



IMPACT STUDY AND ASSESSMENT OF MATCHING GRANTS ON RDDP BENEFICIARIES THROUGH BDF

FINAL REPORT



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EXECUTIVE SUMMARY

The aim of this assignment was to assess the socio-economic impact of the matching grant (MG) model on poor households' welfare of Rwanda Dairy Development Project (RDDP) beneficiaries. Specifically, the study focused more on the socio-economic impact of the matching grants to the poor household farmers including not limited to youth and women in terms of milk production, consumption and sales (market increase), household income, nutritional status, and overall resilience. The study also assessed levels of farmers' linkage to financial institutions and its contribution to agriculture finance. Further, the study looked at the contribution of RDDP MG (mainly water tanks and solar panels) on climate change. Furthermore, the overall contributions of the matching grants to the development of dairy value chain was assessed. Finally, a SWOT analysis framework was used to assess challenges of the matching grants and provide recommendations for future considerations.

The study area covers 19 districts including 14 in the project target area and 5 districts outside the project operational area. RDDP area of operation covers 14 districts in the four Provinces of Rwanda: East (Nyagatare, Rwamagana, Kayonza, and Gatsibo), North (Gicumbi, Burera, and Musanze), West (Nyabihu, Rubavu, Rutsiro, and Ngororero) and South (Nyanza, Huye, and Ruhango). In addition, Ngororero and Gatsibo districts were included in the study area during the project mid-term review of November 2019. Five (5) districts in the control group cover Ngoma, Gakenke, Karongi, Gisagara and Nyaruguru.

Therefore, the scope of work for consultancy activities focused on collecting information in 14 RDDP targeted districts of interventions and other five out of the project operational area. During data collection, the consultant met with the following RDDP matching grant supported beneficiaries through BDF: (1) private individuals including youth and women; (2) private companies; (3) cooperatives; and (4) registered associations like LFFs groups.

This impact study and assessment of the MG employed a multiple sampling techniques involving a two-way sampling procedure. A mixed method approach of data collection was used to collect both quantitative data and qualitative information. To determine the impact of the project on the matching grants beneficiaries we used a household survey collected from 1500 respondents, including 1000 beneficiaries and 500 non-beneficiaries. Second, this study tried to assess the performance of the RDDP matching grants using key

informant interviews (KIIs), focus group discussions, a SWOT analysis framework, and OECD criteria such as relevance, effectiveness, sustainability and impact.

The review identified that like other similar government projects (such as SAIP, PRICE, NEP and PASP) and programs from non-governmental organizations (R-YES, HINGA WEZE and ORORA WUNGUKE) directly targeted smallholder farmers, RDDP MG has specifically improved and strengthened the dairy value chain organized into cooperatives, Livestock Farmer Field Schools (LFFS) groups, and individual entrepreneurs either engaged in production and primary processing in the dairy value chains. The common features for all those projects is that individual entrepreneurs and cooperatives could be selected based on successfully prepared business plans (BPs), where applicable, and addressed post-harvest issues. Specifically, PRICE contributed to the creation of rural enterprises and employments mainly in tea, coffee, horticulture and sericulture components, and introduced Revolving Fertilizer Scheme. These projects also aimed at strengthening the capacity of farmers' organizations and other value chain actors and improving their access to finance. In addition, SAIP focuses on skills development and business training of youth and women in cooperatives and/or individual entrepreneurs, already managing or wanting to start up a business, and supports farmer groups in capturing value, by promoting quality enhancing and pre-processing activities, such as cleaning, grading, sorting, and packaging. Following these pre-processing activities, the project supports as well selected cooperatives, farmers and agro-processors to obtain quality certification, to ease access to domestic and export markets. The project supported financial literacy of farmers through provision of financial skills to cooperatives for example, business planning and financial management, enhancement of the culture of savings, and use of credit and better portfolio management of selected Savings and Credit Cooperatives (SACCOs). This could be an area where the matching grants should concentrate on to increase the capacity of beneficiaries in terms of pitching business ideas in the dairy sector and preparation of business plans as well as financial management.

The results of impact study and assessment report of RDDP project show that the matching grants has contributed to improved livelihood of small scale dairy farmers, increased household income and welfare of dairy value chain players, improved market access of milk production and dairy products and improved household food security and nutrition. Specifically, the study has found that the impact of the matching grants could be noticed in the following areas:

- ***Improved livelihood of dairy farmers through increased income, asset building milk production as well as improved milk quality.*** The matching grants has improved the livelihood of dairy farmers through increased household income and welfare, as well as resilience to climate change through asset building. The MG has resulted in improvements in household living conditions, in terms of

access quality of roofing materials, improved sanitation and asset ownership including mobile phones, and thus contributed towards to the overall project of pro-poor national economic growth while improving the livelihoods of poor rural households. Various factors that contributed to this change are related to improved marketing of milk resulting in increased cash income accruing to livestock farmers. Higher volumes of milk are marketed and the price per liter of milk has increased compared to the situation before the grants.

- ***Improved market access due to improved milk handling practices and increased milk transportation facilities.*** The study shows that there is significant change in quality of milk leading to improved milk marketing and increase in value of milk sold. For instance, the price of milk ranges between Frw 300 and 350 depending on the location and market, from less than Frw 200. The quality of milk has increased thanks to increased knowledge on milk hygiene and standards, and through acquired equipment for milk testing, cans for milk handling as well as motorbikes and bicycles for rapid milk transportation to milk collection facilities.
- ***Improved food security and nutrition.*** The change was brought about by the increased household income from the sale of milk which makes it possible to access various household needs. Moreover, a part of milk produced is consumed at home, leading to improved household diet. It was estimated that about 20% of produced milk is used for home consumption. An important contribution to household food security is from farmyard manure which supports crop production systems inducing tangible increase in yields, thus, increased availability of food for household. In addition to that, through internal regulations of LFFS groups, the minimum quantity of milk that should be consumed at home to improve household diet which contribute to minimum dietary diversity. Another aspect that shows the impact of the project wa linked with increase in productivity where the study confirmed that daily volume of milk per cow has doubled or tripled. This was attributed to the support on various aspects of dairy value chain development, including technologies and practices related to genetic improvement and animal feeding that can affect cow productivity.
- ***Increased rural jobs in the area of intervention.*** New permanent temporal jobs were created by each supported cooperative, LFFs group and private led companies along the dairy value chain. The success stories exist in job creation for youth and women with investments in innovative projects such as animal feed production and other rural enterprises.
- ***Improved access to financial services.*** Services offered by the financial institutions include savings and transfer payments to farmers who supply milk by the cooperatives/LFF groups/MCCs. In addition, these financial institutions have supported beneficiaries to secure loans to mobilize own contribution as prerequisite to access RDDP grants. Some acquired milk handling equipment and transportation trucks through these institutions. This has contributed to increase of milk production,

milk collection and marketing, and also increased trust among cooperative members, which in turn increased the desire to acquire highly productive breeds.

The assessment of the effectiveness of the RDDP MG delivery aims to establish the degree to which the project has been able to achieve the change goals and objectives as outlined in the PDR document as well as appeared in the updated database of active BPs. The RDDP model was successful basing on the high demand registered because of huge opportunities in the dairy value chain. Further, the extent to which the MG was implemented against planned targets was high. This was explained by the fact that adaptations on the allocation of initial fund provided by RDDP to BDF to different categories were done following periodic evaluation of the uptake of funds in each category. Overall, the performance of RDDP project indicates that the overall performance level of outcome indicators is good, and the extent at which the most categories of beneficiaries were achieved was evaluated beyond 80% level of achievement.

The key challenges that were reported in the course of the implementation of the matching grants include:

- Low awareness and inadequate skills among cooperatives members and individual farmers, private-led organization on local dairy value chain challenges and opportunities that would help them formulate relevant business idea and develop business plans.
- Diversion of some grants with the high-rate cancellations of projects submitted
- Delayed disbursing has impacted negatively the implementation of many projects and unnecessary bureaucracy for some small project due to lack of prior criteria for selection.
- Inadequate capacity of the contracted companies (in charge of mobilizations and collection of business ideas) due to insufficient funds.
- Delayed project implementation in most cases due to suppliers who fail to deliver procured equipment on time.

Based project performance, Commendable areas on RDDP matching grants implementation have been provided, such as:

- a. Scaling up the matching grants to increase the geographical impact.
- b. Partnership intervention approach that would contribute to efficient use of funds with minimum costs while reaching out many people (geographical coverage).
- c. Using innovative approaches to catalyze project impacts.
- d. Areas for improvement include among others to (1) get rid of the disconnect between the design of RDDP, activity implementation and BDF project reporting system which makes it not clearly expressed in addition to deficiencies in data management system. There is need for involving an external committee to assist beneficiaries and oversee the procurement process.

- e. Therefore, in future programming, RDDP project and partners should build on lessons learnt from the current innovative strategies as entry points to upscale up existing efforts or replicate to other communities.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ii
TABLE OF CONTENTS.....	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
ABBREVIATIONS AND ACRONYMS.....	xii
1. BACKGROUND	1
1.1. Rwanda Dairy Development Project	1
1.2. Project Implementing Partners.....	2
1.3. About the RDDP Matching grants.....	3
2. LITERATURE REVIEW ON OTHER GRANTS-FUNDED ORGANIZATIONS	5
2.1. Feed the Future Rwanda Hinga Wunguke and Orora Wihaze.....	5
2.2. Agricultural Development: Project for Rural Income Through Exports (PRICE)	6
2.3. National Employment Programme (NEP)	8
2.4. Sustainable Agricultural Intensification and Food Security Project (SAIP)	9
2.5. Rural Youth Employment Opportunities: Support to Integrated Agribusiness Hubs in Rwanda (R-YES) Project.....	11
2.6. Climate Resilience Post-harvest and Agribusiness Support Project (PASP).....	11
3. APPROACH AND METHODOLOGY	13
3.1 Study area.....	14
3.2. Sampling framework and sample size.	15
3.3. Data Collection techniques	18
3.3.1. Desk review	18
3.3.2. Quantitative survey:	18
3.3.3. Focus Group Discussions and Key Informant Interviews	19
3.3.4. SWOT” analysis of the RDDP matching grants	20
3.3.5. Overall contributions of the MG to the development of dairy value chain.	20
3.3.6. Recommendations for future considerations.	20
4. FINDINGS OF RDDP MATCHING GRANTS THROUGH BDF	21
4.1. Identification and Socio-Economic Characteristics of Respondents	21
4.1.1. Identification of Respondents	21

4.1.2. Major supported facilities by the MG	21
4.1.2. Characterization of the Respondents	22
4.2. Matching grants and Household Welfare	24
4.2.1. Household Welfare (Housing and Assets).....	25
4.2.2. Habitat status for the main house: Roofs, Walls and Pavement	26
4.2.3. Household ownership of livestock and other assets/items.....	28
4.2.4. Factors that Contributed to New Livestock Acquisition.....	29
4.2.5. Source of Household Income.....	31
4.2.6. RDDP MG Impact on beneficiaries.....	31
4.3. Matching grants, and production and productivity of dairy products.....	32
4.3.1. Milk Production at Household Level.....	32
4.3.2. Daily production of milk and factors contributing to milk increase	34
4.3.3. Milk production during peak and off-peak season	35
4.3.4. Dairy Production practices.....	36
4.3.5. Animal Health and Diseases Management Practices.....	37
4.3.6. Milking practices	38
4.3.7. Extent to which supported facilities contributed to dairy practices	38
4.3.8. Impact analysis of the grants on household incomes from increased sales of dairy products.....	41
4.4. Matching grants and sales of dairy products.....	42
4.4.1. Improved Physical Access to Markets, Processing and Storage Facilities.....	42
4.4.2. Factors that have led to changes in milk marketing revenues	43
4.4.3. New or improved services or increase in sales by producer organizations	43
4.5. Matching grants and the minimum dietary diversity (MDDW)	46
4.5.1. Household Food Security.....	46
4.5.2. Participation in nutrition programs and household routines	46
4.5.3. Determinants of improvement in HH eating habits	48
4.5.4. Women Reporting Minimum Dietary Diversity (MDDW)	48
4.6. Matching Grants for Supported Rural Enterprises Reporting an Increase in Profit	51
4.6.1. Number of New Jobs Created.....	52
4.6.2. Employment opportunities created by the cooperative before and after MG.....	53
4.7. Linking farmers to financial institutions and its contribution to agriculture finance.	54

4.7.1. Access to financial Services for individual farmers	55
4.7.2. The role of the grants in improving cooperative access to financial services	56
4.7.3. Impact of MG and Access to Financial services.....	57
4.8. Impact of the MG on climate change resilience	57
4.9. SWOT” analysis of the RDDP matching grants	58
4.10. Overall contributions of the MG to the development of dairy value chain.	59
4.10.1. RDDP matching grants project design.....	60
4.10.2. Relevance of RDDP matching grants	60
4.10.3. Effectiveness of RDD matching grants.....	60
4.10.4. Overall impact of RDDP matching grants	66
4.10.5. Sustainability of RDDP matching grants.....	67
4.10. Recommendations for future considerations.	69
4.10.1. Key challenges associated with the RDDP matching grants implementation	69
4.10.2. Lessons learnt.....	71
4.10.3. Conclusion and Recommendations.....	71
APPENDIX A.....	75
A.1. Survey Questionnaire for Individuals, Private led and Companies	75
A.2. FGD Checklist for Beneficiaries and KIIs of Staff at local level	94
A.3. Donors and RDDP Staff, and Implementing Partners: Assessment of MG Performance	95
A4. Key activities or interventions received by LFFS group from RDDP matching grants	97
A5. New employment opportunities created by LFFFS groups	99
A6. Activities /interventions funded to participating cooperatives	101
A7. List of participants in KIIs and FGDs.....	101
Annex 1. Partners participants in RDDP Matching Grant Impact Assessment.....	101
Annex 2. Participants in FGDs-RDDP Matching Grant Impact Assessment.....	103
Annex 3. Partners participants in RDDP Matching Grant Impact Assessment.....	107
Annex 4. Participants in FGDs-RDDP Matching Grant Impact Assessment.....	109

LIST OF TABLES

Table 1. MG approved and financed bankable business plans	4
Table 2. Sample distribution per district and per category of respondents	17
Table 3. Sample distribution of respondents by business names and sex	21
Table 4. Supported facilities under the MG through BDF	22
Table 5. Socio- Economic Characteristics of the Respondents.....	23
Table 6: Impact indicators for household survey	24
Table 7: Status and property of the household.....	25
Table 8. Current status of main houses in terms of roofs, walls and pavement	27
Table 9. Percentage of households owning livestock and assets	28
Table 10. Income categories and sources of income (RWF)	31
Table 11. Inventory of cattle before and after RDDP support	33
Table 12. Milk production and contribution to milk increase.....	34
Table 13. Dairy production practices	36
Table 14. Conserved forage and Health and Diseases Management Practices	38
Table 15. Different milk practices	38
Table 16. Facilities and equipment’s contribution to dairy production and reproduction practices	39
Table 17. Facilities and equipment’s contribution to animal health and diseases control practices	40
Table 18. Milk Selling and Consumption	42
Table 19. Participation in nutrition activities and household routines	47
Table 20. Household managing rural enterprise and type of business.....	51
Table 21. Recurrent seasonal employment created.....	52
Table 22. Job opportunities created by the cooperatives	53
Table 23. Impact of the MG on employment opportunities by categories.....	54
Table 24. Financial literacy and access to loans and micro-credits	54
Table 25. Financial institutions and services provided	56
Table 26. SWOT Analysis of RDDP Matching Grants	58
Table 27. Financing model of RDDPA and category of beneficiaries.....	62
Table 28. The effective use of matching grants to beneficiary categories	64

LIST OF FIGURES

Figure 1. RDDP theory of change.....	13
Figure 2. Map of the districts of study area	14
Figure 3. The contribution of the MG to the status and property of houses.	26
Figure 4: Main house status before in comparison to the current situation	28
Figure 5. MG contribution to the new livestock acquisition	30
Figure 6. Matching grants contribution to new household asset	30
Figure 7. MG contribution to cattle ownership by breed type.....	33
Figure 8. RDDP MG contribution to breed type.....	34
Figure 9. Peak and off-peak milk production	36
Figure 10: How has milk marketing / revenue changed	43
Figure 11. Trend in milk collection comparing the period before and after.....	45
Figure 12. Status of food security in study area.....	46
Figure 13. Improvement in HH eating habits since 2017/18.....	48
Figure 14. Dietary diversity of women in both the treatment and control groups.....	48
Figure 15. Food groups and dietary diversity	49
Figure 16. Comparison of food consumed before and after RDDP.....	50
Figure 17. Sale revenues and costs of operation of rural enterprises.....	52
Figure 18. Main mode of savings by households	55
Figure 19. Used the MG funds to purchase any agriculture-related asset	56

ABBREVIATIONS AND ACRONYMS

AI	Artificial Insemination
BDCs	Businesses Development Centres
BDF	Business Development Foundation
BDF	Business Development Fund
BPs	Business Plans
BRD	Development Bank of Rwanda
CNFA	Cultivating New Frontiers in Agriculture
DSMEs	Dairy Small and Medium Enterprises
FAO	Food and Agriculture Organization of the United Nations
FGDs	Focus Group Discussions
HI	Heifer International
ICPC	Integrated Craft Production Centres
IFAD	International Fund for Agricultural Development
KIIs	Key Informants Interviews
L-FFs	Livestock, and Farmer Field School
LWH	Land Husbandry, Water Harvesting and Hillside Project ()
MCC	Milk Collection Centres
MDDW	Minimum Dietary Diversity
MFI	Microfinance Institutions
MIFOTRA	Ministry of Public Service
MINAGRI	Ministry of Agriculture and Animal Resources
MINICOM	Ministry of Trade and Industry
MoUs	Memorandum of Understanding
MSMEs	Micro-, Small and Medium-sized Enterprises
NEP	National Employment Programme
PRICE	Project for Rural Income through Exports
RAB	Rwanda Agricultural and Animal Resources Development Board (RAB)
RALIS	Rwanda Agriculture Livestock Inspection and Certification Services
RCA	Rwanda Cooperative Agency
RCA	Rwanda Cooperative Agency

RCMC	Rwanda Cheese Makers Company
RCVD	Rwanda Council of Veterinary Doctors
RDB	Rwanda Development Board ()
RDDP	Rwanda Dairy Development Project
RDPA	Rwanda Dairy Processors Association
RMSA	Rwanda Milk Sellers' Association
RNDP	Rwanda National Dairy Platform
RSSP3	Rwanda Sector Support Project ()
RYAF	Rwanda Youth in Agribusiness Forum
RYAF	Rwanda Youth in Agribusiness Forum
SACCOs	Savings and Credit Cooperatives
SAIP	Sustainable Agricultural Intensification and Food Security Project
SPIU	Single Project Implementation Unit

1. BACKGROUND

1.1. Rwanda Dairy Development Project

The dairy sector in Rwanda plays a significant role in improving food security and nutrition, empowering women and youth, increasing smallholder dairy farmer incomes and sustaining climate-resilient dairy value chain development. The sector has experienced significant growth in the past two decades through government, development organizations, and donor programs, and through the public–private partnership. Various policies and programs have been implemented and positively contributed to the growth of the dairy sector and improved the livelihoods of low-income households (Habiyaremye *et al.*, 2021). These include the “Girinka” (one cow per poor family) program, Rwanda Dairy Competitiveness Program II, and Rwanda Dairy Development Project among others. Most of these programs including the RDDP project have contributed to increased access to inputs and services, enhanced capacities of the public and private sector to deliver services, strengthened dairy cooperatives' governance, and increased value proposition to members of various farmer groups and promotion of milk consumption. This also has resulted in improved farmer access to improved cow breeds and improved milk quality and cow productivity through enhanced health inputs and other services.

Despite this considerable progress, there are still significant challenges in the development of the dairy sector in Rwanda. According to the RDDP project report (2016), these include the low milk productivity attributed to the low number of improved dairy cattle, inadequate forage base, animal feeding practices and seasonal fluctuations in water availability; limited support services (AI, vet, extension, inputs), and inadequate knowledge to manage dairy cattle; limited access to finance for dairy value chain actors, especially women and youth; and limited organization of farmers for effective collective action in marketing of milk and access to inputs/services. Additionally, the sector is characterized by inadequate development and management of milk collection, processing and marketing infrastructure for supply of good quality milk to the domestic and regional markets, as well as a nascent policy and institutional framework, with the need for specific laws, regulations and capacity development of key institutions to encourage the growth of the industry.

The Rwanda Dairy Development Project (RDDP) was proposed and has been implemented to address the above challenges by capitalizing on the gains and opportunities that had been created by past investments in the sector. The RDDP project was designed based on the strengths and lessons learned in the dairy value chain through improving cattle productivity, milk quality and processing capacity of the dairy industry, and strengthening the policy and institutional framework for the sector. The project is expected to bring benefits

to smallholder dairy farmers. Some of these are related to increased employment and business opportunities along the dairy value chain owing to the increase in the share of milk production that is marketed/processed as well as matching grants to develop public private partnership initiatives.

1.2. Project Implementing Partners

The RDDP project has been implemented through Private Public Producers Partnerships (4Ps) to explore possibilities for private sector involvement in management of MCCs. The Ministry of Agriculture and Animal Resources (MINAGRI) has been the lead agency for RDDP implementation. Within MINAGRI, the project has been implemented through the Single Project Implementation Unit (SPIU), and the main implementing body for the project is the Rwanda Agricultural Board (RAB) which has been working closely with Heifer International (HI) in the development of the dairy hub model. Furthermore, the RDDP project has established multiple partnerships with other public institutions (RALIS, RYAF, RCA) 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. Other key implementing partners are the Rwanda Council of Veterinary Doctors (RCVD), the Rwanda Cooperative Agency (RCA), the Business Development Foundation (BDF) and the Rwanda National Dairy Platform (RNDP). These agencies were tasked to deliver specialized facilitation and technical services within their mandated roles to support successful project implementation and incorporate assessment and mitigation of short- and long-term climate risks in their services. Collaboration with FAO for technical support where required.

Public institutions are well involved in project activities, and have been consulted in decision-making processes and express overall satisfaction regarding their partnership with the project. The partnership with these public institutions has so far been fruitful, and they have contributed significantly to the achievements of the project outputs. The remarkable partnership with Heifer International (HI) has allowed it to introduce several innovative approaches in RDDP, including the digitalization of MCCs, the profiling of smallholders for their enhanced access to financial services. The RDDP project also established a partnership with Districts that could provide technical assistance for animal health and artificial insemination (AI) activities in the field. 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.

The considerable involvement of the private sector in the development of the dairy sector has been noticed with the participation of international NGOs and development partners that support the dairy sub sector in Rwanda. Mostly these were: World Food Program (WFP), SNV Netherlands, Heifer

International (HI), Send A Cow, and AfDB, USAID & IFA-funded projects. In addition, several Rwanda private sector organizations were involved in the development of the dairy sector. These include: (1) Private Sector Federation (PSF) that harbors the dairy platform as part of the chamber of agriculture and livestock; (2) Rwanda veterinary doctors council established in 2013 to govern certification and regulation of the work of these professionals in delivery of animal health and extension services; (3) the National Cooperatives Confederation of Rwanda (NCCR) to ensure accountability amongst member federations, unions and cooperatives such as SACCOs and MCCs; the Rwanda National Dairy Platform - RNDP that comprises entrepreneurs and businesses engaged in production, processing and marketing of milk and dairy products. There is also the National Dairy Farmers Federation of Rwanda (NDFFR) as an important organization for improving the performance of MCCs, and dairy professional associations which include the Rwanda Milk Sellers' Association (RMSA), the Rwanda Dairy Processors Association (RDPA), and the Rwanda Cheese Makers Company (RCMC).

1.3. About the RDDP Matching grants

The SPIU-IFAD funded projects matching grants (MG) facility provides grants to selected agricultural and livestock value chain activities to support smallholder farmers organized in producer organizations, cooperatives and other off-takers in the value addition development. The MG was implemented based on an MoU was signed between the **Business Development Fund (BDF)** and MINAGRI/SPIU where BDF acts as a service provider to facilitate the implementation of business plan development and MG management. Under this MoU, the impact assessment report indicates that eligible beneficiaries of RDDP grants were cooperative led-businesses, business driven cooperatives in category 1 and 2, individual farmers, joint ventures, and youth projects in the dairy sector.

With the provision of MG through BDF, the RDDP project focuses on leveraging financing for climate resilient dairy enterprises development mostly to finance production investments at farm level. The climate smart window in BDF has gained experience with the Climate Resilient and Agribusiness Project (PASP) through the Post-Harvest Climate Resilient Agribusiness (PHCRAB) matching grants. During its implementation, the RDDP project proposed to support individual farmers to reduce their vulnerability to effects of climate change, by creating a specific window for climate smart investments. Out of 1,780 approved Business Plans (BPs), only 52 % of climate smart investments (that is 938 BPs) received grants related to water tanks and few solar panels. It was reported that the RDDP MG has been only financing capital investments and capacity building, but there was a big gap in financing other dairy value chain (VC) actors with the financial institutions (RDDP Mid Term Review report, 2019). It was also revealed that very few BPs have been funded for rural enterprises in the livestock VC, mainly milk

processing and marketing. Thus, next interventions of the BDF MG scheme were proposed to target cooperatives and private sector players for marketing, processing and service provision (veterinary and AI services and animal feed). This required to re-consider eligibility and conditions of the MG grants with the objective of supporting projects that cannot be fully financed by the financial sector, and facilitating a graduation pathway for a sustainable linkage to the financial sector.

Despite the achievements made so far, the overall performance of RDDP matching grants is still low as it has been highlighted in the impact assessment for the Rwanda dairy development project (RDDP) and the cumulative reports. For instance, it was noted that, a total of 4,201 BPs have been submitted, 4,088 were approved. Out of these, 3,332 projects were approved because some were canceled (357) at the start, while others (433) were canceled before the end of quarter IV of the financial year of 2021/2022. In total, 2,303 dairy value chain BPs were fully or partially financed (Table 1). Only 3,298 business plans equivalent to 80.67% are ongoing. Among 69% of total projects approved, 40% (1,345 projects) received full disbursement, and 29% (958 projects) received partial disbursements.

Table 1. MG approved and financed bankable business plans

Description	Number of projects
Business plans submitted	4,201
Business plans approved	4,088
Cancelled projects due to failure in implementation by 2022	790
Total funded projects	3,332
<i>Total projects that received full & partial disbursement</i>	2,303
Projects that received full disbursement	1,345
Projects that received partial disbursement	958
Projects under implementation without grants disbursement	1,029

Source: RDDP Impact assessment (2021) and cumulative report (2022)

The BDF investment committee approved and financed bankable businesses to access RDDP MG with different windows such as private led BPs, cooperative led BPs, business driven, dairy micro projects, climate smart technologies, youth windows, LFFs and community boreholes. The major supported facilities include: (1) the construction of cowsheds, water tanks (both plastic and masonry), dam sheets, and construction of forage hangar (Shelters); (2) buying motorcycle for milk transport facilities from household level to the MCCs, equipment to be used for milk collection, handling and selling, and milk processing and value addition facilities; (3) establishment of veterinary drugs shop, buying veterinary kits and motorcycles facilitation and animal feeds; (4) farm clearing and fencing, boreholes dehydration and drilling; (and) purchase of solar panels, chopper and bailer machines, and provision of water tanks.

