective PM&E under RDDP requires the following three pillars to be in place:

1. a clear results measurement framework (logical framework) that defines what results are expected to be achieved, what needs to be planned for, what needs to be measured and what data needs to be collected;
2. a system, with clear tools and procedures for data collection and data management, which facilitates how data is collected, recorded, transmitted, stored, processed and used;
3. human resources: sufficient numbers of staff, a clear division of responsibilities, adequate knowledge and skills regarding PM&E, and capacity building when there is a skills gap.

All three pillars were reviewed during the mission and are discussed below.

Figure 2. PM&E Pillars



II. The logical framework

The logical framework of RDDP summarizes the project design and presents its results hierarchy[16]: how project activities and deliverables (outputs) lead to desired change (outcomes) and achieving objectives - the Project Development Objective (PDO) and the overall goal.

The approach and intervention logic as described in the Project Design Report (PDR) are sound: RDDP aims to improve the livelihoods of resource-poor rural households (the goal) by increasing the competitiveness and profitability of the dairy sector (the PDO), which is an important source of income for the target group. This is to be achieved by interventions that lead to change on the production side (increased productivity), the consumption side (increased milk consumption at household level), and in the value chain that takes dairy products from producers to consumers (better functioning cooperatives, increased milk processing capacity and capacity utilization, improved milk quality). These anticipated results are complemented by a focus on long-term sustainability: reducing greenhouse gas emissions, increasing the resilience of livestock farmers to deal with the effects of climate change, and making the policy framework more conducive to the dairy value chain.

The fact that the logic and approach of the project are sound has been confirmed during previous supervision missions and again during this Mid-term Review (MTR). The project team[17], with assistance from

[16] Also referred to as hierarchy of objectives, intervention logic, or theory of change.

[17] The project team comprises members of the Single Project Implementation Unit (SPIU) in Kigali, some of whom are responsible only for RDDP while others also work on other IFAD-supported projects. District Field Officers (DFO) in the twelve districts covered by the projects are also included.

members of the supervision mission, have previously analysed the project design and produced a fairly detailed Theory of Change diagram which captures many elements in and around the dairy value chain that require attention in order to achieve project objectives (see Attachment 1). During the one-day MTR workshop, a similar exercise was carried out using a diagram based on the first column of the logical framework, to assess progress with achieving outcomes and the PDO. In discussion groups, members of the project team and representatives of implementing partners discussed performance and results achieved under each outcome and for the PDO, and gave ratings using a 'traffic light system'.

The findings are shown in Attachment 2. Red signifies limited results and significant challenges to be addressed; yellow/orange signifies reasonable results with scope for improvement; green signifies good results approaching project targets. Yellow/orange dominates in the diagram, which means that while the project is on the right track, much effort will be required during the remaining three years to achieve objectives and targets. There is evidence that project interventions lead to desired outcomes, although more needs to be done in some areas if end targets are to be met. The project is most advanced with increasing production (outcome 1): productivity is increasing and milk production is up by almost 40%, while improving milk quality and increased consumption need further attention. Reasonable achievements were noted regarding improved service delivery by MCCs and cooperatives (outcome 2) through training and coaching: nearly 60% are judged to be performing well and serving targeted farmers. However, there is a need to ensure sustainability by phasing out external support such as the RYAF consultants, and to expand beyond cooperatives: other actors in the value chain also play important roles all the way from collecting milk from farmers to delivering milk to consumers. Relevant interventions have been introduced to make the value chain more climate-smart and farmers more resilient (outcome 5), for example in the L-FSS and through a specific window for climate smart investments. Regarding the former, there is a need to uniformly promote climate smart practices at the L-FFS level, using effective and affordable technologies and facilities. Regarding the latter, the investments have mainly been for rainwater harvesting systems that support a small portion of targeted beneficiaries, and the investments should now be diversified and scaled up.

Outcome 3 on increased utilization of milk collection, processing and outlet facilities, as well as outcome 4 on an enhanced policy framework are behind relative to the other outcomes. Utilization of installed milk processing capacity is estimated to be around 60%. Positive results regarding product diversification (e.g. yogurt, cheese) and new services (e.g. transport, supply of inputs and equipment) were observed, but on a small scale and with a need to ensure their viability. Rwanda is now facing problems of market saturation for milk and more attention must be given to promoting milk consumption, creating other products besides pasteurized milk (fermented milk, yogurt, butter, cheese, ghee, UHT milk, milk powder), and developing marketing channels that deliver dairy products to consumers, including in neighbouring countries. Lack of progress in these areas could put the development objective of increased profitability and competitiveness of the value chain at risk. During field visits, successful marketing initiatives were observed that can be replicated, but bottlenecks on the demand side and regarding market access were also identified. The same applies to the policy framework, where results have been achieved with the Ministerial Order on milk quality and the animal feed law, but major challenges remain, for example regarding uniform price controls for milk that prevent private sector involvement in some parts of the country.

The conclusion is that the logical framework of RDDP captures the interdependence of project deliverables and the intervention logic of the project quite well. The results hierarchy and strategic approach of the project are therefore unchanged. However, there is a need to give more attention to increasing demand, improving product quality, diversification, market access and the policy framework.

Minor changes are proposed in the wording of one output and two outcomes in the logical framework, as follows:

- *"Output 4. Strengthening of value chain"*: it is not sufficiently clear what this deliverable entails, and it is recommended to make the description more specific: "*Increasing the capacity of the value chain to buy, transform and sell dairy products"*;
- *"Outcome 2. Enhanced organizational capacity and enterprise skills of dairy cooperatives"* should be changed to "*Improved service delivery by dairy cooperatives"* to more clearly describe the change that is expected to follow from "*Output 5. Supporting organizational development of cooperatives"*;
- *"Outcome 3. Expansion and improved utilization of milk collection and processing infrastructure"* is clear and relevant but stops at processing infrastructure, leaving out market access. To include the latter, it is recommended to modify the outcome to read: "*Increased utilization of milk collection, processing and outlet facilities"*.

Indicators in the second column of the logical framework are used to measure the extent to which outputs are delivered and results are achieved. For all indicators, their meaning and how data is collected was discussed with the Head of MIS in the SPIU and the M&E Specialist for RDDP. The majority of the indicators are appropriate for the level at which they are used (e.g. outcome indicators that indeed measure change at outcome level) and are of acceptable quality (clear and providing useful information). However, there are exceptions: some indicators are not well understood, are difficult to measure or lack the necessary baseline data that can be used for comparison. Proposed modifications have been discussed by the MTR team and with the SPIU, and include adding eight new indicators, removing seven existing indicators and moving one indicator to a different level. The complete overview of the indicators is presented in Attachment 3, including those for which it is proposed that they are removed, and the new indicators to be added. For most indicators a brief explanation is included on their meaning and what the target is based on.

For the project goal, it is recommended to replace the original indicators, "*households that experience an increase in household assets"* and "*child malnutrition"*. While both are appropriate indicators, baseline data specifically for the target group is not available, which makes it difficult to assess impact. Instead, it is proposed to use "*average income increase for direct beneficiaries"* and "*proportion of households that are food secure"*. The baseline survey report has data on income from milk sales, overall household income, and the proportion of households that are food secure, defined as those that did not have any day when they lacked money or food during the last 30 days. The same data should be collected during a future impact survey and compared to the baseline data.

Relatively minor changes have been proposed for indicators used for the PDO, the five project outcomes and the seven outputs. Output 1, "*developing farmer capacity in good dairy production practices"* had only one indicator, "*technologies that sequester carbon or reduce greenhouse gas emissions"*, which is insufficient. Additional indicators are proposed to measure training of farmers on livestock production (L-FFS), distribution of improved dairy cows (Girinka) and climate-smart investments made. For output 6, "*improving access to financial services"* the indicator "*financing gap of enterprise development plan"* was not well understood and replaced by "*value chain actors funded by financial institutions"*. Full details are provided in Attachment 3.

Assumptions made in the logical framework are considered reasonable, although in some cases evidence is not yet available to confirm that the assumption holds true, while in other cases the assumption is true in principle but in reality, there are practical constraints that cause delays and undermine the assumption to some extent. The assumptions are briefly discussed below.

Assumption	Related to	Comment
Budget for policy implementation is availed by government and capacity for operationalization exists at local level.	Output 7. Strengthening policy development	Implementation / enforcement of the Ministerial Order is not easy and not always the highest priority.
Financial institutions are ready to invest in dairy cooperatives.	Output 6. Improving access to financial services	True, but with caution and requiring attention.
Cooperatives are interested in operational and business development.	Output 5. Supporting organizational development of cooperatives	Generally true.
Dairy cooperatives and unions with category 1 MCCs will want to invest in processing. Existing processors are willing to engage with project.	Output 4. Strengthening of value chain	Generally true.
The ministerial order on milk standards will be effectively implemented and informal sector allowed to upgrade to the level of required standards.	Output 3. Supporting informal sector to comply with milk quality standards	Implementation / enforcement of the Ministerial Order is not easy and not always the highest priority. Value chain actors face procedural and resource constraints when trying to meet standards.
Strengthening animal health services will result in more people accessing services. Private vet and insemination services will improve animal genetic resources and sustainability of services.	Output 2. Strengthening animal health services	True for public services, private services are yet to take off.

Assumption	Related to	Comment
L-FFS will lead to improved animal husbandry practices, leading to improved animal health, improved feeding and improved hygiene generally as well as natural resource base.	Output 1. Developing farmer capacity in good dairy production practices	Generally true.
Climate-smart technologies will offset the carbon footprint of the dairy sector despite eventual increase in livestock population.	Outcome 5. Enhanced climate-smart dairy value chain and strengthened community resilience	Information not yet available.
All relevant stakeholders are consulted and heard.	Outcome 4. Enhanced policy and institutional environment for development of the smallholder dairy industry	Generally true.
Farmers have adequate incentive to supply to formal sector; Sufficient access to services is available, e.g. to technicians, facilities, etc.	Outcome 3. Expansion and improved utilization of milk collection and processing infrastructure	Not always true, especially in more remote areas.
Well-functioning MCCs intend to provide multiple services to farmers beyond mere milk collection and marketing;	Outcome 2. Enhanced organizational capacity and enterprise skills of dairy cooperatives	True.
Improved dairy practices will improve milk productivity regardless of breed purity; Increased and safer dairy production, consumption and education campaigns will lead to domestic consumption and education will lead to domestic consumption.	Outcome 1. Smallholder dairy farming productivity and supply of quality milk enhanced and milk consumption at household level increased	Largely true. The increase in domestic consumption is relatively slow.
Increased production will lead to sales and domestic consumption; Export data for dairy products are more reliable (considering that most of the milk currently exported to Congo DRC and Burundi is not recorded); Incomes increase through a combined effect of increased milk production and improved market access.	Development Objective. To increase competitiveness and profitability of the dairy sector for the provision of quality products from small-scale producers to domestic and regional consumers, thus improving their livelihoods, food security and nutrition whilst building overall resilience	Partly true. Increase in sales and consumption are not progressing as fast as increase in production. Reliable data on exports to DRC and Burundi is not available.
Income from milk sales will be used on household improvements; Income from increased sales accompanied by nutrition education and behaviour change will lead to greater availability of and access to a diversified diet and nutrient-rich crops/ food items.	Project Goal. Contribute to pro-poor national economic growth and improve the livelihoods of poor rural households	Information not yet available.

None of the assumptions are so-called 'killer assumptions' that must be true because otherwise it will be impossible to achieve the project objective. In those cases where the assumptions are currently not completely true, the MTR has identified how this can be mitigated through project interventions. Examples include "*financial institutions ready to invest in dairy cooperatives"*; "*animal health services provided by the private sector"*; and "*increased domestic consumption"*.

III. PM&E System

RDDP is able to deliver the necessary data on implementation of the Annual Work Plan and Budget (AWPB)[18], output-level results and some higher-level results. PM&E data are submitted by District Field Officers and service providers, based on their MOUs. Findings are discussed during weekly management meetings and monthly meetings with all staff and service providers. Part of the data are disaggregated by sex and age group, but collecting accurate disaggregated data is difficult and there is scope for improvement. Capturing environmental and climate-change data has not started, and TA support is needed on this aspect. However, the project does not have an effective PM&E system, which makes data collection and processing time consuming. Data related to indicators are kept in a multitude of files and are understood

[18] This is called the RDDP Action Plan and Budget by the project.

and accessible only by the Head of MIS. The lack of a system makes reporting complicated and prone to errors, makes it difficult to trace the detailed data on which aggregate indicator reporting is based or to assess the accuracy of the indicator data that is reported.

The PM&E system for RDDP should be able to do at least two things: (i) track and report on progress with implementation of the AWPB; (ii) capture detailed data for indicators in the logical framework and use this to generate reports with totals for indicators at output, outcome, PDO and goal level. The same applies for other IFAD-supported projects in Rwanda, which have essentially the same reporting requirements, and it is therefore recommended that RDDP takes the lead in establishing a system that can serve all IFAD projects. A single system might also make it possible to combine data from different projects and report on indicators in IFAD's Results-Based Country Strategic Opportunities Programme (RB-COSOP). For example, the proposed new impact indicator for RDDP, "*average income increase for direct beneficiaries*" is aligned with the third indicator for the overall objective of the RB-COSOP: "*20% average increase in rural per capita income, derived from targeted value chains*".

At activity level, the AWPB is prepared manually using MS-Excel, budget summary tables are prepared manually, and worksheets with activities for each service provider are extracted manually. This approach is time consuming. Using advanced Excel features, it would be relatively easy to further develop the spreadsheets that are currently used for the AWPB so that budget summary tables by component, category and financier are generated automatically and service provider activities can be extracted using filters.

In addition, the Excel-based AWPB should be used consistently as a monitoring tool, by adding 'monitoring data' after each planned activity. This would enable the SPIU and service providers to monitor the implementation of activities in the same way. Attachment 4 illustrates the proposed approach, using some activities from the 2019/20 AWPB. Each activity has a unit and quantities by quarter, which are used to calculate the activity budget: for example, for the activity "*Support to RAB to construct the facilities for forage seeds handling in RAB Stations (Rubona,Songa,Mirama/Nyagatare)"* the unit is "*Number"* and the quantity is "*three"* in the second quarter. Columns with monitoring data have been added: (i) four columns to record the actual quantities for each quarter; (ii) one column for the percentage achievement for each activity, which is calculated and can be used to report overall percentages for components and sub-components; (iii) a column with activity status using standard definitions[19] such as "*behind schedule"* and "*complete"*; and (iv) a column for comments regarding the status of an activity, problems encountered or action needed.

The Heifer International progress report for 2018/19 already uses a similar approach, which could be taken, together with the above example, as the starting point for more standardized reporting. Progress reports could be simplified, by using the progress information by activity and only adding relatively short sections with overall observations and analysis.

To establish an PM&E system for indicator reporting, the SPIU needs to prepare a conceptual design specifying which reports are needed, followed by system implementation by a consultant. MINAGRI has its own Agricultural Management Information System (MIS) that is used to collect agricultural data from sector level upwards. This system was established in 2016 by Agri-TAF, a Technical Assistance Facility that is part of broader donor support for Rwanda's agriculture strategy (PSTA4). Development and implementation support by Agri-TAF ends in December 2019. The system is used as the main data source for monitoring and reporting on performance of the agricultural sector. The MIS is based on the DHIS2 open source platform, which is flexible and allows a system administrator to formulate new indicators, users, data entry forms, validation rules and reports. The system is web-based but can be used off-line; it allows data to be recorded by computer or through mobile phones or tablets. Most data are entered by sector staff (Agronomists and Veterinarians), while international NGOs that have signed an MoU with MINAGRI also use the system.

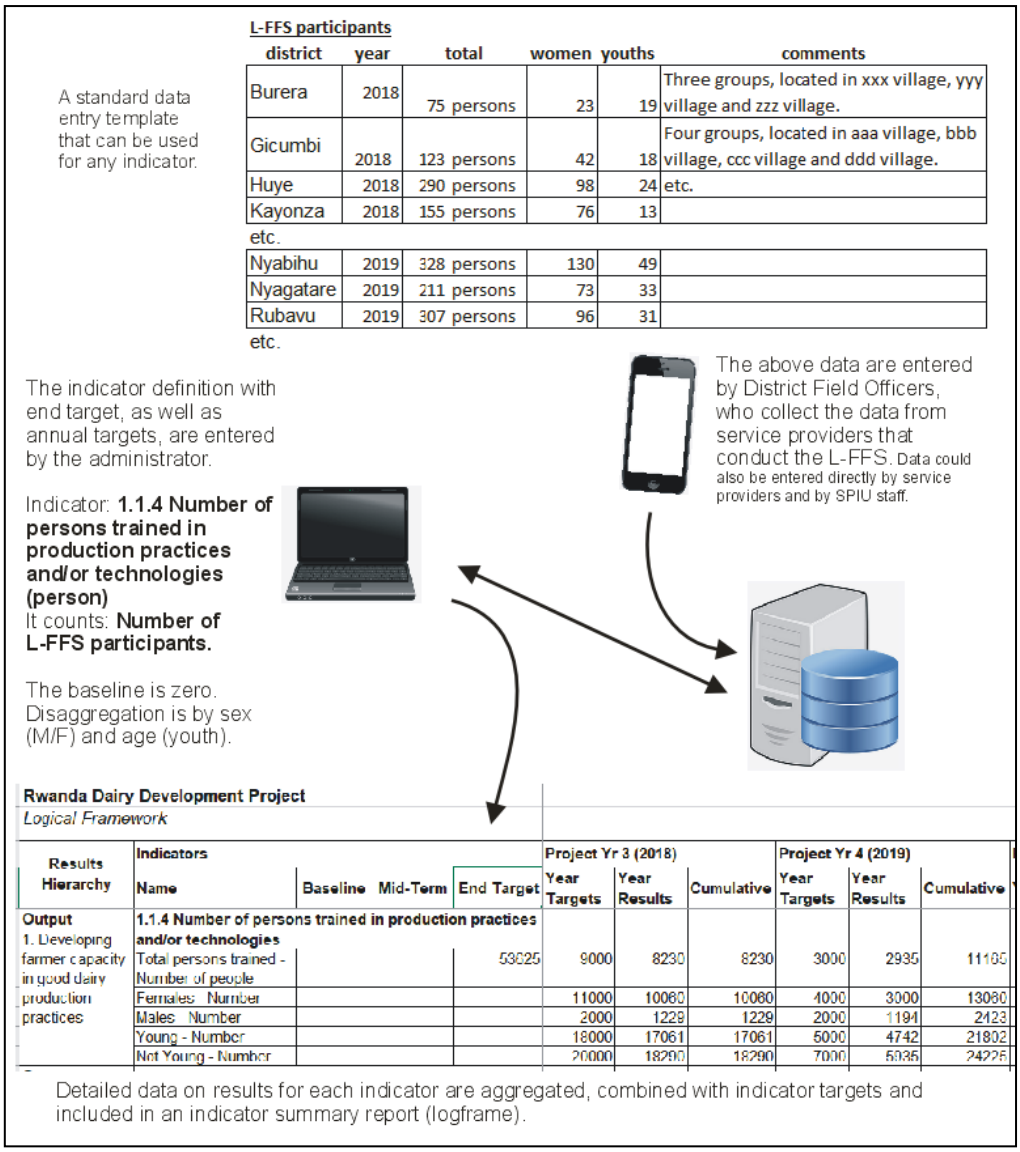
The MIS allows for the development of separate modules to capture information on specific areas in the agricultural sector, which could include a module for indicator data for IFAD-supported projects. Such a

[19] The quantities do not always give a good impression of the status of an activity. For example, the activity "*prepare the rural finance feasibility study and strategy report*" (quantity = 1) could take eight months and as long as it has not been completed, the achievement is zero. However, research, workshops and initial drafts may all have been done. Using standard 'activity status' definitions in addition to quantities can solve this issue: the activity can be classified as "*on schedule*" even though the achievement is still zero.

module could improve data quality, make data collection and processing more efficient and transparent, and contribute to better reports. The basic principle would be that detailed indicator data can be entered for RDDP, or any other IFAD project, by District Field Officers, service providers and selected SPIU members. The data would be checked and approved by the M&E Specialist and/or the Head of MIS, before it is permanently stored and used in aggregation. Indicator definitions would be entered once with details about whether and how the data should be disaggregated and how aggregation should be done[20]. Indicator targets would be entered annually at SPIU level.

The most important report that would be produced by the system is the updated logical framework using a format that is similar to what is exported by IFAD's ORMS: the results hierarchy, indicators, baseline data, mid-term and end targets, followed by annual targets, annual results and cumulative results for each year. Other reports could include, for example, more detailed data by district for selected indicators, or all the indicator data entered by one service provider. The major difference compared to the current approach is that decentralized data entry by multiple project partners would be possible, and that it would be easy to retrieve the detailed data that contributes to indicator totals. The approach is illustrated in Figure 3 below.

Figure 3. Concept for an MIS to capture indicator data for IFAD-supported projects



[20] For some indicators, detailed data can simply be added up to get annual and cumulative totals, but for some indicators that measure percentages aggregation may involve using an average instead of a summation, and in some case the cumulative results would be the same as the annual result for the current year instead of the sum of annual results for all previous years.

The Head of MIS should take the lead in further developing this concept, together with other M&E specialists in the SPIU and in dialogue with MIS staff from MINAGRI. Once a complete conceptual has been agreed on and accepted also by MINAGRI, this would be the basis for hiring a consultant to develop an additional module for the MINAGRI MIS. The technical capacity for such system development work is available in Kigali, including staff currently employed under Agri-TAF.

Annual reports by service providers are informative; more consistent report formats could lead to further improvement. However, the overall RDDP annual report (2018/19) lacks an analytical section, which is indispensable at this stage of the project. Such a section should be added, covering performance analysis (performance of institutions and by component); lessons learned; progress made towards objectives (describing achievements, issues and the overall performance for each outcome and the PDO); and review of the strategic focus (where more or less emphasis and resources are needed).

IV. Surveys

Surveys are one of the tools used by RDDP and are part of the PM&E system. An acceptable baseline survey report has been prepared, which provides relevant baseline data for various indicators in the logical framework. The survey was extensive and took at least six months from preparation to final report. Five questionnaires were used to interview livestock farmers, milk processors, traders, milk collection centres and SMEs providing dairy inputs. The most elaborate questionnaire, for livestock farmers, is 20 pages long. The survey covered 12 districts where RDDP is implemented and where beneficiaries were interviewed. Four districts where RDDP is not active were used as a control group, where non-beneficiaries were interviewed. Using two-stage cluster sampling, villages and households were selected. Interviews were conducted with 1754 households in total, on average 109 households per district including in the control group districts.

Data is from February 2019 which means that the survey was conducted quite late, in the third year of the project. By that time substantial activities had already been implemented: during 2017/18 alone, training of some 11,000 farmers through L-FFS, vaccinating well over 300,000 cows and distribution of nearly 900 cows. This is likely to have resulted in change by the time the baseline survey was conducted, especially regarding milk output and productivity. The data in the report can be used a reference point for comparison, but keeping in mind that it does not represent a true baseline.

It is recommended that RDDP conducts Annual Outcome Surveys (AOS) from the MTR onward, during the first quarter of 2020, 2021 and 2022. A final impact survey would be conducted during the first half or 2023 as part of the project completion process. An AOS should be a much smaller survey than the baseline or impact survey[21], with a narrow focus on selected indicators in the logical framework. The main purpose is to review the project performance at outcome level and for the PDO; create a time-series of data for key indicators; and provide information about the need to shift focus or modify the project strategy. This would involve the following:

- select those indicators in the logical framework that should be included;
- check whether baseline data is available for those indicators, and how it is presented;
- determine if any other data should be collected in addition to data for the selected indicators - this should be kept to a minimum;
- follow the normal survey approach (sample selection; questionnaire preparation; enumerator training; field testing; data collection, entry, cleaning and analysis; and report preparation).

The recommended sample for an AOS is 200 beneficiary households and 200 control group households. An AOS often uses only yes/no questions to assess direction of change (e.g. "*has milk sales increased or not?*"), but for RDDP actual quantitative data is important for some indicators. It may therefore be appropriate to increase the sample size, but it would still be much smaller than for the baseline survey, because the AOS will only report on indicator totals for the entire project area and target group, not disaggregated by milkshed or district. The most important indicators in the logical framework that should be included for data collection from livestock farmers are:

- volume of milk sold from targeted small-holder dairy farmers annually
- value of milk sold from targeted small-holder dairy farmers annually
- average of milk produced per cow (by type) per day during one lactation period

[21] For details on the approach, see Designing and Implementing Annual Outcome Surveys - A Guide for Practitioners, IFAD 2016.

- intercalving period
- households reporting an increase in production
- dairy farmers using a formal milk collection system
- households receiving facilitated animal health services
- success rate of artificial insemination

The following key indicators should also be included, but data would be collected from other sources:

- volume of milk exported
- supported rural enterprises reporting an increase in profit
- average consumption of milk at household level
- MCCs serving targeted farmers
- installed capacity of milk collection and processing facilities utilized
- value chain enterprises reporting an increase in milk sales

The baseline survey report should be analysed to identify specific data that is available for all of these indicators, and how it is presented. The AOS questionnaire should then be built around these indicators and any other outcome-level data that is considered critical for RDDP. Questions can be copied from the baseline survey questionnaire where appropriate, to facilitate consistency and comparison of the data. The AOS report should present results for each indicator as follows: (i) a table with baseline data, AOS survey data and observed change, where possible comparing project beneficiaries and the control group; (ii) supporting text with additional information, observations from the field and interpretation.