The matching grants approach implemented by the RDDP project has contributed to increased entrepreneurship spirit among the dairy cattle communities. However, the grants encountered several challenges which include (1) the lack of enough budget issues that resulted into delays in projects approval process and lack of operating expenses which may slow down the uptake of the grants and create delays in disbursement; (2) delays of project implementation process either from supplier or beneficiary and failure of some beneficiaries to raise their own contribution on time, hence affecting disbursements; and (3) free money mindset that has motivated farmers to request for unnecessary grants. Furthermore, the disbursement process has been heavily affected by COVID-19 Pandemic due to lockdown, which delayed field visits that could be carried out for evaluations of beneficiaries' contributions.

2. LITERATURE REVIEW ON OTHER GRANTS-FUNDED ORGANIZATIONS

This review focuses on grants which have been previously implemented by various organizations and government institutions in Rwanda. These include, the Rural Youth Employment Opportunities: Support to Integrated Agribusiness Hubs in Rwanda (R-YES) Project from Kilimo Trust; Hinga weze and Orora wunguke programmes implemented by Cultivating New Frontiers in Agriculture (CNFA), Land O Lake and Catholic relief services as local NGOs, the Project for Rural Income Through Exports (PRICE) from NAEB, the Sustainable Agricultural Intensification and Food Security Project (SAIP) from MINAGRI and the National Employment Programme (NEP).

2.1. Feed the Future Rwanda Hinga Wunguke and Orora Wihaze.

HINGA WUNGUKE and ORORA WIHAZE PROGRAMS (Raise Animals for Self-Sufficiency) are five-year (October 2019 – September 2024) USAID-funded projects that work with local partners and private sector actors in Rwanda including local NGOs including the Cultivating New Frontiers in Agriculture (CNFA), Land O Lake and Catholic Relief Service. Hinga Wunguke aims to increase incomes and improve nutrition by sustainably increasing agricultural productivity and strengthening the domestic consumption and market for high-value and nutritious agricultural products. Orora Wihaze focuses on improving animal source foods (ASF) value chains to strengthen the ASF market system. Its goal is to sustainably increase the availability of, access to, and consumption of ASF through the development of a profitable market.

Hinga wunguke project uses a market systems approach by engaging and working with existing public and private market actors and structures to facilitate inclusive, locally driven and sustainable change. The approach is structured in four areas: (1) Agricultural Productivity, (2) Access to Finance for Farmers and Agribusinesses, (3) Market Availability and Demand for Nutritious Foods, and (4) Enabling Environment for Market-Driven Agriculture. To increase **Agricultural Productivity**, Hinga wunguke focuses on

improving agricultural practices by facilitating farmers to access to knowledge, information, and improved inputs and technologies, thus promoting sustainable agriculture and strengthening resilience to climate shocks. The project also facilitates **Access to Finance for Farmers and Agribusinesses** by linking farmers and agribusiness to finances, improving their financial literacy skills, and prioritizing private sector engagement. Another area where Hinga wunguke intervenes is “**Improving Market Availability and Demand for Nutritious Foods, which focuses on** expanding farmers’ access to markets while increasing the availability and consumption of safe and nutritious food for consumers. It also supports the private sector in developing and promoting nutritious products, and helping generate demand by educating consumers on the benefits of nutritious products. The project aims to “**Strengthen the Enabling Environment for Market-Driven Agriculture**”, through working with other USAID/Rwanda implementing partners for the development and implementation of policies involving systemic changes that modernize the agriculture sector and drive inclusive growth.

Due to the lack of appropriate financing and poor coordination between public and private sector actors that further constrain access to animal-sourced foods (ASF) leading to low per capita consumption of pigs, fish, poultry, and goats, orora wihaze interventions are concentrated on Strengthening the Private Sector-Led ASF Value Chains; and increasing Demand for ASF Consumption for Women and Children.

Hinga wungu area of operation is in the districts of Burera, Gakenke, Nyamagabe, Nyamasheke, Rutsiro, Ngororero, Kayonza and Ngoma districts (CNFA). Orora wunguke project works across 8 districts of Rwanda including Burera, Gakenke, Nyamagabe, Nyamasheke, Rutsiro, Ngororero, Kayonza and Ngoma Districts for Land O lake, and works with Catholic Relief Services by targeting ASF producer and consumer households in the districts of Burera, Gakenke, Nyamagabe, Nyamasheke, Rutsiro, Ngororero, Kayonza and Ngoma Districts.

2.2. Agricultural Development: Project for Rural Income Through Exports (PRICE)

The Project for Rural Income through Exports (PRICE) was implemented by the Single Project Implementation Unit (SPIU) for IFAD projects and its main implementing partner was the National Agricultural Export Development Board (NAEB) under the leadership of the Ministry of Agriculture and Animal Resources (MINAGRI). PRICE was initially planned as a 7-year project with a total cost estimated at USD 56.095 million. The project was approved by IFAD’s Executive Board on 15 September 2011 and became effective on 20 December 2011. It was completed on 31 December 2020 and closed on 30/ June, 2021. This was a nationwide project that assisted smallholder producers in taking advantage of concrete income opportunities in pro-poor cash crop value chains in partnership with private operators. PRICE targeted 144,980 HHs, of which 46% women (-in particular woman-headed households) divided into sub-

groups: (i) Smallholders interested in producing export crops including coffee, tea, silk, fruit, vegetables and essential oils; (ii) Low-income households cultivating up to 0.5 ha who depend on labor as well as; (iii) and Medium and high-income farmers as important drivers of change of value chain development.

The main goal and development objective of PRICE were to raise smallholder farmers' income, and promote sustainable increased returns to farmers from key export-driven agricultural value chains through increased volumes and quality of production, improved marketing and effective farmer organizations. Specifically, the project intended to increase the volume and quality of coffee, tea and silk cocoons production reaching high value markets and generating increased share of market end prices to coffee growers; develop viable smallholder-oriented business models for selected horticulture VCs; and timely and adequate access to a range of diversified financial products, including risk-mitigating products for selected value chain stakeholders. PRICE contributed to the creation of rural enterprises and employments mainly in tea, coffee, horticulture and sericulture components through the construction of coffee washing stations, establishment of tea factories and processing plants that employ many people in rural areas, and creation of small and medium enterprises in the horticulture and sericulture.

The rationale for **Access to Finances** (Financial Services) under PRICE was to increase the flows of investment financing for agriculture through two guarantees, two performance based MG facilities, and soft support in the form of capacity building to financial institutions. **Performance based grants facility** aimed at increasing the availability of term funding to finance agriculture investments. Initially, the design allocated USD 1 million, which generated thousands of applications and ultimately 177 were approved. To respond to the overwhelming demand of applicants who could not be served because of funds' exhaustion, PRICE established a link with the other ongoing PASP project. This enabled the access to finance for farmers engaged in horticulture processing, storage and/or value addition. Then in late 2017, the second facility was designed and mostly meant for horticulture primary production, however, grants allocated to two other windows for propagation units and packaging materials did not attract much interest. **BDF Guarantee facility** (of USD 450,000) has been used in the first half of the project to guarantee six loans in coffee through CWS and one loan in tomato production. Three loans however could not perform well. **Horticulture Export Guarantee Facility:** Implemented in partnership with the BRD as a pilot introduced through the 2nd AF designed end of 2017, the facility came out from the observation that while the BRD had already rolled out the first two pillars of its export growth fund, it had not been able to start the third pillar of export guarantee facility for lack of capital. Yet this tool was viewed as key for exporters in general and horticulture exporters in particular, to provide transaction-related guarantees to commercial banks and securitize export finance transactions up to 80% of the value of the consignment. **Tea equity participation/**

Revolving Fertilizer Scheme. As earlier mentioned under previous sections, the conditional activity for equity participation in tea factories did not materialize, but the funds were reallocated to a RFS specially created to address the needs of PRICE tea beneficiaries. Two activities were cancelled under this SC: a conditional debt write-off (USD 450,000) of coffee cooperatives and the risk mitigation and micro-insurance programme (USD 303,000).

2.3. National Employment Programme (NEP)

The National Employment Programme (NEP) was designed with the objectives of (1) creating sufficient jobs that are adequately remunerative and sustainable across the economy, (2) equipping the workforce with vital skills and attitude for increased productivity that are needed for the private sector growth, and (3) provide a national framework for coordinating all employment and related initiatives and activities in the public, private sector and civil society. The approach to a jobs strategy that is proposed is aimed explicitly at promoting and facilitating the creation of off-farm wage-paying jobs that are stable and productive and supported by the macroeconomic foundation and competitive conditions necessary for allowing the private sector (where almost all of the additional jobs needed will come from) to thrive and absorb new entrants to the labor force.

In line with this programme, the Government of Rwanda (GoR) along with the Private Sector Federation (PSF) implemented over 25 initiatives that targeted employment creation with a focus on young people, women, vulnerable groups as well as poor households. There are at least 8 initiatives that fall under the Entrepreneurship and Business Development program, some of which target young people and women and provide training to introduce the culture of entrepreneurship, enhance financial literacy skills, assist them to develop BPs and thereby secure sources of funding for their business. Others are geared towards providing business development services to the private sector. Initiatives were divided into three themes based on their primary objective and in accordance with the three pillars adopted for the analytical and operational frameworks of the NEP: Entrepreneurship and Business Development, Skills Development, Labour Market Intervention.

Some of the achievements of the NEP include around 3,000 new businesses created under the Hanga Umurimo programme alone and 17,000 jobs under the apprenticeship scheme jointly run by MINICOM and MIFOTRA under the Hanga Umurimo and Kuremera programmes. PSF and RDB managed to set up 60 Businesses Development Centres (BDCs) across the country which are now being privately run and provide a range of services to the private sector (market access, technology and product development, training and technical assistance, access to finance, basic accounting etc.). Twelve Integrated Craft

Production Centres ICPC) were constructed by districts in collaboration with MIFOTRA to provide modern facilities for the production and marketing of local products in order to generate employment opportunities for the youth and enhance technological development and technical training. MINICOM also planned to set up 3 Community Processing Centres to provide facilities for producers to engage in value-added processing of raw materials without bearing the total cost of the machinery and technology required.” It was suggested that more emphasis needs to be placed on initiatives that promote and encourage linkages between MSMEs and large firms/FDIs.

The NEP states that almost all of the additional jobs to be created in the future would come from the private sector, particularly MSMEs and the informal sector. Off farm jobs increased through entrepreneurship development, access to finance and technology. NEP aimed to provide better access to finance and business services for Rwandan MSMEs, such as through existing credit guarantee schemes and similar schemes designed to make finance more accessible and less costly. Activities concentrated on supporting bankable business proposals and MSMEs projects to access finance through guarantee loan, MG and quasi equity schemes via BDF and other potential financial institutions. Financial access and credit enhancement programs: (1) Credit Guarantees – Product Profile; (2) SACCO Refinancing - Product Profile; (3) Women and Youth Investment Facility – Product Profile; (4) Microloans - Product Profile; (5) Quasi Equity – Product Profile; (6) Women & Youth Savings Program

2.4. Sustainable Agricultural Intensification and Food Security Project (SAIP)

The Government of Rwanda, through MINAGRI and the World Bank, has been implementing the SAIP project, which aims to increase agricultural productivity, market access and food security in eight LWH/RSSP sites across the country. SAIP focused on consolidating and expanding results obtained in Land Husbandry, Water Harvesting and Hillside Project (LWH) and the Third Rwanda Sector Support Project (RSSP3) projects, and other selected MINAGRI developed schemes. SAIP has been implementing three technical components. The first is the “Institutional Strengthening, Agriculture Productivity Enhancement, and Nutrition Improvement”. Under component one, the project has been working closely with the youth groups who have gained exposure to modern agriculture practices in other countries, to support farmers to shift from subsistence agriculture to commercial agriculture. The second is “Irrigation and Water Use Efficiency”. The objective of component two is to promote technology and best practice for increased availability and efficient use of water for irrigation to increase crop productivity and increase farmers’ resilience to climate volatility. Component three is the “Market Linkages and Value Addition Investment Support”, which enhances market linkages and value addition by strengthening the capacity of farmers’ organizations and other value chain actors and improving their access to finance.

This project also supports the capacity development of farmers to access finance to meet their growing business needs by providing capacity building in post-harvest handling in priority value chains to minimize losses and reduce perishability. Secondly, SAIP focuses on skills development and business training of youth and women in cooperatives and/or individual entrepreneurs, already managing or wanting to start up a business, and supports farmer groups in capturing value, by promoting quality enhancing and pre-processing activities, such as cleaning, grading, sorting, and packaging. Following these pre-processing activities, the project supports as well selected cooperatives, farmers and agro-processors to obtain quality certification, to ease access to domestic and export markets. Furthermore, the SAIP project provides MGs for packaging and processing equipment for Irrigation and Water Use Efficiency and technology, including preservation, to reduce food loss and preserve nutrition value of products.

The project continues to support financial literacy of farmers through provision of financial skills to cooperatives for example, business planning and financial management, enhancement of the culture of savings, and use of credit and better portfolio management of selected Savings and Credit Cooperatives (SACCOs). The project avails funds for workshops and training for financial institutions and intermediaries to enhance their understanding of the agriculture sector, build awareness to the market/business potential (that is, business case for investing/supporting the sector), and utilization of SACCOs for agent banking. The project collaborates with existing government ministries/agencies that are tasked with supporting the capacity building of SACCOs and microfinance institutions (MFIs) to develop financial products that better meet the needs of farmers, de-risk their investments, and enhance their access to timely and appropriate financial services. The project also supports farmer organizations, entrepreneurs, and micro and small enterprises in developing business development plans, which form the basis for the grants agreements and could also be utilized by beneficiaries to access finance through MFIs or banks, especially for more mature farmers' organizations. The project staff, together with farmers' groups, facilitate dialogue between farmers' groups and buyers/processors, to establish market linkages to intermediary and end markets through organization of sellers' forum and facilitation of contracting modalities, between farmers/farmers organizations, buyers/processors, and other relevant intermediaries.

SAIP project finances through MGs investment support to market linkages that complement the interventions related to capacity building to foster market linkages, such as post-harvest, marketing and processing facilities to the benefit of those cooperatives, which are not yet mature enough to be able to drying shelters, drying grounds, collection centers, and storage and cold storage facilities, through grants agreements, and wherever possible, it has co-financed through private capital, based on agreed joint

business plans. SAIP also supports more mature organizations to plan necessary investments with their own capital, and provides capacity building for O&M activities and management of those facilities.

2.5. Rural Youth Employment Opportunities: Support to Integrated Agribusiness Hubs in Rwanda (R-YES) Project

Rural Youth Employment Opportunities: Support to Integrated Agribusiness Hubs in Rwanda (R-YES) is a 5 -year project on youth agribusiness incubation in Rwanda implemented by KIRIMO Trust, and funded by IFAD and BMZ. The R-YES project is part of a larger IFAD program that focuses on creation of employment opportunities for rural youth in Africa through support to integrated agribusiness hubs. The goal of the project is to contribute to sustainable employment (self and decent wage) and income generating opportunities for 3,000 youth (including 1,200 direct beneficiaries and 1,800 indirect) in agriculture related activities in Rwanda through an integrated agribusiness hub. Specifically, the project aims to (1) build integrated agri-business capacities of rural youth by identifying strategic partnerships to develop sustainable and innovative agribusiness hub, and (3) generate empirical evidence of the developed and tested integrated agribusiness hub models to inform policy to drive scaling up the models to create jobs for youth.

KIRIMO Trust has ten Memorandum of Understanding (MoUs) signed between different partners including Rwanda Youth in Agribusiness Forum (RYAF), Rwanda Polytechnic (RP), IPRC Kigali, IPRC Gishari, IPRC Musanze, Rwanda TVET Board (RTB), Kavumu TVET Board, EAV Kabutare, College Foundation Sina Gerard and IFAD – SPIU.

2.6. Climate Resilience Post-harvest and Agribusiness Support Project (PASP)

The overall goal of PASP was to alleviate poverty, increase rural income and contribute to the overall economic development of Rwanda. PASP development objective was to increase smallholder and rural labourer incomes (including women, youth and vulnerable groups) from Crop Intensification Programme (CIP) crops and dairy businesses, especially those related to aggregating production for markets, supporting transformation, and creating value-added products to enable smallholders to capture a higher share of the market. The project's primary focus was the facilitation of inclusive business activities that promoted increased agricultural production from CIP crops and dairy development and reduction in losses in a changing and more uncertain climate. PASP's primary target group involved poor smallholder farmers engaged in production and primary processing in the priority value chains (maize, beans, cassava, Irish potatoes, horticulture and dairy).

PASP project coordination was under the responsibility of the SPIU for IFAD-funded projects mainstreamed in MINAGRI. The project was to be implemented over a five-year period and comprised

three mutually-reinforcing components: (i) HUB capacity development programme and business coaching; (ii) Post-harvest climate resilient agribusiness investment support; and (iii) Project management and coordination.

The project directly targeted smallholder farmers organized into cooperatives and or individual entrepreneurs either engaged in production and primary processing of priority crops or in the dairy value chains. Individual entrepreneurs were selected if they included cooperatives in their BPs and addressed post-harvest issues. The engagement of individual farmers and entrepreneurs in co-financing post-harvest investments and capacity building was anticipated to drive the creation of new investments and employment opportunities for vulnerable groups, including the landless poor.

Furthermore, PASP gave specific attention to promoting women and youth participation in post-harvest processes and value chain development to gain access to agricultural support and financial services, and play an active role in management and leadership of cooperatives and cooperative-owned businesses.

PASP financing was complemented by an Adaptation for Smallholder Agriculture Programme (ASAP) US\$ 7 million grants investment that covered the incremental costs associated with reducing the impact of climate change. This grants aimed at enhancing the productivity and profitability of smallholder farming systems while supporting the building of a low carbon and climate resilient post-harvest agribusiness sector in Rwanda.

At design, the project was to support HUBs through a matching grants scheme. In order to access the grants, HUBs were expected to obtain loans from financial institutions to fund post-harvest infrastructure. Successful loan applicant would obtain grants through the Business Development Fund (BDF) and the grants amount would be equivalent to 40% of the approved loan with a ceiling of US\$160,000. However, due to the difficulties among HUBs meeting the 40% contribution, it was agreed during the PASP joint implementation support mission dated of May – June 2015, to revise the MG scheme with grants amount ranging from 20% - 30% of approved loan with a maximum of US\$ 50,000 for projects with no-climate resilience aspects. For projects with notable climate resilience aspects, the grants amounts were placed at between 30% and 40% of approved loan amounts subject to a maximum of US\$ 80,000.

3. APPROACH AND METHODOLOGY

The analysis of the RDDP matching grants was based on a comprehensive analysis of the impact of the grants on project beneficiaries and an assessment of the grants performance (Relevance, effectiveness, sustainability and impact) and SWOT analysis. The objective was to assess if the grants has contributed towards the overall goal of RDDP project, which is to contribute to the pro-poor national economic growth and improve the livelihood of resource-poor rural households by focusing on food security, nutrition and empowerment of women and youth in a sustainable and climate-resilient dairy value chain development. In line with the project’s theory of change (see diagram below on Figure 1), RDDP seeks to enhance the 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.

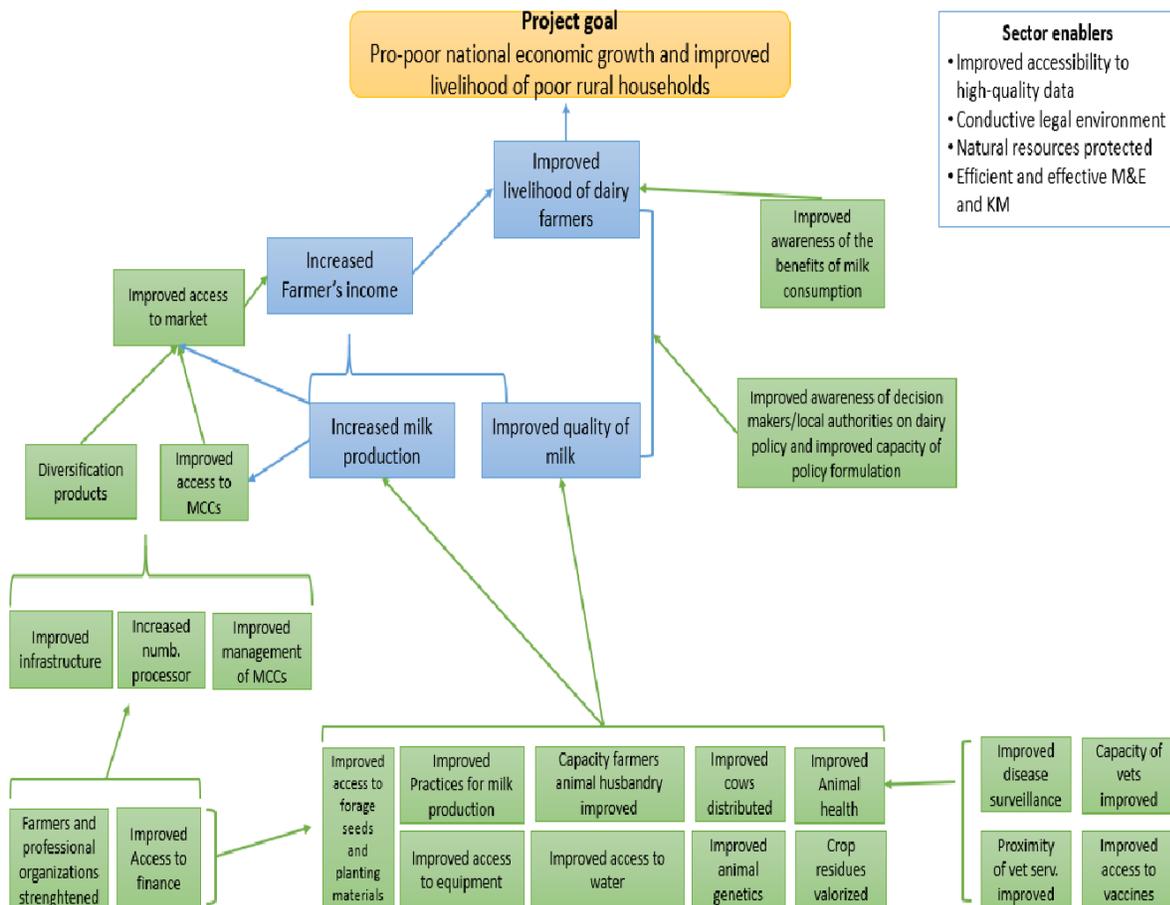


Figure 1. RDDP theory of change

considered for the control group. There was close collaboration with the project staff to get the list of companies and cooperatives with similar characteristics to the ones in the treated districts.

3.2. Sampling framework and sample size.

This study used a multiple sampling involving a two-way sampling approach, and mixed method approach of data collection. First, the study sought to determine the impact of the project on the matching grants beneficiaries using a household survey. Second, this study tried to assess the performance of the RDDP matching grants using key informant interviews (KIIs), focus group discussions, a SWOT analysis framework, and other criteria such as relevance, effectiveness, sustainability and impact.

For the impact evaluation, the study adopted multi stage and systematic sampling techniques that involved different unit of analysis being individuals, private led or companies on one hand, and cooperatives, L-FFS and rural enterprises on the other hand). Each district in this study was considered as a cluster for both beneficiaries and non-beneficiaries. A probability proportionate to size was then applied to determine the sample of individual respondents per district and private led businesses that formed part of the household survey. A weight was applied to determine the representative sample from individuals, private led or companies, cooperatives and L-FFS. At the final stage, a systematic sampling technique was applied at individual and company/ private led or cooperative levels to select the respondents who participated in the interview. For the household survey, a systematic sampling was adopted to select individuals, private led business, cooperatives (MCCs; and (4) registered associations like LFFS groups) or companies.

For assessing the performance of the RDDP matching grants for cooperative and L-FFS, a purposive sampling technique was used to select private companies, cooperatives including MCCs; and (4) registered associations like LFFS groups. From the list of cooperatives supported by the matching grants, a systematic sampling technique was also used to select the cooperatives that were considered for data collection. Similarly, in case of many companies, the same procedure was applied, however, if there are a few of them, the majority amongst them were selected. A separate checklist questionnaire (FGDs and KIIs) for cooperatives was developed and refined in collaboration with the client. Particularly, the study considered LFFs in the treatment districts. Based on discussions during the inception presentation, it had been concluded that, in the project zone, the research team could make a comparison between LFFs groups that had received the matching grants with other LFFs which had not received any RDDP matching grants through BDF. Information related to LFFs in control districts, was sought by considering awareness and perception of cooperative members on LFFs benefits, and challenges.

3.2.1. Eligibility criteria for sampling for Impact evaluation

It is assumed that a minimum of 3 years may be required to realize that an intervention has an impact on beneficiaries, therefore, the assessment of impact evaluation of the matching grants was based on some criteria to select eligible respondents. The first criterion was to consider supported business plans from 2018 to end of 2020 that were fully funded or disbursed, and have their projects been fully implemented. Business plans supported from 2021 were considered for the assessment of the performance of the matching grants. These businesses had not been considered for the impact evaluation because most of them were still ongoing, while others had been so far partially funded. Further, due to the impact of covid19 pandemic, which could have disrupted the speed of implementation of these projects, their impact could not be easily captured. This category also includes those BPS that were canceled, partially funded and implemented projects including the projects that have not yet received equipment; fully disbursed but equipment not well delivered, ongoing projects and own contribution. For example, partially funded projects for cowshed construction were not considered because some balance from the reduction of water tank price have not yet been disbursed for full implementation.

For the total of 2303 projects that received full and partial disbursement, 2,218 were eligible for the impact study and would form the sampling frame. The final list of eligible projects per district and clusters was provided from the RDDP team, and this served as the sampling frame and guide the selection of respondents in the impact evaluation. IFAD recommends that, for final impact evaluation studies, the sample should be distributed equally between the project zone (50%) and the control (50%). However, since it may be difficult to find to get participants with characteristics similar to beneficiaries to make reasonable comparison of the impact of the project, it was agreed during the inception presentation that the research team can consider 70% of the sample from beneficiaries and 30% of respondents out of the project area to make a good comparison group. Based on the list of all full implemented BPs as our sampling frame, the calculated sample was given by the equation below. The following sampling formula was used to come up with mentioned sample size:

$$N = \frac{Z^2 p(1 - P)}{e^2}$$

Where N= sample size, Z= level of confidence, P= baseline level of the selected indicator and e= margin of error. The sample was calculated based on: P= 0.50, Z= 1.96 (at 95% Confidence Interval), e= 3.3%. Using the Z statistic to compute the difference of proportions between treatment and control, we assumed that the proportions being tested are distributed equally around p = .5 as this requires the largest sample

size. For example, for the 5% difference $p_1 = .475$ and $p_2 = .525$. Following the IFAD recommendations, the sample sizes given in the text assume a two-tailed test of the null hypothesis that treatment and control are distributed equally ($p_1 = p_2$). However, this is not always possible whereby proportions are different. Using a one-tailed test would reduce the sample size by about 30% (Moore and McCabe, 1999).