TOR for a first AOS have been prepared but are very broad, impose unnecessarily stringent requirements on the service provider, and are more suitable for a full baseline or impact survey. The number of indicators mentioned are excessive and partly no longer relevant[22]. To the extent possible, the proposed first survey that has already been advertised should be scaled down and brought in line with the AOS approach. The two further outcome surveys would be small, narrowly focused surveys built around the key indicators mentioned above - draft terms of reference have been provided (see Attachment 5).

V. PM&E Plan

RDDP does not have a comprehensive PM&E Plan. Such a plan helps to organize PM&E activities, ensures that each year the necessary PM&E activities are included in the AWPB and that an appropriate budget is allocated.

The plan should describe the results measurement framework (logical framework): what results are expected to be achieved (RDDP objectives), what needs to be planned for (RDDP outputs), and what needs to be measured (indicators). Indicators should be described in detail, explaining what exactly each indicator means, what it counts, what data should be collected, how often this needs to be done, and who is responsible for collecting and entering data. By nature, indicators are short statements which can be open to interpretation or misunderstood, and explanations are therefore important: for example, the logical framework of RDDP included "*stakeholder satisfaction with policy and regulatory framework"* without defining who these stakeholders are and what exactly they should be satisfied with in the broad policy and regulatory framework; and "*financing gap of enterprise development plan"* which was not well understood. IFAD core indicators are quite broad and their specific meaning in the context of RDDP must be explained. This is true especially for the total outreach indicator, "*persons receiving services promoted or supported by the project"*: which people, receiving what services are counted, and how is double-counting avoided when the same persons receive multiple service or benefits from the project? RDDP uses data on numbers of beneficiaries from vaccination, L-FFS participants, recipients of dairy cows and some other interventions, and the M&E Plan should clearly describe how these numbers are used to calculate total outreach.

[22] The TOR mentions the following areas for data collection: (a) quantifying market demand (the consumption side) - 16 indicators; (b) quantifying the milk supply (production) - 4 indicators; (c) identify other milk chain actors (processing, packaging & transportation): 4 indicators; (d) assess gender issues - 4 indicators; (e) analyse the regulatory framework (quality control systems & standards) - 4 indicators; (f) asses the level of the Business Support Services (BDS) - 3 indicators; (g) analyse profitability of milk businesses throughout the chain - 7 indicators; (h) key performance indicators - 14 indicators; (i) climate and environment - 10 indicators; RIMS - 40 indicators; (j) impact - 8 indicators. The total amounts to more than 100 indicators, including 40 old RIMS indicators which are no longer used by IFAD.

The plan should describe the PM&E system: the tools and procedures that facilitate how data is collected, recorded, transmitted, stored, processed and used. Tools and procedures include the baseline survey, Annual Outcome Surveys and their respective survey questionnaires; data collection forms that the project uses; formats for AWPB preparation and AWPB monitoring; calendars with timing and deadlines for PM&E activities; the MIS used to enter and store data; report formats for service provider reports, internal reports (e.g. monthly report for management) and external reports (e.g. semi-annual and annual reports).

The plan should describe roles and responsibilities: who does what? The Head of MIS in the SPIU and the M&E Specialist in RDDP have overall responsibility for PM&E but they cannot do everything, especially when it comes to data collection. The plan should describe who collects data for which aspects of the project, or even specifically for each indicator; to whom they submit data if they do not enter it in a system themselves; how often and when this is done; and who enters data in the PM&E system. Some data collection tasks are handled internally (e.g. District Field Officers collect and submit certain monitoring data) while others are contracted out (e.g. collecting baseline data). The plan should also explain who is responsible for preparing internal and external reports. The number of people involved should be sufficient given the data collection and reporting tasks, also considering the fact that PM&E is only one of their responsibilities. Skills gaps and the need for capacity building should also be identified.

There is no standard or prescribed format for PM&E Plans in IFAD-supported projects. The following outline can be used as a starting point for developing such a plan for RDDP.

1. Describe the aim and focus of PM&E in the project: (i) to provide information, based on accurate data, that facilitates making informed decisions and preparing good quality reports; (ii) focus on the monitoring of AWPB implementation and project deliverables (outputs), and the evaluation of progress towards achieving higher-level results (outcomes, the PDO and overall goal).
2. Describe the results measurement framework (logical framework): the goal, PDO, outcomes and outputs of the project and how they relate. Diagrams such as those shown in Attachment 1 and 2 can be included to highlight the interdependence of RDDP components and results. A table should be included that elaborates the meaning of each indicator, what the target is based on, and what exactly will be measured/counted. The table in Attachment 3 can be used as a starting point, but more details should be included on who collects and enters data for each indicator, and how often this is done.
3. Describe the main PM&E activities that are expected to be carried out during the remaining years of the project (e.g. Annual Outcome Surveys, the PCR) and the recurrent PM&E tasks that happen every year, with their deadlines (e.g. submit draft AWPB to IFAD, prepare Annual Report). These activities can be summarized on an overall and annual PM&E calendar. An overall budget for PM&E should also be prepared: it is important to know approximately how much money will still be required, and to compare this to what has been allocated (see Attachment 5 for examples).
4. Describe the PM&E system. This includes data collection methods and tools, such as apps or forms that are used to collect primary data (e.g. L-FSS participants lists, MCC milk collection records), templates used by the project (e.g. AWPB implementation monitoring), and survey questionnaires. For each tool, it should be clear who uses it, how often it is used and who enters the data in a central system. This central system, the MIS that will be used to enter, store and process data, must also be described. A detailed technical description is not needed, but an overview of what is entered (data entry templates) and what comes out of the system (tables, graphs, reports) is important.
5. Describe who is involved in PM&E and what their responsibilities are. This can include a summary of the main tasks and responsibilities of the Head of MIS and the RDDP M&E Specialists, based on what is specified in their performance contracts. Other specialists in the SPIU also have a role to play, for example verification of M&E data and report sections related to their specific area of expertise. District Field Officers play an important part in collecting data from the field and data verification on the ground. For certain indicators, the data will come from service providers and implementing partners, which are all expected to submit progress reports.
6. Include an overview of reports that RDDP regularly prepares, both internal reports and external reports. Explain their purpose, who they are meant for, and how often they are prepared. For each type of report, include an outline (template or table of contents) in annexes. There are no standard or prescribed report formats for IFAD-supported projects, but a previous supervision mission has provided a useful template for (semi)annual reports that should be used as a starting point. An important aspect that should also be described here is data use: who are the key stakeholders that need data (e.g. RDDP management, RAB/MINAGRI, IFAD), what data do they need (e.g. indicator data, analysis of project performance) and how are they provided with the data (e.g. AWPB monitoring table, updated logical framework, annual report).

VI. Knowledge Management

RDDP has a Knowledge Management (KM) Plan, aligned with the broader KM and communication strategy of MINAGRI, that forms the basis for the project's KM and communication activities. The plan is characterized as a 'living document' and makes reference to important KM tasks and aims, which include:

- using PM&E data as a guide to identify knowledge management products to be disseminated;
- promoting continuous information sharing by people both inside and outside the project, using various meetings as the main communication channels;
- promoting internal communication among all service providers and RDDP partners, to foster a culture of information sharing and team work;
- promoting external communication, partnership and policy engagement: dissemination and sharing of project results, as well as feedback by project stakeholders;
- promote learning and adaptation, to translate lessons learned into practice and contribute to adaptive project management;
- joint efforts to identify lessons learned, how these can be used to improve project implementation, and how they will be disseminated.

The plan describes general KM activities that will be undertaken, which are further elaborated in a KM matrix. The document ends with activities in a work plan for 2018/2019, including web news stories, a success story magazine, Annual Agriculture Exhibition, videos, a photo gallery, how-to-do notes, social media updates, and a KM Workshop. Since it is a living document, the KM plan should be updated by adding a similar work plan for 2019/20, which has all KM activities for the year in one place. These KM activities are already included in the 2019/20 AWPB for RDDP, but are scattered among various sub-component (some are shown below).

- KM Under Component 4, Project Coordination and Management
  - C4104 Knowledge Management (generic, lumpsum)
  - C4107 Promotion materials (generic, lumpsum)
  - C4112 Acquisition of camera and its accessories for video and photos production
  - C420203 Communication fees
  - C420205 Announcements and advertisements
  - C420210 Publicity and TV talk shows
  - C420211 Participation in Agri-show
  - C420212 Fix sign posts and rehabilitate existing sign posts from RDDP supported investments
  - C420202 Support the MINAGRI Knowledge Management & Communication Strategy
- KM under Sub-component 3.3, policy related analysis and technical assistance
  - C331 has a series of activities on promotion of milk consumption, including milk consumption awareness campaign organisation, promotion materials for the campaign, hiring of artists to perform, production of songs, videos and publicities on milk consumption awareness, media and publicity

So far, the focus has been on audio-visual products, printed materials, and using multiple communication channels to deliver information on project activities and results, such as stories from the field, website articles, short videos, posters, and awareness campaigns and talk shows on radio Rwanda and community radios, related to milk production, milk consumption and milk quality. During the National Exhibition Agriculture, more than 25 farmers organizations were supported to exhibit and more than 200 participated. Several booklets have been produced, for example *Kwita ku Isuku Y'amata N'ibiyakomokaho* on milk quality control. During the first half of 2019/20, RDDP has supported the preparation of a MINAGRI campaign for milk promotion, due to start in December 2019. This campaign will focus on further stimulating consumption and demand for milk, which at this juncture is very important for RDDP and development of the value chain.

The KM Specialist has been prolific and production and dissemination of similar knowledge products should continue as long as they fulfil a need. In addition, attention is now needed for more analytical activities, including compilation of lessons learned, analysis of how project effects and impacts are achieved, and knowledge products that will facilitate sustainability and mainstreaming.

Capturing and acting on lessons learned is not yet institutionalized, and it is recommended to establish a 'register of lessons learned', which will be regularly updated by the KM Specialist in dialogue with other technical specialists in the SPIU. The KM Plan includes a basic format that can be used as the starting point for such a 'register of lessons' learned, as shown below with an example. Like the KM Plan itself, this should

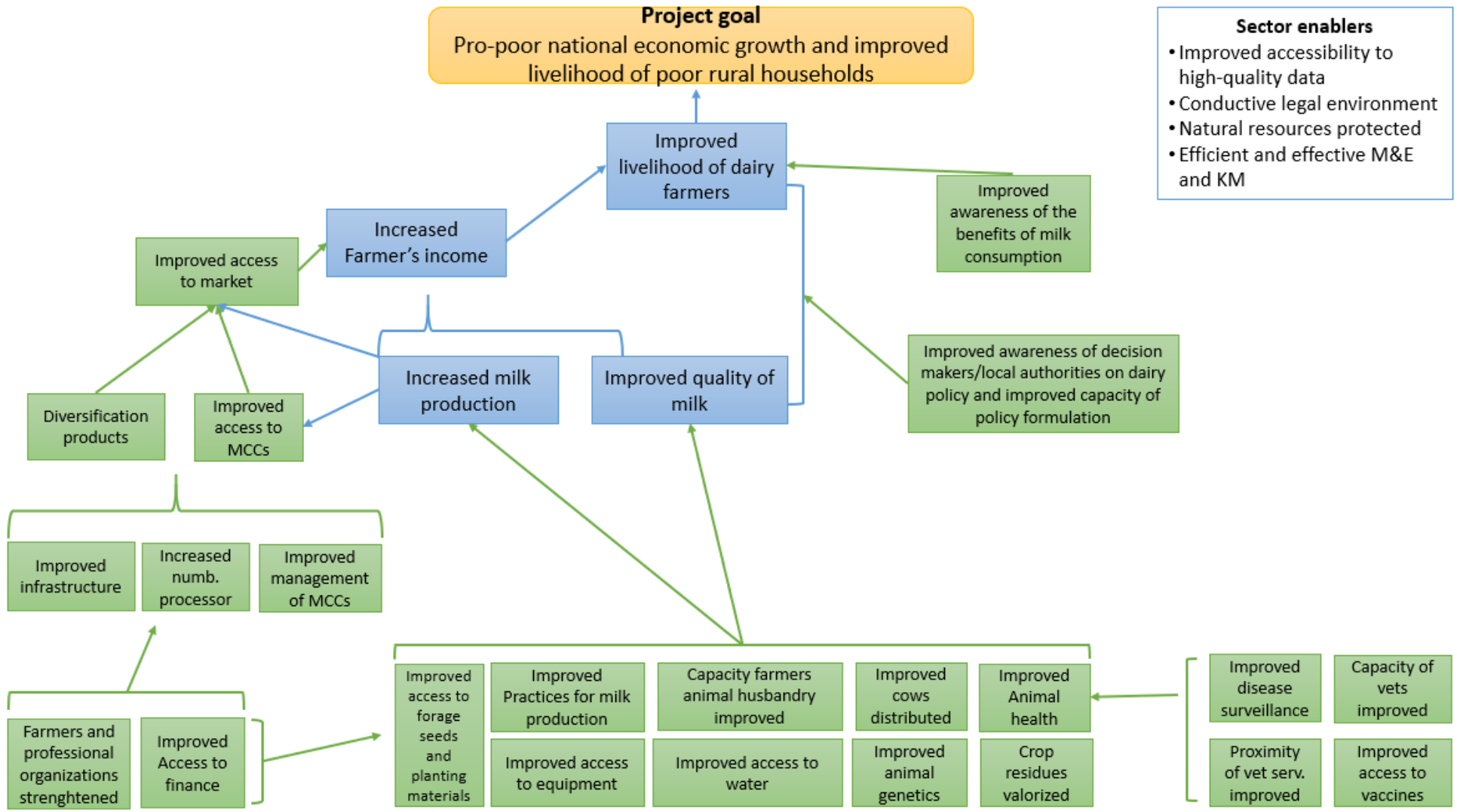
be a 'living document' that is regularly updated and a lesson should be allowed to evolve over time as more information becomes available. Information should be validated to ensure that the basic facts are correct. The lessons learned should be presented during management meetings, should be discussed and validated during the proposed annual KM workshops, and should feed into an analytical section of annual reports that covers performance analysis, lessons learned and the way forward.

Register of Lessons Learned (example)						
Title	**year**	**Who first recorded the lesson**	**How can this be used to improve RDDP / the dairy value chain**	**Who can benefit from this lesson**	**How has it been shared or distributed**	**Information about the use or adoption of this lesson**
High certification cost prevents product diversification	*2019*	*M&E Specialist after field visits*	*Initiate dialogue with RSB and other stakeholders on this issue*	*RDDP Policy Specialist. RSB. BDF. RAB.*	*Presented in RDDP monthly meeting.*	*n.a.*
Description of lesson learned	*The Standardisation Mark (S-Mark) issued by RSB is an important tool for quality assurance. However, the costs of application, audit, testing and licensing can be as much as USD 700 per product per year. For a small milk processing enterprise that plans to diversify into cheese and yogurt production, such high costs on top of the elaborate certification process that must be repeated each year can be prohibitive. This is a constraint that can prevent product diversification and development of the processing capacity in the value chain.* Develop this lesson further: *(i) confirm the cost, typical duration and validity of the certificate with RSB; (ii) do a case study: financial analysis of how it can affect profitability of a small processor; (iii) ask district staff to visit some small businesses and check how many consider this to be a significant problem.*					

KM will play an important role in mainstreaming and ensuring sustainability over the next three years, for which knowledge products of a more analytical nature are needed, as well as training materials, procedural guidelines and operation & maintenance manuals. Examples are guidelines and training materials for L-FFS, to be integrated in the national extension system; guidelines for the organizational assessment and rating of dairy cooperatives and MCCs; and guidelines and tools for testing and certification of milk and milk outlets. Guidelines for operation and maintenance of infrastructure and facilities may also be required, for example for water harvesting structures and other climate smart investments.

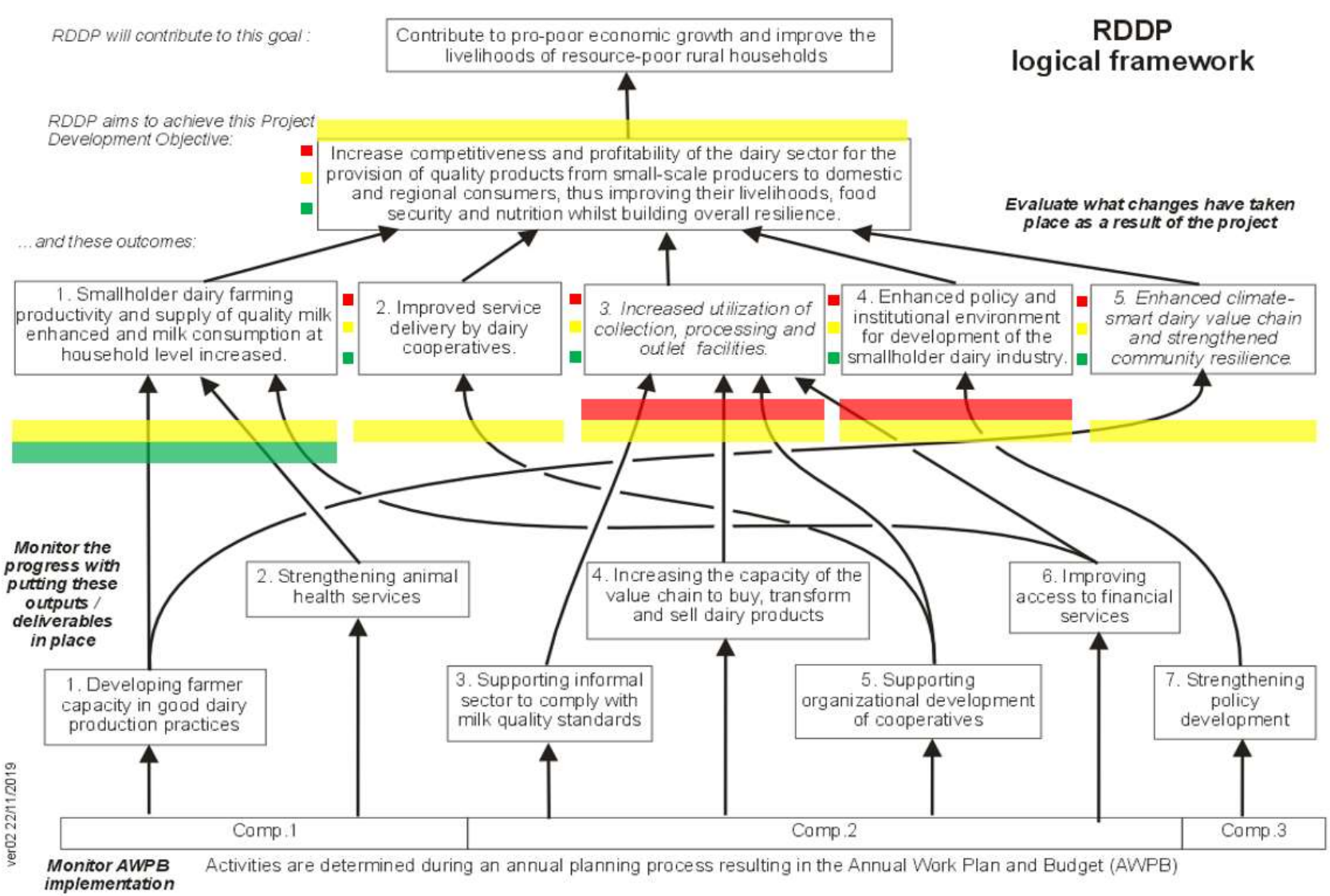
It is recommended to add a section to the KM plan on such manuals, analytical tools and other knowledge products that need to be developed, to help ensure the sustainability and mainstreaming of selected project interventions. The KM Specialist should consult with other specialists in the SPIU and with lead service providers, and prepare an initial inventory of knowledge products that may need to be developed. These should than be discussed with RDDP management, to determine what can be developed within the scope of RDDP and what are the priorities. The KM Specialist would then coordinate the production of these materials, but he is not a subject matter specialist and would require the assistance of others for writing the contents.

Attachment 1. RDDP Detailed Theory of Change Diagram



Attachment 2. RDDP Results Hierarchy in the Logical Framework

This diagram is based on the first column of the logical framework matrix. Arrows have been added to show causal relationships, and in particular to highlight the output-to-outcome logic of the project. The diagram was used during the one-day MTR workshop to assess performance and results for project objectives (outcomes and the PDO) using a 'traffic light' rating system. Red signifies limited results and significant challenges to be addressed; yellow/orange signifies reasonable results with scope for improvement; green signifies good results approaching project targets.



Attachment 3. Proposed modifications to indicators in the Logical Framework

The table below shows the results hierarchy in the first column, indicators in the second column and indicator targets in the third column. The starting point was the RDDP logframe as it is kept by IFAD in its Operational Results Management System (ORMS). Core Indicators, used for data aggregation and corporate reporting in IFAD, can be recognized because they have a prefix[23]. The fourth column mentions proposed actions, for which the options are:

- keep the indicator
- keep the indicator but adjust the end target
- remove the indicator
- add as a new indicator
- move the indicator from one location to a different location in the logframe

The last column further explains the indicator, and gives reasons for proposed changes and adjustment of targets, if applicable.

Level	Logframe Indicator	Target	Action	Comments
Outreach	1 Persons receiving services promoted or supported by the project	100,000	Keep	In principle, RDDP allows only one person per household to participate in project activities (e.g. L-FFS) as direct beneficiary: the numbers for indicator 1 and 1.a are therefore the same. The number of beneficiaries is based mainly on farmers benefitting from livestock vaccination, L-FFS, livestock distribution.
	1.a Corresponding number of households reached	100,000	Keep	The outreach target is unchanged: 100,000 resource-poor rural households (80,000 involved in dairy farming and 20,000 in other activities along the dairy value chain). RDDP is well underway to reach this target. Until now, the project has used the same numbers for female-headed households as for female beneficiaries: this is not correct and should be adjusted.
	1.b Estimated corresponding total number of households members	460,000	Keep	Results for this indicator are calculated, using the number of household reported under indicator 1.a and an average of 4.6 persons per household.
Goal: *Contribute to pro-poor national economic growth and improve the livelihoods of poor rural households.*	~~Households that experience an increase in household assets (number)~~		Remove	This is an old IFAD RIMS indicator which is no longer mandatory. It is an appropriate indicator but baseline data for RDDP beneficiaries is not available.
	~~Children 0-5 years suffering from chronic malnutrition in project area (stunting) (%)~~		Remove	This is an old IFAD RIMS indicator which is no longer mandatory. It is an appropriate poverty indicator, but specific baseline data for the target group is not available (only general baseline data per district from 2018 WFP, CFSVA).
	Average income increase for direct beneficiaries (%).	10%	Add (new)	IFAD COSOP indicator. Income is an impact indicator. The baseline survey report has data on household income. The target is for change in total household income, based on incremental income from the sale of milk by the target group.
	Proportion of households that are food secure (%).	50%	Add (new)	Food security is an impact indicator. The baseline survey report has data. A target of 50% will be achieved if there is an increase of 20% increase in the proportion of food secure households from the 2019 baseline (39.8% for MHH, 42.2% for FHH).

[23] For example: *1 Persons receiving services promoted or supported by the project*; *Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment*; *2.1.6 Market, processing or storage facilities constructed or rehabilitated*.

Level	Logframe Indicator	Target	Action	Comments
PDO: *To increase competitiveness and profitability of the dairy sector for the provision of quality products from small-scale producers to domestic and regional consumers, thus improving their livelihoods, food security and nutrition whilst building overall resilience*	Volume of milk sold from targeted small-holder dairy farmers annually (MT).	76,500	Keep (adjust target)	The end target has been reduced from 95,040 MT, assuming the current rate of increase will continue and extrapolating from actual achievements up to mid-term.
	Value of milk sold from targeted small-holder dairy farmers annually (USD'000).	17,700	Keep (adjust target)	The end target has been reduced from USD 22.8 million, assuming the current rate of change will continue and extrapolating from actual achievements up to mid-term.
	Volume of milk exported (litres per year).	28.8 million	Keep (adjust target)	Can be seen as a measure of competitiveness of the sector. The end target has been reduced from 30 million, using extrapolation from actual achievements up to mid-term.
	~~Increased income among participating smallholder farmers from dairy farming - Beneficiaries - Percentage (%)~~		Remove	A similar indicator on income has been added at goal level.
	2.2.2 Supported rural enterprises reporting an increase in profit (number).	20	Add (moved)	IFAD Core Indicator. Was previously under outcome 3, but it fits better here because it measures profitability, as mentioned in the PDO. 'Enterprise' can be Cooperatives and SMEs.
Outcome 1. *Smallholder dairy farming productivity and supply of quality milk enhanced and milk consumption at household level increased.*	Average of milk produced per cow per day during one lactation period (kg).	2 / 9 / 15	Keep	Recorded separately for local breeds, cross breeds and pure breeds.
	Average consumption of milk at household level (litres per person per year).	100	Keep	Building on the goal of the National Dairy Strategy (increase milk consumption to 80 litre/pp/year by 2020).
	~~Average milk consumption in liters per calf per year~~		Remove	Was not included in the original logframe, adds limited value, and is difficult to measure.
	Intercalving time (Calving dates only between subsequent calving). (days)	410	Keep	Important though difficult to measure. The target is based on a reduction of the national average for intercalving minus thirty days.
	1.2.4 Households reporting an increase in production (%).	70%	Add (new)	IFAD Core Indicator on production. For RDDP, this will be the proportion of dairy farmers who report an increase in milk production.
Outcome 2. *Enhanced organizational capacity and enterprise skills of dairy cooperatives.* Modify the outcome to read: *Improved service delivery by dairy cooperatives*.	MCCs serving targeted farmers (number).	58	Keep	Disaggregated indicator in ORMS: (i) total MCCs (number, target 71); (ii) MCCs serving targeted farmers (number); (iii) MCCs serving targeted farmers (%, target 90%). The focus is milk collection. Cooperatives may provide other services, but these are not captured using an indicator.
Outcome 3. *Expansion and improved utilization of milk collection and processing infrastructure.*	Dairy farmers using a formal milk collection system (M/F %).	80% / 80%	Keep	Records the percentage of men and women farmers.
	Installed capacity of milk collection and processing facilities utilized (%).	80%	Keep	Records average capacity utilization of milk collection and processing facilities.