The total sample size under this study is 1500 respondents, which include 1,000 individual beneficiaries of the matching grants and 500 respondents the control districts. The sample distribution is consistent with the study by Sures *et al.* (2014) who indicated that the ratio of treatment to control group members should not be similar in two different sites, and it could have a 2:1 ration for the larger sample or 1:1 ration for the smaller sites. Since our sample is large, the 1000 respondents from the beneficiaries and 500 respondents from the control group would make a good comparison when when assessing the impact of the matching grants of RDDP project. Thus, the Sample sizes were estimated based on the magnitude of effect of the matching grants on project beneficiaries.

In both treatment and comparison groups, the sample size distributed between individuals/companies (private led), cooperatives, and L-FFS groups. For private led the sample distribution will take into account the types/categories of beneficiaries such as: primary producers, value chain actors, marketing, processors. Other criteria for selecting the respondents include gender and rural enterprises for individual male (50%), female (30%) and youth (20% who, through the matching grants, invested in post-harvest businesses such as transportation, milk value addition and veterinary pharmacies. The following Table 2 indicates the targeted as well as actual collected sample of respondents distribution per district for both treatment and control.

Table 2. Sample distribution per district and per category of respondents

District	Private Led BPs (individual/company)	LFFS Group BPs	Cooperative- led BPs	Total Targeted	Actual Collected
Treatment					
Nyagatare	213	0	3	216	120
Rwamagana	86	1	0	87	79
Kayonza	86	9	1	96	93
Nyabihu	15	0	3	18	15
Rubavu	51	0	0	51	52
Rutsiro	77	1	0	78	92
Nyanza	23	1	3	27	43
Huye	82	3	1	86	100
Ruhango	69	1	0	70	73
Gicumbi	34	2	0	36	49
Burera	138	0	0	138	154

Musanze	84	7	0	91	115
Total	964	25	11	1000	985
Control					
Ngoma	96	0	2	98	97
Nyaruguru	97	0	1	98	96
Karongi	96	0	1	97	97
Gisagara	96	0	1	97	77
Gakenke	96	0	1	97	89
Total	481	0	6	487	456

3.3. Data Collection techniques

The information covered in this study was based on the key performance and core outcome indicators (KPIs) of the project which are designed in project log frame. The evaluation used a mixed method approach combining both quantitative and qualitative surveys. The information collected through a triangulation approach involved desk reviews, a household survey with closed-ended questionnaires, key informant interviews (KII), and focus group discussions (FGD).

3.3.1. Desk review

The main purpose of conducting the desk review was to assess the current status of the project and matching grants, and including the matching grants accessibility and eligibility criteria, requirements, approval process, grants disbursements and other related information. This task was concentrated on reviewing different documents including RDD detailed design report, RDDP mid-term review report, The Impact Assessment of RDDP project report, cumulative report and the report on the annual outcome survey of RDDP project, and baseline and thematic studies reports. The literature review of documents from institutions/organizations whose interventions are similar with RDDP matching grants was carried out, and this will help to assess the gap later during analysis of the results. The list of such institutions include the following: Land O lakes, CNFA (Hinga wunguke, Orora wihaze), NEP, PRICE, SAIP, Youth grants from MINAGRI, and KIRIMO Trust. The review will be followed by some stakeholder consultations in these institutions to get insights from their grants. The process of stakeholder engagement will be facilitated by RDDP project staff.

3.3.2. Quantitative survey:

For the quantitative survey, the research developed a multi-module questionnaire, which was programmed using KOBACOLLECT software installed in tablets for data collection. The importance of

KOBOCOLLECT, as a digital data collection tool, is that it increases the speed and efficiency by reducing the time required for data collection and cleaning. As part of data quality check, visibility, tracking, and the use of online Google Map are also the most important advantage of this method, which will be used to detect every step of the enumerator and if the enumerator is in place where he/she is supposed to be for data collection. The survey forms were administered to individuals, private led or company owners. Each enumerator will fill at least 6 to 8 questionnaires per day. The data collection was conducted by 14 enumerators and 4 supervisors in fifteen (15) working days. Enumerators was recruited from a pool of competitive enumerators from the ELCG database. The survey was conducted in Kinyarwanda or English. The designed questionnaire (see appendix A1) responded to the first deliverable of the assignment related to the assessment of the socio-economic impact of MG.

3.3.3. Focus Group Discussions and Key Informant Interviews

For the qualitative survey focus group discussions (FGDs) and key informant interviews (KIIs) guides were developed. At local level, FGDs were conducted with project beneficiaries including individuals who are fully funded but not fully implemented or those who are partially implemented or still on-going projects (not captured under the household survey). FGDs were also be conducted with cooperative members and LFFS. Key informants will be selected purposively with consideration to those who have direct involvement in project implementation bot at district and national levels. At district level, the study considered district FED, Veterinarians/Animal Resources Officers (1), Managers of MCCs and Milk Processing Plants (2), Union of Dairy cooperatives (2), BDF Manager (1), Community Animal Health Workers, Dairy Small and Medium Enterprises (DSMEs) processors (1), Milk Traders/Milk Zones and Milk traders/Kiosks, IFAD representative (1), and Producers of forage seeds and vegetative planting materials (1). The KIIs guides for the participating organisations and individuals include but not limited to Financial Institutions and Participating Insurance Companies is shown in Appendix 2.3.

At country level, the main key informants will be the RDDP Project donors (IFAD, Heifer International (HPI), Banks and Government of Rwanda) and implementing partners including, BDF, ADC, SORWAF, PSF (Director of Chamber of Agriculture and Livestock), RYAF (Chairperson and the Head of Cluster of Livestock), RCA (Director General and RDDP Focal Point), MINAGRI DG Animal Resources, and FAO Representative. An interview guide (see appendix 2.5) with RDDP partners, Cooperatives and SMEs Managers was developed to assess the impact of the matching grants using the following criteria: Relevance, Effectiveness, Sustainability, Rural poverty impact, Gender and Women empowerment, and Lessons learnt.

FGDs combined different categories of project beneficiaries including smallholder dairy farmers in the zero-grazing system, smallholder dairy farmers in the semi-extensive grazing systems and Girinka

beneficiaries, who are in cooperatives or L-FFS groups. In addition, there were sessions with young farm assistants aged 15 to 24, rural women, aged 15-35 livestock, and Farmer Field School (L-FFS). FGDs ensured the participation of beneficiaries from different areas supported by the financing facility, including the construction of cowshed, provision of water tanks, construction of forage hangar (shelters), establishment of Veterinary Drugs shop, buying motorcycle for milk transport facilities from household level to the MCCs, buying veterinary kits and motorcycles facilitation, farm clearing and fencing, dam and dam sheet construction, boreholes dehydration and drilling, construction of cowshed and water tank, purchase of solar panels, chopper and baler machines, buying equipment to be used for milk collection, handling and selling, milk processing and value addition facilities, animal feeds etc. Additionally, participants in the FGDs were selected from cooperatives supported by RDDP project, as well as Milk Collection Centres (MCCs).

3.3.4. SWOT” analysis of the RDDP matching grants

The SWOT framework is useful to gain an understanding of the situation and provide direction for future implementation of the project. Identifying the strengths and weaknesses for the RDDP matching grants can benefit from using a strength, weakness, opportunities, and threats (SWOT) framework. This element of the consultancy required strong input from RDDP project beneficiaries using a guide in Appendix A2 and other stakeholders using some questions form Appendix A3. The focus was on identifying drivers of change in livestock value chain financing, and that the internal and external factors impacting enterprise development.

3.3.5. Overall contributions of the MG to the development of dairy value chain.

Task 4 is related to the overall contributions of the matching grants to the development of dairy value chain using the criteria of evaluation such as project design and relevance, effectiveness, sustainability and impact. Information based in Appendix A3 was sought from donors, implementing partners and local implementer. It also captured the impact of the project with reference to issues, empowerment (access and use of services and satisfaction with project-supported services), and group membership and influence.

3.3.6. Recommendations for future considerations.

Case studies conducted from various beneficiaries, implementing partners at district or cooperative levels. The study used case studies and success stories to capture successes of the project, with a target on beneficiary respondents who have directly benefited from the project interventions, provide lesson learned and recommendations. This section was based on lessons Learnt, and recommendations that provided by beneficiaries and stakeholders during consultations.

4. FINDINGS OF RDDP MATCHING GRANTS THROUGH BDF

Findings of the impact study answers the following 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*”

4.1. Identification and Socio-Economic Characteristics of Respondents

4.1.1. Identification of Respondents

The distribution of business types within the treatment and control groups, distributed by gender of the respondents who are head of household is shown in Table 3. The survey indicates that 95.3% of the total sample in the treatment group and 98.5% in the control group are engaged in primary production businesses. In the treatment group, 61.7% were males and 33.6% females, while in the control group, 60.2% were male and 38.3% were female. In both treatment and control groups, the proportion of value chain actors, processors and other involved in marketing business were less than 5% of the total sample. Results indicate that there are slight differences in the distribution of value chain actors and marketing-related businesses between the two groups, but generally their proportion are relatively low compared to primary production. The involvement in processing businesses is also minimal in both groups. These results indicate that, overall, the treatment and control groups have relatively similar patterns in terms of the types of businesses individuals are engaged in. Primary production was identified as the most common type of business supported by RDDP MG scheme and stands out as the most prevalent business across both groups.

Table 3. Sample distribution of respondents by business names and sex

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Primary production	61.7	33.6	95.3	60.2	38.3	98.5
Value chain actors	1.4	0.5	1.9	0.2	0	0.2
Marketing	1.5	1.1	2.6	0.9	0.2	1.1
Processors	0.2	0	0.2	0	0.2	0.2
Total	64.7	35.3	100	61.3	38.7	100

4.1.2. Major supported facilities by the MG

Results in Table 4 indicate the percentage of supported facilities by RDDP MG through BDF. Overall, results show that the majority of the beneficiaries (96.5% of respondents) that fall under the category of primary producers received the matching grants for construction of different facilities including cowshed, water tank, dam and dam sheet. Among them, male-headed households constituted 61.3% of the total sample while female household heads were 35.2%. A very small percentage have received grants for

constructing forage hangars, buying motorcycles for milk transport from household level to the MCCs, establishing veterinary drugs shops, buying veterinary kits and motorcycles, and facilitating animal feeds, activities related to farm clearing and fencing, as well as boreholes dehydration and drilling, and purchasing chopper and bailer solar panels, while no males reported receiving such grants. This is consistent with the findings in Table 3 that most of funds were concentrated on primary production businesses.

Table 4. Supported facilities under the MG through BDF

MG supported facilities	Male	Female	Overall
Construction of cowshed, water tank, dam and dam sheet	61.3	35.2	96.5
Construction of forage hangar (Shelters)	0.7	0.2	1.0
Motorcycle for milk transport facilities to the MCCs	0.4	0.1	0.5
Equipment for milk collection, handling and selling, and milk processing and value addition facilities	0.4	0.2	0.6
Establishment of veterinary drugs shop, buying veterinary kits and motorcycles facilitation and animal feeds	0.4	0	0.4
Farm clearing and fencing, boreholes dehydration and drilling	1.2	0	1.2
Purchase of chopper and bailer machines	0.8	0.2	1.1
Purchase of solar panels	0	0.1	0.1

The results also indicate that more male headed households than female-headed households received support from the RDDP MG for the construction of cowsheds, water tanks, dams, and dam sheets. Due to the fact that the percentages of male household heads who have received grants for various activities is always higher than their counterpart, it is still clear that there was still a gender gap in grants distribution.

At cooperative or LFF group levels, key activities or interventions where RDDP matching grants supported are highlighted in appendix A4. These include: purchase of equipment including purchase of milk cans (50l), milk cans (10l), milk cans (20l), alcohol guns, lactometer, water tanks, thermometer infrared, fridge; purchase of bicycles, motorcycles and tricycle motorbike (LIFAN), cooler machine (500l); construction of cowsheds; and others. These equipment and facilities have resulted in changes in milk quality because the members have been supported with having access to appropriate milk cans and other equipment through the matching grants. Due to the fact that the cans distributed among livestock farmers, milk is no longer spoiled at producer level and local MCCs experience higher volumes of milk received. Consequently, produced milk that reaches collection facilities has tripled.

4.1.2. Characterization of the Respondents

Information on the socio- economic characteristics of the respondents disaggregated by the gender of the household head is provided in Table 5. Results show that the minimum age in both groups ranges between 22 and 26 years, while the maximum is 90. For both control and treatment, the average age varies between

49.64 and 52.24 years for males and 53 years for females. On average, age of household heads in the treatment group is slightly higher than in the control group. Female household heads tend to be slightly older than male household heads in both groups.

Results show that, in both groups less than 50% of household heads are members of agriculture cooperatives. Specifically, higher percentage of household heads in the treatment group are members of agriculture cooperatives than in control group. There are 30.2% of male and 13% of female household heads (in the treatment group), whereas in the control group, there are 11.9% of male 5.8 % of female household heads.

Table 5. Socio- Economic Characteristics of the Respondents

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Age of household head						
Minimum	26.0	24.0	24.0	22.0	22.0	22.0
Mean	52.2	53.7	52.7	49.6	53.0	50.9
Maximum	90.0	89.0	90.0	84.0	90.0	90.0
HHH membership in any agricultural cooperative						
Yes	30.2	13	43.2	11.9	5.8	17.7
No	34.6	22.2	56.8	49.4	32.9	82.3
Education level of Household head						
None	5.1	5.3	10.4	10.4	10	20.3
Adult literacy	1.4	0.7	2.1	2.8	1.3	4.1
Primary	37.9	20.3	58.1	38.1	23.4	61.5
Secondary	11.9	5	16.9	6.3	2.8	9.1
Vocational	2.4	1.7	4.1	2.2	0.9	3
University	6.1	2.3	8.4	1.5	0.4	1.9
Marital status of Household head						
Single	1.9	0.8	2.7	2.4	2.2	4.5
Married	60.9	23.2	84	54.3	18.0	72.3
Separated	0.1	1	1.1	1.7	1.9	3.7
Divorced	0.2	0.2	0.4	0.0	0.0	0.0
Widowed	1.7	10	11.7	2.8	16.7	19.5

The results further indicate that a notable proportion of 10% and 20% respectively from control and treatment groups have no formal education. The high proportion of household heads have completed primary education with 58.1% in the treatment and 61.5 % in the control group. Thus, more than 70% of RDDP beneficiaries have little or no education which is an indication of very limited skills. The proportion

of household heads who have completed secondary education is almost 17% for treatment and 9.1% for control. The proportion of respondents with vocational training and university studies is 4.1% and 8.4% respectively in the treatment groups, whereas it is 3% and 1.9% in the control group. The study found that the overall distribution of education levels is relatively similar between the treatment and control groups. However, the proportion of male household heads with secondary and university education is higher compared to female household heads in both groups.

The majority of household heads are married with 84% in treatment and 73.3 % in control group. The percentage of households with married husband and wife is higher among males than females in both groups. For example, the treatment has close to 60% while control has 54.3% of respondents where male household heads married to their spouses. On the other hand, less than a quarter in treatment (23.2%) and less than 20% in control (18%) were female respondents and households head who are married to the husband. The study show that the small percentage of household heads are single, divorced, widowed and separated. The percentage of widowed household heads is significantly higher among females than males in both groups.

4.2. Matching grants and Household Welfare

The study used different indicators outlined in Table 6 to assess the impact of the RDDP matching grants by comparing beneficiaries and non-beneficiaries. Beneficiaries were the target population for this assessment and include individual youth and women in private led businesses who received support from RDDP matching grants through BDF. As indicated before, the project aims at contributing to pro-poor national economic growth and improve the livelihoods of poor rural households. To achieve this, RDDP has focused on increasing the 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

Table 6: Impact indicators for household survey

Impact indicators	Measurement and reporting	Survey instruments
Change (increase/decrease) in Households income as a result of project support	Number and percentage of male and female head-households (sex and age disaggregated).	HH survey (section A, D & G appendix A1) FGD with beneficiaries
Change in households incomes from increased sales of dairy products	Number and percentage of male and female head-households (sex and age disaggregated).	HH survey (section E & F appendix A1) FGD with beneficiaries

Impact indicators	Measurement and reporting	Survey instruments
Change in household assets	Welfare index	HH survey ((section C appendix A1)
		FGD with beneficiaries
Increase in production and productivity of dairy products (Number and Percentage of persons/households)	The indicator should be disaggregated by: number/percentage of households (males, females and youth)	HH survey (section E & F appendix A1)
		FGD with beneficiaries
Percentage of women reporting minimum dietary diversity (MDDW)	The indicator designed to help improve nutrition. Percentage of Women,	HH survey (section H & I in appendix A1)
		FGD with beneficiaries
Households using financial services	The indicator applies to activities regarding rural finance through matching grants and groups savings.	HH survey (section G Appendix A1)
		FGD with beneficiaries

4.2.1. Household Welfare (Housing and Assets)

In line with the project goal of “contributing to pro-poor national economic growth and improve the livelihoods of poor rural households”, both income and welfare measures were used to assess the status of project beneficiaries in terms of housing conditions and assets owned due to the interventions from the project. Table 7 depicts information related to property status of households in both the treatment and control groups.

Table 7: Status and property of the household

		Treatment			Control		
		Male	Female	Overall	Male	Female	Overall
Number of main house rooms	Minimum	2	2	2	2	2	2
	Mean	4.7	4.8	4.7	4.59	4.3	4.3
	Maximum	7	7	7	7	7	7
The property of the household							
Before	In property	62.7	34.5	97.2	60.6	36.7	97.2
	In rent	1.3	0.4	1.7	0.9	1.2	2.1
	Not in property	0.3	0.1	0.4	0	0.2	0.2
	Other	0.2	0.4	0.6	0	0.5	0.5
	Total	64.6	35.4	100	61.5	38.5	100
Current	In property	62.9	34.6	97.5	57.4	35.9	93.3
	In rent	1.2	0.4	1.6	1.7	1.1	2.8
	Not in property	0.3	0.1	0.4	1.9	1.7	3.7
	Other	0.3	0.2	0.5	0.2	0	0.2

Total	64.7	35.3	100	61.3	38.7	100
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On average, houses in both groups have around 4 main rooms. There no significant difference (between treatment and control) regarding the average number of main house rooms owned by both males and females HHHs. Results show that, before RDDP MG, 97.2% of individuals in both groups were in property ownership. After the MG, about 97.5% and 93.3% of individuals respectively in treatment and control groups were in property ownership. Both the treatment and control groups showed similar patterns in property ownership before the intervention. After the MG interventions, property ownership for beneficiaries increased slightly from 97.2% to 97.5%, whereas there was a decrease in property ownership from 97.2% to 93.3% for non-beneficiaries. A small percentage (1.7% for treatment and 2.1% for control) were in rented property and other forms of ownership.

RDDP matching grants beneficiaries, according to Figure 3, the grants main contributions include improvement of the quality of houses as indicated by 83% of the respondents, acquiring own houses by 16% and help accessing rent fee (1%). Therefore, RDDP made a small but significant contribution to the welfare of the beneficiaries through improving the housing conditions and quality of life.

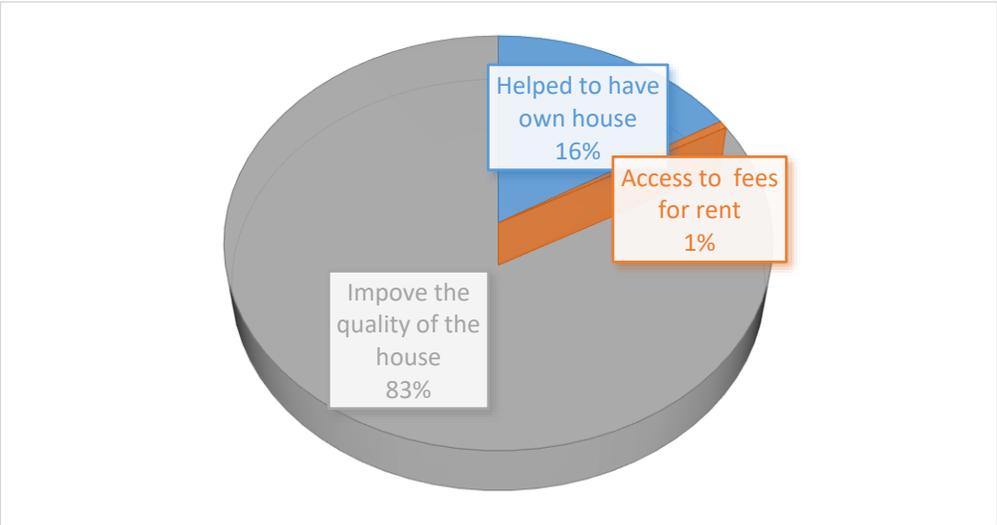


Figure 3. The contribution of the MG to the status and property of houses.

4.2.2. Habitat status for the main house: Roofs, Walls and Pavement

Results on the habitat status for the main house in terms of roof are presented in Table 8. The study found that in both treatment and control groups, the high number of houses have roofs made of sheets followed by tiles, while huts/grasses represents a very tiny proportion.

About 73.6% roof in the treatment group and 64.7% in the control group have the roofs with sheets for their houses. Results show that about 52.5% of beneficiaries and 39.4% non-beneficiaries have walls made of sand mixed with cement. Respectively, for beneficiaries and non-beneficiaries, it was indicated that 9.1% and 23.2% have sandy walls without cement; 19.4% and 6.3% have painted walls; and 18.9% and 31.1% have mud walls. In both groups, walls made of sand mixed with cement are the most common, followed by mud walls and walls with paint. It is also indicated that 63.8% beneficiaries against 52% in the control have cement pavement for their main house from which 42.3% were male and 21.5% of female beneficiaries, while 32.5% males, and 19.5% females were non-beneficiaries. Both cement and muds are the common type of pavement for the main house is cement, whereas very few houses have tiles and lime with cow dung as pavement.

Table 8. Current status of main houses in terms of roofs, walls and pavement

House-Roofs	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Huts/ Grasses	0.5	0.3	0.9	0.2	0.2	0.5
Tiles	15.4	10.2	25.6	20.4	14.4	34.8
Sheets	48.7	24.9	73.6	40.8	23.9	64.7
Total	64.6	35.4	100	61.5	38.5	100
House-Walls						
Mud	11.3	7.6	18.9	16.7	14.4	31.1
Sandy only	6.1	3	9.1	14.8	8.4	23.2
Sandy with cement	33.7	18.8	52.5	25.8	13.7	39.4
Painted	13.4	6	19.4	4.2	2.1	6.3
Total	64.6	35.4	100	61.5	38.5	100
House-Pavement						
Mud	16.9	10.2	27.1	24.6	17.4	42
Lime & cow dung	1.7	1.9	3.7	3.9	1.4	5.3
Cement	42.3	21.5	63.8	32.5	19.5	52
Tiles	3.7	1.8	5.5	0.5	0.2	0.7
Total	64.6	35.4	100	61.5	38.5	100

Compared to before the RDDP matching grants interventions, 22.4% beneficiaries against 14.8% non-beneficiaries reported that they have improved roofs of their main houses. Beneficiaries have a slight high proportion of improved roofs and a smaller percentage of unchanged roofs compared to non-beneficiaries suggests RDDP matching grants has partially and positively impacted on improving the quality of housing. Generally, 76.9% and 84.9% have not changed the roofs. Similarly, 27.4% of beneficiaries and 26.9% non-beneficiaries have improved the walls for their houses. The majority of respondents (70%) in both groups have not changed the walls of their houses. The percentage of individuals who have improved walls is

closely similar between the groups. After the MG, the treatment group has a high percentages of sandy walls with cement and painted walls. The study found that the percentage of individuals who have improved their main house pavement is slightly high in the treatment group. There are differences between the treatment and control groups, particularly in mud and cement pavements.

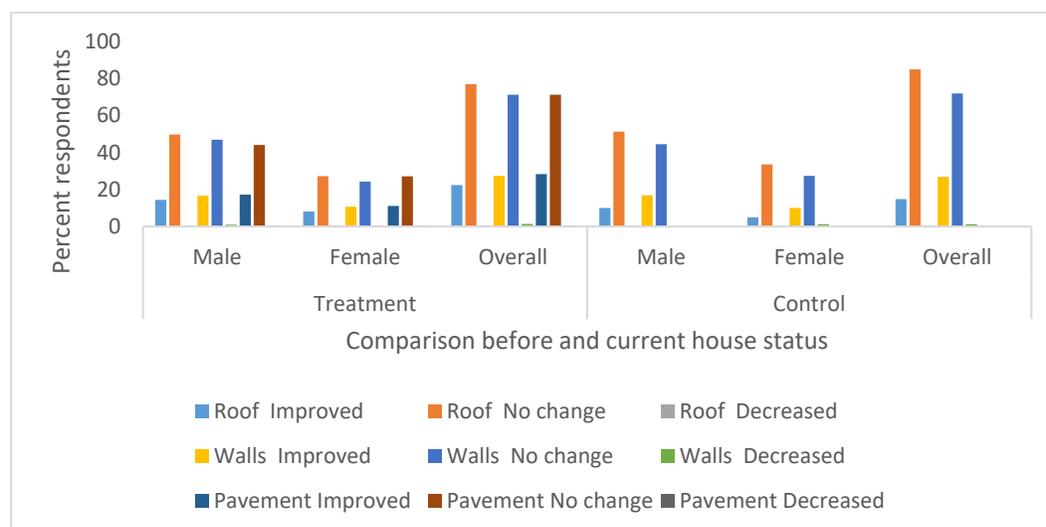


Figure 4: Main house status before in comparison to the current situation

4.2.3. Household ownership of livestock and other assets/items

Household ownership of assets including livestock is another indicator that measure the household welfare. Results on the types of livestock owned by the households including cattle, goat, sheep, poultry, pigs and others are presented in Table 9.

Table 9. Percentage of households owning livestock and assets

Livestock ownership	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Cattle	64.7	35.3	100	61.3	38.7	100
Goat	20.9	10.6	31.5	24.2	10.6	34.8
Sheep	13.0	5.5	18.6	7.1	2.8	10.0
Poultry	22.8	12.4	35.2	18.8	11.5	30.3
Pig	13.5	6.7	20.1	12.3	8	20.3
Other	2.3	1.3	3.6	0.9	0.4	1.3
Assets ownership						
Vehicle	2.8	1.3	4.1	0.6	0.2	0.9
Motorcycle	11.9	2.8	14.7	1.9	0.4	2.4
Bicycle	23.9	8.5	32.4	16.7	7.8	24.5
Radio	49.3	24.9	74.2	44.6	24.2	68.8

Telephone	61.9	33.4	95.3	52.4	31.2	83.5
Computer	8.0	2.9	11.0	1.1	0.0	1.1
TV s	25.4	11.4	36.7	8.0	5.0	13

Respectively for treatment and control, 64.7% and 61.3% of households have cattle; 20.9% and 24.2% have goats; 22.8% and 18.8% have poultry; 13.5% and 12.3% have pigs; and 5.5% and 7.1% have sheep. These results signal that cattle ownership is the highest among all types of livestock in both groups. Goat ownership is slightly lower in the treatment group than in the control group. Sheep ownership is high in the treatment group compared to the control group. Poultry ownership is higher in both groups, with a slightly higher ownership in the treatment group. Ownership of other types of livestock is slightly high in the treatment group.

For types of assets owned by the household, the majority of beneficiaries (95.3%) and a high number of non-beneficiaries (83.5%) own telephones. The treatment owns a high proportion of radios and telephones compared to the control for both males and females. Respectively, 74.2% and 68.8% have radios, and more beneficiaries (36.7%) than non-beneficiaries (13%) own TV set and the percentage of beneficiaries (32.4%) who own bicycles is higher than non-beneficiaries (24.5%) who own the same type of assets. The results imply that the two groups significantly differ in asset ownership. Vehicle ownership in the treatment group is significantly higher than in the control group for both males (2.8% vs. 0.6%) and females (1.3% vs. 0.2%). Bicycle ownership was found to be notably far higher in the treatment than control. While the ownership of computers, motorcycle and TVs is generally low, the treatment still has higher ownership percentages than the control.

4.2.4. Factors that Contributed to New Livestock Acquisition

Figure 5 indicates factors that project that most contributed to the new livestock acquisition. Results show that, across all types of livestock, the contribution of RDDP matching grants was between 2.8% and 8%. For instance, RDDP matching grants contributed about 7.8 % new pig acquisition, 6% to both new cattle and poultry, and 3.6% and 2.8% of new goad and sheep acquisition respectively. The highest contributor to cattle, goat, sheep was poultry acquisition was household members indicated by more than 90% of households.

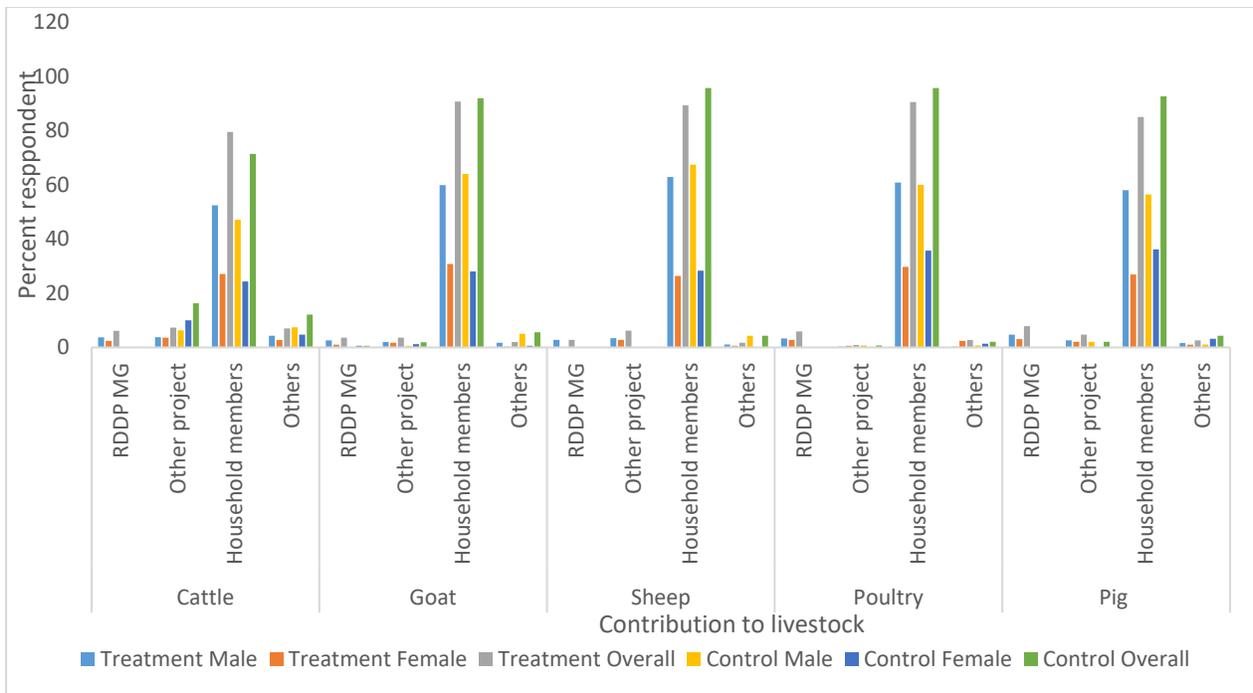


Figure 5. MG contribution to the new livestock acquisition

Results in Figure 6 show that the primary source of asset acquisition is household members. RDDP MG contributed to about 10.3% and 11% of vehicle ownership (especially among males with 7.7%) and bicycle ownership (including 6.8% males and with approximately 33% of motorcycle ownership (including 27% of males); computer and TV set ownership with 12% (with 8.6% males) and 15% (including 11% males) respectively. For Radio and telephone, RDDP MG contributed to a small percentage of new acquisitions.

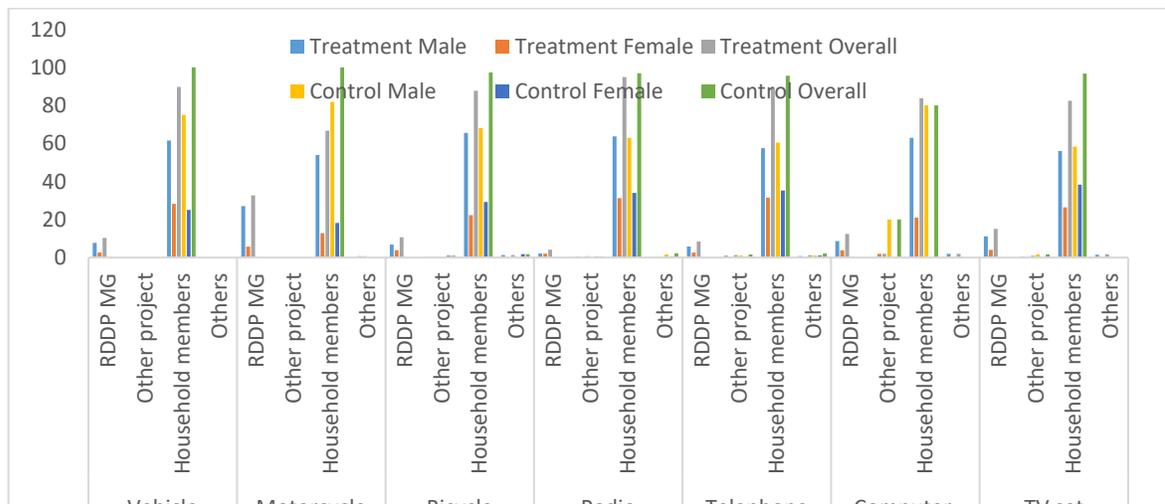


Figure 6. Matching grants contribution to new household asset

4.2.5. Source of Household Income

The impact of RDDP MG was determined by assessing if there were changes in household income for direct beneficiaries as a result of project support. Results in Table 10 presents various sources of income by gender of the household head, which include sales from milk and dairy products, sales from manure, sales from other animal farming products, sales from crop farming, and income from off-farm activities. On average, the study found that beneficiaries of RDDP matching grants tend to have higher household incomes from various sources. Income from sales of milk and dairy products is substantially higher for the treatment than the control (334,569 vs. 159,459). Average income from manure sales is high for beneficiaries (31,960 vs. 14,621). Beneficiaries have higher average income from sales of other animal farming products than non-beneficiaries (145,049 vs. 78,985). Sales from crop farming were also higher than in the treatment group compared than in the control group (478,480 vs. 336,656). Beneficiaries also recorded much high income from off-farm activities compared to the non-beneficiaries (310,030 vs. 171,905).

Table 10. Income categories and sources of income (RWF)

Income sources (RWF)		<i>Sales from milk and dairy products</i>	<i>Sales from manure</i>	<i>Sales from other animal farming products</i>	<i>Sales from crop farming</i>	<i>Income from off farm activities</i>
<i>Treatment</i>	Male	346,314	33,621	161,119	490,248	320,232
	Female	313,024	28,914	115,571	456,894	291,317
	Overall	334,569	31,960	145,049	478,480	310,030
<i>Control</i>	Male	171,739	15,353	84,470	350,664	179,541
	Female	140,045	13,464	70,313	314,508	159,832
	Overall	159,459	14,621	78,985	336,656	171,905

4.2.6. RDDP MG Impact on beneficiaries

The study found that close to 83% and 16% of the respondents reveal the grants has mainly contributed to improved quality of houses or ownership of new houses. In addition, the study found that the RDDP matching grants contributed to between 6% and 7.8 % new pig, cattle and poultry ownership in the study area. Thus RDDP MG has positively impacted the welfare of the beneficiaries through improving the housing conditions and quality of life, and thus contributing towards “*pro-poor national economic growth and improved livelihoods of poor rural households*”.

Generally, the study found that findings of the study indicate that RDDP matching grants has led to a substantial contribution to asset building and climate-smart productivity of poor households, including livestock distribution. Lack of asset is one of the indicator of multidimensional poverty. Asset building contributes to poverty reduction. Therefore, The MG has resulted in improvements in household living conditions, in terms of access quality of roofing materials, improved sanitation and asset ownership including mobile phones, and thus contributed towards to the overall project of pro-poor national economic growth while improving the livelihoods of poor rural households.

Information captured from all LFFS groups that participated in the FGDs reveal that the matching grants has significantly contributed to change in household income. Participants highlighted that various factors that contributed to have contributed to this change are related to improved marketing of milk resulting in increased cash income accruing to livestock farmers. Higher volumes of milk are marketed and the price per liter of milk has increased compared to the situation before the grants. The income was reported to be even higher among beneficiary households from LFFS groups that opted to invest in milk transportation and milk collection posts. Participants reported that before the grants, most of the produced milk was spoiled at home and could not be marketed. Furthermore, the marketing of milk involved intermediate milk collectors who accumulated most of the profit, leaving less to milk producers. In addition to better marketing of milk, grouped payments of supplied milk was reported as a positive factor of change since farmers receive higher amounts of money reaching their home, increasing the household income.

4.3. Matching grants, and production and productivity of dairy products

The outcome indicator under this RDDP is related to “*Smallholder dairy farming productivity and supply of quality milk enhanced and milk consumption at household level increased*”

4.3.1. Milk Production at Household Level

Table 11 present inventory of cattle owned by households per breed type. Overall, the treatment group tend to have the high number of cows of each type compared to the control group. It was shown that 22.7% of households (in the treatment group, including 15.2% of males and 7.5% of females) and 15.2% with 6.9% of males, 8.2% of females) reported that they have exotic cattle. Crossbreed cattle were owned by 72.3% (including 47.2% of males, 25.1% of females) and 76.8% (including 50.1% of males, 26.7% of females) of household in the control. About 17.3% household (with 10.8% of males, 6.5% of females) in the treatment against 16.7% (with 8.9% of males and 7.8% of females) reported that they own local cattle. The number of cows owned by a household was averaged to three (3) exotic cows in treatment and almost two (2) cows

in control. The treatment group has an average 3.5 crossbreed cows compared to 1.6 in the control. average number of local cattle is almost the same across the two groups.

Table 11. Inventory of cattle before and after RDDP support

Percentage of cattle type owned	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Exotic	15.2	7.5	22.7	6.9	8.2	15.2
Crossbreed	47.2	25.1	72.3	50.1	26.7	76.8
Local	10.8	6.5	17.3	8.9	7.8	16.7
Number of cattle type per household						
Exotic	3.1	3	3	1.9	1.6	1.8
Crossbreed	3.9	2.7	3.5	1.6	1.5	1.6
Local	1.4	1.3	1.3	1.5	1.3	1.4

The results in Figure 7 indicates that, in both treatment and control groups, family plays a significant role in acquiring cattle breeds since it is the largest contributor to exotic (with 83.7% and 65.7%) , crossbreed (75.4% and 65.3%) and local cattle (81.9% and 64.9%) respectively. In the treatment, projects (5.9%) and Girinka (3.4%) are the second and third contributors. For non-beneficiaries, contributions of both relatives/neighbors (6.6%) and Girinka (9%) in cattle acquisition are high in the control group.

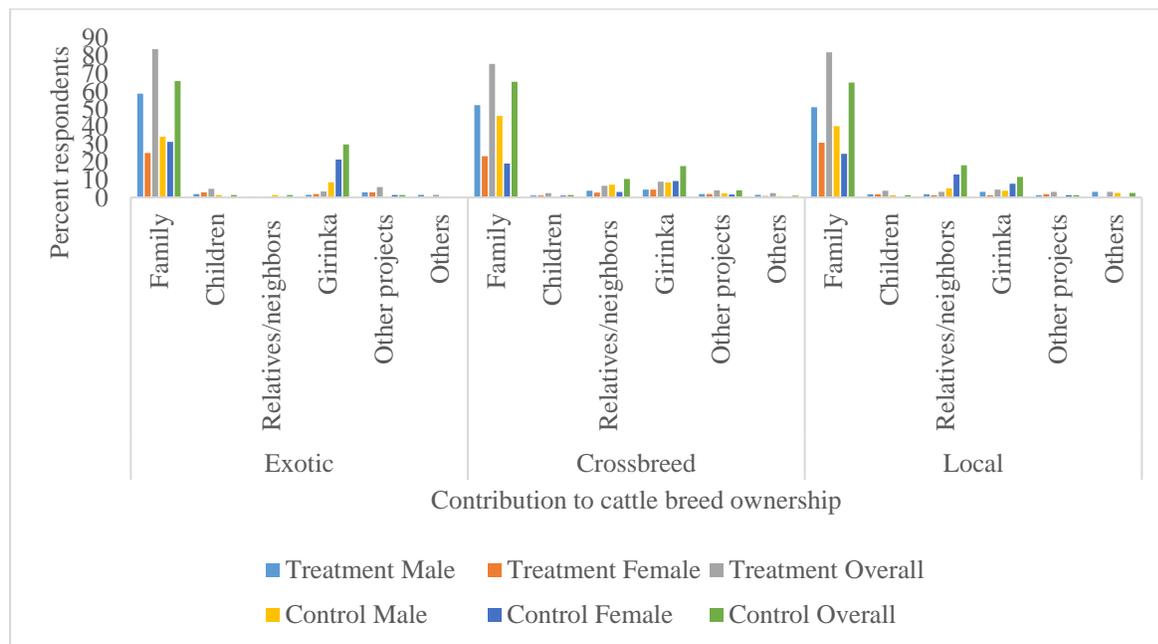


Figure 7. MG contribution to cattle ownership by breed type

The contribution of RDDP MG highly contributed about 30.5% to exotic cattle ownership, 18% of crossbreed cattle, whereas 5.2% of local cattle.

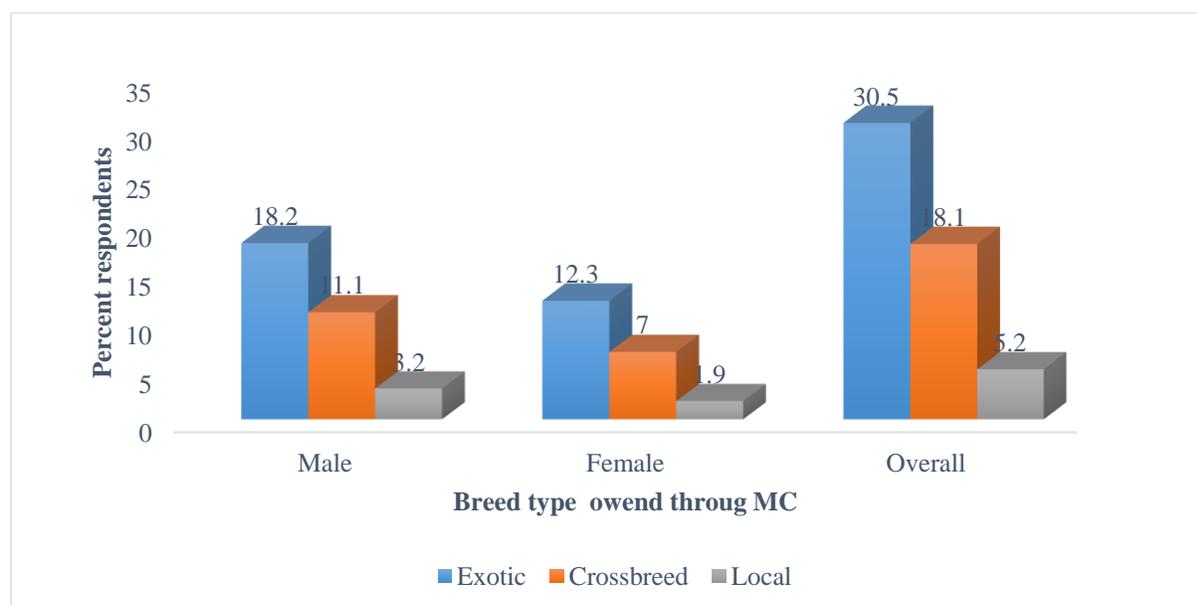


Figure 8. RDDP MG contribution to breed type

4.3.2. Daily production of milk and factors contributing to milk increase

Results in Table 12 indicates that the percentage of households with milking cows is higher in the treatment group (70.1%) than in the control group (51.6%). For beneficiaries, 46% males and 24% females and for non-beneficiaries, 32.8% male and 18.8% females exotic and cross breed milking cows.

Table 12. Milk production and contribution to milk increase

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Do you have a milking cow?	46	24.1	70.1	32.8	18.8	51.6
Milk receive per day (litres)	18.1	15.8	17.3	9.6	11.2	10.2
Compare the current milk production per cow with the production before						
Milk production goes increasing	53.6	27.5	81	43.4	26.3	69.7
No change	6.4	4.4	10.8	11.6	6.8	18.3
Has decreased	5.4	2.7	8.1	8	4	12
Interventions among which most contributed to milk increase						
Improving the breed	51.5	26.8	78.2	38.9	25.7	64.6
Knowledge in cattle feeding	54	27.6	81.6	25.1	16.6	41.7

Knowledge in healthcare	52.3	25.9	78.2	20.6	12.6	33.1
Acquired infrastructure for water provision	46.9	24.9	71.8	9.1	6.3	15.4
Established improved forage species	33.9	16.1	50	6.3	2.9	9.1

Treatment group generally reports high average quantities of milk received per day compared to the "control" group. On average, 17.3 liter of milk is received per day in treatment area, but liters for males have higher quantities 18.1 liter than female HHHs (15.8 liters). In the control group, on average 10.2 liters are received per day with lower quantities for males (9.6 liters) than for females (11.2 liters). Results further show that, 81.0% of the treatment group and 69.7% of the control group have reported that the milk production has significantly increased. About 10.8% and 18.3% respectively in treatment and control" group have reported that there is no change in milk production. Several interventions promoted by that have contributed to milk production increase. The found that there are differences between the two groups particularly "knowledge in cattle feeding," "knowledge in healthcare," and "acquiring infrastructure for water provision". Improving the breed contributed to the highest with 78.2% in treatment and 64.6% in control, and followed by knowledge in cattle feeding and knowledge in healthcare. Water provision and improved forage species have contributed very little in the control group.

4.3.3. Milk production during peak and off-peak season

Quantities of milk produced on a daily basis during peak season as compared to off-peak are presented in Figure 9. The results suggest that there has been an increase in milk production per cow per day in the "Current" period compared to the "Before" period, especially during the "peak season." Generally, during the "Peak season there is higher average milk produced by beneficiaries per cow per day compared to milk produced by non-beneficiaries. Before the MG, daily milk production during peak season was averaged 13.9 liters of milk production per cow. The average milk produced by non –beneficiaries was 6.7 liters before for the control. Milk produced in HH headed by males were not significantly with HH headed by females. Currently, the average milk production per cow per day increased to 22.2 liters for treatment, and reached 12 liters for the control. Milk produced in the peak season is considerably higher than for off-pick season. This increase is generally more pronounced in the treatment group.

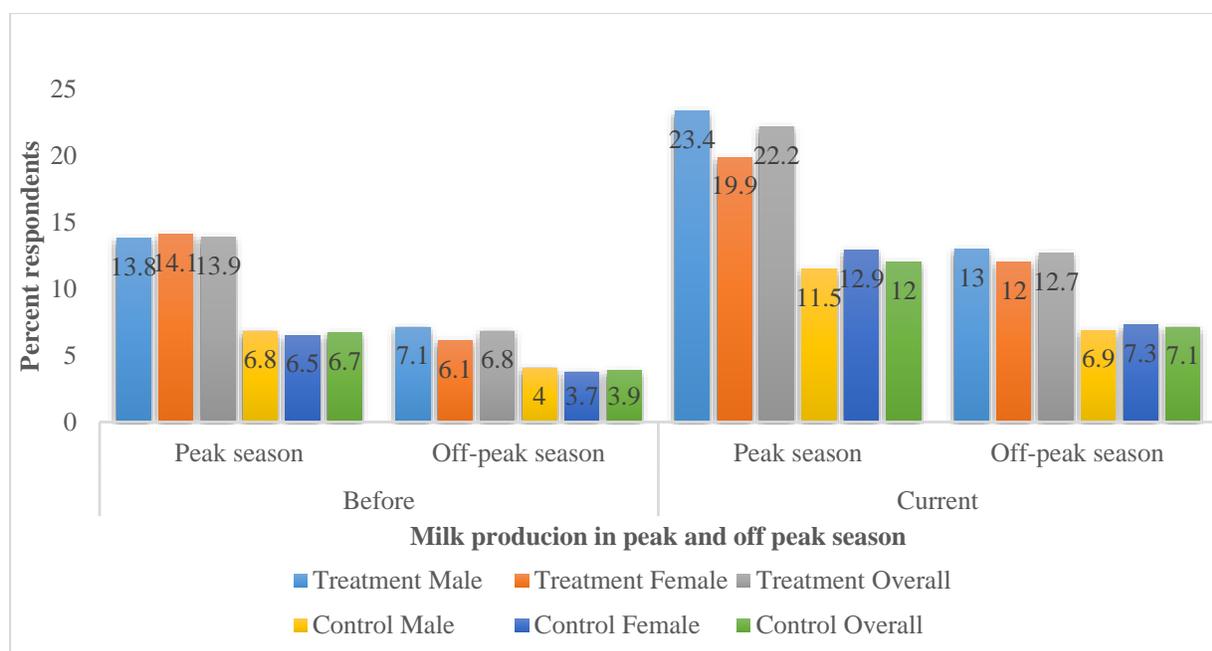


Figure 9. Peak and off-peak milk production

4.3.4. Dairy Production practices

The study results in Table 13 show that a large proportion of respondents in the treatment group compared to the control group participated in training on breeding/reproduction practices before and after RDDP matching grants project was introduced. Participation in the program has increased since the project has been implemented, especially in the treatment group. Participation has increased from 53.7% before to 67.4% currently for beneficiaries, and for non-beneficiaries it slowly changes from 14.3% to 15%.

Table 13. Dairy production practices

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Breeding/reproduction practice						
Before	33.9	19.9	53.7	8.5	5.9	14.3
Current	43.5	23.9	67.4	8.2	6.7	15
Breeding/reproduction practices/ technology						
Heat synchronization	20	10.5	30.5	6.5	7.6	14.1
AI	43.5	23.7	67.2	26.2	16.5	42.7
Embryo transfer	4.2	2.5	6.7	0.7	0.9	1.5
Others	9.7	4.5	14.2	8.7	6.7	15.4

If reproduction practices are useful	50.6	26.9	77.5			
Use reproduction practices in future	62.7	33.6	96.3			
Animal feeding practices	43.9	24.1	68	7.4	5.6	13

The study show that the large proportion of beneficiaries have used these breeding/reproduction practices/technologies. The use of AI for breeding/reproduction practices shows a notable difference between the two groups, with higher usage in the treatment. In the treatment group, 30.5% (including 20% of males and 10.5% of females) and 14.1% of the control group (6.5% for males and 7.6% for females) have used heat synchronization. Overall, 67.2% of the "Treatment" group (including 43.5% of males and 23.7% of females) and 42.7% of the control group (26.2% for males and 16.5% for females) have used AI. Also, the study indicated that only 6.7% of the treatment group and 1.5% of the control group have used embryo transfer. Furthermore, the study found that, 77.5% of the respondents (both males (50.6%) and females (26.9%) consider these practices/inputs/technologies to be useful or effective. Majority of RDDP beneficiaries (96.3%) including males (62.7%) and females (33.6%) — plan to continue using these practices/inputs/technologies. Beneficiaries (68.0% including 43.9% of males and 24.1% of females) and 13.0% of non-beneficiaries (with 9.4% for male vs 5.6% for female) have participated in such training on animal feeding practices/forage establishment.

4.3.5. Animal Health and Diseases Management Practices

Results in Table 14 show that, across both silage and hay, a significantly large percentage of respondents in the treatment group compared to the control group have participated in training on feeding conserved forage. Less than half (47.2%) of the treatment group and very few (8.2%) of the control group have participated in training on silage feeding. More than half (52.6%) in the treatment group and 8.0% of the control group have participated in training on hay feeding. Among them, 34.5% of males and 18.1% of females are from the treatment and 3.7% for males and 4.3% for females are from control. Participation rate in training on disease control routine, recognizing a sick cow, disease prevention measures in your farm (deworming), disease prevention measures in your farm (tick borne diseases by spraying acaricides), conduct regular vaccination against any cows' diseases and health and diseases management practices/technology is significantly higher in the "Treatment" group than in the "Control" group. Across all categories, the treatment group consistently records far higher participation rates and implementation of health and disease management practices than the control. Both males and females benefited from training on animal health and diseases management practices.

Table 14. Conserved forage and Health and Diseases Management Practices

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Feeding conserved forage						
Silage	30.5	16.6	47.2	3.9	4.3	8.2
Hay	34.5	18.1	52.6	3.7	4.3	8
Animal feeding practices/concentrates	40	22.1	62.1	7.6	5.9	13.4
Disease control routine?	40.7	22	62.7	6.5	6.1	12.6
Recognizing a sick cow	42.1	22.3	64.5	6.5	5.4	11.9
Disease prevention(deworming)	41.2	22.3	63.6	7.4	6.1	13.4
Disease prevention (Tick borne)	42.8	23	65.8	7.6	5.4	13
Conduct regular vaccination	41.8	22.8	64.6	6.7	5.9	12.6
Diseases Management Practices	44.5	24.1	68.6	6.5	6.1	12.6

4.3.6. Milking practices

Results reveal that the participation rate in various milk practices including hygienic precaution in milking and use of appropriate milk utensils/equipment in milk transporting & preservation was the highest among other practices with 67.9% and 62.0%. Slightly, more than half (>50%) used observance of recommended time before milking a cow treated with antibiotic and testing for mastitis. The proportion of beneficiaries who use or implement any milking practices was close to 67% for treatment. There is much higher percentages in the use of overall milk practices in the treatment" group than the control group. A significantly high percentage of both males compared to females from the treatment group, have participated in training on different milk practices.

Table 15. Different milk practices

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Hygienic precaution in milking	43.6	24.4	67.9	7.2	6.1	13.2
Testing for mastitis	36.2	19.4	55.6	6.9	4.3	11.3
Equipment/milk transport/preservation	40.0	22.0	62.0	6.1	4.6	10.6
Milking a cow treated with antibiotic	38.9	20.0	58.9	5.4	5.0	10.4
Use or implement any milking practices	43.0	24.0	67	7.8	6.3	14.1

4.3.7. Extent to which supported facilities contributed to dairy practices

Table 16 show the extent to which supported facilities contributed to use of production and reproduction practices. The study observed that there is between 73% and 82% percenta contribution of show that construction of cowshed, water tank, dam and dam sheet to dairy production practices, however, the contribution to Established improved forage species was less as it was estimated at 50%. Purchase of

chopper and bailer machines for most dairy practices was high and above 88%, but it was moderate for practices related to acquired infrastructure for water (66.7%) and low for established improved forage species (55.6%). The contribution of farm clearing and fencing, boreholes dehydration and drilling was very high and above 75% for the majority of dairy practices, but very low for established improved forage species (55.6%). Construction of forage hangar (Shelters) was seen as the most contributor to all dairy practices as it ranges from 80% to 100%.