Level	Logframe Indicator	Target	Action	Comments
Modify the outcome to read: *Increased utilization of milk collection, processing and outlet facilities.*	~~2.2.2 Supported rural enterprises reporting an increase in profit (number).~~		Move	Move this indicator to the PDO, which specifically mentions profitability.
	Value chain enterprises reporting an increase in milk sales (number).	100	Add (new)	Indicator to measure market access, counting Cooperatives and SMEs that have increased milk sales by volume.
Outcome 4. *Enhanced policy and institutional environment for development of the smallholder dairy industry*	~~Stakeholder satisfaction with policy and regulatory framework (%).~~		Remove	This indicator is broad, open to various interpretations (which stakeholders, satisfied with what exactly?) and therefore not well understood in the context of RDDP.
	Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment (number).	5	Keep	IFAD Core Indicator. It counts laws, regulations, policies and strategies that have been fully prepared and <u>proposed</u> to policy makers (regardless of whether they have been approved/adopted or not).
Outcome 5. *Enhanced climate-smart dairy value chain and strengthened community resilience.*	3.2.1 Greenhouse gas emissions (CO_2) avoided and/or sequestered (mt).	1.8	Keep	IFAD Core Indicator. Requires a GLEAM-i expert to support the collection of data on sequestration of GHG emissions as a result of project interventions (pasture land management, manure management, renewable energy sources, waste management, energy efficient dairy equipment, composting, etc.).
Output 1. *Developing farmer capacity in good dairy production practices.*	1.1.4 Number of persons trained in production practices and/or technologies (person).	82,075	Add (new)	IFAD Core Indicator on capacity building in production practices. The indicator counts participants in L-FFS (76,875 dairy farmers in 3,075 groups and 5,200 farm assistants in 400 groups). Record dairy farmers and farm assistants separately.
	Households that have received improved dairy cows (Girinka) (number).	6,000	Add (new)	Livestock distribution is a key deliverable. Separately record first cycle (distribution: 4,000) and second cycle (pass-on: 2,000).
	Climate-smart investments made (number).	7,000	Add (new)	Investments under 1.3 Climate-Smart and Strategic Investment (matching grant fund) and 2.3 Leveraging Financing for Climate Resilient Dairy Enterprise Development. The indicator counts climate smart investments including improved sheds with water harvesting systems and waste management; biogas plants; solar-powered milk cooling devices (fridge, tanks, water heater); small-scale forage choppers; community investments addressing water shortages in drought-prone areas (boreholes, watering points); adoption of climate proof building codes in milk processing unit infrastructures (e.g. proper ventilation, use of translucent sheets to optimize internal lighting, etc).
	3.1.3 Persons accessing technologies that sequester carbon or reduce greenhouse gas emissions (person).	82,075	Keep (adjust target)	IFAD Core Indicator. Includes grant recipients who were provided with renewable energy sources / more energy-efficient technologies. The target has been reduced and equals the modified number of L-FFS participants, who receive training on improved livestock / manure management. It should count only cases where the training (or grant) can help to reduce carbon emissions and secure carbon sequestration.

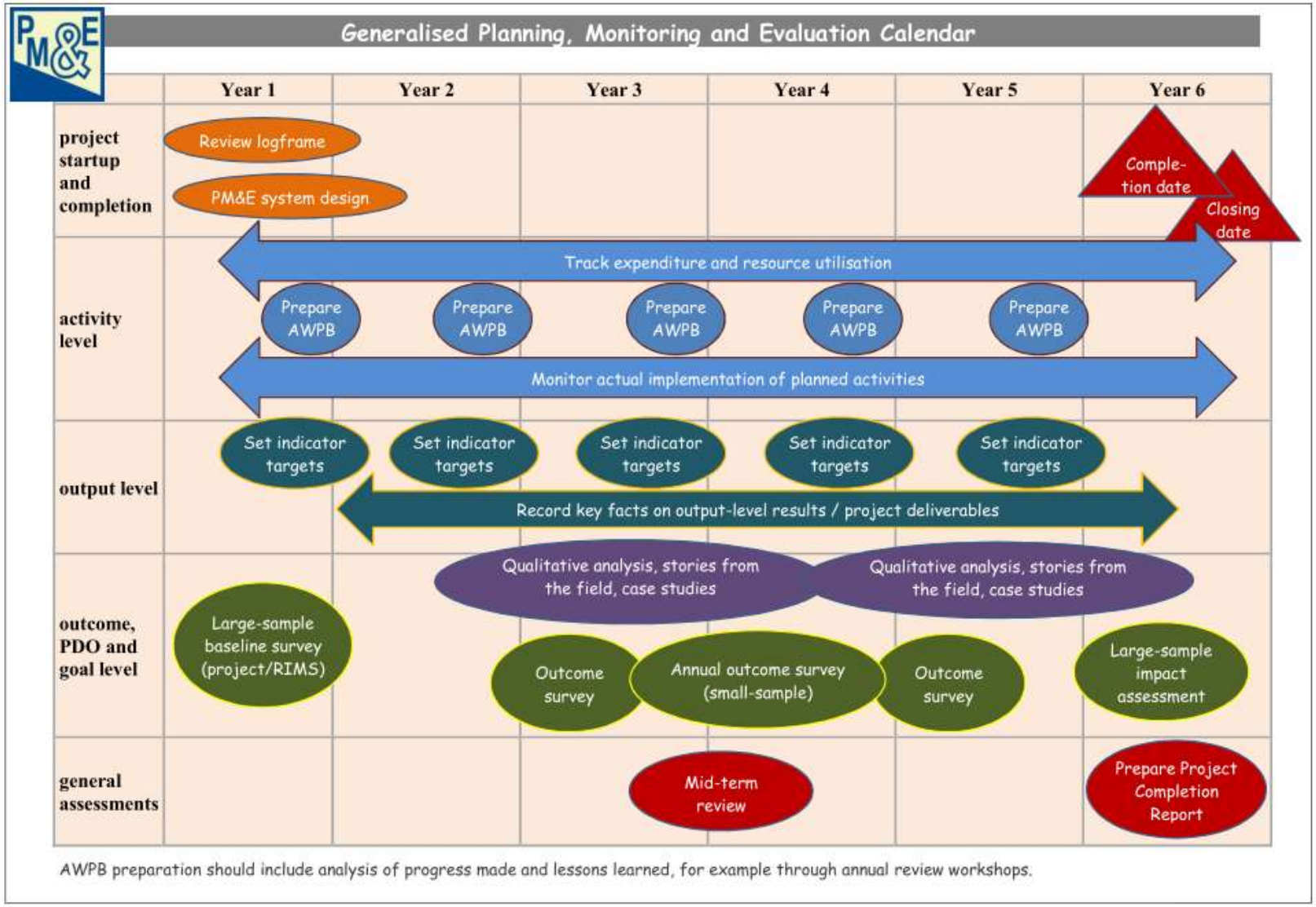
Level	Logframe Indicator	Target	Action	Comments
Output 2. *Strengthening animal health services.*	Households receiving facilitated animal health services, incl. AI and % of success.	see →	Keep	The indicator measures two things: (i) Households receiving animal health services (%) - target 80%; (ii) AI Conception Rate (%) - target 60%.
Output 3. *Supporting informal sector to comply with milk quality standards*.	Milk zones, kiosks and bars established/upgraded and certified (number).	1,000	Keep (adjust target)	The indicator applies countrywide (including Kigali), for outlets certified by RALIS with RDDP support. The original target of 2,000 is considered unachievable and has been reduced.
Output 4. *Strengthening of value chain*. Modify the output to read: *Increasing the capacity of the value chain to buy, transform and sell dairy products.*	Processors supported to improve processing, diversification, packaging, certification, marketing (number).	30	Keep	
	~~2.1.1 Rural enterprises accessing business development services (number/persons).~~		Remove	This indicator is similar to the indicator above, but is considered too narrow (services provided under RDDP are much broader than just BDS).
	2.1.6 Market, processing or storage facilities constructed or rehabilitated (number by type).	20	Keep	Record data for this indicator separately for market facilities, processing facilities and storage facilities.
Output 5. *Supporting organizational development of cooperatives*.	Cooperatives with enterprise development plans (number).	60	Keep	Enterprise plans are a key development tool and means to attract funding.
Output 6. *Improving access to financial services*.	~~Financing gap of enterprise development plan (%).~~		Remove	This indicator is not well understood and difficult to track. Data entered was therefore not correct. The indicator that follows below will be used instead.
	Value chain actors funded by financial institutions (number).	23,040	Add (new)	The indicator counts Cooperatives and SMEs that access financial services (target: 40 out of approximately 100 supported) - not matching grants. It also counts dairy farmers who access loans, short term advances through mobile platform, etc. (target: 23,000 farmers or approximately 30% of 76,875 dairy farmers in L-FFS). Separately record: (i) Cooperatives/SMEs; (ii) farmers.
	1.1.6 Financial service providers supported in delivering outreach strategies, financial products and services to rural areas (number).	153	Keep (adjust target)	IFAD Core Indicator: financial institutions providing services to the target group. The target has been increased from 10 to 153. These include SACCOs operating in the districts where the project operates (target: 150) and some MFIs (target: 3). Record SACCOs and MFIs separately.
Output 7. *Strengthening policy development*.	Policy 1 Policy-relevant knowledge products completed (number).	5	Keep	IFAD Core Indicator, which counts all study reports, strategy documents, draft laws, and publications to support policy implementation, that have been prepared with project support.

Attachment 4. RDDP AWPB with additional columns for activity monitoring data

	Activity No	Activity per component & sub-component	Implementing Agency	IFAD Categ	Unit	Quantity FY 2019/20				Total Quantity FY 2019/20	Activity Progress						
											Achievements FY 2019/20				Total Achieved (%)	Activity status	Progress comments
						Quarter 1	Quarter 2	Quarter 3	Quarter 4		Quarter 1	Quarter 2	Quarter 3	Quarter 4			
50	C1121	**2. Priority Research in Dairy Production**															
51	**C112101**	**Research in animal nutrition**															
52	C11210101	Acquisition of equipment for Research in animal nutrition (Ongoing Contract)	SPIU-IFAD/RAB	II	Lumpsum	0	1	0	0	1	0	1			100%	complete	
53	C11210102	Support to RAB research stations for adaptability of forage varieties	RAB	II	Ha	0	5	0	0	5	0	2			40%	behind schedule	
54	C11210103	Support to RAB to construct the facilities for forage seeds handling in RAB Stations (Rubona,Songa,Mirama/Nyagatare)	SPIU-IFAD/RAB	II	Number	0	3	0	0	3	0	2			67%	on schedule	
55	C11210104	Research on utilisation of different feed rations and forage varieties , crop and brewers by-products in dairy production	RAB	II	Lumpsum	0	1	1	0	2	0	1.05			53%	on schedule	
56	C11210105	Maintainance of existing Forage germplasm collection	RAB	II	Ha	0	20	20	0	40	0	0					
57	C11210106	Develop MoU between International Centre of Insect Physiology and Ecology (ICIPE) for eradication of African black beetle and tsetse flies	SPIU-IFAD-ICIPE	II	Lumpsum	1	1	1	1	4	0	0.78				schedule	

not yet due
not started
on schedule
behind schedule
complete
cancelled

Attachment 5. Examples of a general PM&E Calendar, annual PM&E Calendar and PM&E Budget (elements of a PM&E Plan)



Example of an Annual Planning and Monitoring Calendar

Task	When	Responsibility
Collect physical progress monitoring data on activities and outputs from the field and project implementers; review, clean and enter data into the M&E system.	monthly	M&E Officer and focal persons in lead implementing agencies
Submit to IFAD a record of contracts awarded, listing all contracts with date of approval by IFAD.	monthly[1]	PMU / Financial Manager
Submit Withdrawal Applications (replenishment requirements based on next quarter's cash-flow requirements, account balances and commitments).	quarterly (more often if needed)	PMU / Financial Manager
Steering committee meetings to review and approve work plans; check implementation; review and approve progress reports; ensure coordination among the project parties.	quarterly	Director of Projects
Submit quarterly financial report and updated procurement plan to IFAD Country Programme Manager	quarterly, on 30th of the following month	PMU / Financial Manager
Submit consolidated Annual Progress Report for the past project year to the Project Steering Committee.	before 15 February	PMU / Project Coordinator
Submit consolidated Annual Progress Report on project implementation for the past project year to IFAD.	before 1 March	PMU / Project Coordinator
Submit RIMS indicator data for the previous year to IFAD.	before 31 March	PMU / M&E Officer
Submit to IFAD financial statements of the project operations, resources and expenditures for the past year.	before 31 March[2]	PMU / Financial Manager
Submit to IFAD confirmation of (re)appointment of independent auditors.	before 30 April	PMU
Have project accounts audited by independent auditors and submit to IFAD a certified copy of the audit report.	before 30 June	Ministry of Agriculture / PMU
Submit to IFAD the response to the audit management letter.	30 days after receiving the letter	PMU / Project Coordinator
Submit Half-yearly Progress Report for the first six months of the year to the Project Steering Committee.	before 1 August	PMU / Project Coordinator
Submit consolidated Half-yearly Progress Report for the first six months of the project year to IFAD.	before 15 August	PMU / Project Coordinator
Submit draft AWPB for the next project year to the national Project Steering Committee.	before 1 October	Ministry of Agriculture / PMU
Submit to IFAD a draft AWPB for the next project year, after approval by the Project Steering Committee.	before 1 November[3]	Ministry of Agriculture / PMU
Review comments[4] on the AWPB and make modifications if needed.	December	PMU / Project Coordinator

Note: tasks and dates will vary by project

[1] As per IFAD's Loan Disbursement Handbook (Register of Contracts Form C10).
[2] IFAD's General Conditions (2009-2014) specify four months after the end of the project year.
[3] IFAD's General Conditions specify 60 days before the start of the project year.
[4] IFAD's General Conditions specify that comments from IFAD on the AWPB are due 30 days after it has been received; in the absence of such comments the AWPB can be considered accepted.

PM&E budget

Activities	Salaries	Consultants	Travel	Meetings	Documentation	Dissemination	Other	Activity Subtotal
Annual planning workshops								
Quarterly field verification visits								
Annual Outcome Surveys								
Head of MIS								
RDDP Specialist								
etc.								
Total								

Attachment 6. Draft Terms of Reference for Annual Outcome survey

ANNUAL OUTCOME SURVEY

TERMS OF REFERENCE

A. Introduction

The RDDP is funded by the International Fund for Agricultural Development (IFAD) and the Government of Rwanda (GoR). It has the overall goal of improving the livelihoods of poor rural households, by increasing the competitiveness and profitability of the dairy sector. The RDDP focuses on developing the dairy value chain through improving cattle productivity, milk quality and processing capacity of the dairy industry, and strengthening the policy and institutional framework.

The project covers 12 districts in four provinces: East (Nyagatare, Rwamagana and Kayonza), North (Gicumbi, Burera and Musanze), West (Nyabihu, Rubavu and Rutsiro) and South (Nyanza, Huye and Ruhango). The primary target group comprises 100,000 households, of which about 80,000 are involved in smallholder dairy farming and 20,000 in value chain activities. The project also works with a variety of other actors in the dairy value chain. The project has the following three components.

Component 1: Climate-smart Dairy Production Intensification, aimed at increasing the capacity of dairy farmers to produce and supply higher volumes of quality milk to the dairy market and for home consumption. It includes capacity building of smallholder dairy farmers; improving access to public and private livestock services including animal health services; asset building and climate-smart productivity of poor households, including livestock distribution.

Component 2: Producer Organization and Value Chain Development, aimed at strengthening the organization of smallholder dairy farmers and improving their access to input, service and output markets. It focuses on organization and capacity building of dairy cooperatives and other value chain actors; investment in milk collection and processing infrastructure; and improving access to finance for investment in the value chain and climate resilient dairy enterprise development.

Component 3: Institutional and Policy Development, aimed at facilitating the consolidation of a conducive policy framework and institutional structure for the Rwandan dairy sector. It includes policy formulation, support for policy implementation and institutional strengthening, and policy related analysis.

B. Scope of Work

After more than three years of implementation and conducting a Mid-term Review, the project will regularly assess progress made towards achieving its objectives, which are:

- to increase competitiveness and profitability of the dairy sector for the provision of quality products from small-scale producers to domestic and regional consumers (Project Development Objective)
- Outcome 1. Smallholder dairy farming productivity and supply of quality milk enhanced and milk consumption at household level increased.
- Outcome 2. Improved service delivery by dairy cooperatives.
- Outcome 3. Increased utilization of milk collection, processing and outlet facilities.
- Outcome 4. Enhanced policy and institutional environment for development of the smallholder dairy industry.
- Outcome 5. Enhanced climate-smart dairy value chain and strengthened community resilience.

Three Annual Outcome Surveys (AOS) are foreseen during 2020, 2021 and 2022, which are to collect and present data related to each outcome and the PDO, and summarize the progress made with achieving the outcomes and the PDO. The findings would be used to provide lessons learned and conclusions regarding the performance under each outcome and the PDO, and advice on possible

improvements that can be made to the project's strategy and implementation modalities. These TOR are for the first AOS in 2020.

Each AOS will involve collecting data from a small sample of beneficiaries and a control group using a questionnaire; and collecting data from selected other actors in the value chain (cooperatives, milk collection centres, small- and medium enterprises) using key informant interviews. The AOS will be a focused survey, built around the set of project indicators that is presented at the end of this document. Quantitative survey data will have to be compared to available baseline data, and presented in tables in a survey report, with brief elaboration and interpretation for each table.

C. Duties and Responsibilities

The consultant will review key documents that will be provided by the project, including the design report, the baseline survey report and IFAD guidelines for AOS. Regular consultations between the consultant and the project's Head of MIS are expected to take place, while the following tasks are carried out:

- constructing the sample frame and drawing the sample (project beneficiaries and control group)
- preparation of the survey questionnaire and translate into Kinyarwanda
- selecting value chain actors to be visited
- preparing notes for semi-structured interviews with key informants
- training supervisors and enumerators
- field testing and finalization of data collection tools
- data collection
- data entry and cleaning
- data analysis, preparation of summary graphs and tables, and writing a draft report
- presentation of the draft report during a half day workshop with the RDDP project team
- preparation of the final report

D. Deliverables

The consultant is expected to deliver the following:

- Inception report including sampling and data collection approach.
- Survey questionnaire, beneficiary sample and control group sample.
- List of value chain actors to be visited and notes for semi-structured key informant interviews.
- Draft and final survey report.
- Tables in Excel with underlying data for all graphs and summary tables in the report.

E. Qualifications of the Consultant

The outcome survey shall be carried out by a consultancy firm that has demonstrable experience with conducting similar surveys and the evaluation of rural development projects, using questionnaire-based surveys for quantitative data and key informant interviews for complementary qualitative information. They should have a good understanding of the agricultural sector in Rwanda, an understanding of the logical framework as tool for project management and evaluation, and an understanding of value chains. Specific knowledge of the dairy value chain would be an advantage. Fluency in English is required, which will be the language of the report, while data collection will require knowledge of Kinyarwanda.

F. Duration and Supervision Arrangements

The consultancy is expected to take approximately eight weeks. The survey will be implemented under the responsibility of the RDDP Operations Manager, and the technical supervision of the Head of MIS of the Single Project Implementation Unit (SPIU) in MINAGRI.

G. Key indicators to be covered by the survey

Data to be collected from dairy farmers (project beneficiaries and control group):

- volume of milk sold from targeted small-holder dairy farmers annually
- value of milk sold from targeted small-holder dairy farmers annually
- average of milk produced per cow per day during one lactation period, by type of breed
- intercalving time
- households reporting an increase in production
- dairy farmers using a formal milk collection system
- households receiving facilitated animal health services
- success rate of artificial insemination

Data to be collected from other sources:

- volume of milk exported
- supported rural enterprises reporting an increase in profit
- average consumption of milk at household level
- MCCs serving targeted farmers
- installed capacity of milk collection and processing facilities utilized
- value chain enterprises reporting an increase in milk sales

Appendix 4.6. Community Infrastructure

I. Introduction

The overall goal of Rwanda Dairy Development Project (RDDP) is to contribute to pro-poor national economic growth and improve the livelihoods of resource-poor rural households. This is to be achieved by focusing on food security, nutrition and empowerment of women and youth in a sustainable and climate-resilient dairy value chain. Specifically, the project seeks to increase competitiveness and profitability of the dairy sector for the provision of quality products from small-scale producers to domestic and regional consumers, thus improving their livelihoods, food security and nutrition whilst building overall resilience.

To achieve this overall goal, the RDDP aims at achieving the following specific objectives:

- Sustainably intensify dairy production and productivity among participating smallholder farmers and increase their consumption of milk and dairy products at household level. This is to be achieved through strengthening the capacity of male and female smallholder dairy farmers and farm assistants; promotion of improved climate-smart dairy farming practices and access to quality dairy inputs and livestock services, including animal health and artificial insemination; appropriate green technologies; and, business and financial services following the hub model approach.
- Increase income by at least 80% among participating smallholder farmers' from dairy farming through improved market access. This shall be achieved through the development of 30 dairy hubs; establishment and strengthening of dairy farmers associations; and, facilitation of linkages to markets and dairy value chain actors, such as milk collectors, processors, transporters and investors in milk quality through public-private-producer partnerships (4-Ps).

In order to achieve these objectives, the design provided for investments in infrastructure along the different stages of the dairy value chain from production stage, processing and value addition as well as the marketing stage. The following sections report on what has been achieved including an assessment on the performance of the implementation process as well as the infrastructure already constructed.

II. Planned Investments in Infrastructure

Given that the Project is a dairy production oriented project, the infrastructure that was foreseen at design stage is to be found spread in the various components and subcomponents, each meant to support an aspect of milk production, processing, value addition and marketing. Among the key infrastructure that were provided for in the design include:

- Investment in infrastructure to support milk collection, comprising of milk collection centres (MCCs) and milk collection points (MCPs) to expand outreach and improve capacity utilization. These included construction of five (5) new MCCs and rehabilitating 60 existing MCCs and providing them with 3-phase electricity supply as well as providing improved water

supply. Other investment is the construction of 50 MCPs to help far off farmers have a place where milk can be collected that meets the standards specified in the Ministerial Order (MO) regulating the collection, transportation and selling of milk;

- Feeder roads improvement in milk production clusters which have limited links to collection and marketing points. It's worth noting that while the need for improved access was foreseen, the design provided for a budget that could only result in minimal improvement. This was as result of the rural access roads mandate being fully vested in the Rwanda Transport Development Agency (RTDA);
- The design also provided for infrastructure that would be developed under the 4-Ps. This was to be through investments in infrastructure to facilitate the linkages to markets and dairy value chain actors, such as milk collectors, processors, transporters, traders, and investors in milk quality through the 4-Ps model. Through this model, the Project would strengthen the dairy value chain and, in particular, the linkages between smallholder dairy producers and their organizations on one hand, and processors or traders on the other. The Project would avail infrastructure investment resources to leverage private co-investment and borrowing from the commercial banking system; and,
- Other infrastructure was to be developed by the Project providing incentive packages to upgrade dairy collection, handling and marketing of small private dairy operators at district level. Still another category includes strategic support infrastructure such as: rehabilitation/upgrading of laboratories; construction of a liquid nitrogen plant; construction of a bull station; rehabilitation of a quarantine station; and, construction of cattle immobilization facilities.

It is worth noting that while the design had provision of water supply as an intervention, this had been foreseen as only water for MCCs. Water for livestock had not be included in the original design. However, right from the start of implementation of the activities, it became strikingly clear that there was need to provide for water for livestock, especially in the high milk producing areas such as the Gishwati Basin and the pastoralist districts of Nyagatare and Kayonza. This necessitated reallocation of funds to facilitate the studies and designs as well as construction of livestock water facilities: boreholes in Nyagatare and pipeline systems in the Gishwati Basin. It also became clear that even in areas that were thought to have sufficient water resources, it availability at household level was still a challenge. Thus the SPIU provided a budgetary provision for construction of rainwater harvesting systems at household level.

III. Implementation Progress

A. Implementation Arrangements

The Process of Implementation: The Project has undertaken the implementation through a combination of approaches:

- **The MCCs and Foliage Storage Hangers:** whose design had been adopted nationally, are being undertaken through the SPIU tendering the works to a government supported

contractor, the Reserve Force, to rehabilitate or construct under the supervision of Association d'Exécution des Travaux d'intérêt Public (ASSETIP)

- **MCPs and Household Level Rainwater Harvesting Systems**: These are being implemented through Heifer Project International (HPI) which organisation is a partner in the implementation of RDDP.
- **Boreholes**: the responsibility for identifying borehole sites and carrying out the drilling was assigned to the Water and Sanitation Corporation (WASAC), which in turn contracted the drilling to the Reserve Force.
- **The Water Pipeline Systems**: these are both for Nyagatare and Kayonza and the Gishwati Basin which required feasibility studies and designs to be carried out first. The SPIU contracted the studies and designs to engineering consulting firms. Once the consultants finalize the designs, the SPIU will tender for the works including tendering for supervision of the construction work.
- **Communal and Individual Cow Sheds**: these have been constructed under HPI.
- **Other works including**: rehabilitating satellite laboratories, nitrogen making machine housing were contracted to the Reserve Force.