Regarding breeding/reproduction practices/ technology, Facilities and equipment related to Buying motorcycle for milk transport and milk collection, handling and selling, and milk processing demonstrated some very significant contributions, respectively followed by construction of forage hangar and shelters (75%) and construction of cowshed, water tank, dam and dam sheet (70.2%). There is an average contribution of Purchase of chopper and bailer machines and Farm clearing and fencing, boreholes dehydration and drilling estimated at 66.7% and 54.5%. Buying motorcycle for milk transport and milk collection contributed high (75%) to heat synchronization; construction of forage hangar (Shelters) and milk collection, handling and selling, and milk processing; other practices have very little impact on heat synchronization. Further, Farm clearing and fencing, boreholes dehydration and drilling and construction of forage hangar (Shelters) have a lot of contribution of silage and hay practices. Other practices have moderate contribution to hay and silage. There was no very less reported contribution of Buying motorcycle for milk transport facilities to silage, hay and embryo transfer, and finally the impact of these supported facilities was overall low for embryo transfer.

Table 16. Facilities and equipment’s contribution to dairy production and reproduction practices

Facilities and equipment	Construction of cowshed, water tank, dam and dam sheet	Construction of forage hangar (Shelters)	Buying motorcycle for milk transport facilities	Milk collection, handling and selling, and milk processing	Farm clearing and fencing, boreholes dehydration and drilling	Purchase of chopper and bailer machines
Production practices						
Improving the breed	78.4	80	50	33.3	77.8	88.9
Knowledge in cattle feeding	81.6	100	50	66.7	88.9	88.9
Knowledge in healthcare	78.1	100	100	100	88.9	88.9
Acquired infrastructure for water provision	72.7	100	0	66.7	88.9	66.7
Established improved forage species	50.2	80	0	66.7	44.4	55.6
Breeding/reproduction practices/ technology						

Heat synchronisation	31.2	62.5	75	60	54.5	22.2
AI	70.2	75	100	100	54.5	66.7
Embryo transfer	6.6	12.5	0	0	0	11.1
Silage	47.9	75	25	60	81.8	55.6
Hay	53.7	100	0	60	90.9	66.7

Results in Table 17 show that there is a very high contribution of construction of forage hangar (shelters) to animal health and diseases control practices that is estimated above 87.7% and high for testing for mastitis with 75%. Farm clearing and fencing, boreholes dehydration and drilling follows by contributing between 72.7% and 81.8%. The contribution of purchase of chopper and bailer machines was high and between 77.8% and 90%, but less for testing for mastitis with 66.7%. There was a medium (60%) to high (80%) contribution of Milk collection, handling and selling, and milk processing to most practices, but very low for Milk collection, handling and selling, and milk processing with only 40%. Construction of cowshed, water tank, dam and dam sheet has a moderate contribution to animal health and diseases control practices. There as very significant contribution of Buying motorcycle for milk transport to diseases management practices/ technology, but with minimal impact on other animal health and diseases control practices.

Table 17. Facilities and equipment's contribution to animal health and diseases control practices

	Constructio n of cowshed, water tank, dam and dam sheet	Construc tion of forage hangar (shelters)	Buyi ng moto rcycl e for milk trans port	Milk collectio n, handling and selling, and milk processi ng	Farm clearing and fencing, borehole s dehydrat ion and drilling	Purch ase of chopp er and bailer machi nes
Disease control routine	64.5	100	0	60	81.8	77.8
Recognizing a sick cow	65.7	100	25	40	81.8	77.8
Disease prevention measures	67.4	100	50	60	81.8	77.8
Conduct regular vaccination against any cows' diseases	66	100	50	60	81.8	77.8
use / implement any Health and Diseases Management Practices/ technology	69.3	100	100	60	81.8	88.9
Training on Hygienic precaution in milking	69.1	100	50	80	81.8	77.8
Testing for mastitis	55.9	75	25	60	72.7	66.7
Use of appropriate milk utensils/equipment in milk transporting, & preservation	63.4	87.5	25	80	81.8	77.8
Trained on observance of recommended time before milking a cow treated with antibiotic	60.4	87.5	25	60	81.8	77.8

Use of milking practices / technology	68.4	87.5	50	80	72.7	88.9
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4.3.8. Impact analysis of the grants on household incomes from increased sales of dairy products

Results of the quantitative survey reveal that RDDP MG contributed respectively between 30.5% and 18% of exotic and crossbreed ownership, and increased number of households (70.1%) with milking cows, whereby 81.0% of has indicated that milk production has significantly increased thanks to the interventions and the high average quantities of milk was 7.3 liter received per day as compared to 15.8 liters for non-beneficiaries. Knowledge in cattle feeding and healthcare and improving the breed contributed between 78% and 83% to these changes in addition to the use of AI by 67.4%. However, the use of heat synchronization was found to be low as it was reported at 30.5% (including 20% of males and 10.5% of females). Thanks to the grants, beneficiaries' participation in milk production practices has increased from 53.7% to the current situation of 67.2%.

The impact was attributed to changes in productivity. An increase in productivity was generally reported by participants from FGDs who confirmed that daily volume of milk per cow has doubled or tripled, although they also acknowledged that this increased productivity could not be solely attributed to the effect of RDDP matching grants. Indeed, LFFS groups have been supported by the project in various aspects of dairy value chain development, including technologies and practices related to genetic improvement and animal feeding that can affect cow productivity. Participants reported the impact was also due to a positive mindset noticed among farmers who are more motivated to increase livestock productivity since the market for milk is no longer a barrier as it used to be before the RDDP matching grants.

One of the impact of the matching grants on beneficiaries was related to improvement in household food security as reported by participants in FGDs. Moreover, a part of milk produced is consumed at home, leading to improved household diet. It was estimated that about 20% of produced milk is used for home consumption. An important contribution to household food security is from farmyard manure which supports crop production systems inducing tangible increase in yields, thus, increased availability of food for household. The development of vegetable kitchen gardens was reported as a good example, as it becomes easier for households to practice it because of increased access to manure.

Another effect of the MG on beneficiaries was the increased household income from the sale of milk which makes it possible to access various household needs. Participants in all FGDs have reported there was a significant change in quality of milk leading to improved milk marketing and increase in value of milk sold. The quality of milk has increased thanks to increased knowledge on milk hygiene and standards. For instance, the price of milk ranges between Frw 300 and Frw350 depending on the location and market,

from less than Frw 200. Through RDDP matching grants, many LFFS groups have acquired basic equipment for milk testing, cans for milk handling as well as motorbikes and bicycles for rapid milk transportation to milk collection facilities. Furthermore, investment made in cowsheds construction improved milking hygiene and prevention of diseases such as mastitis. All these interventions ensure that marketed milk meets required standards and is no longer rejected at milk collection facility level.

4.4. Matching grants and sales of dairy products

4.4.1. Improved Physical Access to Markets, Processing and Storage Facilities

The study findings show that, higher percentage of beneficiaries than non-beneficiaries have improved physical access to facilities (Table 18). Results also show that the high percentage of beneficiaries (54.9%) report improved physical access to facilities including selling milk. Beneficiaries have shown that they have greater diversity in selling points, including more engagement with milk collectors (53%), milk collection centers (31.8%), direct individual consumers (25.5%) and primary cooperatives (9.4%). In the control group, there is a concentration of sales to Direct individual consumers (56%), milk collectors (41.7%) and direct individual consumers, and very few for milk collection centers (20.5%). Beneficiaries tend to sell and consume slightly more milk. Milk selling and consumption patterns differ between morning and evening, but participants in the treatment group consistently tend to have higher average quantities than non-beneficiaries. It is also indicated that 41.7% of respondents in the treatment group and 33.6% in the control group reported that some part of milk produced is process at home. In the treatment group, 28.2% of males and 13.5% of females' report that some part of their milk production is processed at home. In the control group, 20.6% of males and 13.0% of females indicate a similar practice.

Table 18. Milk Selling and Consumption

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Selling milk from farm	35.8	19.1	54.9	18.2	10.4	28.6
Milk buyers (sell to)						
Milk collectors	34.6	18.3	53	30.3	11.4	41.7
Milk collection centers	23	8.8	31.8	10.6	9.8	20.5
Primary cooperative	7.3	2	9.4	0.8	1.5	2.3
Direct individual consumer (s)	15.5	10	25.5	34.8	21.2	56.1
Milk marketing or selling point	2	0.8	2.9	1.5	0	1.5
Restaurant/Hotel	3.3	2.2	5.5	13.6	12.9	26.5
School/health centers	0.4	0.8	1.2	0	0.8	0.8
Others	2.6	1	3.7	0.8	0	0.8
Milk consumption						

Selling-morning	12.8	10.9	12.1	8.8	9.1	8.9
Selling-evening	7.1	6.5	6.9	5.6	7.9	6.4
Home consumption-morning	1.6	1.2	1.4	1	1	1
Home consumption-evening	1.6	1.3	1.5	0.8	0.7	0.7
Donated per day	1.1	0.8	0.9	0.6	0.6	0.6
Milk processed at home	28.2	13.5	41.7	20.6	13	33.6
Milk product produced at home						
Fermented whole milk	67.3	32.2	99.5	61.3	38.7	100
Butter	19.3	8.3	27.6	14.2	9.7	23.9
Milk processed at Cooperative	9.9	5	15	6.5	2.8	9.3
Distance to the processing facility(min)						
Before 2018	5.1	5.1	5.1	5.7	4.3	5.2
Current	3.5	3.2	3.4	4.8	3.7	4.3

4.4.2. Factors that have led to changes in milk marketing revenues

Figure 10 indicates that the most significant difference between the two groups is in the increased category. The "Treatment" group consistently reports a higher percentage of respondents indicating an increase in milk marketing or revenue, compared to the control group. The proportion of respondents reporting no change in milk marketing or revenue ("Stayed the Same") is relatively similar between the two groups. While the treatment group also has a slightly higher percentage of respondents reporting a decrease, the overall impact on decreased milk marketing or revenue seems to be smaller than the positive impact observed in the "increased" category.

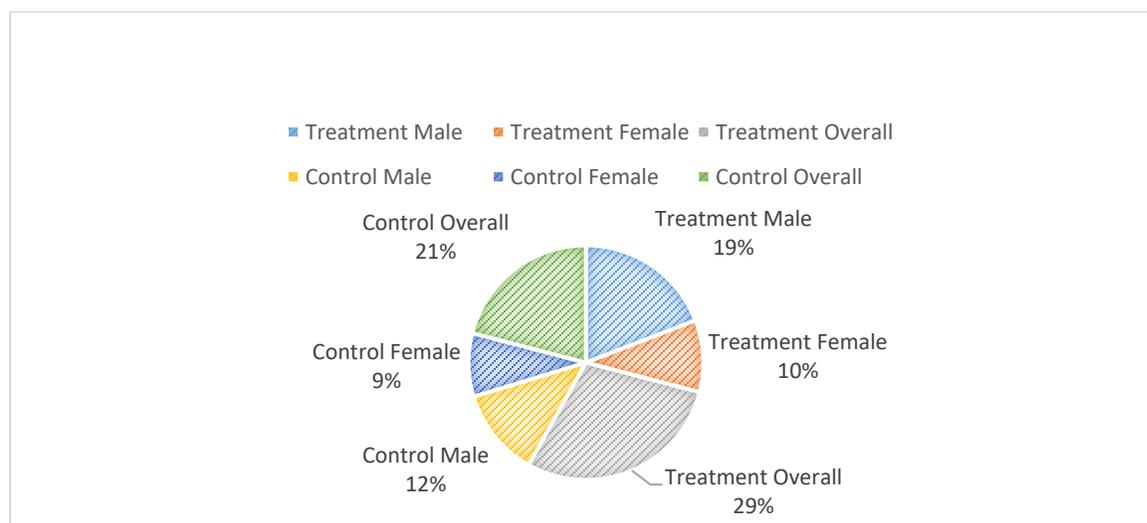


Figure 10: How has milk marketing / revenue changed

4.4.3. New or improved services or increase in sales by producer organizations

Figure 11 presents results on monthly milk sales (liters) and milk collection by rural producer organisations during before and after the implementation of the matching grants. Milk sold through the cooperative has generally increased by 16.4% of the annual milk sold before the MG. At production level, this change towards the high production of milk has been partly attributed to increased access water by cos mainly constructed dams, damsheets and boreholes. For example, cooperatives such as Terimbere Mworozzi Mbare have acknowledged an important increase in milk production due to investment in damsheets as support to farmers.

Most cooperatives reported that there have been changes in milk quality because the members have been supported with having access to appropriate milk cans through the matching grants. For instance, Matwoki and Terimbere Mworozzi Mbare cooperatives in Nyagatare district have increased the quality of milk collected to grade one (1) whereby fewer volumes of milk collected that are of grade 2 are sold to local shops. For cooperatives like KIDACO that was supported to get standard certificate through the RDDP matching grants has now increased its skills and capacity in dairy products diversification and improved the practices of in collection and processing milk. This led to overall increase in income and members' capital share.

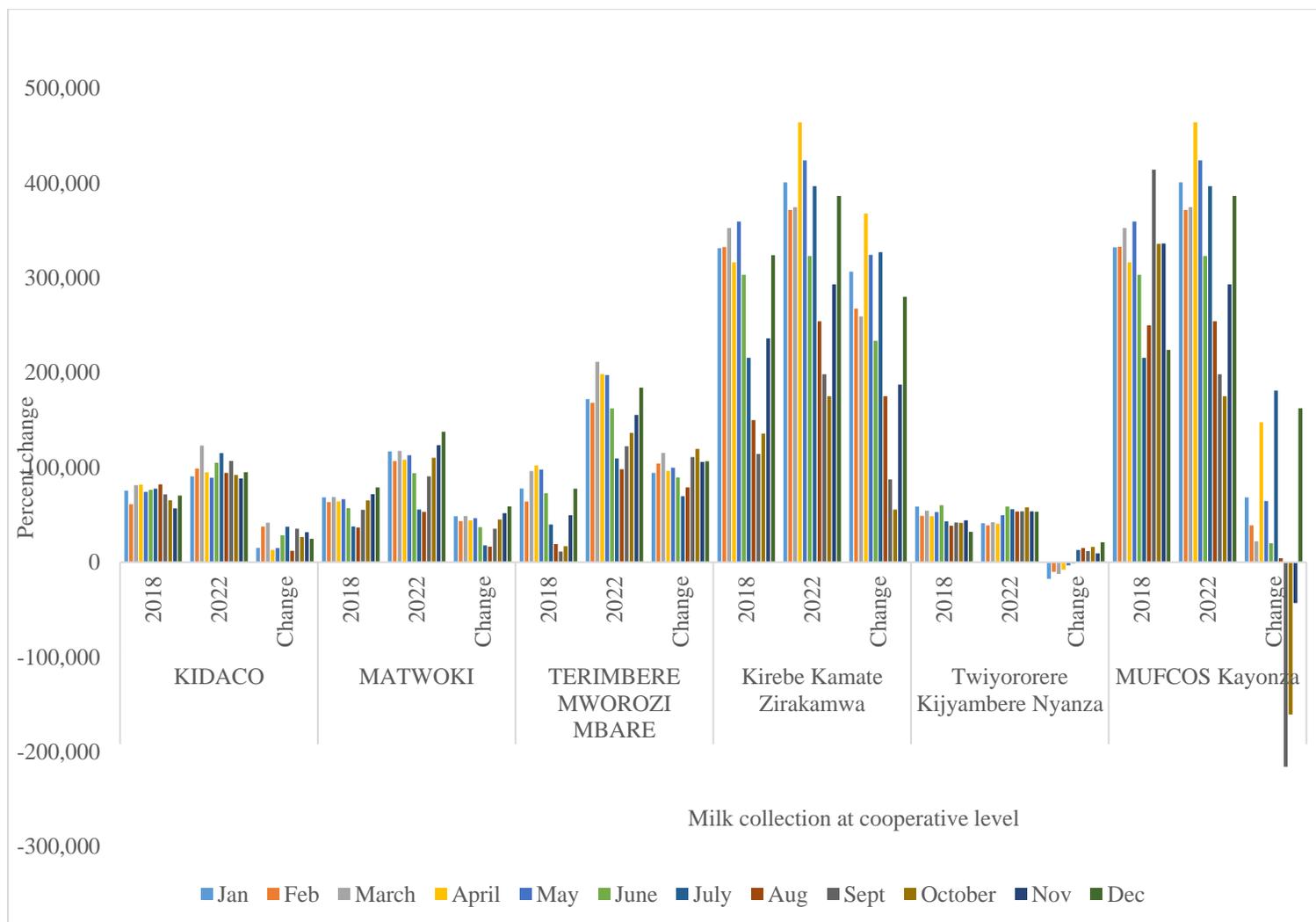


Figure 11. Trend in milk collection comparing the period before and after

4.5. Matching grants and the minimum dietary diversity (MDDW)

4.5.1. Household Food Security

Results reveal that, most of respondents from both group have two meals a day (Figure 12). The proportion of households with two meals has increases from 78.6% to 86.9% in the control. In the treatment group, household that reported they consumed two meals in the control reduced from 67.7% to 63%, but those with three meals per day increased by 10% from 8% to 18.1% . Another positive outcome from the MG interventions is the increased level of milk consumption at household level, participants in FGDs reported. In practice, the internal regulations of LFFS groups recommends a minimum quantity of milk that should be consumed at home to improve household diet. For some LFFS groups, Saturday and Sunday milk is exclusively reserved for home consumption, while in almost all LFFS groups, the evening milk is used for household consumption.

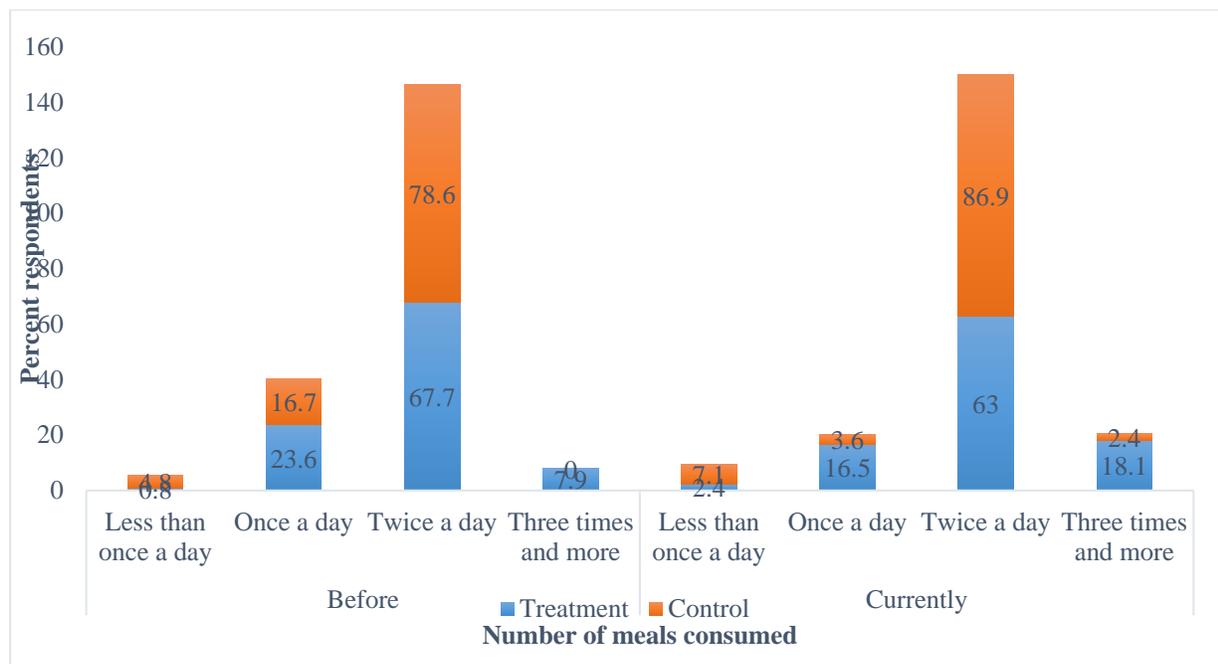


Figure 12. Status of food security in study area

4.5.2. Participation in nutrition programs and household routines

Results in Table 19 reveal that participation in activities designed to help improve nutrition has increased from 31.5% (before) to 46.5% now for beneficiaries. For non-beneficiaries, around participation increased from 19% to 42.9% of households. It was indicated that, before, approximately 32.3% of respondents reported that at least one member of their household had participated in activities designed to improve nutrition. In the control group, about 11.9% of respondents reported participation in nutrition-improvement

activities. Currently, the percentage of households reporting participation in nutrition-improvement activities increased to 49.6%. Approximately 44% of households reported participation in such activities.

In the treatment group, about 34.6% of households reported that the husband usually takes care of routine household purchases. The spouse (55.1%) was the most common person responsible for these purchases. Daughters (5.5%) were involved in a smaller portion of households' routine purchases. A small percentage (4.7%) mentioned that others handle this responsibility. In the control group, the husband (36.9%) and spouse (59.5%) were responsible for household purchases, similar to the treatment group. Daughters (3.6%) played a smaller role compared to the treatment group. No sons were reported to handle routine purchases. Currently, the husband (33.9%) continued to handle routine purchases, with a slight decrease, spouse's responsibility remained high (59.8%), and daughters' involvement (6.3%) increased slightly. In the control group, the husband's involvement (38.1%) increased slightly from before, the spouse's responsibility (57.1%) remained similar, and daughters' involvement (3.6%) remained consistent.

Table 19. Participation in nutrition activities and household routines

Who in the household?		Participated in improved nutrition activity		Takes care of routine household purchases		Decides what to buy for routine household purchases	
		Treatment	Control	Treatment	Control	Treatment	Control
Before	Husband	34.6	36.9	33.1	44	33.1	44
	Spouse	55.1	59.5	59.1	53.6	59.1	53.6
	daughter	5.5	3.6	5.5	2.4	5.5	2.4
	Son	0	0	0	0	0	0
	Others	4.7	0	2.4	0	2.4	0
Currently	Husband	33.9	38.1	32.3	44	32.3	44
	Spouse	59.8	57.1	61.4	52.4	61.4	52.4
	daughter	6.3	3.6	6.3	2.4	6.3	2.4
	Son	0	1.2	0	1.2	0	1.2
	Others	0	0	0	0	0	0

Results indicated that in both groups, the husband (with 33.1% for treatment and 44% control) and spouse (with 59.1% for treatment and 53.6% for control) were responsible for household purchases, and daughters (5.5% versus 2.4%) played a small role in taking care of routine household purchases. Currently, the husband's responsibility slightly decreased to 32.3% and spouse's responsibility and daughters' involvement increased to 61.4%, and (6.3%) respectively. In the control group, the husband's involvement (44%), spouse's responsibility (52.4%) and daughters' involvement (2.4%) remained consistent.

4.5.3. Determinants of improvement in HH eating habits

Figure 13 shows that in both the treatment and control groups had a substantial percentage of households reporting improved eating habits, with the treatment group having a slightly high percentage (66.9% vs. 64.3%). Less beneficiaries (28.3%) compared to non-beneficiaries (31%) reported that their eating habits has never changed. Only 2.4% from the treatment group and 3.6%) from the control group have decreased their eating habits.

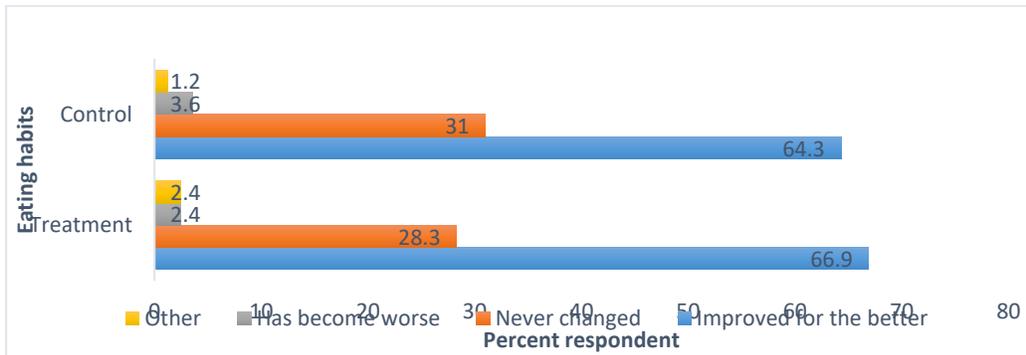


Figure 13. Improvement in HH eating habits since 2017/18

4.5.4. Women Reporting Minimum Dietary Diversity (MDDW)

Results in Figure 14 indicate that, respectively for both treatment and control, there is a highest dark green leafy vegetables for beans or peas pulses (96% and 86%), roots and tubers (any white roots or tuber or plantains (89% vs 88%), dark green leafy vegetables (85.8% vs 82%).

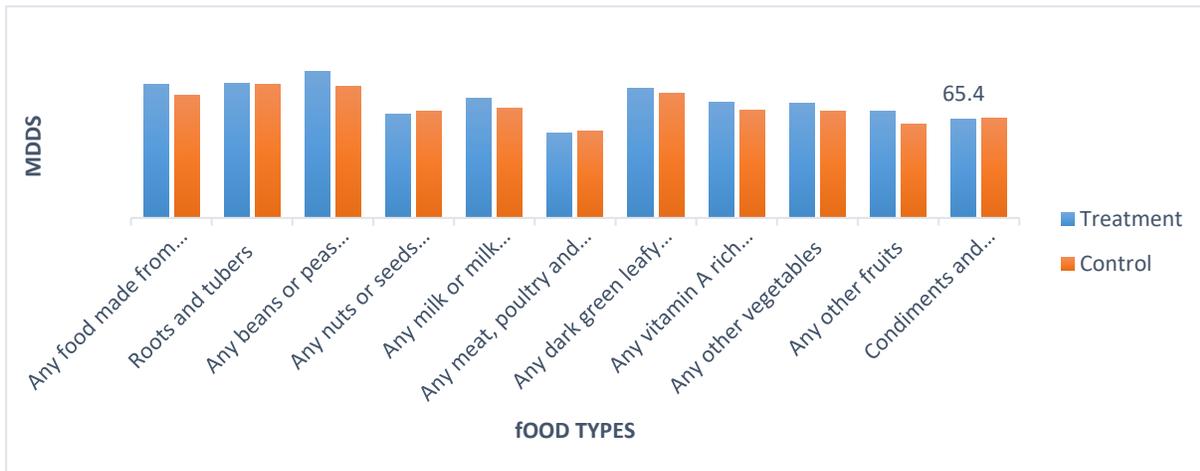


Figure 14. Dietary diversity of women in both the treatment and control groups

The dark green leafy vegetables were high and above 70% for milk or milk products (78.7% vs 72.6%), vitamin A rich fruit, vegetables and roots, and vegetables, Fresh peas, snow peas, snap peas or green beans

cucumber, tomato. There is low to moderate MDDW for meat, poultry and fish products and condiments and seasonings that is less than 70%.