B. Achievements as at MTR:

Implementation of the different infrastructures has been ongoing with different degrees of completion. Among the key implementation milestones include:

Fodder Storage Hangers: 110 fodder storage hangers out of the 220 planned are already constructed in individual farmer's homesteads. Much as they have already been constructed, what is emerging on the ground is that they may not be having as much value/utility as may have been foreseen at design. For instance, of the four hangers that the mission visited: two farmers had found the "RDDP" hangers inadequate for their needs and constructed their own version which they are using, leaving the "RDDP" ones unused. Another farmer was found to be using hers as a livestock shed. She moved her livestock from the old traditional shed to the hanger. The fourth one was a shared one in a model village in Kayonza, which was empty since the communal cattle shed had much more animals than the hanger could adequately store fodder for. It is the opinion of the mission that given the big list of new projects that the SPIU wants included, some of which would result in much higher utility, the remaining hangers be removed from implementation.

Rehabilitation of MCCs: Sixty (60) MCCs were planned for implementation with the user community expected to contribute 20% of the rehabilitation cost. As at MTR 39 MCCs had their 20% community contribution and out of these 18 had been rehabilitated and provisionally handover (PHO) to the respective cooperatives; 12 were completed but on inspection were found to have defects that must be rectified before PHO; and, work was set to begin for the remaining four. For the remaining 21, the user community are experiencing challenges in mobilizing their contribution, as a result of which the issuance of the service order is delayed.

MCPs: SPIU has done a design which is already validated with farmers. The construction, as observed above, is managed by HPI which will manage the entire construction process. The construction is expected to start in the third quarter of this financial year.

Rehabilitation of 4 veterinary satellite Laboratories: the contractor, the Reserve Force, had completed the facilities but on inspection were found to have defects that they have to rectify before handing over. The contractor seems to be having challenges correcting the defects which is delaying the handing over of the facilities.

Boreholes: Nineteen (19) sites were identified and the geophysical surveys carried out (12 in Nyagatare and 7 in Kayonza). Five (5) boreholes have been successful drilled and water is available, and the equipping has been completed. On inspection some defects were found that the Contractor has to rectify before PHO. The management committees have been formed but are yet to be trained.

Out of the remaining 7 boreholes in Nyagatare 4 have been drilled and equipping is ongoing while 3 of the 7 boreholes in Kayonza have been drilled and equipping in progress. Drilling for the remaining ones is ongoing and expected to be completed by end of the December 2019.

Detailed study for Kayonza: A consulting firm, Cavicon Consultants Ltd, was engaged for the feasibility study and design and has so far:

- Completed the inception report which was discussed and accepted by the SPIU;
- Undertaken the topographical surveys of the supply area;
- Assessed the two boreholes that had been identified as possible sources for the area and found out that:
    - One has already been equipped by the WASAC and is abstracting 4m^3/hr for supply to a neighbouring community. The pump tested yield was 12m^3/hr in which case the unutilized capacity could be incorporated in the Project. The consultants plan to undertake a fresh pump testing to establish how much could be available.
    - The other one has apparently been destroyed by having objects thrown down the hole. The consultants are recommending, and mission is in agreement, the drilling of a replacement borehole, given that the aquifer at that point had also demonstrated a good yield, also estimated at 12m^3/hr.

Detailed study for the Gishwati Basin: A consulting firm, Maxwell Ltd, was engaged to undertake the feasibility study and design and has so far:

- Completed the inception report which was discussed and accepted by the SPIU;
- Has undertaken an assessment of the water sources including mapping and discharge measurements;
- Carried out the topographical surveys of the supply area; and,
- Undertaken the hydraulic calculations and is finalizing the Bills of Quantities.

Because of the hilly nature of the Gishwati Basin, the consultants have identified only sources that will allow for gravity flow systems. The systems are designed to provide water for 1600 farms among them being some that are 5 hectares and others that are 10 hectares. In addition to the

farms, the system will also provide water to MCCs, MCPs and some individual households within the Basin.

Detailed study for the Songa Bull Station: The same consulting firm, Maxwell Ltd, was contracted to also undertake the study and design of the Bull Station at Songa. So far the consultants have:

- Undertaken the field assessments, done the topographical surveys and undertaken the ESIA;
- Carried out the geotechnical investigations and the preliminary architectural drawings; and,
- The RAB tasked the Consultants to make the bull station a centre of excellence. Towards this end, they have already undertaken a bench marking visit to Kitale Bull Station in Kenya as well as online bench marking with stations in Jersey UK and Denmark.

Climate Smart investments: The investments under this subcomponent include biogas, solar and rainwater harvesting systems. So far only a relatively few rainwater harvesting systems (ponds with liners) have been constructed. For instance in Nyagatare where the project is working with over 5000 farmers, only about 30 had applied for the ponds. The other category of rainwater harvesting systems were the ones mentioned above that are being implemented through HPI.

Access Roads and Spot Improvement: The tender process for rehabilitation of 1.1 Km access road in Huye is ongoing and one spot to be improved in Muzanze. The technical specifications have been worked out by SPIU and validated by RTDA and concerned districts. Construction is expected to start by quarter 3 of the financial year. The tender process for supervising consultant is also ongoing.

Table 1 below presents the infrastructure planned and the cumulative progress so far.

Activity	implementing Agency	Total (No.)	Unit Cost (000 RwF)	Total Cost (RwF)	total Cost (USD)*	Achievement	SPIU Status Report
Construction works of 220 Forage Storage Facilities in Nyagatare and Kayonza Districts	SPIU-IFAD/RAB	220	1,682	370,040,000	370,000	110	completed and provisional handover done in June/19 Service order for the remaining under preparation
Supervision for construction works of Forage Storage Facilities	SPIU-IFAD/RAB	220	direct supervision	direct supervision	direct supervision	ongoing	SPIU doing direct supervision
Construction and installation of boreholes	SPIU-IFAD	19	31,006	589,114,000	589,000	5 complete 14 ongoing	5 have been drilled and equipped. Work is ongoing on the remaining and expected to be completed before end of 2019.
Supervision for borehole construction and installation	SPIU-IFAD	19	direct supervision	direct supervision	direct supervision	ongoing	supervision has been through visits by WASAC and District staff – which was inadequate
Updating existing study on Construction of livestock watering system in Kayonza District	SPIU-IFAD	1	lump sum	consultant to be hired	consultant to be hired	Report is at draft stage	Consultants have done the socio-economic survey, topographical surveys and working on the distribution network
Construction of livestock watering system in Kayonza District: Network length of 72 KM, 322 farms on total area of 2,482 Ha.	SPIU-IFAD	1	1,500,000 (estimate)	1,500,000,000 (estimate)	1,678,000	Not yet started	It is proposed that the construction is to be under the upcoming Kayonza Irrigation & Integrated Watershed Management Project (KIIWMP)
Detailed design Study of water supply in Gishwati farms(Nyabihu,Rubavu and Rutsiro Districts)	SPIU-IFAD	1	Lump sum	80,000,000	89,485	Report is at draft stage	Consultants have: done the water sources assessment & mapping, topographical surveys, hydraulic calculations and profiles as well as the Bills of Quantities (BoQs)
Supervision of works	SPIU-IFAD	1	lump sum	consultant to supervise	consultant to supervise	to be contracted	A consulting firm will be contracted

Rehabilitation of 4 veterinary satellite laboratories	SPIU-IFAD/RAB	4	40,569	162,277,000	181,500	ongoing	Complete but with defects so awaiting rectifying them for provisional handing over
Construction of a facility to accommodate the new Nitrogen machine	SPIU-IFAD/RAB	1	59,868	59,868,000	67,000	All Done	Now completed and final handover done
Individuals' cow sheds	HPI	2,280	150	342,000,000	385,500	ongoing	HPI provides construction materials to beneficiaries to carry out works themselves under supervision by HPI.
Standard communal shed designed to provide for feed storage	HPI	18	15000	270,000,000	302,000	ongoing	11 out of 18 are completed and in use. Water tanks provided
Rehabilitation of MCCs	SPIU-IFAD	60	16,280	945,068,433	1,057,000	ongoing	Construction ongoing for 34. 18 of the 34 have been provisionally handed to the coops. 12 had defects which are to be rectified before PHO. For the remaining 21 service order is under preparation. The lack of contribution by the beneficiaries is what is delaying the issuing of the service order.
Supervision for MCCs rehabilitation	SPIU-IFAD		lump sum	126,708,000	142,000	ongoing	ASSETIP is the supervisor.
Support original 7 MCCs with 3 phase electricity	SPIU-IFAD	42.8	14,301,770/km	612,130,096	684709	ongoing	5 of the 7 are now connection and work on the 2 is ongoing
Support another 8 MCCs with 3 phase electricity	SPIU-IFAD	60.361	17,180,709/Km	1,037,044,790	1,160,005	ongoing	the valuation of the properties on the wayleave is ongoing
Construction of new MCCs*	SPIU-IFAD	5	60,000	300,000,000	335,570	not yet started	beneficiary contribution has been a challenge so none has been tendered
Supervision for new MCCs	SPIU-IFAD	5	2,000	10,000,000	11,186	Not yet started	SPIU has got IFAD no objection to use ASSETIP in all construction projects undertaken by SPIU. However, depending on their quotations and

							negotiations. It may turn out to be open tender too.
For MCPs	SPIU	50	6,000,	30,000,000	33,557	ongoing	activity transferred to HPI: -design has been approved by stakeholders - water supply still an issue -adopt the household level rainwater harvesting system
Study for feasibility and design of the Bull Station in Rubona	SPIU -IFAD	1	70,100,000	70,100,000	78,412	Ongoing	the consultants have carried out the field assessments, topographical surveys, ESIA, Geotechnical investigations and the preliminary architectural drawings
Construction of the Bull Station in Rubona	SPIU -IFAD	1	350,100,000	350,100,000	391,611	Not yet started	the construction awaits the outcome of the feasibility study & designs by consultants
Rainwater Harvesting at Household level (60% grant from project)	HPI	2400	77,500	186,000,000	208,054	ongoing	HPI procuring the non-locally available materials (cement, iron sheets) community.
Access Roads and Spot Improvement	SPIU - IFAD	1.1km access road; + one spot improvement	129,412	129,412,000	144,756	at tender stage	The tender process for rehabilitation of 1.1 Km access road in Huye, is ongoing and spot improved in Muzanze. The technical specifications have been worked out by SPIU and validated by RTDA and concerned districts. Construction is expected to start by Q3 of the financial year
supervision of access road and spot improvement	SPIU/IFAD	lump sum	41,825	41,825,000	46,784	at tender stage	The tender process for supervising consultant is also ongoing.

Source: SPIU

*Note: The exchange rate used is one USD = 894RwIF, which is the rate SPIU used in the 2019/2020 AWP&BIV

IV. Assessment of Infrastructure

A. Relevance of the Infrastructure:

The infrastructure is highly relevant to the needs of the farmers as wells as the national interest of Rwanda. At the time of the Project design, it was recognized that progress in the development of the dairy sector was hampered by, among others, "*inadequate development and management of milk collection, processing and marketing infrastructure for supply of good quality milk to the domestic and regional markets*". For instance, the MCCs and MCPs are directly responding to the farmer needs and priorities in development of the dairy sector. The other key infrastructure that is being implemented is the water for livestock. Indeed at design, water for livestock had not been given prominence but from the start of implementation of the project, it became strikingly clear that there was a scarcity of water in the key milk production zones and that without water for livestock, milk production would always be constrained.

The implementers realized that the lack of access to clean water had a number of negative implications. First, the cows had to trek long distances for water during which treks they used energy for walking as opposed to making milk. Secondly, due to milking in unhygienic conditions, the cows had been susceptible to infections such as mastitis. The first Technical Assistance mission of the RDDP noted that in the Gishwati dairy basin in Nyabihu district, a survey had found that around 75% of cows were showing either clinical or sub-clinical signs of mastitis. Thirdly, again due to poor hygiene of the milk containers, the farmers had been experiencing very high rejection rates for milk delivered to the MCC. This realization necessitated the reallocation of resources to provide for provision of water for livestock.

B. Effectiveness

Given the physical achievements as summarized in Table 1 above, the conclusion is that the Project has so far been effective as far as implementation of infrastructure related activities. With regard to utilization, anecdotal evidence and observations during the field visits suggest that the already completed infrastructure has been put into effective use, except for the fodder storage hangers. The rehabilitated MCCs are in use and are already contributing to improved quality of milk sold; the already equipped boreholes are in use by the target households and their livestock[24]; the rehabilitated laboratories are already in use; there has been an improvement in the Artificial insemination services as result of improved semen availability resulting from the operationalization of the nitrogen making machine; all the families that have received a cow under the Grinka program have a functional cow shed including those that were supported with communal cow sheds. The fodder storage hangers, as observed in paragraph 8 above are the only infrastructure that is not being effectively used.

C. Sustainability

Sustainability of infrastructure is dependent upon a number of factors, among them including: the appropriate design; proper construction; and, very importantly, effective operations and maintenance (O&M). The designs of the different infrastructure are, on the

[24] The mission found the boreholes being used for livestock and household purposes. However, the SPIU was yet to receive borehole completion reports which make it difficult to conclude on whether they will be providing adequately for the target households and their livestock.

overall, appropriate for the purpose to which the facilities are meant to serve. The construction, on the other hand, has been affected by inadequate supervision in some cases. The SPIU, and to some extent the Districts, are constrained in terms of technical capacity. For instance, there is only one civil engineer handling all the civil works for all the projects under the SPIU. While the workload on civil works in RDDP alone is big enough (as itemized in Table 1 above), in combination with works from other projects it becomes overwhelming for one engineer. Thus, there have been cases, for instance the boreholes, where the works had been taking place without a site supervisor. To ensure adequate supervision of the works, the mission strongly recommendations the augmenting of the technical capacity in the SPIU.

With regard to O&M it is important to note that the bigger majority of these infrastructures will be under the day-to-day operation by community organisations such as cooperatives or Livestock Water User Organisations (LWUO). These community based organisations ordinarily do not have the necessary skills in organization and management or the technical skills needed for operation and maintenance. It is necessary, therefore, to build their capacity in those areas for them to sustainably manage the facilities. The capacity building should include the group organizational & management skills as well as the technical aspects of O&M of the different infrastructure. For the O&M, the SPIU should ensure that for each of the infrastructure an O&M plan is developed. The communities should then be trained on this plan during the O&M training.

The capacity building should be a structured process starting with the community sensitization & awareness creation even before the construction/drilling, involvement of the users during the construction and the actual training in the different aspects. Unfortunately, this has not been the case in RDDP. The case of the boreholes is illustrative. The boreholes are meant to be handed over to the District as the asset holder/owner, while the users are the day-to-day operators of the installations. The tender for construction and implementation has been carried out through WASAC, which organization on its part, has subcontracted the actual works to Reserve Force. As observed in the last Support Supervision Mission, the works have been carried out with minimal supervision, and more so with no reference to the user community. The completed ones are being operated by the users, who have not been prepared for that role at all.

Related to the above is that the contractor has not been submitting progress reports on the drilling works. More critical is that the contractor has finalized drilling and equipping of the 5 boreholes without sharing the borehole drilling reports with the Client – the SPIU. Thus, the SPIU does not have critical borehole data such as:

- Depth drilled and borehole design;
- The tested yield of the boreholes;
- Installed pumping capacity; or,
- Chemical analysis of the water.

In absence of such data, it is not possible to assess whether the boreholes are producing enough water to meet the demand of the target households and their livestock. This, in turn, makes it difficult to conclude on their capacity to sustainably meet the water demand in the long term.

The situation in Kajumo borehole in Box 1 below is typical of what is currently happening.

BOX1: The Case of Kajumo Borehole in Nyagatare

The mission visited Kajumo borehole in Nyagatare, which is among the 5 boreholes already operational. The borehole drilling and equipping was completed in June, at which time the community started using the water but the operations remained under the contractor until September when the contractor left it under the operation by the users. They have had no training at all: not on organization & management nor on operations & maintenance. And this is the case with all the other completed boreholes. WASAC has indicated that they are planning to train the committees, but this will be a community were the process of group formation, which is technical undertaking, has not been followed. Furthermore, WASAC is more of a technical organization - strong in operations and maintenance but not necessarily in community organization and management which casts doubt in the long term effectiveness of the user community training and their ability to sustainably managing these facilities. The District, on its part, commits to be budgeting for some of the bigger maintenance requirements but from experience and, given the high number of infrastructure that needs maintenance, it is doubtfully whether the districts will be in a position to provide adequately for the long term maintenance and replacement requirements.

The long-term sustainability of the infrastructure is therefore not assured unless the technical capacity to oversee the entire process from studies & designs, adequate supervision during construction enhanced & structured and adequate capacity building of the user communities in organization & management and operations & maintenance is done.

V. Summary of Findings and Recommendation

Based on the findings and analysis presented in the paragraphs above, a distillation of findings and recommendations is presented in table 2 below.

Table 2: Summary of Findings and Recommendations

Observations Findings	Recommendation/Agreed Action	Responsible	By When
Climate Smart investments seen as only rainwater harvesting systems and rate of uptake has been fairly low. For instance, Nyagatare out of more than 5,000 farmers only 30 have applied for support for rainwater harvesting structures.	• Raise awareness/intermediate on the other possibilities such as Solar and biogas systems	• SPIU/Districts/HPI	• Immediate and continuous

The studies & designs stage. the process is carried out either in-house or through consultants: in each case participation of beneficiaries is inadequate and some of the BOQs are incomplete	• Increase participation of beneficiaries • Ensure complete BoQs	• SPIU • SPIU	• Immediate & continuous • Immediate & continuous
Technical Capacity at the SPIU With only one Civil Engineer for all SPIU projects, its challenging to: • Check thoroughly all the designs and BoQs for correctness & completeness • Adequately supervise construction of all the ongoing construction • Participate fully in the development & carriage of the community capacity building	• Augment the capacity technical capacity of the SPIU • Outsource supervision to consultants who can have a day-to-day presence on site. • Involve the user communities in monitoring of the construction	• RAB • SPIU	• Immediate • SPIU • SPIU/contractors
Sustainability of Infrastructure: Design of the infrastructure not including an O&M plan: E.g. Boreholes have been drilled and equipped without user involvement. The user committees are being formed after completion of drilling & equipping while training to expected to take place later.	• Designs to include and O&M plans for each category of infrastructure • Contractors to involve local community during construction for them to learn some technical skills • Contractors to develop an O&M manual and train community for each infrastructure	• SPIU/Districts	• Immediate and continuous
Community Capacity Building in management of O&M is weak, especially around boreholes	• **Set-up Water for Livestock User Groups** • The organisations will need to be set up and guidelines established for proper O&M of Water for Livestock facilities, including the Operation, and Maintenance, payment of water fees to cover operational expenses. • Need to have the capacity building process structured	• SPIU/Districts/WASAC	• Immediate and continuous

Consistency in the Implementation Process: The infrastructure being implemented is diverse and complex. To ensure that the implementation is smooth and takes into account the requirements for sustainable O&M, the SPIU need to have implementation guidelines.	• Elaborate an Implementation Manual that clearly spells out the process of implementation of the infrastructure from: identification, studies& designs, construction, handing over & O&M.	• SPIU	• Immediate

Appendix 4.7. Environment and Climate Change

Introduction

This technical annex provides further insights on how to optimize the project approach on climate smart dairy production intensification. This annex complements the recommendations provided in the MTR report and related to adaptation to climate change, environment and natural resources management and SECAP. This should be read jointly with annex 12 on SECAP review note in RDDP PDR.

Overall, Rwanda dairy production has a high pressure on the natural resources through biophysical degradation and potential loss of biodiversity if extensive farming is encouraged and green strategies and good agricultural practices are not well promoted along the whole dairy value chain. In addition, dairy production is highly vulnerable to climate change and variability mainly through increased temperatures and alteration in rainfall patterns. Hence, the environmental and social category of RDDP is **B** and the climate risk category is **medium to high**.

Adaptation and mitigation measures

RDDP embodies both adaptation and mitigation measures in order to improve food security, adapt the dairy sector to climate change and reduces both direct and indirect GHG emissions. During the MTR, it was noted that the understanding of climate adaptation practices and related investments is not consistent among the SPIU staff. The table provides clarification on the differences and synergies between adaptation and mitigation strategies for addressing climate change.

Table 1: Differences and synergies between adaptation and mitigation strategies

Definition	
Adaptation (A)[25] involves changes in social-ecological systems in response to actual and expected impacts of climate change. Adaptation strategies and actions can range from short-term coping to longer-term, deeper transformations, aims to meet more than climate change goals alone, and may or may not succeed in moderating harm or exploiting beneficial opportunities.	**Mitigation (M)** addresses the deep causes of climate change (accumulation of greenhouse gases in the atmosphere).
Both approaches are needed. On the one hand, even with strong mitigation efforts, the climate would continue changing in the next decades and adaptation to these changes is necessary. On the other hand, adaptation will not be able to eliminate all negative impacts and mitigation is crucial to limit changes in the climate system.	
Scales of interventions and sectors affected	
Primarily a local issue, as adaptation mostly provides benefits at the local scale. ***Sectors affected***: Mitigation is a priority in the energy, transportation, industry and waste management sectors	Primarily an international issue, as mitigation provides global benefits. ***Sectors affected***: Adaptation is a priority in the water and health sectors
Examples of technologies promoted through RDDP	
- ***(A):*** Rainwater harvesting technologies (water tanks, , etc..) - ***(A):*** Use of drought and flood tolerant and diversified forage varieties ; - **(A) :** Forage conservation and storage as a way to adapt to shortage during dry season or drought	- **(M)** Solar-powered equipment, facilities along the dairy value chains (solar powered fridge, solar panels fro MCCs, - **(M)** Biogas unit - (**M)** Replacing commercial feed with local concentrates - **(M)** Promotion of agro-forestry for increasing soil carbon sequestration

[25] From this point forward, capital **A** will stand for **Adaptation** and capital **M** will stand for **Mitigation**

	- **(M)** Waste management (waste water and manure, etc.)

The RDDP approach to tackle climate change encourages the following interventions:

- **(A/M)** Enhancing animal feeding practices
- **(A)** Increasing pasture productivity and quality by enhancing the composition of forage varieties,
- **(A)** Conservation and better pasture management
- **(A)** Adoption of organic fertilizers and practices such as cover crops, crop residues retention, mulching and composting so as to better cope with drought and be more resilient to extreme events
- **(A)** Refining cow sheds infrastructure to cope with heat stress in both extensive grazing and zero grazing system
- **(M)** Improving energy use efficiency along the dairy value chain
- **(M)** Manure and waste management.
- **(M)** Promoting low carbon source of energy for chopping and milling forage systems, cooling and dairy processing plant

To date, the project has moderately integrated the above approach within project interventions. RDDP have mainly tackled challenges identified at production stage while constraints are observed along the whole dairy value chain. The table below provides some areas of reflections on how to enhance adaptation and mitigation strategies within RDDP.

Table 2 :Identified climate risks constraints along the dairy value chain and potential techniques et technologies		
Dairy value chain nodes	***Specific Climate constraints***	***Potential techniques and technologies to be promoted by the project***

Production:
• Low productivity of cows associated with:
  ○ Low number of improved breeds
  ○ Poor feeding practices due to lack of knowledge of farmers and low availability of raw feeding materials
• Limited knowledge and resources to comply with dairy quality standards
• Cattle rearing often culturally oriented rather than business oriented
• Low incomes prevent uptake of appropriate feeds
• However, there is a concentration of livestock population in urban areas
• There is also a growing concern regarding overgrazing of agricultural and rangelands associated with expansion of grazing areas in agricultural and forest areas
	Eastern and southern Province
	• Long dry season / drought which leads to seasonal variation of production volume up to 50% due to quantity and quality of feeds
	• Water availability and accessibility
	• Increasing overgrazing and environmental degradation of rangelands, forest ecosystems, pasture and farmlands (depletion of carbons)
	• Increasing soil erosion and nutrient losses
	• Waste from livestock production as well as manure disposal affects atmosphere (CH4) and surface and groundwater systems
	• Deforestation associated with use of firewood for heating water for hygiene purposes (milking and cleaning equipment)
	• Cereal and leguminous production especially become more difficult to cultivate because of the lack of water
	• Increase of animal diseases/parasites
	• Poor quality of forage and fodder leading to acidity of milk
	• Seasonal fluctuations in rain water distribution that entails low hydroelectric production and affects availability and use of electricity in the milk cold chain
	Northern and Western Province
	• Seasonal fluctuations in rain water distribution that entails low hydroelectric production and affects availability and use of electricity in the milk cold chain
	• Water accessibility
	• Loss of soil fertility by leaching of arable lands
	• Local risks of landslides, irreversible land leaching, soil erosion and degradation
		• **(M)** Replacing commercial feed with local concentrates
		• **(A)** Construction and installation of appropriate rain water harvesting facilities (Either masonry or plastic tanks) (*tested under PASP)*
		• **(M)** Biogas at farm level as manure management and source of renewable energy (*tested under KWAMP*)
		• **(A)** Conservation of forage
		• **(A)** Cultivation of drought or flood tolerant forage varieties
		• **(A/M)** Cultivation of agroforestry species
		• **(M)** Solar Milk Cooling with Insulated Milk Cans at farm level for the evening milk

Transport : • Weak market infrastructures (feeder roads, cold chain, electricity, aggregation centres)	**Northern and Western Province** • Floods and landslides that damage or close roads making milk transport more difficult **Eastern and southern Province**	• **(A)** insulated transportation containers for the young milk collectors/ transporters

• Inefficient transportation system that leads to milk spillage, spoilage and side selling • Long distance covered by transporters from Farm to MCCS	• cold chain failure/break during periods of high temperatures	
Bulking and chilling • Extensive use of diesel generators that uses a lot of fuel raising cost of chilling as well as contributing to GHG production • Poor management of some MCCs leading to poor maintenance and upgrade	**Northern and western province** • Destruction of livestock infrastructure (MCCs, Processing units, Cow sheds, water installations, etc.) **Eastern and southern Province** • Drought and dry spells leading to water shortage	• **(M)** Simple Milk equipment washing facilities associated with solar water heater (*tested under PASP*) • **(M)** Solar energy system to provide source of energy to power milk cooling tanks (for MCP or MCC) (*tested under PASP)*
Processing • Low level of product diversification • High processing cost mainly from packaging and electricity leading to high prices of local products • Inappropriate and expensive milk processing machineries (e.g. pasteurizers, sterilizers) with limited locally available spare parts	**Northern Province**: Destruction of rural and livestock infrastructure (MCCs, Processing units, Cowsheds, water installations, etc.) **Eastern and southern Province** Drought and dry spells leading to water shortage	• **(M)** Establishment of Solar powered cold storage associated with milk processing unit (*tested under PASP)* • (**A/M**) Adoption of climate proof construction techniques in dairy infrastructures (such as introduction of proper ventilation and use of translucent sheets to optimize internal lighting during the day, etc.) (*tested under PASP)* • Waste water management and treatment systems at Milk processing unit (*tested under PASP)*
Retailing • Inappropriate cold chain / transport systems leading to poor quality of raw/fresh milk • Long distances covered between milk shed to milk processing units	**Northern Province**: Destruction of rural and livestock infrastructure (MCCs, Processing units, Cow sheds, water installations, etc.) **Eastern and southern Province** cold chain failure/break during heat events	• **(M)** Establishment of Solar powered cold storage

Monitoring and evaluation

Climate risk management is a cross cutting issue as climate risks are observed at each dairy value chain node*.* The project logical framework includes two initial indicators and one new indicators to measures the impact of project implementation on the natural resources bases and GHG. It is recommended to give further emphasis on these indicators during the Monitoring and Evaluation Systems. Below is a table that provides further insights on the assessment of climate risks management within RDDP:

Table 3: Monitoring and Evaluation of specific indicators related to climate smart dairy intensification		
Indicators	***Description***	***Target within RDDP***
Core Indicator: **3.1.3** Persons accessing technologies that sequester carbon or reduce greenhouse gas emissions	***Definition from NEW RIMS report (2017)*** - Refers to the number of individuals who were provided, either during the past 12 months (annual reporting) or since project start-up (cumulative reporting), with renewable energy sources and/or more energy-efficient technologies helping to reduce carbon emissions and secure carbon sequestration through the enhancement and protection of carbon stocks in the biomass, both above ground (e.g. conservation/restoration of degraded ecosystems) and below ground (in soil organic matter). - - Individuals who received advice or training during the past 12 months with a view to changing their land-use practices in the forestry and agricultural sectors (e.g. improved livestock and manure management, improved rice cultivation) should also be included.	The individuals targeted are: - L-FFS members receiving training on improved livestock and manure management (should be part of the normal curriculum) - L-FFS members planting agro-forestry and fodder trees - Girinka beneficiaries equipped with improved cowshed with concrete floor that allow for collection of manure and urine that could be used as organic manure or feed for biogas digester - L-FFS members receiving matching grant for biogas unit (none to date) - L-FFS members or RDDP beneficiaries using improved cook stoves because of project interventions or Graduation pathway from Heifer - RDDP beneficiaries who applied for a grant to purchase solar panels or solar powered technologies along the dairy value chain (including solar cooled collection points, solar milk chillers, solar panels to provide electricity to MCCs, solar water heating systems, etc.)
Climate-smart investments made (number)	**Not a core indicator.** These investments will include both adaptation and mitigation options: →**Adaptation options (A)** are defined as technologies that support our beneficiaries to adapt to the adverse effects of climate change. →**Mitigation options (M)** are defined as technologies that reduce or sequester green gas emissions. This will include both beneficiaries of matching grant under 1.3 ***Climate-Smart and Strategic investment*** (Matching Grant Fund) as well as **2.3** ***Leveraging financing for climate resilient dairy enterprise development***	Climate smart investment includes: - **(A)** Rainwater harvesting technologies (water tanks, etc...) - **(A)** Use of drought and flood tolerant and diversified forage varieties; - **(A)** Forage conservation and storage as a way to adapt to storage during dry season or drought; - **(M)** Solar-powered equipment, facilities along the dairy value chains (solar powered fridge, solar panels for MCCs, - **(M)** Biogas unit
Core Indicator 3.2.1 Greenhouse gas emissions (CO2) avoided and/or sequestered (mt)	Livestock sector contributes largely to GHG emissions through methane gas emitted by the cows, lack of manure management, high use of energy associated with milk production from processing to transportation and marketing. Mitigation options addresses the causes of climate change (accumulation of greenhouse gases in the atmosphere), by reducing the emissions sources or enhance the sinks of greenhouse gases. The project interventions include pasture land management through the use of organic fertilizer instead of chemical fertilizers; promotion of agro-forestry and leguminous for increasing soil carbon sequestration; manure management to reduce emissions of GHG, promotion of renewable energy (e.g. biogas, solar, etc.), waste management and promotion of energy efficient dairy equipment; replacing commercial feed with local concentrates, composting, etc.	A **GLEAM-i** expert to be hired directly by the project to support the collection of data (baseline, MTR and completion) on sequestration of GHG emissions.

Appendix 4.8. Financial Management and execution

I. DISBURSEMENT.

The project is in its 4th year of implementation and the disbursement rate for Loan No.200000164200 is 46.68% while Grant No. 200000164100 is at 60.79%. Pending WA 27 for approximately SDR 0.7 million, raises the disbursement rate to 48.93%. Other financing sources have been disbursed as; GoR 9% (USD 0.347.54 of 3.8 million), HI is 55% (USD 2.3 of 3.9 million), private sector contribution 0% (of the planned USD 6.5 million), and beneficiary contribution 0.23% (USD 0.013 of 5.9 million), resulting into an overall disbursement of 35%.

CUMULATIVE EXPENDITURE BY COMPONENT as at October 2019 (USD '000')																				
	IFAD & LOAN			IFAD GRANT			HPI			GOR			BENEFICIARY			Private sector			Total		
	Alloc	Actual	%ge	Alloc	Actual	%ge	Alloc	Actual	%ge	Alloc	Actual	%ge	Alloc	Actual	%ge	Alloc	Actual	%ge	Alloc	Actual	%ge
A. Climate-smart Dairy Production	21,543	10,205	47%	536	452	84%	998	2,043	205%	2,256	98	4%	604	-	0%	1,700	-	0%	27,637	12,799	46%
B. Producer Organization and Value Chain Development	14,750	6,088	41%	345	170	49%	2,998.9	142	5%	1,332	170	13%	5,328	13.7	0%	4,867		0%	29,621	6,583	22%
C. Policy and Institutional Strengthening	1,471	763	52%	210	30	14%				186	21	11%	-			-			1,868	813	44%
D. Project Coordination and Management	5,854	2,485	42%		22					89	59	66%							5,943	2,566	43%
Total	**43,619**	**19,541**	**45%**	**1,091**	**674**	**62%**	**3,996.88**	**2,185**	**55%**	**3,864**	**348**	**9%**	**5,932**	**13.68**	**0.23%**	**6,567**		**0%**	**65,069**	**22,761**	**35%**

The beneficiary and private sector contribution is underestimated since it has not been fully evaluated by the project. Data received from technical departments indicates that, currently, private sector contribution is estimated at USD 268,887 (FRW 248.7 million), and beneficiary cash contribution at USD 880,668.89 (FRW 814.6 million). There is need therefore, for the technical departments to provide the related support documents to the accounting department for verification/evaluation and presentation to the external auditors for certification. Such contribution will appear as a disclosure to the audited financial statements.

Funds flow, and Statement of Expenditures (SoEs) review. Given the funds flow requirements for the project, the Authorized Allocation (AA) of USD 2.5 million seems inadequate to facilitate smooth activity implementation. As at 31st October 2019 the designated and operation accounts had a combined cash balance of USD 0.6 million (27%). At the time, there was a WA (25) in the pipeline of USD 862,923, and by the time it was paid (value date 14/11/19), the project bank accounts had a combined cash balance of USD 0.3 million - while invoices and requests for payment to suppliers/service providers by end November 2019 amounted to approximately USD 2.4 million. The likelihood for cashflow constraints presents a risk of delayed activity implementation, and IFAD ought to consider increase of the AA. To this effect, the project submitted a cashflow forecast indicating a requirement for an increase of the AA to USD 4.0M.

SoEs: The support documents for SoEs submitted through WA 24,25 and 27 were reviewed and found to be mostly supported. The few areas that require improvement in support documents are;

- Failure to comply with Presidential order regulating civil servants on official travel either abroad or in-country where payments were made to RDDP staff and other staff from collaborative institutions but the original mission authorizations and mission reports were not submitted to the Accountant within eight (8) open days.
- Partially supported expenditures for workshops and meetings, where attendance lists for some stakeholders events/meeting, organized by RDDP were missing.

Treasury status. The post MTR period has an estimated combined cash balance of USD 24.3 million (IFAD Loan USD 23.9 and 0.43 million for the grant). Funds that are already committed are estimated at

USD 3.2 million, resulting into approximately USD 23.1 million as the balance carried forward for the post MTR period. A set of activities to be undertaken have been presented to the mission but the estimated cost is above the estimated fund balance. Together with the MTR mission, an agreement has been reached on the activities that can be implemented during the post MTR period. Before such activities are confirmed, and a new set of cost tables drawn, a clear assessment of the available cash balance relative to the proposed activities should be done. This will be followed by generation of cost tables, and a request for re-allocation of resources amongst expenditure categories.

FUND BALANCE as of November 2019 (LOAN)					
Category Description	Allocated	Disbursement	%	Available Balance	Bal USD Equiv
200003 Works	3,830,000.00	896,745.54	23%	2,933,254.46	4,037,760
200008 Consultancies	3,700,000.00	2,401,462.32	65%	1,298,537.68	2,056,512
200012 Grants and subsidies	5,030,000.00	1,276,792.41	25%	3,753,207.59	5,162,162
200013 Goods, services and inputs	8,090,000.00	6,449,053.54	80%	1,640,946.46	2,594,960
200016 Operating costs	780,000.00	124,447.28	16%	655,552.72	920,163
200018 Salaries and allowances	2,420,000.00	1,080,868.89	45%	1,339,131.11	2,012,912
200019 Training and workshops	6,300,000.00	761,126.97	12%	5,538,873.03	7,681,629
250001 Advance account startup cost		99,752.23		-99,752.23	(135,274)
270001 Authorized allocation		1,544,412.05		-1,544,412.05	(2,124,184)
290001 Unallocated	1,200,000.00			1,200,000.00	1,650,480
total:	**31,350,000**	**14,634,661**	**47%**	**16,715,338.77**	**23,857,119**

FUND BALANCE as of November 2019 (GRANT)					
Category description	Allocated	Disbursement	%	Available Balance	Bal USD Equiv
200008 Consultancies	350,000.00	201,943.75	58%	148,056.25	203,637
200013 Goods, services and inputs	370,000.00	135,279.65	37%	234,720.35	322,834
270001 Authorized allocation	-	**143,022.64**		**(143,022.64)**	(196,713)
290001 Unallocated	70,000.00			70,000.00	96,278
TOTAL:					**426,036**
Total approximate USD available					**24,283,154**

During RDDP design, the expenditure category for salaries and allowances did not cater for the recruitment of 12 field staff. As a result, the expenditure category is now drawn at 40% and stands a risk of being overdrawn during project implementation. The proposed post MTR project activities should provide an allocation for the 12 field staff.

HI Disbursement. There is a disproportionate execution by HI amongst components. Against appraisal targets, component one (1) was allocated USD 0.988 million of which USD 2.04 million has been spent (representing 205%), and component two (2) was allocated USD 2.99 million of which USD 0.142 million has been spent (representing 5%). The explanation for the disproportionate execution amongst components is that activities in component two are being implemented by other actors in the Diary sector, and that there was no need for duplicating similar activities. This MTR therefore, will re-allocate financing by HI amongst components, and this will be reflected in the post MTR cost tables.

HI EXPENDITURE BY COMPONENT AS AT OCTOBER 2019			
COMPONENT	Planned '000' USD	Actual	%
Climate-smart Dairy Production	998.0	2,043.09	205%
Producer Organization and Value Chain Development	2,998.9	142.05	5%
Policy and Institutional Strengthening	0	0	
Project Coordination and Management	0	0	
TOTAL	**3,996.9**	**2,185.15**	**55%**

Actions	Responsibility	Deadline	Status

Funds flow IFAD to consider increase of the AA to USD 4 million to avoid cashflow constraints that may arise	IFAD	Continuous	Agreed
Project cost tables: An assessment of the available cash balance, relative to the proposed activities should be done before cost tables are drawn, and the proposed post MTR project activities should provide an allocation for the 12 field staff	IFAD Rwanda ICO	Dec 2019	Agreed
Beneficiary and private sector contribution Project to evaluate beneficiary and private sector contribution	SPIU	June 2020	Agreed

II. QUALITY OF FINANCIAL MANAGEMENT

Overview: The project is using the government recommended IFMIS, but the IFMIS set-up does not entirely facilitate expenditure classification that will result in additional disclosures to the financial reports required by the project/IFAD. In order to generate expenditure reports by component/category/financier and SoEs, the project resorts to use of excel. The IFMIS possesses 'reporting analysis tools' that can be used to help automated generation of the required project additional disclosures to financial reports, but the Ministry of Finance has not helped configure these within the system. The approach of using parallel systems too has failed and can only be possible if a temporary accountant is hired to capture financial data into TOMPRO.

Financial management system (FMS). RDDP uses the government recommended Integrated Financial Management Information System (IFMIS), which is specifically designed to assist government to compile central and general Government Financial Statistics in a coherent manner. The IFIMIS is a highly structured FMS, and entails careful assignment of responsibilities and approval processes, thus ensuring effective internal control processes, government financial reporting, budget monitoring, and commitment control. However, the 5 segments of the IFMIS Chart of Accounts do not entirely facilitate expenditure classification that will result in additional disclosures to the financial reports required by the project/IFAD. In order to generate expenditure reports by component/category/financier and SoEs, the project resorts to use of excel. This process is cumbersome, susceptible to error, and does not facilitate timely monitoring of financial against physical achievements.

In order to mitigate the above challenge, use of parallel systems (TOMPRO & IFMIS) had been adopted, but this approach has failed since the project has one accountant responsible for RDDP, and individually handling both systems to ensure real time accounting is practically impossible. The approach of parallel systems would have been possible if the two were compatible to allow import and export of financial data. Now that import and export is not possible, the only available option is to recruit a part time accountant to record transactions into TOMPRO, and reconcile them to the General Ledger in IFMIS. Through such an arrangement, financial reports according to IFAD requirements could be generated on a real time basis.

Since it is a government requirement, during the post MTR period, RDDP will continue to use IFMIS. The IFMIS possesses 'reporting analysis tools' that can be used to help automated generation of the required project/IFAD additional disclosures to financial reports, but the Ministry of Finance has not helped configure these into the system. The implementing agency (RAB) or the parent Ministry (MINAGRI) should request for a high level meeting with the Ministry of Finance to find a permanent solution to this issue – since all other upcoming IFAD projects will be using IFMIS. In the meantime, a part-time accountant should be recruited to capture/reconcile financial data into TOMPRO.

Internal controls. The Summary of fixed and intangible assets presented in draft financial statements (FY 2018/19) and the project fixed assets' register do not tally. The balance per financial statements is FRW 4.1 billion while the balance per assets register is FRW 2.5. The main reason for this difference is that the capitalization policy for the project is not elaborated, e.g treatment of equipment purchased by the project and distributed to beneficiaries be treated? Which purchase value of an item qualifies to be

considered an asset? Etc. The SPIU PIM (to be revised) should define the capitalization policy for purposes of updating the asset register.

COMPARISON BETWEEN FIXED ASSET REGISTER & FS ASSET MOVEMENT SCHEDULE			
Description	**Balance/summary in financial statements** (a)	**Balance/summary in the Fixed asset register Frw** (b)	**Difference Frw C=(a)-(b)**
Opening balance at 01/07/2018	1,602,432,109	781,298,035	821,134,074
Additions (01/07/2018-30/06/2019)	2,502,660,536	1,796,644,054	706,016,482
Transfer and disposals	0	2,434,483	-2,434,483
Closing balance	**4,105,092,645**	**2,575,507,606**	**1,529,585,039**

AWPB. The actual execution against AWPB 2019/20 is 9.5% (FRW 1.1 billion of 11.5 billion), broken down per component as; Climate-smart Dairy Production Intensification (5.5%); Producer organization and value chain development (8.3%); Institutional and Policy Development (34.6%), and Project Management and Coordination (24%). At five months of implementation, this performance is rated low, and highly unlikely that it will improve by financial year end. However, there are commitments ready for payment (invoices and requests submitted) amounting to FRW 2.3 billion which if factored in raise AWPB execution to 29.5%.

RDDP BUDGET EXECUTION FY 2019-2020 as at October 2019				
Components	**AWPB**	**Commitments**	**Execution**	**%**
1 .Climate-smart Dairy Production Intensification	4,952,302,000	1,158,910,000	1,429,660,632	29%
2.Producer organization and value chain development	5,080,697,000	1,031,211,600	1,301,962,232	26%
3. Institutional and Policy Development	392,172,000	55,328,800	326,079,432	83%
4.Project Management and Coordination	1,147,767,000	61,393,000	332,143,632	29%
Total FY 2019/2020	**11,572,938,000**	**2,306,843,400**	**3,389,845,928**	**29%**

Actions	Responsibility	Deadline	Status
IFMIS The implementing agency (RAB) together with the parent Ministry (MINAGRI) should request for a high level meeting with the Ministry of Finance to find a permanent solution to help automated generation of the required IFAD additional disclosures for financial reports	RAB/MINAGRI	Continuous	Agreed
Reconciliation of fixed asset register Reconcile the fixed movement schedule to the asset register, and the SPIU PIM should define the capitalization policy to enable constant update the asset register.	FC	June 2020	Agreed
Increased AA IFAD to consider increase of the AA to USD 4 million to avoid cashflow constraints that may arise	IFAD	Continuous	Proposed
Recruit a temporary accountant to capture/reconcile financial data into TOMPRO	SPIU	Feb 2020	Proposed

III. QUALITY AND TIMELINESS OF AUDIT

The opinion on financial statements was unqualified, the financial statements were informative and the financial audit report together with compliance report were submitted to IFAD on time. Based on audit work performed, RDDP complied, in all material respects with applicable laws, regulations and guidelines to realize value for money in utilization of public funds for year ended 30 June 2018, except for the effect on the matter (s) described in the Basis for qualified opinion section 3.2.1 of the report (lack of performance security EDCL contract).

The financial statements give a true and fair view of the financial position of RDDP as at 30 June 2018, and of its financial performance and its cash flows for the year then ended in accordance with the guidelines provided by the government relating to financial regulations and Organic Law No. 12/2013/OL of 12/09/2013 on State Finances and Property. In addition, proper books of accounts have been prepared and are in agreement with the financial statements prepared. The Auditing standards (ISSAI), and performance of the auditor was rated highly satisfactory and acceptable to IFAD. RDDP will continue to be audited by the Office of the Auditor General during the post MTR period.

IV. COUNTERPART FUNDS

The funds provided by GoR annually to meet taxes and duties are not as per the approved AWPB projections. Since project inception GoR has provided 9% against appraisal targets. In kind contribution from government has not been quantified and reported upon.

From project inception to-date GoR has contributed USD equivalent 0.347.54 (FRW 275 million) of the planned USD 3.8 million representing 9% of appraisal targets. GoR contribution is still low and given that infrastructure related activities which have a tax element have increased, annual cash contribution by government might not be sufficient to cover taxes. It has been observed that cash disbursed is always below AWPB projections. This might affect the cashflows of the project since, in order to meet Rwanda Revenue Authority tax return deadlines, and avoid penalties, the project might resort to borrowing from IFAD special account. There is also an element of GoR in-kind contribution (e.g; office rent and RAB/MINAGRI staff, that should be appraised to form GoR contribution). IFAD has provided guidance on the quantification and reporting of in-kind contribution that is yet to be done.

AWPB Vs ACTUAL DISBURSED BY GoR				
Planned as per the AWPB	**AWPB (FRW)**	**Disbursed (FRW)**	**Variance (FRW)**	%ge Variance
2016-2017	0	46,470,418	-46,470,418	
2017-2018	327,224,000	75,000,000	-252,224,000	-77.08%
2018-2019	319,798,000	200,000,000	-119,798,000	-37.46%
2019-2020	0	0	0	
Total	**647,022,000**	**321,470,418**	**-418,492,418**	**-64.68%**
USD	**699,483**	**347,536**	**351,948**	

Actions	Responsibility	Deadline	Status
Government contribution GoR to provide sufficient funds to cover taxes, and SPIU to appraise in-kind contribution.	RAB/SPIU	Continuous	Agreed

V. COMPLIANCE WITH LOAN COVENANTS

The Project is being implemented in compliance with the financing agreement except for; beneficiary and private sector contribution which has not been evaluated. A summary of compliance status is shown at appendix 3.

Appendix 5: Mission preparation and planning, TORs, schedules, people met.

Appendix 5.1. Mission ToRs

Rwanda - Dairy Development (IFAD LOAN N° 2000001642-RW, GRANT 2000001641) - Mid-term Review Mission from 18 to 30 November 2019

I. Background

The Rwanda Dairy Development Project (RDDP) became effective on 19 December 2016 and it is due for completion on 30 December 2022 while the closing date is 30 June 2023. Project coordination is under the responsibility of the Single Project Implementation Unit (SPIU) for IFAD-funded projects under the Rwanda Agriculture and Animal Resources Development Board (RAB) of the Ministry of Agriculture and Animal Resources (MINAGRI). Key implementing partners are Heifer International Rwanda, the Rwanda Council of Veterinary Doctors (RCVD), the Rwanda Cooperative Agency (RCA), the Business Development Fund (BDF) and the Rwanda National Dairy Platform (RNDP).

RDDP comprises the following mutually reinforcing components: (i) Climate-smart dairy production intensification; (ii) Producers' organization and value chain development; (iii) Institutional and policy development; and (iv) Project management and Coordination. The project is co-financed by (i) IFAD up to USD 44.7 million (68%), through a USD 43.6 million highly concessional loan and a USD 1.1 million grant; (ii) Heifer International for USD 4.0 million (6%); (iii) Private sector for USD 6.6 million (10%), (iv) Government of Rwanda for a total of USD 3.9 million (6%) in the form of tax exemptions; and (v) Beneficiaries for USD 5.9 million (9%).

The overall goal of RDDP is to contribute to pro-poor national economic growth and improve the livelihood of resource-poor rural households. This will be achieved by focusing on food security, nutrition and empowerment of women and youth in a sustainable and climate-resilient dairy value chain development. Specifically, the project seeks to increase competitiveness and profitability of the dairy sector through the provision of quality products from small-scale producers to domestic and regional consumers, thus improving their livelihoods, food security and nutrition whilst building overall resilience. The primary target group of the project comprises 100,00 resource-poor rural households, of whom 80,000 are involved in dairy farming (mostly zero-grazing) and 20,000 in off-farm activities along the dairy value chain.

II. Programme implementation performance and status

2.1 Climate-smart Dairy Production Intensification

The last ISM of May 2019 noted RDDP’s good progress on the L-FFS approach: almost 25,000 beneficiaries are organised in 972 L-FFS groups, 27 Master Trainers (MTs) and 535 facilitators trained, and a comprehensive curriculum is in place. There is a very constructive cooperation between the RDDP team and Heifer International (HI) to make the L-FFS program effective and responsive to farmers’ needs. However, there is still some concern regarding consistency and quality of the L-FFS approach. RDDP has signed an MOU with FAO for a better organization of the L-FFS and corrective measures are expected to be implemented.

The RDDP team also made good progress in the implementation of the Feed Assessment Tool (FEAST); the MoU with ILRI was signed in January 2019, 19 Master Trainers (MT) have been trained, and the FEAST tools were field-tested and rolled-out in six districts.

The sustainability of vaccination and Artificial Insemination (AI) campaigns need to be strengthened, as the recurrent program leads to competition between the private and public sector. The findings of

the ongoing studies on privatization of veterinary and AI services should inform the vision, and exit strategy of RDDP.

The incidence of mastitis in several districts is worryingly high; RDDP must be commended for the ongoing mastitis program as the incidence in some areas has been reduced from 70% to 43%. As treatment costs are high for smallholder farmers, RDDP needs to focus on monitoring and prevention of the disease. Following the mastitis studies carried out by New Vision Veterinary Hospital (NVVH), it appears that the levels of Anti-Microbial Resistance (AMR) for some antibiotics are worrying. The last mission recommended to include an AMR study, including the drafting of a prevention strategy. The project was also requested to procure rapid detection kits, to be used at MCC levels.

The target for seed multipliers (100) has been achieved with 108 trained; all have set up seed production plots and 2,058 ha of forage seeds have been planted. The project should support multipliers in providing linkages to the farmer groups and to establish cooperatives to facilitate market access.

Rehabilitation of the 4 veterinary satellite laboratories is complete with the contractor repairing defects before provisional handing over; the liquid nitrogen plant in Rubona (RAB station in the Southern Province) is now complete and in use.

The success of the Girinka program and RDDP has resulted in milk production levels that often exceed market absorption capacity, and the marketing of dairy products is therefore identified as a priority. The last ISM therefore recommended engaging specific business development Service Providers (SPs) in order to address this gap, to conduct a detailed market demand analysis, to engage an interim-marketing specialist, to reconsider project staffing at MTR to include a marketing specialist, and to form a marketing team at project level. In addition, a request from GoR to increase the target to 6,000 will be reviewed during the MTR.