A big percentage of women in the treatment group (88.2%), compared to compared to the control group (83.3%), have achieved dietary diversity since they consume 5 or more food groups (Table 15).

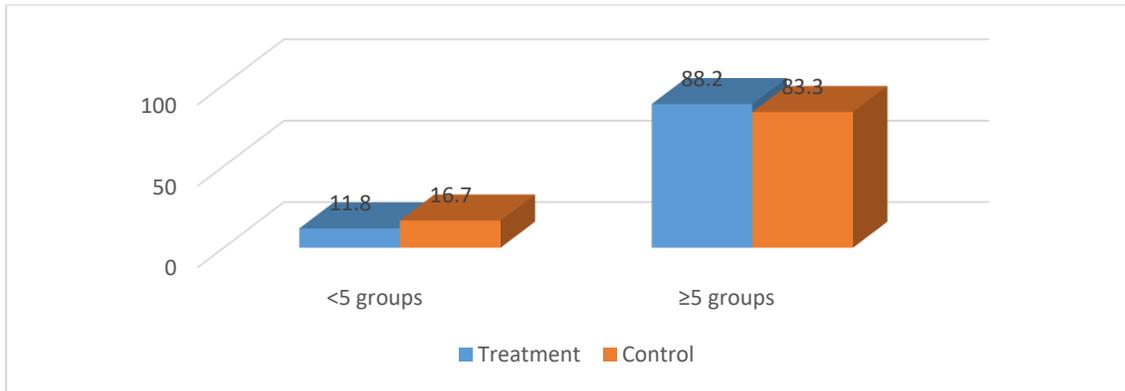


Figure 15. Food groups and dietary diversity

Results in Figure 16 indicate that the dietary diversity of women in both the treatment and control groups is relatively high, with significant percentages of women consuming various types of foods from different food groups. In most cases, results reveal that the situation of food consumption was "not bad" or was "the same as now" for most food groups. A small percentage reported that the situation was "better than this" or "worse than this." The perceived changes in food consumption since 2017/2018 are relatively consistent between the treatment and control groups, indicating similar trends in dietary habits.

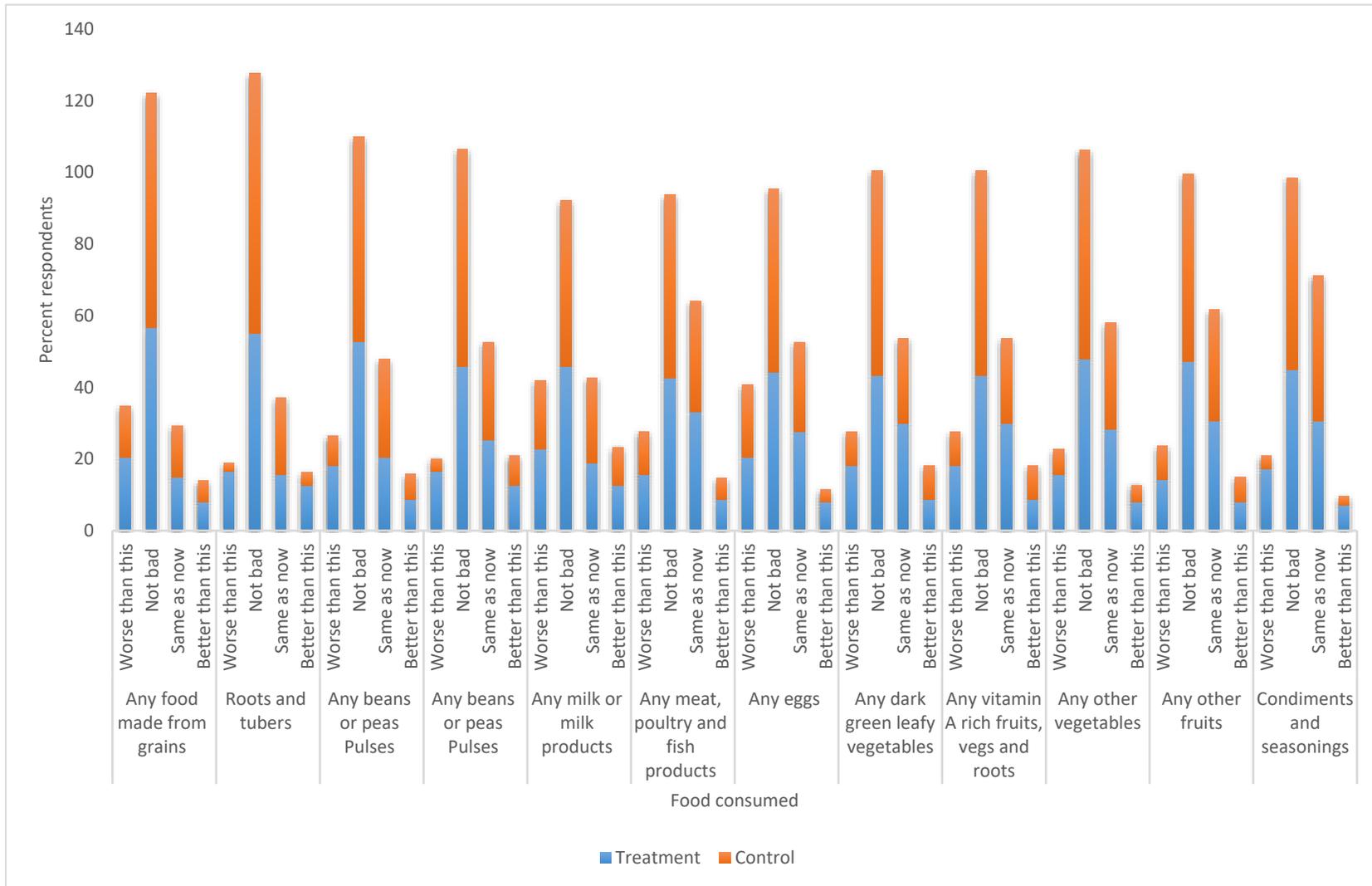


Figure 16. Comparison of food consumed before and after RDDP

4.6. Matching Grants for Supported Rural Enterprises Reporting an Increase in Profit

It was noted that both group have around 4.8% of respondents or members of their household who indicated to have ownership or management of a rural enterprise (Table 20). Among them, 67.4% of rural enterprise promoted by RDDP are managed by husbands in the households, whereas 21.7% and 19.6% of wives within households own or manage a rural enterprise promoted by RDDP. For the control, 19.6% of wives own or manage a rural enterprise promoted by RDDP. Respectively, 15.2% and 15.2% of respondents in the treatment and control groups are engaged in milk collection from farmers to MCC. Nearly, 17.4% of respondents in the treatment group are engaged in milk transportation, and 21.7% are engaged in milk retail. About 58.7% of husbands and 10.9% of the wives in the household decide on the use of earnings/transfers from the rural enterprise.

Table 20. Household managing rural enterprise and type of business

	Male	Female	Overall
Household own/manage a rural enterprise	3.5	1.3	4.8
Who in HH mostly owns a rural enterprise?			
Husband	63	4.3	67.4
Wife	2.2	19.6	21.7
Both husband and wife	2.2	0	2.2
Other	6.5	2.2	8.7
Type of business of the rural enterprise			
Milk collection farmer to MCC	8.7	6.5	15.2
Milk transportation	10.9	6.5	17.4
Milk retail	10.9	10.9	21.7
Milk processing	2.2	0	2.2
Veterinary services service	41.3	2.2	43.5
Decision on the use of earnings/transfers			
Husband	58.7	0	58.7
Wife	0	10.9	10.9
Both husband and wife	6.5	8.7	15.2
Other	8.7	6.5	15.2

4.9. Rural Enterprises Reporting an Increase in Profit

Results in Figure 17 show that the rural enterprise has the minimum sales value of RWF50,000 and maximum sales value of RWF20,000,000. The average sales value is approximately RWF2,834,636, while the average total operating costs are approximately RWF 4,204,746. In terms of sales value, females' owned enterprise generally report high sales values compared to males. The overall average sales value is higher

for females than for males. In terms of total operating costs, the average total operating costs are slightly higher among females compared to males.

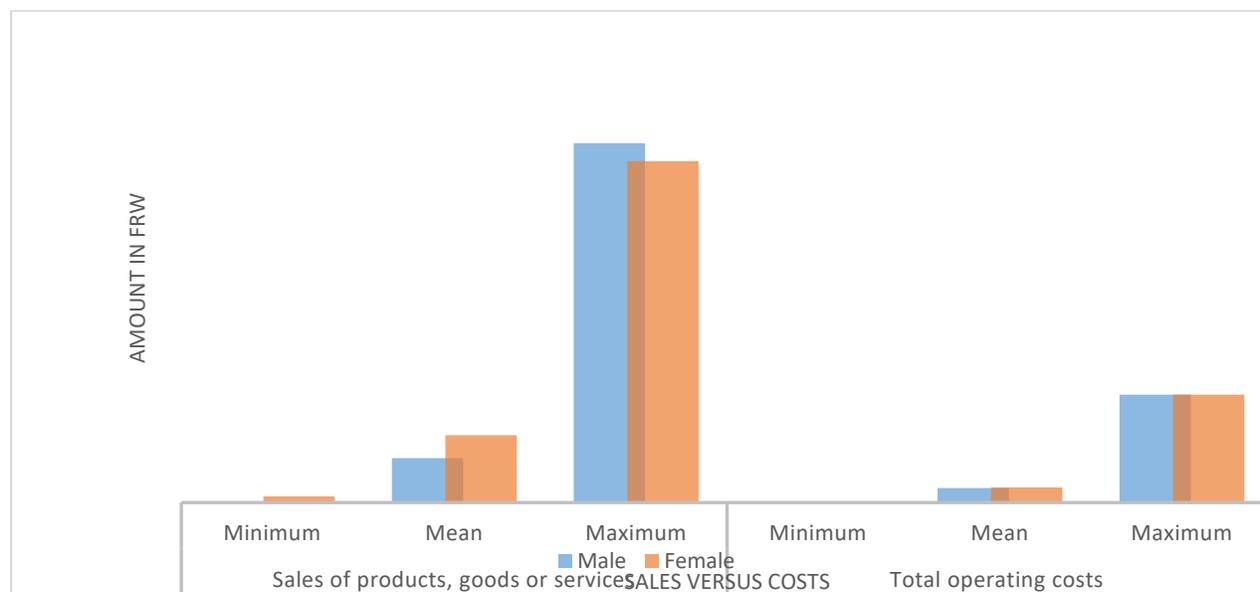


Figure 17. Sale revenues and costs of operation of rural enterprises

4.6.1. Number of New Jobs Created

In the last 12 months, results of the study presented in Table 21 indicate that respondents reported that they recruited 28.3% of full-time employees including 19.6% full-time male and 8.7% full-time female employees. The full-time employees recruited before RDDP MG increased up to 13.0% (that is 10.9% male full-time and 2.2% female) to the current situation.

Table 21. Recurrent seasonal employment created

	Male	Female	Overall
Did you recruit any full time last year?			
In the last 12 months	19.6	8.7	28.3
In 12 months before 2017/18	10.9	2.2	13
Who did you recruit			
Men	61.5	15.4	76.9
Women	38.5	30.8	69.2
Youth	53.8	30.8	84.6
Recruit any recurrent seasonal employees?			
In the last 12 months	37	15.2	52.2
In 12 months before 2017/18	19.6	6.5	26.1
Who did you recruit/recurrent seasonal employees?			
Men	41.7	12.5	54.2

Women	29.2	16.7	45.8
Youth	66.7	29.2	95.8

4.6.2. Employment opportunities created by the cooperative before and after MG

At cooperative level, the number of new temporary and permanent jobs are distributed in Table 22 and are disaggregated by men, women and youth.

Table 22. Job opportunities created by the cooperatives

<i>Cooperative</i>	<i>New jobs</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Youth</i>
KIDACO	Permanent jobs	10	3	2	5
	Temporary jobs	0	0	0	0
MATWOKI	Permanent jobs	1	0	1	1
	Temporary jobs	0	0	0	0
Terimbere Mworozu Mbare	Permanent jobs	4	2	2	4
	Temporary jobs	0	0	0	0
Kirebe KAMATE ZIRAKAMWA	Permanent jobs	2	2	0	1
	Temporary jobs	0	0	0	0
Twiyororere Kijyambere Muyira	Permanent jobs	1	1	0	0
	Temporary jobs	0	0	0	0
MUF COS	Permanent jobs	12	9	3	1
	Temporary jobs	4	2	1	0
Average per cooperative	Permanent jobs	5	3	2	2
	Temporary jobs	1	1	0	0

Table 23 shows an analysis of the impact of the MG on employment opportunities by three main categories by showing the total number of direct jobs created and the average number of indirect jobs created per project funded through the MG support. Results show that private-led individuals created 14 additional jobs thanks to the interventions, and all men, women and the youth benefitted equally from these job opportunities. Among 6 sampled cooperatives from the total contacted, a total of 37 permanent jobs and 4 new temporal jobs were created leading to an average of 5 new permanent jobs by each cooperative. A total of 22 LFFS group created 204 jobs including 142 new temporal jobs and 82 permanent jobs, indicating that on average each FFS have contributed between 4 to 6 new permanent and casual employment respectively. The success stories exist in job creation for youth and women with investments in innovative projects such as animal feed production (Ruhango District).

Table 23. Impact of the MG on employment opportunities by categories

Beneficiary categories	New jobs	Total	Men	Women	Youth
Private-led	Before MG	33	11	10	11
	After MG	47	13	11	23
Total per cooperative (n=6)	Permanent jobs	37	17	8	12
	Temporary jobs	4	2	1	0
Average per cooperative (n=6)	Permanent jobs	5	3	2	2
	Temporary jobs	1	1	0	0
Total LFFS (n=22)	Permanent jobs	82	55	25	25
	Temporary jobs	142	101	40	27
Average per LFFS Group	Permanent jobs	4	3	1	1
	Temporary jobs	6	5	2	1

4.7. Linking farmers to financial institutions and its contribution to agriculture finance.

Results in Table 24 indicated that participation in financial literacy has increased by 12% (from 21.2% to 33.5%) and 4% (from 8.7% to 12.8%). Nearly half of beneficiaries (48.6%) are members of LFFs saving groups. Access to loans or micro-credit among beneficiaries has increased by 7% (from 34.2% to 42%) and 3% (from 11.5% to 14.3%). Access to loans or micro-credit among beneficiaries is further predicted to increase by 64%. Generally, there is a strong interest in saving services across both groups, but slight higher percentages are found in the treatment group (97.3%) than control group (97.0%). The treatment group also demonstrates a high interest in loans services (83.9%) compared to the control group (68.0%). The majority of both beneficiaries and non-beneficiaries 52.4% of beneficiaries and 57.6% of non-beneficiaries overall are very satisfied with the services provided by the loan or micro-credit, whereas 45.9% and 42.4% overall) are somewhat satisfied with the services. Only a small percentage of respondents (1.7% overall) report being somewhat dissatisfied

Table 24. Financial literacy and access to loans and micro-credits

	Treatment			Control		
	Male	Female	Overall	Male	Female	Overall
Financial literacy training programs						
Before	12.4	8.8	21.2	5.6	3	8.7
Currently	20.9	12.6	33.5	7.8	5	12.8
Membership in LFFS saving group	30.5	18.2	48.6	5.8	2.2	8
Access to loans or micro-credit						
Before	22.8	11.5	34.2	7.6	3.9	11.5
Currently	28.3	13.6	41.9	9.1	5.2	14.3
Future	42.8	21.4	64.2			
Satisfied with micro-credit						

Very satisfied	36.4	16	52.4	36.4	21.2	57.6
Somewhat satisfied	30.2	15.7	45.9	27.3	15.2	42.4
Somewhat dissatisfied	1.0	0.7	1.7	0.0	0.0	0.0
Very dissatisfied	0.0	0.0	0.0	0.0	0.0	0.0
Future need for financial services/FIs	54.8	27.1	81.9	26.2	16.5	42.6
Specific services from FIs						
Savings	65.1	32.2	97.3	59.9	37.1	97
Loans	56.7	27.3	83.9	38.6	29.4	68
Others	1.0	0.5	1.5	0.5	1.5	2.0

4.7.1. Access to financial Services for individual farmers

Access to Financial Services is explained by main mode of savings reported by the respondents in their households (Figure 18). Before, SACCO was reported as the most common mode of savings with 40.9% (25.4% males and 15.6% females), followed by "Community savings & credit with 29.4% (19.4% males, 10% females, and overall). "Bank" was chosen as the main mode of savings by 24.4% (17.4% of males and 7% of females). With RDDP MG, the main mode of savings slightly shifted 43.9% and 36.8% for treatment and control respectively. Use of banks as the main mode of savings has currently reached 30.5% among beneficiaries.

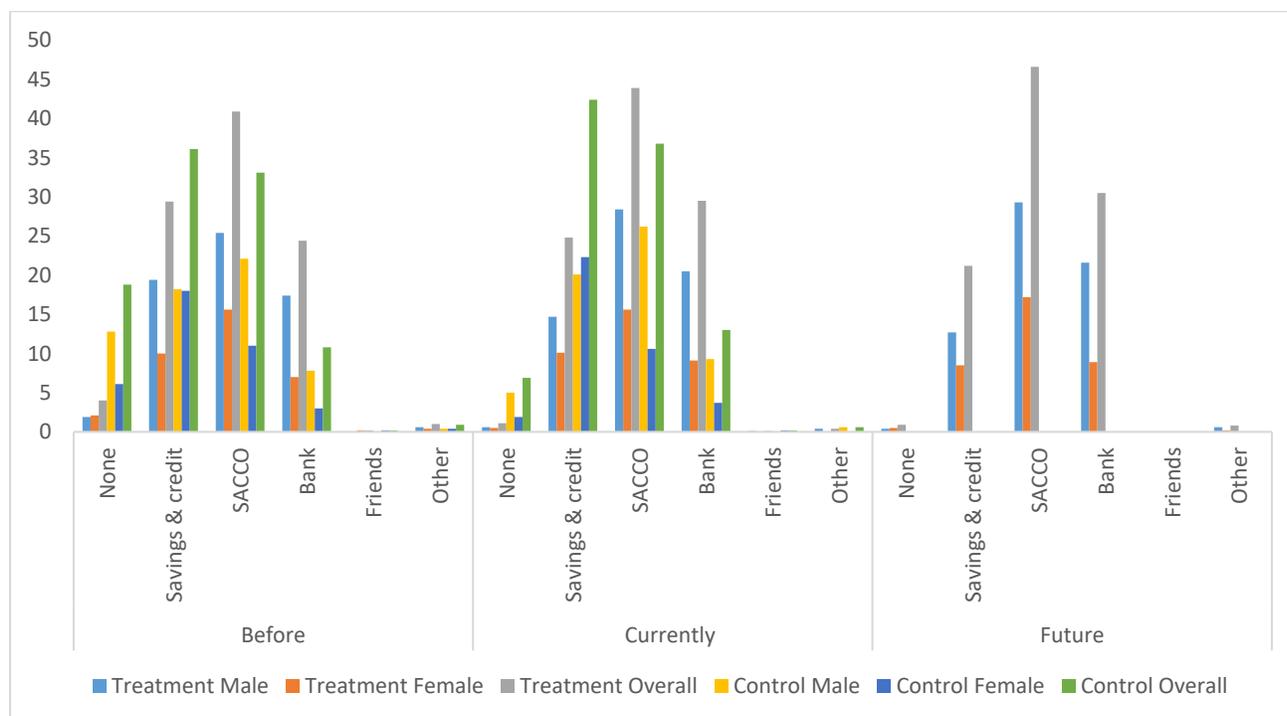


Figure 18. Main mode of savings by households

It was indicated that 58.7%, have employed the MG funds to purchase livestock, 14.1% to purchase agricultural equipment, and 11.6% to acquire household assets.

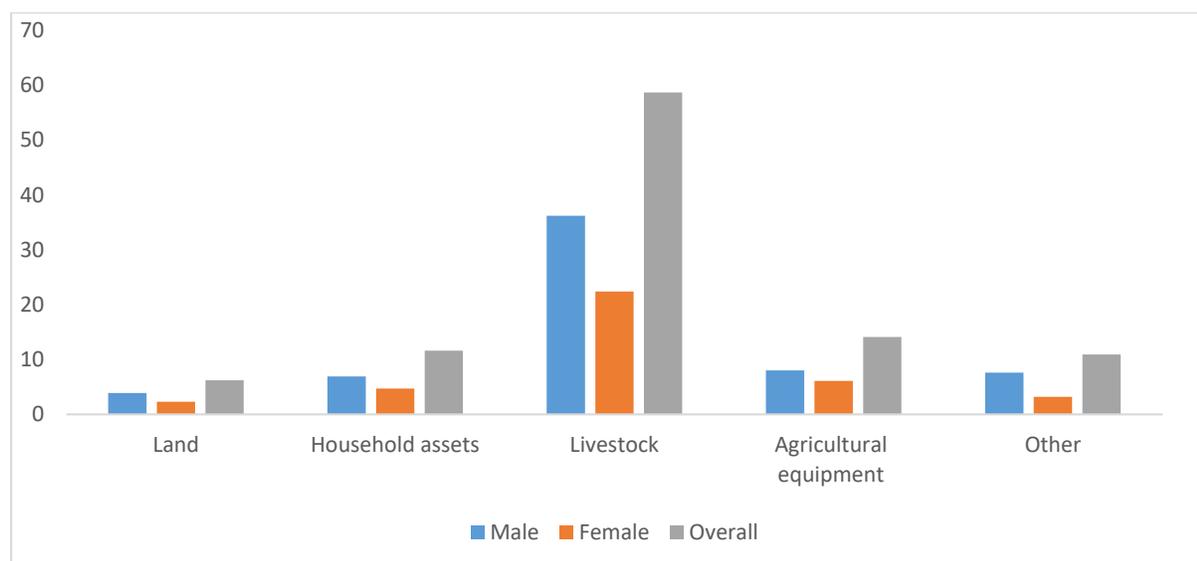


Figure 19. Used the MG funds to purchase any agriculture-related asset

4.7.2. The role of the grants in improving cooperative access to financial services

The impact of the RDDP matching project on beneficiaries was assessed through access to financial services and captured as the number of percentages of households reporting using rural financial services. Various financial institutions are linked with LFFS groups including those that have been involved in supporting these groups to access to the RDDP matching grants funding. These include SACCO, BPR Bank, EQUITY Bank and Bank of Kigali. Services offered by these financial institutions to LFFS groups include saving and transfer payments made by MCCs to farmers who supply milk. In addition, these financial institutions have supported LFFS groups to secure loans to mobilize own contribution as prerequisite to access RDDP grants.

The survey results presented in Table 25 identified the list of all local financial institutions including those that were involved in supporting the cooperative to access the MG. Some cooperatives like Kirebe Kamate Zirakamwa have acquired a milk transportation truck through these institutions. This has contributed to increase of milk production, milk collection and marketing, and also increased trust among cooperative members, which in turn increased the desire to acquire highly productive breeds.

Table 25. Financial institutions and services provided

Cooperative	District	Total	Men	Women	Youth	FIs	Service provided
KIDACO Kinazi	Huye	10	6	4	0	SACC O	Payments to staff and milk suppliers

						BK	Mobilizing cooperative contribution for MG
Jyambere	Nyanza	252	170	82	10		Loan for milk truck purchasing
Mayaga							Mobilizing cooperative contribution for MG
Twiyororere	Nyanza	134	78	56	0		Payments to staff and milk suppliers
Kijyambere							
Muyira							
Kamate	Nyagatare	258	224	34	0	BK	Mobilizing cooperative contribution for MG
Zirakamwa							
MATWOKI	Nyagatare	151	138	13	7	BK	Mobilizing cooperative contribution for MG
Matimba						BPR	Payments to staff and milk suppliers
Terimbere	Nyagatare	185	143	42	10	BK	Mobilizing cooperative contribution for MG
Mworozi							
Mbare						SACC	Payments to staff and milk suppliers
						O	
MUFCOS	Kayonz	430	310	120	0	BK	Mobilizing cooperative contribution for MG
Murundi	a						

4.7.3. Impact of MG and Access to Financial services

It came out from FGDs that community savings and credits among members have played an important role in mobilizing LFFS group regarding access to RDDP matching grants. For instance, TWONGERE UMUKAMO LFFS Group in Mbazi Sector (Huye District) was able to mobilize about Frw 4 million as own contribution. The same group had acquired the plot for MCP construction through accumulated savings among members.

Information from FGDs indicated that all the assessed cooperatives are willing to continue using the financial services from the same FIs they are linked with. Also, LFFS group members confirmed their willingness to continue using financial services to mobilize support for arising funding needs in dairy activities.

4.8. Impact of the MG on climate change resilience

FGDs with beneficiaries from LFFS groups have confirmed RDDP matching grants contribution improving farmer's capacity in good dairy production practices and/or technologies through investment in climate-smart practices and technologies. The most reported practices are highlighted below:

- Cowshed construction for optimization of benefits from zero grazing practice. The cows no longer suffer from extreme weather conditions such as heavy rain, wind or direct sunlight. This result in increased productivity of cows

- Water tanks and dam sheets allow water availability for livestock even during dry seasons. This leads to increased milk production, and has minimized the high gap in production (variations) between off and peak seasons as it used to be before. Available water is also used to keep hygiene of utensils and equipment used in milking and milk handling thus contributing to improved quality of milk.
- Milk cans help in milk hygiene and conservation keeping milk quality before delivery to milk collection facilities (MCP or MCCs).

4.9. SWOT” analysis of the RDDP matching grants

The SWOT framework is useful to gain an understanding of the situation and provide direction for future implementation of the project. The analysis based on strength, weakness, opportunities, and threats (SWOT) framework of the RDDP matching grants was conducted based on internal and external factors that can be considered helpful (strength and opportunities) or harmful (weaknesses and Threats) to the development of the dairy sector. This element of the consultancy relied on strong input from RDDP project beneficiaries using a guide in Appendix A2 and other stakeholders using some questions form Appendix A3. The focus was on identifying drivers of change in livestock value chain financing, and that the internal and external factors impacting enterprise development. The analysis also was based on the fact that there were different beneficiaries (primary production, value chain actors, marketing operators and processors, LFFs groups and cooperatives), and that there may be much variations in each district, thus the internal and external factors impacting the dairy enterprise development are likely also to vary. SWOT framework is useful to gain an understanding of the situation and provide direction for future strategy.