Among the ongoing climate-smart and strategic investments is the construction of 2,400 household-level rainwater harvesting systems, implemented by Heifer International (HI). The SPIU has identified 19 sites for boreholes whereby 3 are near completion and 2 are equipped with solar pumps. It was recommended to have a supervising company on-site, as some defects have been noted, and water users should be involved in the tendering and monitoring. Upon completion, beneficiaries should receive training on management and maintenance of the boreholes.

2.2 Producer organizations and value chain development

The RDDP through Rwanda Youth in Agribusiness Forum (RYAF) has mapped and categorized dairy cooperatives, based on a list of criteria adapted from the PASP project. This list of criteria includes leadership, management structures, milk collection, infrastructure investment, as well as diversification of services. However, thorough analysis is needed in order to be fed into planning and prioritisation of capacity building. Some strategic 5-year business plans of MCCs and cooperatives have been developed, but the strategy for implementation is not enough clear.

46 RYAF consultants have been posted at MCC-level, with the majority having an animal production or veterinary background. Their assignment, however, goes beyond their technical skills (e.g. 5-year strategic plans); the tasks should be better linked to the MCC needs and match the RYAF staff profile. RYAF's exit strategy should be improved, for example by initiating co-funding of their salaries by the cooperatives (e.g. 25% in next FY).

The project received 860 BPs between July 2018 and April 2019. About 95% of the 860 approved BPs focus on milk production. In light of the milk marketing priorities, the project may hire a SP specialized in enterprise development, processing and marketing to better advise farmers / cooperatives for the development of BPs other than production.

Heifer International (HI) is piloting the digitalization of the dairy VC, in collaboration with the Master Card Foundation, by creating farmer business profiles, to facilitate access to finance. So far 18,000 profiles have been created and 2 banks have accepted to finance those with acceptable profiles. The

banks are using milk production as collateral and do require the animals to be insured. The project should consider scaling up this pilot in RDDP.

HI, together with UAP, has been implementing a livestock insurance scheme, with more than 3,000 farmers involved. RDDP financed the 1st year of premiums for farmers linked to the Girinka program. As HI performs most tasks in agreement with the insurer, some sustainability concerns exist. An exit strategy needs to be developed, linked to GoR's National Agriculture Insurance Scheme (NAIS). To achieve this, clients that would be purchasing market-based insurance need to be identified, as well as delivery channels, insurer capacity and tools to reach smallholders.

The current large volume of smaller BPs has challenged BDF to process all applications and to monitor progress; it has also led to increased costs for monitoring and administration. RDDP might need to cover some of the costs, and this should be reviewed during MTR. BDF is the entry point to accessing financial services and delegating the BP processing to other SPs is not a sustainable solution. Very few commercial banks, MFIs and other FSPs are currently facilitating access to finance for the project beneficiaries, with the project relying exclusively on the Matching Grant (MG) scheme, with little collaboration of other FSPs. The last mission recommended for the project and BDF to: (i) develop a strategy to sustainably enhance project beneficiaries' access to financial services; (ii) identify knowledge gaps among FSPs; (iii) work with commercial banks, MFIs and other FSPs to develop specific products targeting cooperatives and dairy farmers and enhance their knowledge and appetite for dairy sector. Opportunities for co-financing from the private sector should also be explored.

2.3 Institutional and policy development

The project has so far had limited influence on the policy or institutional development. The project has made little progress in regard to the participation of smallholder farmers in the formulation of the National Dairy policy and the other regulations and strategies, which will be required by the sector.

At the moment there is limited consultation between dairy VC actors at district level. Previous missions recommended the establishment of a district dairy platforms, which would monitor MCCs, identify problems and solutions, and organize actors at local level to address the issues. RDDP has made some progress in some districts, but this needs to be strengthened and expanded in all districts, with an active role of RNDP in their establishment. VC stakeholders could include some of the same clusters as represented in the national level Platform, such as dairy producers, MCCs, cooperatives, private sector, service providers including financial institutions, and district staff.

The GoR intends to implement major policy reforms in the livestock sector, in line with the new overall agriculture policy: these reforms include support to the privatization of veterinary and AI services. The project should proactively support these institutional reforms by providing technical expertise and facilitating inclusive policy dialogue (using both national- and district-level platforms). It should also assist in revising, updating or drafting important policy documents such as the breeding policy, including AnGR conservation, and the animal feeding policy. The formulation of these strategic and policy frameworks will also help to guide project activities, that sometimes lack strategic focus and long-term perspective.

III. The Mid-term Review Process

The Mid-Term Review process is in compliance with the financing agreement of RDDP that stipulates the following:

- The Lead Project Agency and the Fund shall jointly carry out a review of Project implementation no later than the end of the third year of the Project (the "the Mid-term Review") based on terms of reference prepared by the Borrower/the Recipient and approved by the Fund. Amongst other things, the Mid-term Review shall consider the achievement of

Project objectives and the constraints thereon, and recommend such reorientation as may be required to achieve such objectives and remove such constraints.

- The Borrower shall ensure that the agreed recommendations resulting from the Mid-Term Review are implemented within the agreed time frame and to the satisfaction of the Fund. Such recommendations may result in modifications to the Project.

The Mid-Term Review Process will consist of the following two steps:

An internal evaluation. This process, to be executed by the Borrower, is meant to provide an opportunity to the RAB and the SPIU to carry out a self-assessment on the implementation performance of the project and the attainment of its objectives in order to reorient it for the remaining implementation period, based on constraints faced and lessons learnt. This process will be executed by the SPIU for IFAD-funded projects under MINAGRI together with other implementing partners. The output expected from this evaluation is a final report that reviews the implementation performance of the project and achievements made to date; the constraints faced and lessons learnt; the outputs, outcomes and impacts generated by the project and last but not least, a proposal of the activities to be considered for the remaining implementation period, based on remaining funds, priorities and recent developments in the respective sectors.

The Mid-Term Evaluation. This process will be executed and managed jointly by both the GoR and IFAD. The main objectives of the MTR will be to: (a) provide a strategic review of the project in view of the evolution of government policies, the changes in the socio-economic preconditions and the other ongoing and planned initiatives; (b) to assess project performance in relation to the stated outcomes and objectives; (c) review the project components structure and the detailed implementation arrangements under each component, including ensuring effective coordination among the components; (d) examine the adequacy of the institutional, organizational and management arrangements, with particular emphasis on ensuring government's ownership of the project and sustainability of project's interventions; (e) review the adequacy of arrangements for technical assistance and the performance of all parties involved in implementation and supervision; and (f) analyse the main constraints during implementation and suggest the necessary corrective actions required and adjustments that need to be made to the project design, including mainstreaming of 4P modalities as part of the RDDP-supported instruments with clear guidance provided for tasks related to the identification, negotiation and monitoring of 4Ps.

The review is expected to produce: (i) an assessment of the relevance of project design in its third year of implementation and necessary adjustments to be made for the next phase; (ii) a thorough review of programme implementation performance with the aim to extract the main lessons learnt so far; (iii) an assessment of the efficiency and effectiveness of the project's institutional, organizational and management arrangements under each component; (iv) a detailed plan and implementation arrangements for the remaining period using remaining funds in an effective and efficient way to maximise impact towards project's objectives. Particular emphasis will be given to the adjustment of the project implementation strategy in view of its remaining period, and to the definition of a detailed exit strategy.

IV. Detailed Terms of reference and individual team member responsibilities

Francesco Rispoli, Country Director and Team Leader will be responsible for the overall leadership and guidance of the mission, for arranging and delegating responsibilities to the mission members, as required.

Aimable Ntukanyagwe, CPO, will be responsible for supporting the Team Leader and the MTR mission team for the overall organization, liaison with the GoR, guidance of the mission and for contributing to the MTR report.

Alban Bellinguez, Livestock specialist and technical team leader, will support the team leader in the guidance of the mission, including its operational and technical aspects. He will contribute in producing the Aide Mémoire and final MTR report. In addition to delivering on the above MTR objectives and outputs, he will:

- Assess the overall progress in the implementation of the project in collaboration with other mission members;
- On the basis of the internal evaluation made by the SPIU and the mission's analysis and findings, review the performance of the project, lessons learnt, challenges and recommendations for the remaining period of the project;
- Review the implementation arrangements established with all implementing partners and the adequacy and effectiveness of such arrangements, including reporting mechanisms;
- In conjunction with relevant project stakeholders, identify and discuss actual and potential/emerging problems and constraints, and agree on solutions, changes or improvements and the responsibility for their implementation, especially with regard to component 1 (Climate-smart dairy production intensification) of the project;
- Assess project activities, output and impact in the context of the logical framework; and
- With contributions from other members, assess partnerships and collaboration opportunities that can be created with other development partners and actors, to help leverage IFAD's limited resources available to support the respective components.

In light of the above, he will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period. In addition, he will produce the draft Aide Memoire and the overall final MTR report.

Duration and timing: He will undertake this assignment from 17 to 30 November 2019 in-country, including external and internal travel and report writing. The specific timing of the mission will be as follows: Rwanda (14 days); home (5 days).

Paul Picot, Rural Finance specialist, will be responsible for reviewing the financial services aspects of the project. More specifically, he will:

- Review the overall rural finance services for the ongoing PRICE.
- Review the PFIs' utilization and performance of PRICE guarantee fund managed by BDF;
- Review the implementation arrangements with BDF and the degree of its functionality, including reporting mechanisms.
- Based on key findings/lessons learnt from PRICE, review overall progress in implementing RDDP's financial services strategy with specific reference to the sub-component 2.3 (Leveraging financing for climate-resilient dairy enterprises development) based on design provisions and implementation experience.
- Review the coherence between implementation and design provisions;
- Together with the other mission team members, assess the progress made by project beneficiaries in developing bankable BPs as well as the performance of the SPs assisting with their formulation;
- Together with the mission members, analyse the most effective approaches for financing BPs through an appropriate 4Ps model;
- Together with the Climate and Environmental specialist, assess the capacity building needs of the financial sector partners in terms of investing in climate adaptation dairy production;
- Assess partnerships and collaboration opportunities that can be created with other development partners and actors, to help leverage IFAD's more limited resources in order to reach the desired levels of intervention with regard to Rural Finance Services;
- In conjunction with relevant project stakeholders, identify and discuss actual and potential/emerging problems and constraints, and agree on solutions, changes or improvements and the responsibility for their implementation; and
- Make time-bound recommendations (including cost estimates) to enhance the effectiveness and efficiency of the project in general and ensuring access to finance for project's beneficiaries in particular, based on evidence and government priorities.

In light of the above, he will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period especially with regard to rural finance. In addition, he will contribute to the draft Aide Memoire and overall final MTR report together with a technical annex.
Duration and timing: He will undertake this assignment from 17 to 30 November 2019 in-country, including external and internal travel and report writing. The specific timing of the mission will be as follows: Rwanda (14 days); home (2 days).

Eva Jordans, Community Empowerment specialist, will be responsible for reviewing the performance and progress of all community empowerment and institutional development aspects in the RDDP project. More specifically, she will:

- In conjunction with relevant project stakeholders, identify and discuss actual and potential/emerging problems and constraints, and agree on solutions, changes or improvements and the responsibility for their implementation, especially with regard to the sub-component 2.1 of the project (Organization & capacity building of dairy cooperatives and other value chain players);
- Review the institutional and policy aspects of the project (component 3);
- In collaboration with the Technical Team Leader, review the overall project management performance, staffing levels and make necessary recommendations for adjustments;
- Assess the coordination mechanisms between MINAGRI, the SPIU and field staff based at District level;
- Evaluate progress on Dairy Hubs' empowerment and sustainability, analyse key constraints and solutions;
- Assess progress made by service providers on governance and organisational strengthening;
- Review the progress in reinforcing the institutional capacities of the participating farmers' organizations, their economic viability and sustainability;
- Review the role and effectiveness of dairy organisations as central actors in RDDP implementation;
- Make time-bound recommendations (including cost estimates) to enhance the effectiveness and efficiency of the project with regard to community empowerment and institutional development.

In light of the above, she will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period especially with regard to community empowerment, policy and institutional development. In addition, she will contribute to the draft Aide Memoire and overall final MTR report together with a technical annex.

With regard to PASP, the consultant will:

- Assess the overall progress in the implementation of the activities planned in the respective project's components and follow-up with implementation of the recommendations provided by the latest mission held in September 2019;
- Check on the status of ongoing business plans, identify constraints and gaps and remedial actions if required to improve the progress towards completing all business plans before March 2020;
- Provide implementation support for activities undertaken within the 2019-20 AWPB and propose key recommendations.
- In conjunction with relevant project's stakeholders, identify and discuss actual and potential/emerging challenges and constraints, agree on solutions, changes or improvements, and accountabilities for their implementation;
- Review the progress of all exit strategy activities and overall readiness of the project towards project completion.

With regard to PRICE the consultant will provide support to the SPIU in the preparation of the completion review process and the related PROJECT Completion Report.

Duration and timing: She will undertake this assignment from 17 to 30 November 2019 in-country, including internal travel and report writing. The specific timing of the mission will be as follows: Rwanda (14 days); home (2 days).

King'ori Wathobio, Community Infrastructure Specialist, will be responsible for the following:

- Identify the different water sources that could be available for livestock use in the project area;
- Identify existing technologies and assess their applicability in relation to the various water sources in the project area;
- Identify institutions that would be available to provide technical support to make available water for livestock during implementation and assess their capacities;
- Assess progress made in feeder roads improvement in order to ensure access to milk collection points and centres in all targeted districts;
- In coordination with the Rural Finance specialist and other relevant project stakeholders, identify and discuss actual and potential/emerging problems and constraints, and agree on solutions, changes or improvements and the responsibility for their implementation, especially with regard to the sub-component 2.3 of the project (Investment in milk collection and processing infrastructure);
- Make time-bound recommendations to enhance the effectiveness and efficiency of the project with regard to community infrastructure.

In light of the above, he will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period especially with regard to community empowerment, policy and institutional development. In addition, he will contribute to the draft Aide Memoire and overall final MTR report together with a technical annex.

Duration and timing: He will undertake this assignment from 17 to 26 November 2019 in-country, including external and internal travel and report writing.

Marie Clarisse Chanoine Dusingize, Climate Change and Environment specialist will be responsible for reviewing performance and progress on environmental and climate resilience aspects. She will:

- Explore linkages and synergies with IFAD-funded activities as well as initiatives tackling climate resilience undertaken by national or / international partners and private sector;
- Review at RAB level the dissemination of new varieties of crops/forage that address climate constraints and incorporates market requirements;
- Assess the capacity building needs of service providers in terms of mainstreaming climate change, adaptation and resilience considerations in supported activities;
- Review the preparation and dissemination of early warning messages appropriate to the risks identified in each RDDP area (droughts, floods, etc.) developed through climate information services;
- Assess the production and publication of weather information bulletins;
- Together with the SPIU KM & Communication Officer, explore potential partnerships with local media ensure that lessons from RDDP are captured and communicated broadly;
- Review cost-effectiveness strategies for solar and biogas powered milk coolers for the dairy value chain;
- Together with the Rural Finance specialist, assess the capacity building needs of the financial sector partners in terms of investing in climate adaptation and what tools are

required for staff to review BPs and ensure mainstreaming of climate resilience in the loan review process;
- Make time-bound recommendations to enhance the effectiveness and efficiency of the project with regard to mainstreaming climate risk and environmental management.

In light of the above, she will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period. In addition, she will contribute to the draft Aide Memoire and overall final MTR report together with a technical annex.

Duration and timing: She will undertake this assignment from 17 to 26 November 2019 in-country, including external and internal travel and report writing. The specific timing of the mission will be as follows: Rwanda (10 days); home (2 days).

Oscar Damen, M&E Specialist, will be responsible for reviewing the performance and progress of the M&E aspects of the project. More specifically, he will be responsible for the following:

- Assess the ability of the current M&E system to produce meaningful information relative to implementation progress and the achievement of project objectives;
- Assess the extent to which the information of the current M&E system is used for progress reporting and management decisions;
- Review logical framework based on implementation performance and propose adjustments to be made based on the MTR findings and recommendations;
- Assess the performance of M&E activities at district level (field offices) and linkages with the SPIU;
- Review the overall reporting by the project to ensure consistency and accuracy of data;
- Assess progress and identify challenges in the implementation of the project's KM and communication strategy;
- Review the effectiveness of the project communications systems in capturing, documenting and sharing knowledge;
- Make time-bound recommendations to enhance the effectiveness and efficiency of the project.

In light of the above, he will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period. In addition, contribute to the draft Aide Memoire and overall final MTR report together with a technical annex.

Duration and timing: He will undertake this assignment from 17 to 26 November 2019. in-country, including external and internal travel and report writing.

Giulia Pedone, Gender, Targeting and nutrition specialist, will be responsible for reviewing the progress in the implementation of gender, youth, targeting and nutrition aspects. More specifically, she will:

- Review the gender equality and women participation aspects of the project;
- Assess the project's youth focus;
- Review the targeting aspects of the project;
- Review the progress made by the project with regard to nutrition aspects;
- Make time-bound recommendations to enhance the effectiveness and efficiency of the project.

In light of the above, she will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period. In addition, she contribute to the draft Aide Memoire and overall final MTR report together with a technical annex.

Duration and timing : She will undertake this assignment from 17 to 30 November 2019. in-country, including external and internal travel and report writing. The specific timing of the mission will be as follows: Rwanda (14 days); home (2 days).

Frederick Kagaba, Financial Implementation Support specialist, will be responsible for reviewing and documenting the findings to all aspects pertaining to the project's financial management arrangements, financial performance and reporting, as well as all other fiduciary aspects. More specifically, s/he will:

- Use the original FMAQ as the basis to review the relevant information to review actions taken to address recommendations of previous year's supervision missions and recommendations raised by external auditors on previous years' management letters, recommendations raised by FMD during the audit review exercise.
- Perform a Financial Management Performance Assessment, on the basis of the questionnaire as per FMD guidelines. Re-assess the strengths and weaknesses of financial management systems and suggest mitigation actions.
- Review sample Withdrawal Applications and Statements of Expenditure to verify adequacy, completeness and validity of claims (at least 30%), using the checklist provided. Note down clearly any ineligible expenditures.
- Review bank account reconciliations and the status of advances given to implementing partners (if any).
- Follow-up on the introduced disbursement efficiencies (Authorized Allocation, implementation of extended SOEs, minimum WA size etc..) and ineligible expenditures (if any).
- Review and analyze the projects/programmes financial performance (annual and cumulative).
- Conduct an assessment on the status of the accounting software and the accounting records by liaising and discussion the status with the project and developing agency. Review a sample of the reports generated by the accounting software system.
- Review the adequacy of Internal controls in place in the PMU including the level of segregation of duties, authorization levels, financial procedures manual/ and periodic account reconciliations.
- Review the most recent Financial Progress Reports. - have periodic progress reports been submitted within the prescribed time limit? Is content as agreed?
- Review the Internal audit arrangements including reports and status of recommendations.
- Provide implementation support as necessary.
- Undertake ad-hoc tasks as assigned through email by the Director, Senior Finance Officer, and Finance Officer before the each mission.
- Prepare the Financial management risk assessment including an updated Summary of project fiduciary risk (Financial Management Performance Assessment at Supervision and Summary of Project Fiduciary Risk Assessment at Supervision) as per IFAD's guidelines.
- In line with the Supervision Guidelines and FMD guidelines, provide inputs to the Aide-Memoire and MTR mission report as follows:
- Input to Main body of the Aide-Memoire and the MTR report including the following under section iv. "Financial Management and Execution": i) Disbursement Rate, ii) Quality of financial management, iii) Quality and timeliness of audit including follow up on the finding of the audit review exercise performed by FMD) and iv) Counterpart funds. Following the ORMS format, assign ratings and record recommended actions, responsibilities and dates under each section.
- Appendix 1: Financial: Actual financial performance by Financier; Disbursements by Category and by component: Tables 1A, 1B and 1C.

- SOE – review log showing the expenditures items reviewed during the SOE review and observations requiring follow-up, and clearly document any ineligible expenditures identified and their values.
- Review log of previous years audit and supervision mission recommendations.
- Review the COSTAB if needed.

Duration and timing: He will undertake this assignment from 17 to 26 November 2019 in-country, including internal travel and report writing.

Frederick Kagaba, Procurement specialist, will be responsible for reviewing the procurement aspects. More specifically, in line with Module IV of the IFAD Procurement Manual, he will carry out the following tasks:

- Review the current Procurement Plan in order to assess it has been fully updated and upgraded, ascertain its completeness, its concurrence with the AWPB, and its consistency with the country systems and/or IFAD Procurement Guidelines and Handbook;
- Provide support, advice and recommendations on the following:
    a) The thresholds, ceilings and preferences to be applied in the implementation of procurement under the project;
    b) The contract types and contractual arrangements for goods, works and consulting services required to implement the projects;
    c) The proposed methods of procurement;
    d) The related IFAD review procedures and provide suggestions to improve the overall quality of the procurement processes;
- Review a minimum sample of 10% of all procurement contracts for compliance;
- Carry out spot checks on past procurement activities and assess the extent these adhere to Government and/or IFAD Procurement Guidelines and Handbook; in particular, verify that the goods, services and works procured correspond with the approved AWPB and Procurement Plan, in terms of quality and quantities;
- Review the procurement, contracting and implementation processes and timeliness and appropriateness of procurement actions;
- Assess contract administration and management procedures;
- Assess the procurement capacity of all entities to be reviewed in terms of manpower, levels of training of procurement staff, work environments and independence of procurement staff to carry out their statutory assignments;
- Conduct specific analysis of value for money (VFM) at all levels and the reasonableness of prices for:
- Goods, equipment, etc using available price indicators;
- Civil Works, compared to locally accepted standards and prices; and
- Services compare quality-output to international standards and prices;
- Determine whether adequate systems are in place for procurement planning, implementation and monitoring, and whether documentation are maintained as per required standards and can be relied upon;
- Verify to the extent possible, whether goods, works and consulting services contracted were supplied/completed according to the required specifications and technical standards;
- Review issues identified in the previous procurement review and aide-mémoire and procurement related issues identified in project audit reports;
- Identify deficiencies and make recommendations for improvements and control mechanisms in the procurement procedures and processes;
- Conduct a review of any significant changes in the borrower/recipient’s procurement system and practices, and ensure project procurement procedures and systems are updated accordingly;

- Review/update the Procurement Risk Assessment, using the IFAD Procurement Risk Matrix (Module I of the IFAD Procurement Manual);
- Assess further procurement staff training needs and ensure relevant training is planned and provided to project management and procurement staff in a timely manner;
- Submit an assignment report (as per IFAD format), and any other relevant ancillary documents;
- Carry out any other activity, as required by IFAD.

In light of the above, she will provide technical guidance and agree upon the necessary measures and recommendations to be executed for the remaining implementation period. In addition, she contribute to the draft Aide Memoire and overall final MTR report together with a technical annex.

Duration and timing: He will undertake this assignment from 11 to 17 November 2019. in-country, including report writing.

V. Mission Output

The mission will produce an Aide Mémoire and MTR report, including annexes, which will document the MTR findings and recommendations. The Aide Mémoire will be discussed with the Government authorities at a wrap-up meeting at the end of the mission. The draft MTR report to be discussed with the Government and shared with all relevant stakeholders shall be made available no later than 2 weeks after the end of the mission.

VI. Mission Documents

A copy of the RDDP Financing Agreement; Letter to the Borrower; and Project Design Document, including appendices, will be provided by IFAD. The other documents that will guide the work of the MTR mission will be made available by the SPIU by e-mail to all team members by 10 November 2019. These include:

- The final internal evaluation report that documents the self-assessment made by the SPIU-MINAGRI;
- A copy of the last supervision mission report and its working papers;
- A proposal of the mission’s schedule of work, including key meetings (Government and others);
- Progress reports of RDDP and services providers;
- The AWPB for the FY 2019/20;
- Tables on project financial progress (cumulative & per AWPB, per components, per category, including by financiers);
- Tables on physical progress against planned expenditures per component;
- MOU signed with all implementing partners;
- A table showing current progress on the procurement plan and the updated contract register, including all MOUs and amendments.