Table 26. SWOT Analysis of RDDP Matching Grants

	Helpful	Harmful
Internal origin	Strengths <ul style="list-style-type: none"> ▸ Strong legal and regulatory framework ▸ Improving environmental awareness ▸ Improving livelihood & Climate change resilience (asset building, increased income) ▸ Strong institutional support including PPP 	Weaknesses <ul style="list-style-type: none"> ▸ Barriers to entry (high capital requirements) for dairy value chain development ▸ Lack of expert capacity to reach required milk quality standards
External origin	Opportunities <ul style="list-style-type: none"> ▸ Growing local and regional dairy demand ▸ Growing export demand ▸ Low competition on supply side 	Threats <ul style="list-style-type: none"> ▸ Milk and cattle diseases ▸ Regulatory uncertainty ▸ Market access ▸ High transport/labour costs
Cooperatives and LFFs groups		
Internal origin	Strengths <ul style="list-style-type: none"> Strong norms and institutions among members 	Weaknesses <ul style="list-style-type: none"> Poor management skills of cooperative Lack of expert capacity to reach required milk quality standards

	Helpful	Harmful
	Improving economic empowerment of members Improving livelihood & Climate change resilience (asset building, increased income) Strong institutional support including PPP	
External origin	Opportunitites Easy access to extension services such as LFFs Strong policy and government support Easy access to loan collateral	Threats <ul style="list-style-type: none"> ▸ Milk Disease ▸ Regulatory uncertainty ▸ High transport/labour costs ▸ Non-compliance to standards and certification
Primary production & Private-led businesses		
Internal origin	Strengths Easy access to financial services through BDF Guarantee fund to support LFFS groups Improving livelihood & Climate change resilience (asset building, increased income) Strong institutional support including PPP	Weaknesses Lack of expert capacity to reach required milk quality standards Financial illiteracy including business plan preparation
External origin	Opportunitites Awareness campaign on benefits for farmers to access their services Low competition on supply side	Threats Regulatory uncertainty Market access High transport/labour costs High interest rate of financial institutions High value collateral required

4.10. Overall contributions of the MG to the development of dairy value chain.

The purpose of this section is to discuss the contribution of RDDP matching grants to the development of dairy chain and to pro-poor national economic growth and improved the livelihoods of poor rural households based on the four standard criteria of evaluation: relevance, effectiveness, efficiency, impact, and sustainability. It also discusses aspects of project design in terms of coordination and governance of the RDDP MG activities in achieving the goals set. This helps to establish the extent to which interventions made under the RDDP are responsive to the needs and issues facing Rwanda and citizens in particular, the degree to which RDDP project has been able to achieve its goals as stipulated in the RDDP project document, the efficiency levels about the services and products offered under the various project interventions, the impact of the RDDP MG, and the sustainability of activities implemented to comment on their continuity beyond the support from donors and partners.

4.10.1. RDDP matching grants project design

The development and design of the RDDP matching grants was largely based on comprehensive analysis of the Rwandan context and the power constellations where critical barriers to inclusive development were identified through a context analysis of the dairy sector in Rwanda. The key areas of consideration include: the country's general economy, rural poverty, agriculture and smallholder farming, food and nutrition security, women empowerment, and climate change and adaptation. The context analysis assessed opportunities for change and where RDDP MG could add value. The identification of all the partners brought on board was based on local experiences and expertise in the dairy value chain production and financing. RDDP MG was conceptualized and designed based on experiences of the local context in the dairy value chain. However, the design has not taken into consideration baseline information based on which an impact assessment could be established. A baseline study of the MG could have served as a reference point in measuring the progress of beneficiaries of the grants. The modalities of such analysis mostly entailed fact finding, some of which are technical guidance and support to the project implementation. The design was also based on partnerships with the district level, which was regarded as the link to the target communities, while facilitating rigorous context and self-assessments.

4.10.2. Relevance of RDDP matching grants

The relevance of the project MG focuses on problems and policy priorities as outlined in the theory of change (TOC) in Figure 1. The ToC was based on four development objectives related to improved livelihood of dairy farmers, improved farmers' income, improved access to market and improved awareness of the benefits of milk consumption. The assessment tried to answer the following questions? Did the project implementation take into account the commitments made in the country's national policies and strategies for rural development, poverty reduction and food and nutrition security? And if there have been other circumstances that could have had a significant impact on the project (presence of other donors, changes in needs, ets) been taken into account in the implementation of RDDP project? The achievement of the development objectives was in accordance with the pillar of the national transformation strategy.

4.10.3. Effectiveness of RDD matching grants

This sub section focuses on achievement of the project's direct objectives by concentrating on innovative project strategies and managing of relationships between RDDP project and partners. It is necessary to include in the report an analysis on the effectiveness and impact of MG taking into consideration each of the seven categories that have been supported by the RDDP Matching Grants. These include including Private agribusiness-led BP, Cooperative-led BPs, Joint venture between producer's cooperatives and private sector, Business driven cooperative-BPs, Climate smart and strategic investments and youth

window for innovation (plus LFFS Associations which were later added). The seven categories are summarized in Table 27 based on information provided by BDF staff. The percentages show the project contribution to total investment and the rest was to be provided by the beneficiaries. For example, own resources from Cooperative-led BPs, Cooperative-led BPs, Joint venture between producer's cooperatives and private sector and Business driven cooperative-BPs or the requested loan from MFIS was 20%, while the project would finance up to 80% for Capacity building for the cooperative to manage infrastructure (e.g quality standards, certification from RSB) technical; Capacity building on technical (ex. Extension), organisation (ex. Coop governance) and management (eg. Accounting, business planning and marketing issues). Similarly, Business driven cooperative-BPs and Youth window for innovation were financed the highest amount which is up to 70% respectively for investment on processing infrastructure and equipment for storage and value addition because they are very weak, and investments for youth innovations in dairy value chain related to intensified milk production using climate smart technologies.

Table 27. Financing model of RDDPA and category of beneficiaries

Types of activities to be funded for 4P partners	% project contribution to total investment						
	Private-led BPs	Cooperative-led BPs	JV btn coops and PS	Business driven coop-BP	C.smart strategic investment	Dairy micro projects	Youth window for innovation
Investment on processing infrastructure and equipment for storage and value addition	30%	50%	40%	70%	X	80%	X
Investment on marketing and processing infrastructure and equipment for increased milk collection, storage and value addition & animal feeds	40%	X	X	X	X	X	X
Capacity building for private sector (e.g quality standards , certification from RSB)	30%	30%	30%	X	X	X	X
Capacity building for the cooperative to manage infrastructure (e.g quality standards, certification from RSB) technical; Capacity building on technical (ex. Extension), organisation (ex. coop governance) and management (eg. accounting, business planning and marketing issues)	80%	80%	80%	80%	X	X	X
Investment on 4p private sector partner's assets (eg. Transportation, inputs distribution)	X	30%	X	X	X	X	X
Joint investment on processing infrastructure and equipment for storage and value addition by the 4P private sector partner	X	X	20%	X	X	X	X
Rainwater harvesting (Water tanks, Gutters, Damsheets, boreholes, dairy watering system (eg.water pumps), plastic sheets	X	X	X	60%	X	X	X
Rainwater harvesting systems (solar system biogas), waste water management and treatment systems at milk processing unit, simple milk equipment washing facilities associated with solar water heater, climate proof component, milk processing unit infrastructure with clear climate risk management plan.	X	X	X	60%	X	X	X
Individual farmers, Private veterinary/AI technicians for small collective milk infrastructures, sugical kits, vaccines, AI kits, Motorbikes, Curative cares (pharmacy) etc.	X	X	X	X	X	50%	X
Investments for youth innovations in dairy value chain. Intensified milk production using climate smart technologies	X	X	X	X	X	X	70%

The effectiveness in use of matching grants to the seven categories is illustrated as the percentage amount disbursed versus approved in Table 28. The assessment of the effectiveness of the RDDP MG delivery aims to establish the degree to which the project has been able to achieve the change goals and objectives as outlined in the PDR document as well as appeared in the updated database of active BPs. The RDDP model was successful basing on the high demand registered because of huge opportunities in the dairy value chain. Further, the extent to which the MG was implemented against planned targets was high. This was explained by the fact that adaptations on the allocation of initial fund provided by RDDP to BDF to different categories were done following periodic evaluation of the uptake of funds in each category.

Results show that the disbursement of approved grants has been very effective for projects that focused on climate smart and strategic investments (99%), youth windows (95.6%) and private-led (90.7%). The grants disbursement has been moderately effective for LFFS Group (70%), business driven (88.1%) and Micro Project for youth and women (88.9%), and generally less effective for Cooperative-led BPs and joint venture between producer's cooperatives and private sector as it was explained by slightly 50% of disbursed amount from what was approved. The study therefore. The overall level of performance of implementing the RDDP matching grants has reached more than 80% for at 70% categories of beneficiaries. Furthermore, half of the categories of beneficiaries over-achieved the set targets. However, many eligible BPs (more than 1000) have not received the support due to prioritization of categories. For example, there was a project that was meant for making Amarula from milk, which was a very good project but it could not fall under our mandate because we always referred to what the project document recommends.

Table 28. The effective use of matching grants to beneficiary categories

Project Description	Project Category	Project total cost (FRW)	Own contribution (FRW)	Grant approved (FRW)	Grant Disbursed (FRW)	Approved vs Disbursed (%)
Private-led (n=4703)	Total	7,725,029,728	4,113,395,841	3,604,402,141	3,253,816,756	90.3
	Average	113,521,710	67,370,300	45,963,338	43,519,331	94.7
Cooperative led (n=33)	Total	3,478,234,128	1,736,249,387	1,753,378,919	913,512,979	52.1
	Average	233,185,342	118,306,380	109,348,211	59,419,642	54.3
Joint Venture (n=2)	Total	3,711,419,470	1,854,555,767	1,862,727,130	972,932,621	52.2
	Average	1,855,709,735	927,277,883	931,363,565	486,466,311	52.2
Business Driven (n=24)	Total	131,039,318	55,638,069	75,401,249	58,807,232	78.0
	Average	5,459,972	2,318,253	3,141,719	2,800,344	89.1
Climate smart and strategic investments (n=80)	Total	50,497,995	21,051,097	29,446,898	29,173,698	99.1
	Average	3,230,176	1,358,264	1,871,911	1,866,025	99.7
Micro Project (youth & Women) n=60	Total	619,737,199	234,538,547	385,328,652	342,617,977	88.9
	Average	123,947,440	46,907,709	77,065,730	68,523,595	88.9
Youth projects	Total	2,045,531,154	767,269,752	1,029,021,819	973,931,991	94.6
	Average	20,054,227	7,522,252	10,088,449	9,642,891	95.6
LFFS Group	Total	132,978,273	50,034,133	82,443,899	57,635,499	69.91
	Average	3,693,841	1,389,837	2,290,108	1,600,986	69.91

The evaluation established that RDDP adopted several innovative strategies to effectively implement the matching.

- ***Innovative use of Livestock farmer field school (LFFs) for primary production: it is indicated that the project supported*** 640 Livestock Farmer Field School (L-FFS) facilitators; 450 producers of forage seeds and vegetative planting materials; 175 vets, 72 community animal health workers and AI technicians all involved in production process at farm level or input supply.
- ***Dairy value chain production and linking LFFs to access finance:*** milk collectors and traders; and dairy processors. RDDP and BDF contracted *three (3) firms that were in charge of linking dairy farmers to FIs through business idea formulation and business plan preparations that could be submitted to BDF and then to be presented to RDDP Investment committee (IC) for final evaluation, and if approved, farmers could get funds by making contractual agreements for their own contributions. This was a good initiative for awareness and mobilization for untapped opportunities in the dairy sector for business development and employment creation.*
- ***Putting women and youth at the center of all its implementation:*** the evaluation team established that RDDP considered that all interventions were meant to benefit women and youth with the aim of promoting equity and equality at family and community levels. This aspect contributed to a large scale in the effective implementation of the matching grants. For instance, the project achieved around 60 Micro Project owned and managed by the youth and women totaling an estimated amount of at least 2,045,531,154 FRW.
- ***Use of existing community strategies, systems and structures:*** The evaluation team established that RDDP worked with the existing dairy producer cooperatives, MCCs and rural enterprises at grassroots in targeted intervention areas to deliver interventions that respond to project outcomes. Working with existing government structures at national and district levels contributed to effective delivery of the RDDP activities.
- ***Working with and through partners to implement projects:*** The evaluators established that RDDP adopted a model of working with and through partners to implement the matching. This model was effective in delivery of interventions because local institutions and staff were familiar and understood the local context of operation sites. This also promoted ownership and buy-in by citizens, local government and civil societies in the context of promoting localization principle. In

addition, the evaluation established that RDDP implemented the grants in 14 Districts in collaboration with BDF and other partners.

- ***Signing agreements with key partners:*** The evaluation team established that RDDP signed a Memorandum of Understanding with different organization on regulating and monitoring policies, and implementing project activities.

4.10.4. Overall impact of RDDP matching grants

This sub section discusses the key long term changes established from RDDP project. It focusses on the assessment of the achievement of the broader objectives. It tries to answer the following question. Has the project impacted the lives of poor women and men through improved livelihood, increased income, improved market access, and household food security and nutrition. It also tries to understand positive changes that have been made in the lives of all intended beneficiaries in the areas of financial services, women empowerment and climate change resilience.

- ***Impact on livelihood of dairy farmers.*** the matching grants has improved the livelihood of dairy farmers through increased household income and welfare, as well as resilience to climate change through asset building. The MG has resulted in improvements in household living conditions, in terms of access quality of roofing materials, improved sanitation and asset ownership including mobile phones, and thus contributed towards to the overall project of pro-poor national economic growth while improving the livelihoods of poor rural households. Various factors that contributed to this change are related to improved marketing of milk resulting in increased cash income accruing to livestock farmers. Higher volumes of milk are marketed and the price per liter of milk has increased compared to the situation before the grants.
- ***Impact on market access.*** improved market access, the study shows that there is significant change in quality of milk leading to improved milk marketing and increase in value of milk sold. For instance, the price of milk ranges between Frw 300 and 350 depending on the location and market, from less than Frw 200. The quality of milk has increased thanks to increased knowledge on milk hygiene and standards, and through acquired equipment for milk testing, cans for milk handling as well as motorbikes and bicycles for rapid milk transportation to milk collection facilities.
- ***Impact on food security and nutrition.*** on improved food security and nutrition, the change was brought about by the increased household income from the sale of milk which makes it possible to access various household needs. Moreover, a part of milk produced is consumed at home, leading to improved household diet. It was estimated that about 20% of produced milk is used for home consumption. An important contribution to household food security is from farmyard manure which supports crop production systems inducing tangible increase in yields, thus, increased availability

of food for household. In addition to that, through internal regulations of LFFS groups, the minimum quantity of milk that should be consumed at home to improve household diet which contribute to minimum dietary diversity. Another aspect that shows the impact of the project was linked with increase in productivity where the study confirmed that daily volume of milk per cow has doubled or tripled. This was attributed to the support on various aspects of dairy value chain development, including technologies and practices related to genetic improvement and animal feeding that can affect cow productivity.

- ***Increased rural jobs in the area of intervention.*** New permanent temporal jobs were created by each supported ccooperative, LFFs group and private led companies along the dairy value chain. The success stories exist in job creation for youth and women with investments in innovative projects such as animal feed production and other rural enterprises.
- ***Improved access to financial services.*** Services offered by the financial institutions include savings and transfer payments to farmers who supply milk by the cooperatives/LFF groups/MCCs. In addition, these financial institutions have supported beneficiaries to secure loans to mobilize own contribution as prerequisite to access RDDP grants. Some acquired milk handling equipment and transportation trucks through these institutions. This has contributed to increase of milk production, milk collection and marketing, and also increased trust among cooperative members, which in turn increased the desire to acquire highly productive breeds.

4.10.5. Sustainability of RDDP matching grants

A number of indicators were used to assess the possible measures for sustainability of RDDP matching grants. The sustainability of the project draws from key success stories of the RDDP matching grant implementation and innovations brought by the projects. First, the support to farmers was very significant because the sector is somehow neglected in terms of access to loans due to lack of collateral and farmers were pushed to make more investment. For example, there was a cooperative of dairy farmers in Nyiragikokora which is strong in terms of finances, they used to have transport issues such as delays to transport the milk using trucks from Mukamira dairy. RDDP interventions and the information they acquired about the matching grants helped them mobilise funds to buy a milk transport truck where every farm provided a bull to meet the 50% obligation to access the loan.

The Sustainability is based on what was achieved at different levels (e.g: infrastructure and improved cows. With noticeable increase in primary production and along the dairy value chain,

they will have to maintain the infrastructure facilities they have constructed. Sustainability will involve a systematic follow up/ phase out of the matching grants in terms of investment and finances because most beneficiaries have low levels of education. This would require the next investment along the value chain to target more transportation and processing through linking primary producers to FIs so that they can be involved in other value chain activities that will increase the gross margins (e.g milk price before pasteurization is 300Frw/l, but it is 500Frw/l after pasteurization).

Formation of groups. The groups formed and supported, including LFFs, cooperative-led business, driven business cooperatives and joint ventures cooperatives and private sector, are expected to self-maintain and be independent by the time of the RDDP project come to an end. under RDDP. A strong linkage between LFFs group members and members of dairy cooperatives to milk collectors, MCCs and mainly to FIs were with a hindsight developed to ensure continuity and strengthening of the project activities. These were accompanied by capacity building support in terms of managing infrastructure (e.g quality standards, certification from RSB), technical, technical (ex. Extension), organisational (ex. coop governance), and managerial (eg. accounting, business planning and marketing issues) in form of linkages with finance institutions through BDF.

Community facilitators in primary production. The tools, approaches and capacity developed in this area will lead to sustainability of the project activities. the involvement of community facilitators in primary production such as producers of forage seeds, vets, animal health workers and AI technician is one principle innovation aimed at leveraging of existing structures to implement the dairy value chain activities. This will lead to increase in dairy productivity thus resulting in better health and social wellbeing.

Partnerships and private sector engagement. Working through partners who have local knowledge and accompanied with continued capacity development for them will enhance the ability for the project to continue beyond the project life. This includes the Public Private Partnerships (PPPs) formed with private such as NGOs like Heifer International (HI) in the development of the dairy hub model and supported with linkage to financial institutions through BDF. RDDP project has established multiple partnerships with public institutions (RALIS, RYAF, RCA), RCVD, RNDP among others to deliver specialized facilitation and technical services.

Innovative approaches. RDDP has brought an innovative approach to ensure continuous production of high milk and milk products through use of LFFs good agricultural practices and other key players involved in dairy production (producers of forage seeds, vets, community animal health workers and AI technicians).

Women and youth empowerment. The gender and youth have been integrated in all the projects activities, from primary production to other value chain players, which demonstrates a pertinent interest that RDDP has given to the comprehensive promotion of gender equality and equity at household and community levels. In addition to services provided to members, the cooperatives have also increased their capacity, expanding their services to the local community. These include milk collection services offered to all livestock farmers in the cooperative area, input supply (medicines, feeds) provided to livestock farmers that sell milk through cooperative milk collection facilities. Cooperative Veterinaries are also available to non-member farmers. However, direct payment of service fee is generally required prior to access veterinary services.

Intervention needs for sustainability. For sustainability of projects funded by the RDDP matching grants through BDF, capacity building interventions should be carried out involving field tours inside and outside the country. Such capacity building interventions could uplift beneficiaries to a higher level of understanding towards adoption of practices and technologies that are meant to increase productivity and profitability of the dairy value chain.

4.10. Recommendations for future considerations.

4.10.1. Key challenges associated with the RDDP matching grants implementation

This section presents the key challenges that were reported in the course of the implementation of the matching grants and lists key lessons learnt.

- **Low awareness and inadequate skills** among cooperatives members and individual farmers, private-led organization on local dairy value chain challenges and opportunities that would help them formulate relevant business idea and develop business plans. This is added to beneficiaries' low capacity to identify dairy value chain gaps, challenges to create new business opportunities in the dairy industry.
- **Diversion of some grants.** A high-rate cancellation of projects was noticed. Many projects (e.g. more than 500 contracts) were either fully or partially cancelled because of deviation, misappropriation of grants or failure to raise own contribution by beneficiaries. Another reason for cancellation is to be linked to the mindset or speculation of projects owners whereby an incorrect high cost was deliberately allocated to projects leading to failure while mobilizing own contribution (50%).
- **Delayed disbursing has impacted negatively the implementation of many projects.** This adds to unnecessary bureaucracy for some small project due to lack of prior criteria for selection. In

addition to the issue of slow evaluation process from far distances, it takes too much time and even costly for beneficiaries (including LFFS group representatives) due to frequent long distances travelling to BDF in addition.

- ***Inadequate capacity of the contracted companies (in charge of mobilizations and collection of business ideas)***. Due to insufficient funds for them, there was wrong selection of business ideas that lead to unfeasible projects that were brought without a deep analysis could lead to them, which was the cause of high rejections. The high probability of rejections at IC level could also be attributed to the screening process at district or BDF level, which was not effective because BDF could forward all the received projects without any critical analysis. IC got a lot of projects and took a long time to analyze them.
- ***Delayed project implementation in most cases due to suppliers who fail to deliver procured equipment on time***. For some projects, reasons were associated with the COVID-19 pandemic with its restrictions on goods and people movements. However, for some other projects, contracts between suppliers and beneficiaries were not properly done. For instance, cases were reported of the existence of differences in terms of timeline between the supplier and the beneficiary of equipment in one hand, and between the supplier and the manufacturing company in the other hand. Further, it was found out that technical specifications were developed by suppliers on behalf of beneficiaries and were deliberately manipulated to meet suppliers' interest. Various cases have been noticed, including MATWOKI cooperative (coolers, milk reception tanks and cans) and Kirebe Kamate Ziarakamwa cooperative where milk transportation truck took about 3 years to be delivered. Less involvement of beneficiaries in decision making process for instance in the reception of procured equipment. Substandard equipment was reported for instance at *Twongere umukamo Mbazi* (Huye) where the procured cooler was of secondhand quality and is not working properly.
- Some farmers are still reluctant to utilize services from financial institutions due to high interest rates and high value collateral required. Furthermore, farmers lack of basic information on available financial products (e.g. livestock insurance), yet this is a requirement for the banks to lend to farmers.
- Despite the youth window supporting youth projects by up to 70% of matching grant, youth access to the fund is still limited, it is still difficult for the youth to mobilize the 30% own contribution which must be in cash. In addition, a contribution of 50% is difficult to afford by small scale farmer, some groups were about to abandon and leave out the process.

4.10.2. Lessons learnt

- Community based approaches, including the reinforcement of capacity for existed local based systems such as Community health workers, facilitators, vets and others were critical for the success and sustainability of project;
- Involving local authorities including at cell, sector and district levels increased ownership of the project as well as built assets and infrastructure;
- Community mobilization to participate in the design of the project increases the speed of activities implementation and ownership of project outcomes;
- Milk collection and marketing: the investment in coolers increased the collection capacity and allowed MCCs to collect evening milk from farmers. In addition, cooperatives have supported farmers to acquire cans which improved the quality of milk collected. The investment in milk processing plant has therefore increased the capacity of cooperatives to collect higher volumes of milk. Efficiency in milk collection has also improved with the use of refrigerated milk trucks.
- Input supply (medicines, feeds) and veterinary services: Existing cooperative pharmacy from which farmers can access veterinary services, medicines, and other inputs such as feeds. Farmers are provided with services and inputs payables at a monthly basis through deductions to farmers' income from milk collected and sold by the cooperative. Access to inputs and veterinary services was improved with increased volumes of milk marketed by farmers through the cooperative.
- Advisory services to livestock farmers on good agricultural practices: Existing advisory services to livestock farmers on good agricultural practices were improved in most cooperatives
- Linking members to local financial services: Cooperatives already linked with SACCO and banks such as BPR through which payments to milk suppliers are made. Some cooperatives have even established partnership with local banks to secure credit line and get loans to support regular cooperative activities and mobilize loans for investment

4.10.3. Conclusion and Recommendations

The impact study and assessment of matching grants conclusions and recommendations are derived from findings from the impact evaluation using survey data collected from project beneficiaries and non-beneficiaries, including private-led business, cooperatives and LFFs. The study provides information on the socio-economic impact of matching grants to the poor household farmers including not limited to youth and women in terms of milk production, consumption and sales (market increase), household income, nutritional status, and overall resilience. In addition, the conclusions were drawn from the assessment of project design, relevance, effectiveness and sustainability of implementation/ delivery and lessons learnt from this RDDP project and based on its outcome indicators. The analysis of internal and external factors

that can be considered helpful (strength and opportunities) or harmful (weaknesses and Threats) to the development of the dairy sector using a SWOT analysis framework provides a clear guideline for key challenges and future recommendations. Therefore, the main objective of this assignment is to study and assess the socio-economic impact of matching grants model on poor households' welfare of beneficiaries of RDDP projects and its implementing partners.

This RDDP impact study and assessment report shows that the matching grants has contributed to improved livelihood of small scale dairy farmer, increased household income and welfare of dairy value chain players, improved market access of milk production and dairy products and improved household food security and nutrition. The assessment of the performance of RDDP project indicates that the overall performance level of outcome indicators is good and the project has achieved its target well as a good level of achievement. The following recommendations were drawn from the findings of the study and are based on lessons learnt from implemented activities using the matching grants. They also are structured into five commendable areas that RDDP has performed well and other aspects requiring some improvements.

Commendable areas on RDDP matching grants implementation

- a. ***Scaling up the matching grants to increase the impact.*** Geographical coverage, other value chain players (beneficiaries, integration with small livestock to scale the impact, inclusion other livestock players in the value chain).
- b. ***Partnership intervention approach.*** Intervention approach through partners has advantages in terms of efficient use of funds with minimum costs while reaching out many people (geographical coverage). RDDP project recorded a very good collaboration with district officials which is an indicator for sustaining interventions at grassroots. Future interventions should consider optimum placement of field staff to ensure effectiveness in activity implementation.
- c. ***Using innovative approaches.*** The adoption of innovative approaches in RDDP has in a way helped to catalyze project impacts. For example, the approach of good agricultural practices through LFFs has not only addressed the problem of reliance on rain-fed agriculture but also increased production and productivity of dairy cattle. The inclusion of women and youth in all project components has socially and economically empowered women and made them aware of make decisions regarding production and use of income and finances. Rural enterprises have not only been a source income for dairy farmers but also a source of employment creation in the communities. Therefore, in future programming, RDDP project and partners should build on lessons learnt from the current innovative strategies as entry points to upscale up existing efforts or replicate to other communities.
- d. ***Areas for improvement:***

(1) Project design, monitoring and reporting. There is a disconnect between the design of RDDP, activity implementation and BDF project reporting system which makes it not clearly expressed. In addition, there are deficiencies in data management using the MEAL system. A new project should consider linking project design to activity implementation with BDF funding mechanisms or integrating/ mainstreaming of resource deficiency activities into other BDF programs. In future RDDP design should inform progress of monitoring and updates on achievement of outcome indicators data to monitor impact in a SMART manner.

(2) Involving an external committee to assist beneficiaries and oversee the procurement process. As BDF grant managers do not have the capacity to intervene in supply contracts as there would be a conflict of interest. The committee could be comprised of representatives from dedicated institutions such as IPRC, RAB, NAEB, RSB etc. Such a committee could be coordinated by one institution and could produce a reception report to BDF against which the procurement of the last instalment should be done. While establishing supply contracts, the capacity of the supplier and performance guaranty should be considered.

(3) Other recommendation:

- a. To sensitize LFFS Group members on savings for investment/ the project to increase direct support to LFFS Groups which are highly motivated but show limitations mobilizing beneficiary contributions
- b. There is a need for shortening the bureaucracy from projects selection to disburse and involving beneficiaries in decision making and supervision of activities intended to them.
- c. Capacity building to cooperative in business plan formulation/ Training in business plan formulation and assistance from local experts nearby the beneficiaries' groups should be enhanced
- d. Close follow up and supervision is needed for every step of the procurement process. This highlights the need to involve local government in the follow-up process.
- e. There is a need of the IC at the district level to select and approve small projects at a certain amount (e.g: 100,000 to 2,000,000 Rwandan Francs). This also implies that IC should have two groups involving two stages for assessing the projects, one for technical assessment, and the other one for monetary feasibility of the assessed project.
- f. Financial institutions to conduct awareness campaign on benefits for farmers to access their services, and improve access to information and sensitization on available financial services/products available to them. Banks should consider revising interest rates for farmers under the matching grant scheme.