Appendix 5.2. Mission schedule

DATE	Time	Activity	Venue	Who	Responsible	Tasks
Monday 18/11/2019	8: am- 10 am	Meeting with CPO-IFAD	Kacyiru/FAO Conference meeting	All Team	To be chaired by CPO-IFAD	Briefing and discussion of the mission agenda
	10:00 am-12 pm	Meeting with SPIU team	MINAGRI conference meeting	All IFAD Team and SPIU including RDDP Field Staff	To be chaired by SPIU Coordinator	Briefing and presentation of RDDP achievements and the mission itinerary
	2 :30 pm - 3:30 pm	Meeting with Rwanda Council Veterinary Doctors (RCVD)	MINAGRI	Split team	APGS Specialist	Arrange for appointments
	2 pm -3:30 pm	Meeting with Rwanda National Dairy Platform (RNDP)	SPIU Offices	Split team	Market Support Specialist	Arrange for appointments
	4 pm -5 pm	Meeting IFAD Team with RYAF	SPIU Offices	Split team	M&E Specialist	Arrange for appointments
Tuesday 19/11/2019	9:00 am - 10:00 am	Meeting with Inyange Industries	Masaka	Eva and Paul	Michel	Arrange for appointments
	11.00 am-12.00 pm	Meeting with RCA	SPIU	Eva and Telesphore	Nutrition Specialist	Arrange for appointments
	11.00 am-12.00 pm	Meeting with Equity Bank	Town	Paul, Representative Officer	Shyaka Emmanuel	
	2.00 pm-4.00 am	Meeting with BDF	Town	Paul and Eva	Access to Finance Specialist	Arrange for appointments
	2 pm-3 pm	Meeting with RALIS	Kiyovu/Town	Alban, Vincent	Vincent	Arrange for appointments

DATE	Time	Activity	Venue	Who	Responsible	Tasks
	4.30 pm-6.30 pm	Meeting with Heifer International Rwanda	HPI Office/Kacyiru	All team	Vincent	Arrange for appointments
Field visits Wednesday 20/11/2019						
Group 1: Northern-Western Province	11h00-12h00	Visit Burera Dairy to discuss with MD/ALPHA MILK, new potential buyer through Privatization process on expectations from RDDP.	Cyanika/ Burera	Alban, Oscar, CPM, Martin, Joseph, Vincent and HPI Representative	Firmin	Arrange for appointments
	13h00-14h00	Visit of Fromagerie la Lumiere supported through matching grant	Musanze	Alban, Oscar, CPM, Martin, Joseph, Vincent and HPI Representative	Sosthene	Arrange for appointments
	14h30-15h30	Visit Mukamira Dairy to discuss challenges on milk value chain issues specially processed milk marketing	Mukamira/ Nyabihu	Alban, Oscar, CPM, Martin, Joseph, Vincent and HPI Representative	Alexandre	Arrange for appointments
	16h00-17h00	Visit Mahoko Milk sellers Cooperative & SME to discuss challenges on milk marketing and expectations from RDDP	Mahoko/ Rubavu	Alban, Oscar, CPM, Martin, Joseph, Vincent and HPI Representative	Fidele	Arrange for appointments
Group 2: Eastern Province	10h00-10h30	Meet the local authorities Discuss implementation of project activities.	Nyagatare	Kingori, Picot, Xavier and Emmanuel	Maurice	Arrange for appointments
	11h00-12h00	Visit Kamate MCC: rehabilitated, equipped and willing to upgrade into SME	Nyagatare	Kingori,Picot, Xavier and Emmanuel	Maurice	Arrange for appointments
	13h00-14h00	Visit of boreholes (1 completed and 1 ongoing)	Nyagatare	Kingori, Picot, Xavier and Emmanuel	Maurice	
	15h20-16h00	Visit Savannah Dairy to discuss challenges on milk marketing	Nyagatare	Kingori, Picot, Xavier and Emmanuel	Maurice	

DATE	Time	Activity	Venue	Who	Responsible	Tasks
	16h00-17h00	Visit Nyagatare RAB Station to discuss on overview, challenges intervention needs in: (i) milk value chain; (ii) forage conservation; (iii) quarantine station rehabilitation	Nyagatare	Kingori,Picot, Xavier and Emmanuel	Maurice	
Group 3: Southern Province	09h00-09h30	Meet the local authorities Discuss implementation of project activities.	Ruhango	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Gisele	
	10h00-11h00	Visit of a School or Hospital willing to open a milk selling point/Milk zone	Ruhango	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Gisele	
	12:00 -1: 00 pm	Break				
	1:30 -2:00 pm	Meet the local authorities Discuss implementation of project activities.	Nyanza	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	2:00-2:40 pm	Visit Nyanza Milk Industry to discuss challenges on milk marketing	Nyanza	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	3:00-4:00 pm	Visit the L-FFS group Zirakamwa/ Kigoma	Nyanza	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
Thursday 21/11/2019						
Group 1	8h00-9h00	Meet the local authorities Discuss implementation of project activities.	Rubavu	Alban, Oscar, CPM, Martin, Joseph, Vincent and HPI Representative	Fidele	

DATE	Time	Activity	Venue	Who	Responsible	Tasks
	10h30-12h30	Visit of Gishwati range land to see and exchange on findings from the livestock watering study	Nyabihu, Rubavu, Rutsiro	Alban, Oscar, CPM, Martin, Joseph, Vincent and HPI Representative	Alexandre, Maurice & Andre	
	13h30-14h30	Break	Musanze			
	15h00-16h00	Visit Kinigi or Muhoza MCC: rehabilitated, equipped and willing to upgrade into SME	Musanze	Alban, Oscar, CPM, Martin, Joseph, Vincent and HPI Representative	Sosthene	
	16h00-18h00	Return to Kigali				
Group 2	8h00-8h30	Meet with Individual farmer (Rusagara Damiel) supported by RDDP matching Grants	Nyagatare	Kingori,Picot, Xavier and Emmanuel	Maurice	
	10h00-10h30	Meet the local authorities Discuss implementation of project activities.	Kayonza	Kingori,Picot, Xavier and Emmanuel	Faida	
	10h00-11h00	Visit of the Community cow shed at Rugeyo IDP Model Village to discuss with beneficiaries	Kayonza	Kingori,Picot, Xavier and Emmanuel	Faida	
	11h30-12h00	Visit of Schools and/or Hospital willing to open a milk selling point/Milk zone	Kayonza & Rwamagana	Kingori,Picot, Xavier and Emmanuel	Faida & Vestine	
	13h00-14h00	Break	Rwamagana	Kingori,Picot, Xavier and Emmanuel	Vestine	
	15h00-16h00	Visit Gahengeri MCC: equipped and willing to upgrade into SME	Rwamagana	Kingori,Picot, Xavier and Emmanuel	Vestine	
	16h00-17h00	Return to Kigali				

DATE	Time	Activity	Venue	Who	Responsible	Tasks
Group 3	9h00-09:30 am	Meet the local authorities Discuss implementation of project activities.	Huye	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	10:00-10:40 am	Visit L-FFS group ABAHARANIRA KONGERA UMUKAMO/ MBAZI	Huye	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	11:00 am-12h00 pm	Visit Rubona RAB Station for New Bull Station site and constructed Nitrogen Plant	Huye	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	12H30: 1:00 pm	Visit KIDACO Cooperative financed by the project	Huye	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	1:30 -2:00 pm	Break				
	2:30-3:00 pm	Visit Inyambo Fresh Dairy: SME producing fresh pasteurized milk and fermented milk after being financed by the project with a Milk Pasteurized	Nyanza	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	3:30-4h00 pm	Visit of a School or Hospital willing to open a milk selling point/Milk zone	Nyanza	Eva,Chanoine,Aimable, Giulia, Michel,Madjid, Jean Paul ,Kamwe and RNDP Representative	Jean Noel	
	4:00-6h00 pm	Return to Kigali				
Friday 22/9/2019	9.00 am-5.00.pm	Pre-wrap up meeting and preparation of workshop	IFAD Office	IFAD Consultants		
	9:00 am-11 am	High level meeting with RAB management team	RAB HQ	IFAD :CPM&CPO	Michel	

DATE	Time	Activity	Venue	Who	Responsible	Tasks
				RAB: DG, DDG-ARTT, Head of department and Ag SPIU Coordinator,		
	2.00 pm-4.00.pm	Meeting with MINAGRI Authorities (PS & Minister)	MINAGRI	CPM, CPO & Ag. SPIU Coordinator	SPIU Coordinator	Arrange for appointments
Saturday-Sunday 23-24/11/2019	All day	Preparation of Aide-Memoire and workshop	Hotel	All team	Team Leader	
Monday 25/11/2019	9:00 am-5 pm	Workshop on findings and set new priority activities and formulated the recommendations of draft Aide Memoire	Hotel	SPIU team, RAB , representatives from service providers and IFAD Team	Eva	
Tuesday 26/11/2019	9:00 am - 12:00 pm	Individual meeting with SPIU Staff	SPIU	Split team		
	2:00 pm-5:00 pm	Preparation of Aide Memoire	IFAD Office	IFAD Team		
Wednesday 27/11/2019	9:00 am - 12:00 pm	Individual meeting with SPIU Staff	SPIU	Split team		
	2:00 pm-5:00 pm	Finalization of Aide memoire and submit it to SPIU and RAB	IFAD Office	IFAD Team	Team Leader & CPM	
Thursday 28/11/2019	9.00.am-12.00 am	Team meeting (rating)	IFAD Office	IFAD Team	Team Leader	Providing comments on the draft AM
	9.00.am-12.00 am	Review the draft Aide memoire	SPIU	SPIU and RAB Team	Michel	
	2:00 pm	Wrap up meeting with other key stakeholders	RAB conference meeting	SPIU team,RAB , representatives from	SPIU Coordinator	Invitation to Participants, Avail

DATE	Time	Activity	Venue	Who	Responsible	Tasks
				service providers and IFAD Team		the room and print out the copies of AM
Friday 29/11/2019	10 am - 12 pm	Revised Annual Work Plan and Budget FY 2019/20 and next AWPB FY 2020/21	Hotel	All team divided in 2 groups (comp 1&4,comp 2&3)	Alban and Eva	

People met
To be added by Alice when received from P

Appendix 6: Procurement

Review of the procurement plan: The progress on the implementation of the 2019/2020 PP is impressive in terms of procurement processes so far launched, but low in terms of fully complete processes with contracts dully signed. In total, the project planned to undertake forty three (43) procurement processes, and as of November 2019, twenty two (22) processes had been launched and published (51%), and twenty one (21) had not been launched (49%). Of the procurement processes so far launched, only thirteen 13 (30% of the planned) are fully complete and contracts signed. Overall, this presents a low performance on the implementation of the PP, and this is mainly because the PP for FY 2019/20 was uploaded onto the E-procurement system in September. At close to mid financial year, there is risk that some activities may not be implemented within the relevant FY.

RDDP is registered on the 'Rwanda E-procurement system (UMUCYO)', and by Law (circular No. 010/2018/2019-2884/RPPA), all procurement processes and the related PP are supposed to be published onto 'UMUCYO'. It has been observed that the excel based PP (for which a No objection was provided by IFAD) used to monitor implementation progress is different from the one uploaded onto 'UMUCYO', and that there are activities whose procurement processes have been conducted outside the system. The explanation provided for this anomaly is that, the activities were omitted by error and will be rectified, and that there are activities that are cross-cutting which if published by one of the IFAD projects in the SPIU, will be left by the other. Since the whole concept of E-procurement is new, RPPA should continuously build capacity of project staff on the use of the system. Not using the E-procurement system contravenes the public procurement Law and may have an effect on the 'Compliance Audit' conducted by the Auditor General annually.

Review of Ongoing/Completed Procurement Activities and Documentation: The SPIU properly keeps all documents regarding a particular procurement case under one file, making it easy for reference and review. A representative sample of 30% of procurement actions undertaken indicates that the documents pertaining to bidding processes, and bid evaluation reports are of good quality, and that there is overall compliance with government procurement regulations and IFAD guidelines. Refer to Appendix 1 for the procurement activities reviewed, and the detailed findings.

Contract Management: This function is the responsibility of the Procurement Unit (PU) and the user department. A contract manager is appointed for every contract, and the PU keeps records of correspondences related to the contract. However, the entire process of completing all tasks and terms that are mentioned as deliverable in the contract, in order to determine whether a contract has been ultimately and conclusively closed, are missing on file. And indeed, the contract register too does not show whether a contract is still ongoing or has been closed. It is important that all documents pertaining to the execution of a contract are kept on file to facilitate review of contract execution processes up to contract closure.

Review of issues identified in the previous review and aide-mémoire and procurement related issues identified in project audit reports: The previous mission had three agreed actions, and one (1) is fully implemented and the other two (2) are partially implemented. See table below for details.

Agreed action	Responsibility	Deadline	Status
Parties involved in the procurement cycle to play their roles timely e.g. provide bills of quantities on time, and avoid low implementation of the PP.	Procurement Unit/User departments	Continuous	Partially done since some ToRs for planned activities are yet to issued to the procurement department to allow publication of tenders.
Adhere to the bid evaluation period and the evaluation criteria for consultancies set out in the procurement Law.	Procurement unit	Continuous	Done

Put in place an effective contract monitoring system.	Procurement unit	Dec 2019	Not effective as yet, since the filing of documents related to contract execution processes up to contract closure is not in place.

Review of project's procurement filing system and the ease of document retrieval: The filing system at the SPIU is perfect. All documents pertaining to a particular procurement case are enclosed within a single box file and arranged in a manner that facilitates easy review. For example, documents are filed in a bottom – up approach, where the whole process from a requisition to contract signature are filed in a chronological order.

Review of any significant changes in the Borrower/Recipient's procurement system and practices: The procurement arrangements as identified at project design have slightly changed to a web based system through which various procurement operations are electronically conducted. The e-procurement system provides to bidders information on tender opportunities advertised by procuring public entities, and all the ensuing procurement processes until contract signature are done online. Within the SPIU, it is only RDDP that is registered onto the e-procurement system.

Actions	Responsibility	Deadline	Status
Procurement Plan: Request for No objection from IFAD timely to avoid late start of procurement processes	SPIU	Continuous	Agreed
Use E-procurement system as per government Law. Rectify the PP that has been uploaded onto 'UMUCYO'	SPIU	Continuous	Agreed
Documents pertaining to the execution of a contract should be kept on file to facilitate review of contract execution processes up to contract closure	SPIU	Continuous	Agreed

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Appendix 1: Detailed reviews - the sampled contracts are; Contracts Register line No. 137, 140, 142, 144, 145, & 147:

137. Addendum of the Contract for supply of equipment for vaccine storage for Rwanda Dairy Development project by; JV MUPENZI RWANDA & FAITH TRADING CO.LTD

#		
	Contract amount	FRW 305,030,000
1	Procurement Documentation (Filing)	Single file for all documents
	Date of tender issue	19/12/2018
	Bid opening date	17/01/2019
	Start date of evaluation	24/01/2019
	End date of evaluation	31/01/2019
	Bid validity period	120 days
	Final notification	25/03/19
	Performance guarantee	It is open ended, 30 days after delivery of goods
	Contract signature	16/04/2019
	No objections	All available
	How are these transactions referenced in Procurement Plan?	OK
2	Procurement method; describe the completeness of the bid documents (including the following sections: ITBs/BDS, Awarding Criteria, Schedule of Requirements or BOQs/Technical Specifications and Terms of Payment)	NCB, bid document is the recommended government bid document.
3	How was advertising or direct invitation done?	Published in national newspaper. IMVAHO NSHAYA No. 4713

4	What is the source of suppliers invited?	Public notice
5	What time was allowed for submission of bids?	30 days
6	Bid opening and minutes of bid opening: indicate number of participants, bid validity, and prices per lot	One bidder responded and was compliant with all the evaluation criteria
7	Were there any disqualifications? If yes, provide the reasons.	None
8	Did the procuring entity apply the Awarding Criteria properly?	Yes
9	How are the costs compared to budget and market price? Provide a table showing this comparison	N/A
10	Avail contract document or purchase orders	Available
11	Avail Bill of Lading, if any	N/A
12	What were the planned contractual completion dates?	60 calendar days after receipt of purchase order. There was a 90 day non cost extension of the contract for the reason that there was delay for the arrival of vessel at the port of discharge, and that factory which was to supply the refrigerator freezer had requested extra period for production .
13	Provide delivery receipts and similar instrument (inspection reports etc.)	Delivery notes available but not on file
15	Were there any amendments or contract modifications? If yes, indicate number, amounts, and %	None
17	Were there any contractual disputes? If yes, indicate the resolutions.	None
18	Were there any cost overruns? If yes, indicate reasons and explanations.	No
19	Has the contract been closed? If so, describe the process.	Technical report for receipt of goods not on file
20	Has the contract been closed? If so, describe the process.	The contract has been closed. Closing documents not on file.

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139. Recruitment of a consultant firm to conduct a study on private practice of exercising veterinary profession and artificial insemination services in Rwanda and recovery policy of public investment on behalf of RDDP by IRONA CONSULTANTS Ltd

#	Contract amount	54,000,000
1	Procurement Documentation (Filing)	Ok
	Date of tender issue	7/01/2019
	Bid opening date	05/02/2019
	Start date of evaluation	22/02/2019
	End date of evaluation	22/02/2019
	Bid validity period	120 days
	Contract signature	7/05/2019
	No objections	N/A
2	How are these transactions referenced in Procurement Plan?	OK
3	Procurement method; describe the completeness of the bid documents (including the following sections: ITBs/BDS, Awarding Criteria, Schedule of Requirements or BOQs/Technical Specifications and Terms of Payment)	QCBS, Bid document is the recommended government bid document.

4	How was advertising or direct invitation done?	Published in national newspaper/ IMVAHO NSHAYA No. 4732.
5	What is the source of suppliers invited?	Public notice
6	What time was allowed for submission of bids?	30 days
7	Bid opening and minutes of bid opening: indicate number of participants, bid validity, and prices per lot	Available, only one participant submitted a bid.
8	Were there any disqualifications? If yes, provide the reasons.	One bidder responded and was compliant with all the evaluation criteria
9	Did the procuring entity apply the Awarding Criteria properly?	Yes
10	How are the costs compared to budget and market price? Provide a table showing this comparison	N/A
11	Avail contract document or purchase orders	Available
12	Avail Bill of Lading, if any	N/A
13	What were the planned contractual completion dates?	90 calendar days after receipt of purchase order.
15	Provide delivery receipts and similar instrument (inspection reports etc.)	Completion report not on file
17	Were there any amendments or contract modifications? If yes, indicate number, amounts, and %	There was a no cost extension of 30 days
18	Were there any contractual disputes? If yes, indicate the resolutions.	None
19	Were there any cost overruns? If yes, indicate reasons and explanations.	No
20	Has the contract been closed? If so, describe the process.	Closed but reports not in procurement file.

Note: Procurement file should include all documents related to the contract until closure, e.g completion report, inception report.

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140. Supply and installation of milk cooling tanks and refrigerators on behalf of RDDP by EP NSHUTI BUSINESS Ltd

	Contract amount	120,000,000 FRW
1	Procurement Documentation (Filing)	Single file for all documents
	Date of tender issue	15/03/2019
	Bid opening date	19/04/2019
	Start date of evaluation	26/04/2019
	End date of evaluation	09/05/2019
	Bid validity period	120 days
	Final notification	Evaluation done in E-procurement
	Contract signature	06/08/2019
	No objections	All available except on contract
2	How are these transactions referenced in Procurement Plan?	Ok, referenced to the AWPB
3	Procurement method; describe the completeness of the bid documents (including the following sections: ITBs/BDS, Awarding Criteria, Schedule of Requirements or BOQs/Technical Specifications and Terms of Payment)	The procurement method is NCB, and the bid document is the recommended government bid document.
4	How was advertising or direct invitation done?	Published on E-procurement system.
5	What is the source of suppliers invited?	Public notice
6	What time was allowed for submission of bids?	30 days

7	Bid opening and minutes of bid opening: indicate number of participants, bid validity, and prices per lot	Opening done automatically by the system. 7 participants, bid validity is 120 days
8	Were there any disqualifications? If yes, provide the reasons.	Only one company qualified for technical evaluation. Others were disqualified at administrative stage for not providing; audited financial statements for 3 years, providing certificate of warranty for 1 year, and certificate of good completion.
9	Did the procuring entity apply the Awarding Criteria properly?	Yes
10	How are the costs compared to budget and market price? Provide a table showing this comparison	N/A
11	Avail contract document or purchase orders	Contract
12	Avail Bill of Lading, if any	N/A
13	What were the planned contractual completion dates?	3 months, end 28/10/19
15	Provide delivery receipts and similar instrument (inspection reports etc.)	Reports available, but not in procurement file.
17	Were there any amendments or contract modifications? If yes, indicate number, amounts, and %	There was one amendment due to an error where instead of end date being indicated as 28/10/2019, it was indicated as 27/01/2020.
18	Were there any contractual disputes? If yes, indicate the resolutions.	None
19	Were there any cost overruns? If yes, indicate reasons and explanations.	No
20	Has the contract been closed? If so, describe the process.	The contract has been closed. Closing documents not on file.

Note: Procurement file should include all documents related to the contract until closure, e.g delivery note, and goods received note.

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142. Recruitment of a consultant firm for feasibility study & detailed design and consultancy services for a modern bull station construction works project on behalf of RDDP by JV MAXWELL Ltd &DASUDA Ltd

#	Contract amount	FRW 55,000,000
1	Procurement Documentation (Filing)	Single file for all documents
	Date of tender issue	28/03/2019
	Bid opening date	26/04/2019
	Start date of evaluation	03/05/2019
	End date of evaluation	16/05/2019
	Bid validity period	120 days
	Final notification	E-procurement – automated 12/07/2019
	Contract signature	09/08/19
	Performance guarantee	N/A
	No objections	N/A
2	How are these transactions referenced in Procurement Plan?	OK
3	Procurement method; describe the completeness of the bid documents (including the following sections: ITBs/BDS, Awarding Criteria, Schedule of Requirements or BOQs/Technical Specifications and Terms of Payment)	QCBS/EOI, bid document is the recommended government bid document.
4	How was advertising or direct invitation done?	Through E-procurement system
5	What is the source of suppliers invited?	Public invitation

6	What time was allowed for submission of bids?	30 days
7	Bid opening and minutes of bid opening: indicate number of participants, bid validity, and prices per lot	Available
8	Were there any disqualifications? If yes, provide the reasons.	3 companies were shortlisted and they all qualified for technical evaluation, and two qualified for financial evaluation.
9	Did the procuring entity apply the Awarding Criteria properly?	Yes
10	How are the costs compared to budget and market price? Provide a table showing this comparison	N/A
11	Avail contract document or purchase orders	Available
12	Avail Bill of Lading, if any	N/A
13	What were the planned contractual completion dates?	5 months from effective date – effective as of 9th august 2019 to 9th January 2020
15	Provide delivery receipts and similar instrument (inspection reports etc.)	Contract on-going
17	Were there any amendments or contract modifications? If yes, indicate number, amounts, and %	None
18	Were there any contractual disputes? If yes, indicate the resolutions.	None
19	Were there any cost overruns? If yes, indicate reasons and explanations.	No
20	Has the contract been closed? If so, describe the process.	On going

Note: No contract management details on file, and hence cannot tell if there any challenges in the implementation of the contract.

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144. Contract for electrification for 7 milk collection centres (MCCS) on behalf of (RDDP) EDCL.

#	Contract amount	FRW 1,037,044,790
1	Procurement Documentation (Filing)	Single file for all documents
	Date of tender issue	19/02/2019
	Bid opening date	Single Source
	Start date of evaluation	06/03/19
	End date of evaluation	09/03/19
	Bid validity period	N/A
	Final notification	21/06/19
	Performance guarantee	Valid until Aug 2020
	Contract signature	28/08/19
	No objections	All available
2	How are these transactions referenced in Procurement Plan?	OK
3	Procurement method; describe the completeness of the bid documents (including the following sections: ITBs/BDS, Awarding Criteria, Schedule of Requirements or BOQs/Technical Specifications and Terms of Payment)	Single source since it is the only institution providing such services in the country.
4	How was advertising or direct invitation done?	Direct invitation
5	What is the source of suppliers invited?	Sole supplier of such services
6	What time was allowed for submission of bids?	30 days
7	Bid opening and minutes of bid opening: indicate number of participants, bid validity, and prices per lot	One participant

8	Were there any disqualifications? If yes, provide the reasons.	None
9	Did the procuring entity apply the Awarding Criteria properly?	Yes
10	How are the costs compared to budget and market price? Provide a table showing this comparison	Unit prices negotiated
11	Avail contract document or purchase orders	Available
12	Avail Bill of Lading, if any	N/A
13	What were the planned contractual completion dates?	10 months – effective 28th Aug 2019
15	Provide delivery receipts and similar instrument (inspection reports etc.)	Ongoing
17	Were there any amendments or contract modifications? If yes, indicate number, amounts, and %	None
18	Were there any contractual disputes? If yes, indicate the resolutions.	None
19	Were there any cost overruns? If yes, indicate reasons and explanations.	No
20	Has the contract been closed? If so, describe the process.	Ongoing

145. Addendum N0 1 for Supply &installation of solar powered boreholes for clean water supply to different milk collection centers located in Nyagatare, Kayonza District by WASAC.

#	Contract amount	FRW. 589,125,602
1	Procurement Documentation (Filing)	Single file for all documents
	Date of tender issue	16/02/2018
	Bid opening date	28/02/2018 submission of financial proposal
	Start date of evaluation	05/03/2018
	End date of evaluation	20/03/2018
	Bid validity period	N/A
	Final notification	18/07/2018
	Performance guarantee	20/10/19 – expired
	Contract signature	04/03/2019 as amended 06/09/2019 for 3 months to 6/12/2019
	Performance guarantee	Available expired on 31st August 2019 and not renewed
	No objections	All available
2	How are these transactions referenced in Procurement Plan?	OK
3	Procurement method; describe the completeness of the bid documents (including the following sections: ITBs/BDS, Awarding Criteria, Schedule of Requirements or BOQs/Technical Specifications and Terms of Payment)	Single source. No objection provided by RPPA as per government regulations.
4	How was advertising or direct invitation done?	Direct invitation
5	What is the source of suppliers invited?	Single source
6	What time was allowed for submission of bids?	30 days
7	Bid opening and minutes of bid opening: indicate number of participants, bid validity, and prices per lot	N/A. financial offer negotiated.
8	Were there any disqualifications? If yes, provide the reasons.	N/A
9	Did the procuring entity apply the Awarding Criteria properly?	Yes
10	How are the costs compared to budget and market price? Provide a table showing this comparison	N/A

11	Avail contract document or purchase orders	04/03/2019 as amended 06/09/2019 for 3 months to 6/12/2019
12	Avail Bill of Lading, if any	N/A
13	What were the planned contractual completion dates?	6 months from 04/03/2019 as amended 06/09/2019 for 3 months to 6/12/2019
15	Provide delivery receipts and similar instrument (inspection reports etc.)	Ongoing
17	Were there any amendments or contract modifications? If yes, indicate number, amounts, and %	None
18	Were there any contractual disputes? If yes, indicate the resolutions.	None
19	Were there any cost overruns? If yes, indicate reasons and explanations.	No
20	Has the contract been closed? If so, describe the process.	Ongoing

Note: The initial contract duration was 6 months from 04/03/2019 and was amended on 06/09/2019 for 3 months period; to expire on 6/12/2019. The performance guarantee expired on 31st August 2019 and was not renewed following contract amendment.

Follow up on recommendation of previous mission

Colour code and analysis:	**Not implemented: 18 out of 81 = 22%**
	Partially implemented: 39 out of 81 = 48%
	Implemented: 24 out of 81 = 30%

44 recommendations are repeated at MTR (Yes in last column) = 54%

Component	Responsibility	Deadline	Implementation Status at 18th November 2019	Recommendation repeated at MTR + colour code
Component 1				
1.FAO support mission to assess L-FFS approach and propose measures to improve	FAO, FFS specialist	Sep '19	Contract with FAO was signed. Waiting for the availability of the consultants and start the implementation.	Yes
2.Use one common curriculum for all L-FFS (include HPI curriculum)	HPI, FFS Specialist	FY '19-'20	We have incorporated a budget for integration of the Value based holistic community development approach of the HPI into the L-FFS under the budget line C1104104, to harmonize the training content provided in all established L-FFS groups HPI is participating and will continue to participate in the establishment and development of the farmer field schools with the inclusion of its VBHCD approach. HPI also has provided 12 L-FFS technicians based at district level and 2 L-FFS Coordinators and have been trained as L-FFS master trainers.	Yes
3.Exchange visits to Kenya/Zanzibar for facilitators, RAB officials and project staff; additional internal project exchange visits between FFS groups and facilitators	HPI, FFS Specialist	FY '19-'20	This activity was incorporated in the AWPB 2019/2020 under the budget line C110304. The activity will be implemented after the arrival of the FAO TA.	No
4.*Twigire Mworozi:* Initiate to adopt L-FFS as national livestock extension approach	RDDP team, SPIU coordinator, RAB	Jan '20	Dialogues started with RAB authorities but not yet completed. The implementation of the Twigire approach in livestock will require the implementation of the FP (farmer promoter model) in addition to FFS. The FPs in livestock will play the role of CAHWs and will be placed at village level. This will bring fantastic synergy to existing FFS speeding up the extension impact as many farmers will be reached in short time.	Yes
5. Link CAHW program / other vets to FFS and other project activities.	FFS and AH Specialist	Sep '19	This was done through L-FFS coordination activities at district level which bring together all project extension actors including CAHWs. These are mainly: District extension staff, RDDP Field Officer, L-FFS	No

			master trainers, L-FFS facilitators, Community facilitators/HIR, CAVES/HIR. They met and discussed the role of each and everybody in the achievement of the project objectives.	
6. Adapt FFS curriculum for FAs to suit the needs. Pilot performance based payment system for FAs.	FFS and AH Specialist	Sep '19	The specific package for training of farm assistants is being improved considering the specific needs that were identified during the mapping exercise. This will focus mainly on diseases control, milk hygiene, feeds and feeding, group savings and loans etc.	Yes
7.Ensure equipment is placed at FFS/Cooperative level for the benefit of learning in FFS groups	RDDP team	June 2019	The procured equipments were distributed to L-FFS groups for learning and demonstration and they are in service. For baler machines and tractors, we are waiting for plates to start servicing them in the communities.	No
8. Incorporate FEAST findings into project implementation, include cost element.	AP&FFS specialists	FY'19-20	The implementation of feed interventions (results from Feed assessment tool) findings is planned in the AWPB 2019/2020. The activities related to training and demonstration on forage conservation and conservation of crop residues were undertaken through L-FFS groups in 12 Districts of RDDP since July 2019 and will continue during the harvesting period of different forage varieties and crops (mainly for maize, beans, and soy). In addition, some activities will continue to be conducted after getting the results from feeding trials of dairy cows which are ongoing in RAB stations for example, Musanze-Kinigi station. The cost-benefit analysis of different feed interventions is going to be conducted with the technical support from ILRI.	Yes
9.Finalize strategic studies	AP & AH specialists	June 2019	The study of Animal Feed Law and Ministerial Order and Financial Sustainability of RCVD an Income generating activities were completed. The study on the private practice of exercising veterinary profession and AI services in Rwanda and cost recovery policy of public investment is almost done. The draft report was approved and the final report was submitted, and its presentation is going to take place before ending November 2019.	Yes
10.Incorporate research findings into project implementation	RDDP team, SCDR, RNDP	FY'19-'20		No
11. Findings of privatization study on support services to be integrated into project, including the organization of support service providers.	RDDP team	FY'19-'20	The study on the private practice of exercising veterinary profession and AI services in Rwanda and cost recovery policy of public investment is almost done. The draft report was approved and the final report was submitted, and its presentation is going to take place before ending November 2019. Findings will be integrated into project, including the organization of support service providers.	Yes
12.Prioritize cow fertility, finalize ongoing study and commission follow-up study	AP specialist	FY'19-'20	The study on adoption and success rate of Artificial Insemination (AI) was completed and the project is organizing a big forum/workshop with stakeholders in dairy subsectors, including policy makers in December	No

			2019 to present the findings and being approved before disseminating to users. A follow-up study on cow's fertility to identify the key constraints on low fertility rate is planned in the AWPB for FY 2019-20 is going to be conducted by RAB Scientists through MoU.	
13. Focus CAHW program in selected districts and organize CAHW associations.	AH specialist	FY'19-'20	72 CAHWs were trained and equipped in Nyagatare District and are integrated into LFFS In RDDP action plan and budget FY 19/20 we planned to train 150 CAHW which will be chosen from Huye and Rubavu Districts.	No
14. Expand Mastitis program, use SCC and CMT equipment at MCC and farm level	AP/AH/FFS specialists	FY'19-'20	The program of mastitis control is being implemented with focus in Gishwati milk shed and Gicumbi District which have a high prevalence of mastitis. CMT are being used to screen cows at farm level.	No
15. Study on AMR, procurement of detection kits	AH specialist	FY'19-'20	The rapid antibiotic residues test kits were bought and distributed in all concerned areas such as Gishwati milk shed (Nyabihu, Rubavu and Rutsiro), Nyagatare, Kayonza and Gicumbi. Regarding the prevention strategy for Anti-Microbial Resistance (AMR), there is a technical assistance from Brazil that will come to assess the status and provide the recommendations to be undertaken by the project	No
16. Support development of quality payments	FO specialist	FY'19-'20	Producing and keeping good quality milk has a cost and normally that incentive of producing good quality milk should be paid by Milk processors. RDDP will continue mobilizing farmers to produce good quality milk and sensitizing milk processors to pay that incentive.	No
17. Organize seed multipliers into cooperatives	AP, FO specialists	FY'19-'20	This activity was planned in the AWPB for FY 2019-20. First, the whatsApp groups were created in East, South, North, and West to ensure regular communication on market opportunity and challenges so that we can take actions on time. Secondly, forage seeds multipliers established the committees at District level each zone made official (written letters) request to DG RAB to become seed multipliers. Currently, Eastern zone received acceptance letters, and other zones are still waiting. During agricultural season 2020A, RDDP project linked those multipliers with his current supplier where he bought the required seeds and vegetative materials from them and being distributed to dairy farmers in the RDDP districts of interventions. From January 2020, RDDP project will meet conduct meetings with seeds multipliers to create 1 cooperative at province level to ensure that they have access to market easier	Yes
18. Promote 4Ps with feed **manufacturer**	AP specialist	FY'19-'20	This activity is planned to start in January 2020, where Project will organize the awareness meetings to discuss with feed manufacturers about the available opportunities through matching grant	No

19. **Drilling and Equipping of boreholes**: (i) increase participation of beneficiaries in the design process; (ii) ensure to complete Bill of Quantities (BoQ); (iii) Outsource on-site supervision of construction and involve user communities in monitoring of the construction; (iv) include training in both organization & management and operation & maintenance; (v) the training should include a maintenance plan specific to each of the infrastructure	SPIU, technical staff	June 2020	Water users committees were established for the completed sites (5) in Nyagatare District and are functioning where they also fixed the contribution modalities (Monthly payment) for beneficiaries of water to ensure security, regular maintenance when damages occur, and the new committees will be established from December 2019 to the remaining sites. Also, in partnership with WASAC, a training to the water users committees will be organized from January 2020 regarding organization, management and maintenance of infrastructures.	Yes
20. **More comprehensive guidelines on "climate-smart" investments**: create a more comprehensive list of approved CS interventions (mitigation and/or adaptation).	SPIU, Access to Finance Officer, IFAD	June 2019	Not yet done and need more discussions during the MTR	Yes
21. Improve coordination between SPs of component 1 (e.g. regular coordination meetings).	SPIU, SPs	June 2019 on wards	Coordination meetings with service providers (SPs) are organized on quarterly basis but also punctual meetings are organized whenever necessary to resolve any issue or try to speed up activity that seems dormant.	Yes
Component 2: Producer organizations and value chain development				
Analysis of ranking of MCCs and Dairy Cooperatives 22. Analyse the detailed mapping/ranking of MCCs and dairy cooperatives, to define specific interventions for improvement and update this information bi-annually to track progress.	SPIU, RCA, RYAF	September 2019	Recommendation implemented, Cooperative managing MCCs are monitored and ranked on regular basis (quarterly) to track their performance. Analyzing cooperative managing MCCs that are almost representing around 80% of dairy cooperatives in general, gives a true picture of performance of dairy cooperatives.	Yes
Cooperative Strategic 5-year Plans: 23. RDDP to follow-up on implementation of the plans and find BDSPs to support MCCs and Cooperatives in implementing strategic plans, with a specific focus on dairy marketing and business.	SPIU, SPs	December 2019	From the FY started on 1st July 2019, the MCCs are implementing the action plan provided during the development of the 5-year strategic plans for the milk collection centers. The RDDP is under monitoring of this implementation.	Yes
Match RYAF staff to MCC needs 24. Post RYAF consultants with skills matching priority needs emerging from	SPIU, RYAF	July 2019	This activity has been done, whereby the RYAF consultants are matching with priority needs at MCCs.	No

the ranking exercise at MCC and keep their task focused.				
Strategy phasing out of RDDP paying RYAF staff 25. For next FY start co-financing of 25% salary by cooperative. The year after 50%.	SPIU, RYAF	July 2019	Co-financing RYAF Consultants by MCCs was considered in the annual work plan and budget 2019-20, whereby RDDP planned to avail 75% of the initial support and the cooperative/MCC will to top-up with the balance representing 25%.	Yes
Capacity building beyond Executive Committees 26. Continue to expand the participants of capacity building beyond the Executive Committees and organise most training and coaching on site. Plan for follow-up coaching and feedback sessions with members.	SPIU, SPs, RCA	July 2020	This is being done by RCA	No
Study tours and Training by Cooperative members 27. Provide opportunities for study tours for cooperative members to other cooperatives, and provision of training by Cooperative members to other cooperatives.	SPIU, SPs	July 2020	10 cooperative members participated in 15th ESADA Conference and Exhibition in Kenya. Thy have learnt updated dairy technologies and shared experience with other farmers from the whole East Africa. They have managed to make contacts with equipment manufacturers for the acquisition of standardized equipment. Coaching dairy cooperatives on Cooperative Governance, leadership, financial management are ongoing.	No
New cooperative formation 28. Form cooperatives only in those cases where members want to do business together, otherwise form Associations.	SPIU, RCA, RGB	July 2020	This will be done in collaboration with RCA	No
29. Ensure there is beneficiary participation from feasibility& design stage and through the entire implementation process.	SPIU	Continuous	The mobilization and sensitization of farmers to avail their contributions are being carried	No
30. Engage supervising consultants for the infrastructure that is under direct supervision.	SPIU	Immediate	This is being done and for the new contracts related to the construction of infrastructures, a supervisor company is planned to be recruited.	Yes
31. Provide for capacity building of the user communities in operations and maintenance of their respective infrastructure.	SPIU	immediate & continuous	Recommendation implemented, the user communities of infrastructures developed such as boreholes were formed and trained on operations and maintenance and the activity is continuous.	Yes
32. Provide Technical Assistance in developing implementation guidelines.	IFAD	October 2019	Technical assistance from IFAD is given upon request by SPIU.	No

BP data aggregation and analysis: 33. Aggregate BP data and perform a simple statistical analysis on investment category (MG window, climate smart, veterinary, etc.) and other themes such as gender, youth, district, etc.	SPIU (Access to Finance)	October 2020 (before MTR)	Recommendation implemented. The template for the approved BPs shows the window/category, climate smart BPs including gender disaggregated data.	Yes
Proactive BP development support by enterprise development specialist: 34. Work with business development SP on enterprise development, especially processing and marketing.	SPIU (Access to Finance)	June 2020	Terms of reference for the recruitment of business plans service providers developed and shared with IFAD for no objection and waiting for response.	Yes
Rural finance strategy and involvement of commercial banks, MFIs, and other FSPs: 35.With support from a specialized TSP and in close coordination with BDF, the SPIU should: (i) develop a strategy to enhance project beneficiaries' access to financial services; (ii) identify knowledge gaps among FSPs (and BDF) and conduct a training on dairy sector and its value chains including marketing and processing; (iii) work with commercial banks, MFIs and other FSPs to develop specific products targeting cooperatives and dairy farmers and enhance their knowledge and appetite for dairy sector (e.g. creation of a finance forum).	SPIU, TSP (Rural Finance Specialist), BDF	October 2019 (Strategy) September 2020	(i) Regarding the strategy to be developed, it is planned to organize a consultation meeting with stakeholders (Access to Finance Rwanda and BDF) in December 2019 to agree on the concept for the elaboration of the strategy. It is expected that IFAD will send an Expert in rural finance to support in this process of developing the above strategy as promised. (ii)Terms of reference for the recruitment of a service provider who will provide capacity building on financial literacy, governance and financial management have been developed and shared with IFAD for no objection and waiting for response. (iii)Terms of reference for the recruitment of a service provider who will provide capacity building of MFIs and SACCOs on products development in the dairy value chains were developed and shared with IFAD for no objection and waiting for response.	Yes
36. Explore the possibility of scaling up HPI pilot on digitalization of the dairy value chain, to involve a larger number of RDDP beneficiaries.	SPIU/HPI	September 2019	The activity is ongoing	Yes
37. Develop a sustainable exit strategy for the livestock insurance scheme exploring the possibility of linkages to GoR's National Agricultural Insurance Scheme (NAIS).	HIP/SPIU	December 2019	The activity is ongoing	Yes

38. Review the existing study (-ies) on dairy value chain and undertake a dairy market assessment study that identifies emerging market opportunities.	SPIU	June 2020	The terms of reference for a dairy market assessment study have been elaborated.	Yes
39. Explore the opportunities for co-financing of new MCCs with private sector and financial institutions.	SPIU	October 2019	This shall be discussed during the Mid-Term Review	Yes
Component 3 Institutional and policy development				
40. Support to and involvement of RNDP: Provide support for the ratification of Dairy Platform law (submitted in June 2018 to MINAGRI) and expand the role of RNDP in project implementation, through the amendment of the MoU signed with MINAGRI.	SPIU, RNDP, MINAGRI	Immediate	The activity is planned under the action plan and budget FY 2019/20.	Yes
41. Establish District Dairy VC Platforms: Task RNDP with forming District Dairy VC platforms to identify VC problems, link VC actors and agree on joint solutions and monitor MCC performance.	SPIU, Districts, RNDP	Sept 2019	The District Dairy VC Platforms have been established in Nyabihu, Kayonza, Rwamagana, Musanze and Nyagatare districts.	Yes
42. RALIS staff training to be undertaken.	RALIS	June 2019	The training of RALIS staff was prepared but is still waiting the approval of their travel clearance from the ministry.	Yes
43. Support evidence-based formulation of thematic policies and strategies using national and district platforms for policy dialogue and stakeholder consultation.	SPIU, RNDP, MINAGRI	June 2019	The recommendation was implemented and the support is planned in AWPB FY 2019/20.	Yes
Cross-cutting Issues				
Targeting and outreach				
44. Prepare a youth targeting strategy, as part of preparation for MTR.	RDDP Manager Gender specialist,	Dec '19	The SPIU has designated a team to elaborate the strategy. Preliminary meetings have been conducted. It was expected to finalize this in November but due to other urgent duties of team members in November the final meetings to validate the strategy will be in December.	Yes

45. Register and compile overview of gender, age and socio-economic categories of beneficiaries, such as for example L-FFS participants.	RDDP Manager Gender specialist, FFS Specialist	October 2019	This is being done according to the recommendation	Yes
46. Create guidelines for RDDP interventions outside target districts	SPIU, IFAD	October 2019	The areas that need the guidelines were identified and it's for the support of interventions with national interests in relation to dairy sub sector such as: vaccination campaigns, semen and liquid nitrogen distribution, construction/rehabilitation of quarantine posts, national vet lab and its satellites, and milk marketing,	Yes
Gender				
47. Find a way to provide remuneration for farmer facilitators/ambassadors in gender awareness training at District level.	Gender specialist, FM, Procurement, RDDP Manager	July 2019	This was discussed with Financial Department and recommended to follow the procedures as did the L-FFS specialist. After checking the modalities which are being used by L-FFS facilitators it was found that the services provided by GALS facilitators are not in the similar context with those provided by L-FFS facilitators. So there is a need to find other modalities which are respecting financial procedures. (The discussions which are ongoing with IFAD and Oxfam could be an alternative solution).	Yes
48. Organise training workshops to sensitize service providers in remaining 7 districts.	Gender specialist, RDDP Manager	December 2019	This was discussed with the Acting Program manager and provisionally planned to be held in December.	No
49. Assess whether it is legally possible to combine the upcoming baseline gender study with assessment of some preliminary mid-term result from GALS in 5 Districts.	Gender specialist, FM, Procurement, RDDP Manager	June 2019	This has been implemented as recommended the consultant introduced an aspect of assessing some results on GALS implementation (The draft report will be submitted in the starting week of December 2019)	No
50. RDDP to provide for agreed allocation to MINAGRI for data collection to establish WEAI.	SPIU coordinator RDDP Manager, Gender specialist	December 2019	SPIU signed MoU with MINAGRI and Frw 130 Million was transferred to MINAGRI for data collection to establish Women's empowerment in agriculture index (WEAI). The draft report is available.	No
Nutrition				
51. **Nutrition campaign at the grass-root level**: after the milk consumption awareness campaign at the district-level, for FY2019/20, the awareness raising campaign should continue at the sector-level.	SPIU, MCC, L-FFS	June 2020	The preparations of the Milk Consumption Awareness Campaign are almost at the end and the works on fields are to start soon. The design is up down to make sure the messages reach in the communities.	Yes
Adaptation to Climate Change				
52. Review and revise the time allocation of the officer in charge of environmental issues in SPIU to support RDDP activities.	SPIU	June 2020	The officer in charge of environment started working with RDDP Team. For example, she is involved in reviewing the environment impact assessment for livestock watering system studies in Gishwati and Kayonza.	No

53. **Technical support for SPIU staff**: conduct training on (i) climate smart practices for relevant SPIU staff and (ii) GHG calculations.	SPIU, IFAD	December 2020	Activity planned to be conducted in January 2020	No
Environment and natural resource management				
54. **Fodder and forage production**: (i) include more agroforestry trees and (ii) include training on manure utilisation in L-FFS	SPIU Animal Production and field officers	FY'19-'20	As pilot, 200,000 seedlings of fodder trees (Calliandra and Leucaena) were prepared in 10 Districts of RDDP mostly in zero grazing areas except for Nyagatare and Kayonza, and being distributed to dairy farmers during the season of 2020A. The seedlings of Calliandra and Leucaena were prepared through 20 L-FFS groups (2 groups per District, each prepared 10,000 seedlings). After this season, we will review the implementation status and faced challenges with the aim to extend the areas and quantities of seedlings to be prepared.	No
55. Explore the possibility of collaboration with Landscape Approach to Forest Restoration and Conservation (LAFREC) in Gishwati areas to include fodder trees in the land restoration initiative.	SPIU Animal Production and field officers	FY'19-'20	We made the contact to LAFREC but we are a bit challenged by the fact that LAFREC is in the exit period (Closing by 2020), and the activities related to agroforestry trees plantation were completed. Having collaboration with another project in this situation could not be a good strategy. As further option, RDDP will continue to collaborate with L-FFS groups located in Nyabihu District (around Gishwati area) in producing fodder trees, which can be grown on progressive and bench terraces where farmers use to produce food crops to ensure availability of fodder rich in protein to dairy cows and contributing to soil protection and erosion control.	No
Project Management				
56. Support RDDP to engage extra staff or dedicated service providers to promptly support project activities and address emerging needs.	SPIU Coordinator, RAB	June 2020	We engaged staff from service providers and ministry for the energy needs such evaluation of performance of MCCs, data collection on milk production, new design of MCPs and MTR preparation, etc…	Yes
57. Designate one of the existing technical staff as focal person to coordinate and follow-up policy issues/interventions under component 3.	SPIU Coordinator, Project Manager	June 2019	This was done; the SPIU assigned the Nutrition Specialist.	Yes
58. Form a milk marketing working team (members not limited to RDDP/SPIU) under RDDP.	Programme Manager	June 2019	The milk marketing working team was established.	No
59. Concentrate contract management of SPs under component 2 to two technical staff (FO and AH specialist).	Programme Manager	June 2019	This was done.	No

60. Develop a detailed Project Implementation Manual	SPIU Coordinator/ RAB	October 2019	The tender of recruitment the consultant who will develop a detailed Project Implementation Manual is under process	No
61. Organize a strategy workshop to prepare the ground for MTR and adjust the proper strategy and Theory of Change to better address emerging challenges	SPIU	September 2019	The workshop was organized and a self-assessment document for MTR was prepared and will be shared with IFAD mission	No
Actions M&E				
62. Develop the project M&E plan.	MIS Head SPIU and M&E officer	October 2019	The project M&E plan is under development.	No
63. Explore the possibility of use/access of a decentralized MIS aligned and being hosted by the MINAGRI MIS.	MIS Head SPIU and M&E officer, RAB	November 2019	Meeting with the MIS team in MINAGRI and the possibility of use/access of a decentralized MIS aligned is being under analysis.	Yes
64. Data collection tool improvement: Add disaggregation by age (Y and NY).	MIS Head SPIU and M&E officer	June 2019**June**	This was done	No
65. Adopt the new template shared by IFAD to be used for semi-annual report and the progress report before the ISM.	MIS Head SPIU and M&E officer M&E officer	October 2019	This was done.	Yes
66. Add in the AWPB Excel sheet 2 or more columns to report on progress on activities implemented and budget utilized for each activity line of AWPB.	MIS Head SPIU and M&E officer	July 2019	This was done	Yes
67. Include indicators such as AI conception rates, inter calving time, home/calf consumption of milk, manure benefits, milk recording.	RDDP team, M&E officer	June 2019	The data collection for these indicators will be done during the study of annual outcome survey under tendering process.	Yes
68. Log frame should be updated whenever data is available at least twice a year and in line with the data presented in the progress report.	MIS Head SPIU and M&E officer	June 2019	This is being done.	Yes
69. Conduct an annual outcome survey to inform the MTR: i) TORs finalized and IFAD NO obtained.	MIS Head SPIU and M&E officer	August 2019	The ToRs developed for the recruitment a company who will conduct an annual outcome survey.	No
ii) Conduct a survey and finalize a report.	MIS M&E officer and M&E officer	October 2019	The tender advertised on e-procurement channel.	No
Knowledge Management				
70. Ensure capture of lessons learned also from challenges that lead to change of implementation activities or modalities.	KM specialist	October 2019	This is being done and captured in the progress reports.	Yes

71. Finalize KM activities and implementation plan for 2019-2020.	KM specialist	May 2019	This was done and KM activities have be integrated in the action plan and budget FY 2019/20.	Yes
Financial Management				
Withdrawal applications. 72. Prepare and submit withdrawal application number 20 to obtain funds for implementation of the 2019/20 AWPB.	SPIU DAF	May 2019	WA 20 and subsequent WA were submitted for 2019-20 AWPB implementations still continuous.	No
Project cost tables. 73**.** Engage a consultant to revise the project cost tables. The specialist should work with the relevant technical specialists to properly define activities.	IFAD Rwanda ICO/SPIU DAF	November 2019	This will be done during the Mid-Term Review Mission	Yes
Authorised allocation. 74. Carry out a cash flow analysis and present a request for increase in authorised allocation.	SPIU DAF	July 2019	Request was submitted based on cash flow analysis we wait for response from FMD.	No
Accounting systems. 75. Follow up with the PS MINECOFIN and Accountant General to confirm roll out of the project module of IFMIS.	IFAD Rwanda ICO/DG RAB	July 2019	The issue is still pending we use parallel software.	Yes
AWPB. 76. Submit the AWPB for the FY 2019/20 to IFAD for No Objection.	SPIU Coordinator	May 2019	The action plan and budget FY 2019/20 was done and approved by IFAD	No
SOE Review. 77. Expenditure items should be included in SOEs only after they have been justified and justification accepted.	SPIU DAF/Chief Accountant	May 2019 2019/Ongoing	Continuous action and expenditure have been justified.	No
GoR in-kind contribution. 78. Compile all items of in-kind contribution and engage services of a professional Valuer to facilitate valuation and reporting of in kind contribution.	SPIU Coordinator/DAF	July 2019	Tender in process	Yes

Procurement				
79. Parties involved in the procurement cycle to play their roles timely e.g. provide bills of quantities on time, and avoid low implementation of the PP.	Procurement Unit/User departments	Continuous	This is being done	No
80. Adhere to the bid evaluation period and the evaluation criteria for consultancies set out in the procurement Law.	Procurement unit	Continuous	This is being done	No
81. Put in place an effective contract monitoring system.	Procurement unit	Dec 2019	The contract monitoring system is being used for the contract management.	No