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APPENDIX A

A.1. Survey Questionnaire for Individuals, Private led and Companies

INTRODUCTION

Hello. My name is.....We are from Effective Logistics and Consultancy Group (ELCG) Ltd, a research firm based in Kigali . We are working on the Rwanda Dairy Development Project (RDDP) project, which is concerned with the impact assessment of matching grants on RDDP beneficiaries through BDF in which you could have participated. RDDP is a project of the Ministry of Agriculture and Animal Resources (MINAGRI) implemented under the Rwanda Agriculture and Animal Resources Development Board (RAB) through a Single Project Implementation Unit of IFAD Funded Projects (SPIU-IFAD). The project is co-financed by the International Fund for Agricultural Development (IFAD) and the Government of Rwanda (GoR). The main objective of this assignment is to study and assess the socio-economic impact of matching grants model on poor households' welfare of RDDP beneficiaries. More specifically the study will put more emphasis on (1) the impact of matching grants to the poor household farmers including not limited to youth and women by assessing milk production, consumption and sales (market increase), household income, nutritional status, and overall resilience; (2) linking farmers to financial institutions (Access to finance activities) and its contribution to agriculture finance; and assess its contribution to the climate resilience change. Furthermore, the study will assess the overall contributions of the matching grants to the development of dairy value chain, conduct aSWOT" analysis on matching grants; and provide recommendations for future considerations. Now, the project is almost ending as we are in the final year, and we are completing a survey among participants and non-participants to know more about [your family background, farm and non-farm activities, etc.: complete according to project and survey's characteristics]. The interview will take about [one hour}, and all the information we obtain will remain strictly confidential and your answers and name will never be revealed. Also, you are not obliged to answer any question you do not want to, and you may stop the interview at any time. I would like you to answer questions honestly, telling me about what you know, the way you live and work. Do you have any questions about the study or what I have said? If in the future you have any questions regarding the study and the interview, or concerns or complaints we welcome you to contact [0788477818], by ELCG. In addition, you can contact [XX], at [RDDP]. We will leave one copy of this form for you so that you will have record of this contact information and about the study. Do you agree to participate in this interview?

Yes ___ No ___ If yes, continue to the next question; if no, stop the interview. Do you have any question before we start? (Answer questions).

I _____, the enumerator responsible for the interview taking place on _____, 2023 certify that I have read the above statement to the participant and they have consented to the interview. I pledge to conduct this interview as indicated on instructions and inform my supervisor of any problems encountered during the interview process.

A. HOUSEHOD IDENTIFICATION & LOCATION (all categories)

Name of interviewer	Starting time:
Name of Supervisor	End time:
Date: ... /01/2015	Questionnaire number: /___/	Supervisor's signature:
A.1.	Respondent's Names Contact/ Tel.:

A.2. Type of beneficiaries		Code: [1] Individuals including youth and women; [2] Private companies; [3] Cooperatives (100);FGDs [4] Registered associations like LFFs groups (100).....	
A.3.	A.3.1 Province / __/	[1] Eastern [2] Northern [3] Western [4] Southern	
Location	A.3.2 District / __/	East: 1.1. Nyagatre 1.2. Rwamagana 1.3. Kayonza 1.4. Gatsibo 1.5. Ngoma 1.6. Bugesera North: 2.1. Gicumbi 2.2. Burera 2.3. Musanze 2.4. Rulindo	West: 3.1. Nyabihu 3.2. Rubavu 3.3. Rutsiro 3.4. Ngororero 3.5. Karongi South: 4.1. Nyanza 4.2. Huye 4.3. Ruhango 4.4. Nyaruguru
	A.3.3 SectorA.3.4 CellA.3.5Village:		
A.4. Business name:			
A.4.1. Business category/type;.....(Choose one) [1] primary production, [2] value chain actors, [3] marketing, [4] processors.			
A.5. Matching grants received through BDF:.....(select multiple) [1] Construction of cowshed, water tank, dam and dam sheet [2] Construction of forage hangar (Shelters); [3] Buying motorcycle for milk transport facilities from household level to the MCCs, [4] Equipment to be used for milk collection, handling and selling, and milk processing and value addition facilities; [5] Establishment of veterinary drugs shop, buying veterinary kits and motorcycles			

- facilitation and animal feeds;
- [6] Farm clearing and fencing, boreholes dehydration and drilling;
- [7] Purchase of chopper and bailer machines, and
- [8] Purchase of solar panels, chopper and bailer machines, and
- [9] Provision of water tanks.

B. SOCIO- ECONOMIC CHARACTERISTICS OF THE MG BENEFICIARY (all categories)

Please ask only a household member who received RDDP grants support r in the visited household and provide an answer or circle the appropriate choice of the answer for the following questions where appropriate:

SECTION A: HOUSEHOLD CHARACTERISTICS / IGIKA A: IBIRANGA ABAGIZE							
URUGO							
A1. How many people in your household? <i>(Total number of people within respondent's household)</i>	Household members		Number of members in the household				
			Age in years	Male	Female		
	Household head						
	Spouse of household head						
	Young child						
	Young farm assistants						
	Small child						
	A2	A3	A4	A5	A6	A7	A8
Please provide the following information about the household head and spouse.	Names	Gender of [Name] [1] Male [0] Female	Age of [Name] (in years)	Marital status of [Name] <i>(Choose one)</i> [1] Single [2] Married [3]	Education level of [Name] <i>(Choose one)</i> [0] None [1] Adult literacy	[Name's] phone number: <i>(If don't have, put N/A)</i>	Is [Name] a member of any agricultural cooperative? [1] Yes [0] No

				Separated [4] Divorced [5] Widowed	[2] Primary [3] Secondary [4] Vocational [5] University		
HH head /Umukuru w'urugo							
Spouse name / Umufasha w'umukuru w'urugo							

C. HOUSEHOLD WELFARE (HOUSING AND ASSETS) (all categories)

C1. Status and property of the household

C1. Question	Answer code:	How was the ownership of house in your household before 2017/2018	What was the contribution of RDDP
Is the house the property of the household	[1]: In property [2]: In rent [3]: Not in property and don't pay the rent [4]: Other/Ikindi.....		
If the house is a rented house, indicate the monthly cost (FRW)			

How many separate rooms (excluding kitchen, toilet and bath room) do the members of your household occupy?			
Habitat status-main house/ Roof	[1] Huts/ Grasses [2] Tiles [3] Sheets	[1] Improved [2] No change [3] Decreased	
Habitat status-main house/ Walls	[1] Mud [2] Sandy only [3] Sandy with cement [4] painted		
Habitat status-main house/ Pavement	[1] Mud [2] Lime & cow dung [3] Cement [4] Tiles		

C2. Does your HH have any of the following types of livestock? (Choose all that apply)

Household assets	Yes=1 or No=0	Number of animals before 2017/2018	Current number of animals in 2022/2023	What contributed most to the new livestock in this households (contribution in what to the new animals? How do you define new animals? [1] RDDP MG [2] Other project [3] Household members [4] Others (specify)	What was the contribution of RDDP (In what?)
[1] Cattle					

[2] Goat					
[3] Sheep					
[4] Poultry					
[5] Pig					
[6] None					
[7] Others (specify):					

C3. Does your household own any of the following items? (Choose all that apply)

Household assets	Yes=1 or No=0	Number of assets before 2017/2018	Current number of assets in 2022/2023	What contributed most to the new assets in this households [1] RDDP MG [2] Other project [3] Household members [4] Others (specify)	What was the contribution of RDDP
[1] Vehicle					
[2] Motorcycle					
[3] Bicycle					
[4] Radio					
[5] Telephone /mobile					
[6] Computer					
[7] TV set					
[8] None					
[9] Others (specify):					

D. HOUSEHOLD INCOME (all categories)

QC_1. Source of household income currently and in the last 5 to 6 years.

How much money (FRW) have you earned form	Amount (FRW)
---	---------------------

the following sources of income in the last 12 months as compared to years before 2018?	Income in the last 12 months as per now	Income in the last 12 months as per before 2018
1) Sales from milk and dairy products		
2) Sales from manure		
3) Sales from other animal farming products		
4) Sales from crop farming		
5) Foods consumed by household		
6) In-kind foods given to workers		
7) In-kind income from other farms		
8) Business		
9) Selling of logs, wood, timber, and/or charcoal /		
10) Artisan (e.g. Carpenter/Mason /Barber/Cobbler/Tailor/Potter/Butcher, etc) /		
11) Selling of other environmental friendly / off farm employment activities at HH level such as beekeeping, handicrafts, and organic charcoal.		
12) Part time employment of HH members		
13) Permanent job of HH members		
14) Renting of property or land		
15) Retirement allowances		
16) Gifts /remittances		
17) Any other (specify)		

A. HOUSEHOLDS REPORTING AN INCREASE IN MILK PRODUCTION (primary production only)

E1. Inventory of cattle before and after RDDP support

Inventory of cattle	Number currently owned	Number Owned before 2018	Who contributed most [1] Family [2] Children [3]Relatives/neighbors	Has RDDP grants contributed to the achievement?	What was the contribution of the MG RDDP?

			[4] Girinka [5] Other projects/ Institution? Organisation? Project?... [6] Others specify)	(Yes=1; No=0)	
Total Number					
Type of cattle owned (1. Exotic, 2. Crossbreed, 3. Local)					
New born					
Received to raise					
Bought to raise					
Given away as gift or payment for some service provided?					
Lost to theft, injury, accident, natural disaster, or disease					
Sold alive					
Slaughtered for sale					
Slaughtered for consumption					
Do you have a milking cow?					
If yes, what is the quantity of milk (litres) do you receive per day					
Can you compare the current milk production per cow	[1] Milk production goes				

with the production before 2017/2018 ?	increasing [2] No change [3] Has decreased [4] No cows [5] Others (specify)				
If the milk production has increased, what interventions among the following have most contributed to that increase?	[1] improving the breed [2] Knowledge in cattle feeding [3] Knowledge in healthcare [4] Acquired infrastructure for water provision [5] Established improved forage species				
What was the quantity of milk did you produce in different seasons on a daily basis	[1] Peak season [2] Low season	[1] Peak season [2] Low season			

Dairy Production practices

Breeding / reproduction practices	After 2017/18 until now	Before 2017/18	Who provided the trainings
Did you or anyone in the HH participated in training on breeding/reproduction practices ?	Response: 1=Yes 0=No		
Did you use / implement any of the following breeding/reproduction practices/ technology?	1.Heat synchronisation, 2.AI, 3.Embryo transfer, 4. Others (specify).		
Do you think reproduction practices/ inputs /technologies provided by RDDP project is useful or effective?			
Have you adopted and will you continue to use reproduction practices/ inputs /technologies provided by RDDP project?			
Animal Feeding Practice / Technology			
Did you or anyone in the HH participate in training on animal feeding practices/ Forage establishment			
Did you or anyone in the HH participate in training on feeding conserved forage? (Silage and Hay)	1. Silage 2. 2.Hay		
Did you or anyone in the HH participate in training on animal feeding practices/ Use of concentrates to the lacting cow (Silage and Hay making)			
Animal Health and Diseases Management Practices			
Did you or anyone in the HH participate in training on Disease control routine?			
Did you or anyone in the HH participate in training on Recognising a sick cow?			
Did you or anyone in the HH participate in training on Disease			

prevention measures in your farm (deworming)?			
Did you or anyone in the HH participate in training on Disease prevention measures in your farm (Tick borne diseases by spraying acaricides)			
Did you or anyone in the HH participate in training on Conduct regular vaccination against any cows' diseases?			
Did you use / implement any of these Health and Diseases Management Practices/ technology?			
Milking practices			
Did you or anyone in the HH participate in training on Hygienic precaution in milking?			
Testiing for mastitis?			
Using appropriate milk utensils/equipment in milk transporting, & preservation Observance of recommended time before milking a cow treated with antibiotic?			
Did you use / implement any of these Milking practices / technology? (Mention those practices)			

B. HOUSEHOLDS REPORTING IMPROVED PHYSICAL ACCESS TO MARKETS, PROCESSING AND STORAGE FACILITIES (all categories)

ACCESS TO MARKETS	Currently	Before 2017/18	What was the role of RDDP matching grants?
. Do you sell milk from your farm these days?	Response: 1=Yes 0=No		
If not, why	[1] not enough milk [2] No market information [3] Too low price [4] Not interested to sell (produce		

	for home consumption only)		
If yes, where do you sell your produce? (Count individual customers as one category)	[1] Milk collectors [2] Milk collection centers [3] Primary cooperative [4] Direct individual consumer (s) [5] Milk marketing or selling point [6] Restaurant/Hotel [7] School/health centers [8] Others (specify)		
How much milk do you sell per day? (liters)- Morning?			
How much milk do you sell per day? (liters)- Evening?			
How much liter of milk do you consume at home-Morning			
How much liter of milk do you consume at home-Evening? How much milk (litters) do you donate per day?			
How has milk marketing / revenue changed?	[1] Increased [2] Stayed the same [3] Decreased		
What are three (3) major constraints / challenges do you face in milk marketing?			
MILK VALUE ADDITION			
Is any part of your milk production processed at home	1=Yes 0=No		
If yes, which products do you produce?	[1] Fermented whole milk [2] Ghee [3] Butter [4] Cheese		
If part of your milk is processed at	1=Yes 0=No		

Cooperative or Agro-industry, is this facility functional?			
What is the walking distance to the processing facility (number of hours used)			

C. RURAL FINANCIAL SERVICES (all categories)

ACCESS TO FINANCIAL SERVICES	Currently	Before 2017/18	What was the role of RDD P matching grants?
1.Has any member of the Household participated in any financial literacy training programs from the project ?	Response: 1=Yes 0=No		
2.What is the main mode of savings do you have in your households (choose all that apply)?	[1] None [2] Community savings & credit [3] SACCO [4] Bank [5] Friends [6] Other (specify)		
3.If your main mode is community savings, are you a member of LFFS saving group			
4.Has your HH accessed loans or micro-credit?	1=Yes 0=No		

5. How satisfied are you with the services provided by this loan or micro-credit	[1] Very satisfied [2] Somewhat satisfied [3] Somewhat dissatisfied [4] Very dissatisfied		
6. In the future, do you need further financial services through financial institutions?	Response: 1=Yes 0=No		
7. If yes, what specific services will you require from these institutions	[1] Saving [2] Loans, [3] Others (specify)		
8. Based on, have you used the MG funds from RDDP to purchase any agriculture related asset or activity?	[1] Yes [2] No [1] Land /_/_ [2] Household assets (wood lot) /_/_ [3] Livestock (specify) /_/_ [4] Agricultural equipment (specify)..... /_/_ [5] Other (specify)		

D. HOUSEHOLD FOOD SECURITY (Individuals, private led/companies, but women only)

NUTRITION	Currently	Before 2017/18	What was the role of RDDP matching grants?
What number of meals per day do you take in your households?	[1] Less than once a day [2] Once a day [3] Twice a day [4] Three times and more		
Has any member of the Household participated in any activity designed to help improve nutrition?			
Who participated in any activity designed to help improve nutrition?	[1] Husband [2] Spouse [3] daughter		

	[4] Son [5] Others		
In your household, who usually takes care of routine household purchases (food for daily consumption or other household needs)	[1] Husband [2] Spouse [3] daughter [4] Son [5] Others		
Who usually decides what to buy for routine household purchases (food for daily consumption or other household needs)	[1] Husband [2] Woman [3] daughter [4] Son [5] Others		
How have your household eating habits changed since 2017/18?	[1] Improved for the better/ [2] Never changed [3] Has become worse [4] other (specify)		

E. WOMEN REPORTING MINIMUM DIETARY DIVERSITY (MDDW)- To be asked to a woman aged 15-49 in this household

Ask about the food consumed yesterday from early morning to the time until she went to sleep in her home or elsewhere? Please tell me what you ate and drank from early morning after you woke-up in the morning to the time you went to bed at night. Mention any food that is more than 15 gr ?

Classification	Food categories	If consumed in 24hrs (from now)	How was the situation of food consumed before 2017/2018
1 Any food made from grains and any white roots or tuber	Any food made from grains /	A.1. Sorghum A.2. Wheat A.3. Rice A.4. Maize A.5. Other grain	1. Worse than this 2. Not bad 3. Same as now 4. Better than this

or plantains	Roots and tubers (any white roots or tuber or plantains)/	B.1. Irish Potato B.2. Sweet B.3. Yam B.4. Cassava B.5. Banana B.6. Other root or tuber	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
2 Any beans or peas	Pulses (Any beans or peas)	C.1. Beans C.2. Peas C.3. Lentils C.4. Other pulse	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
3 Any nuts or seeds	Nuts and Seeds	D.1 Groundnut D.2. Tree nut D.3.Certain seeds D.4. Nut/seed “butters D.5. Other nut / seed	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
4 Any milk or milk products	Milk and milk products	E.1. Milk/Amata E.2. Cheese E.3. Yoghurt E.4. Other milk products	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
5. Any meat, poultry and fish products	Organ meat	F.1. Liver F.2. Kidney F.3. Heart F.4. Meat	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
	Meat and poultry	G.1. Beef G.2. Pork G.3. Lamb G.4. Goat G.5. Rabbit G.6. Chicken G.7. Duck G.7. Other bird	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
	Fish and seafood	H.1. Fresh fish H.2. Dried fish	1. Worse than this 2. Not bad

		H.3. Shellfish	3. Same as now 4. Better than this
6. Any eggs	Eggs	I.1. Poultry eggs I.2. Eggs from any other bird	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
7. Any dark green leafy vegetables	Green leafy vegetables	J.1. Spinach J.2. Cassava leaves J.3. Amaranth J.4. Cabbage J.5. Other greens:	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
8. Any vitamin A rich fruits, vegetables and roots	Vitamin A-rich vegetables, roots and tubers	K.1. Carrots K.2. Pumpkin K.3. Broccoli	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
	Vitamin A-rich fruits	L.1. Ripe mango L.2. Ripe papaya L.3. Ripe Banana L.4. Tree tomato L.5. Passion fruit (ripe)	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
9. Any other vegetables	Fresh peas, snow peas, snap peas or green beans Cucumber, tomato, etc.	M.1. Beans (various) when eaten as fresh pods/ M.2. Cauliflower M.3. Celery M.4. Chayote chowchow, christophine) M.5. Corn (fresh, not dried/flour/meal) (green maize)/ M.6. Cucumbers M.7. Eggplant M.8. Green pepper M.9. Mushroom M.10. Peas green, when eaten	1. Worse than this 2. Not bad 3. Same as now 4. Better than this

		as fresh pod	
10. Any other fruits		N.1. Apple N.2. Avocado N.3. Banana N.4. Jackfruit N.5. Guava N.6. Lemon N.7. Mandarin orange N.8. Orange N.9. Pineapple N.10. Watermelon N.11. Passion Fruit	1. Worse than this 2. Not bad 3. Same as now 4. Better than this
11	Condiments and seasonings/ Ibirungo	Ingredients used in small quantities, such as O.1. Chilies O.2. Spices O.3. Herbs O.4. Fish powder O.5. Tomato paste O.6. Flavour cubes or Seeds O.7. Oil	1. Worse than this 2. Not bad 3. Same as now 4. Better than this

QH_3 Do you have knowledge in preparation of balanced food? Before 2017/18, did you have the same knowledge? If not what was the role of RDDP in that?

1: Yes /yego, 0: No/Oya

F. SUPPORTED RURAL ENTERPRISES REPORTING AN INCREASE IN PROFIT (value chain actors & processors)

Q_1. Do you or does any member of your household own/manage a rural enterprise?

Q_2. Who in the household owns/manages a rural enterprise promoted by RDDP

[1]: Husband

[2]: Wife

[3]: Both husband and wife

[4]: Other (specify)

Q_3. What is the name of the rural enterprise promoted through RDDP support

Q_4. When did the enterprise start? Month: Year:

Q_5. What is the type of business of the rural enterprise among those promoted by RDDP

[1]: Milk collection farmer to MCC

[2]: Milk transportation

[3]: Milk retail

[4]: Milk processing

[5]: Veterinary services

Q_6. During project period, what was the value of total sales of products, goods or services?

Q_7. During project period, what was the value of total operating costs (including inventory, wages, equipment, transport, etc.)?

Q_8. Who in the household decides on the use of earnings/transfers from the rural enterprise?

[1]: Husband

[2]: Wife

[3]: Both husband and wife

[4]: Other (specify)

G. NUMBER OF NEW JOBS CREATED

(Collect data on youth (indicator 2.2.1) employment and develop a matrix on opportunities created/ supported)

Employment and develop a matrix on opportunities created/ supported	In the last 12 months	In 12 months before 2017/18	Men	Women	Youth
G_1. Did you recruit any full time last year?	[1] <i>Yes/yego,</i> <i>(if yes</i> <i>[0]</i> <i>No/Oya</i>	[1] <i>Yes/yego,</i> <i>(if yes</i> <i>[0] No/Oya</i>	Number... ...	Number... ...	Number... ...
G_2. Did you recruit any recurrent seasonal employees?	[1] <i>Yes/yego,</i>	[1] <i>Yes/yego,</i> <i>(if yes</i>	Number... ...	Number... ...	Number... ...

	<i>(if yes [0] No/Oya</i>	<i>[0] No/Oya</i>			
G_3. Which kind of opportunities were created?					
G_4. How these people benefited from your employment opportunities created/ supported compared to before?					

A.2. FGD Checklist for Beneficiaries and KIIs of Staff at local level

1. What key activities or interventions have you received from RDDP matching grants Project in this district? What RDDP matching grants did dairy farmers receive since the introduction of RDDP project
2. What are the key changes/ trends have taken place since you received funds from RDDP matching grants through BDF (since 2017), Probe for?
 - Average income household for direct beneficiaries as a result of the matching grants
 - Households food security
 - Profitability (volume of milk per cow) and quality products (increase in value of milk sold)
 - Dairy farming productivity and supply of quality milk or milk consumption at household level
3. How do you perceive the service delivery by dairy cooperatives or MCCs? Are they serving targeted farmers in milk collection and marketing, dairy input supply, animal health and extension services and financial services? Has this service improved compared to before the project?
4. Do you have milk collection, processing and outlet facilities? Have there been changes in these facilities in the last 67/7 years? Are dairy farmers currently using a formal milk collection system? Do you think milk collection and processing facilities are well functional and their capacities are well utilized?
5. What is the trend in milk sales for your company/cooperative/MCCs (Value chain enterprises) since you received this grants?

6. How do you perceive the role of RDDP matching grants in Enhancing improvement in empowerment and creating new employment opportunities in this district/ area?
7. Has the RDDP matching grants contributed to improving farmer’s capacity in good dairy production practices? Probe for: production practices and/or technologies, Climate-smart investments made, Climate-smart investments made, etc.
8. Has the RDDP matching grants impacted the capacity of the value chain to buy, transform and sell dairy products. Probe for
 - a. improved processing, product diversification, packaging, certification and marketing
 - b. Market, processing or storage facilities constructed or rehabilitated
9. What has been the role of the grants in improving access to financial services? Have financial service providers been adequately supported in delivering outreach strategies, financial products and services to rural areas
10. **How these people benefited from your personal/companies or cooperative employment opportunities created/ supported compared to before?**
11. What have been the challenges associated with the RDDP matching grants in the last 6/7 years? What are the recommendations for future implementation and sustainability?

A.3. Donors and RDDP Staff, and Implementing Partners: Assessment of MG Performance

Name of Respondent (optional).....

Date.....

Position.....

1. Introduction

2. Context Analysis-SWOT Analysis, Lessons Learnt, and Recommendations

- a) What are the key context changes/ trends have taken place over the years of RDDP matching grants implementation (since 2017), or that are anticipated in the coming period that are likely to affect the impact of the project work? (*probe for policies, institutional arrangements/strong institutional support, disbursement of funds; strong social norms; improving awareness*).
- b) Specifically, what have been the strength or what are the emerging trends and implications in the matching grants project operations?
- c) To what extent did there exist room/ flexibility to adapt the project in light of changing contexts? Probe for with clarity of selection and eligibility criteria, time bound, capped and transparent. Give examples

- d) What do you perceive as the weaknesses of the implemented matching grants project (*Probe for lack of expert capacity to reach milk quality standards*)?
- e) What else could have been done to better position RDDP matching grants to these changes in context?
- f) What elements of the broader context (factors, actors) have helped or hindered your achievement of results? What opportunities exist (*Probe for Growing market for milk and animal product, Growing local and export demand, Low competition on supply side? What are possible pitfalls (probe for possible threats: Animal Disease, Regulatory uncertainty, Market access, High transport/labour costs)*)?
- g) To what extent, and how has the administration of the grants by IFAD hindered or facilitated the realization of intended results?
- h) What has RDDP matching grants learned thus far from the implementation and how has it shared and applied it?
- i) What should be taken forward (strengthen, deepen, replicate) so as to strengthen the project in future work? What can be regarded as best practices? What should be avoided?
- j) What general/ overall recommendations can be formulated based on the experiences to date?

3. Design & Relevance, effectiveness, Sustainability and impact

- a) What is your opinion about the following aspects of the RDDP matching grants project?

Issue	Very High	High	Average	Low	Very low
1. To what extent was the project designed based on clear context analysis?					
2. To what extent was the project objectives realistic?					
3. RDDP's theory of change/ approaches are well articulated and understood by the project staff?					
4. Have RDDP staff largely followed the Project Goal & Development Objective set out in the logical framework?					
5. To what degree were project results and indicators being clear/ easy to understand?					

6. To what extent were issues related to gender, and youth were addressed?					
7. To what extent were the donor, partners/stakeholders involved in project design, development and implementation?					

4. Effectiveness and Delivery of RDDP matching grants.

- a) What significant changes (results) did the matching grants supported interventions bring/ contribute to? (Probe for household incomes for direct beneficiaries, improve the livelihoods of poor rural households, profitability of the dairy sector and quality dairy products. Probe for:
1. Dairy farming productivity and supply of quality milk and milk consumption at household level
 2. Improved service delivery by dairy cooperatives
 3. Increased utilization of milk collection, processing and outlet facilities
- b) How do the results compare with the original targets (extent of realization of set targets)?
- c) On what issues/ program outcome did the project perform particularly well?
- d) What particular factors or events have affected RDDP matching grants performance?
- e) What elements of the project did not work out well or should be done differently in future?
- f) Please rate the quality of external relations (donors, partners) of RDDP matching grants through BDF:
- g) What do you perceive as the impact or contribution of RDDP matching grants on the following:
1. policy and institutional environment for development of the smallholder dairy industry
 2. Enhancing improvement in empowerment
 3. Enhancing Employment Opportunities of Rural Producers' organizations
- h) Could you tell us the impact of the project on the overall economy, rural poverty, and food and nutrition security.

..... *Thank you*.....

A4. Key activities or interventions received by LFFS group from RDDP matching grants

No	Names of beneficiaries	District	Sector	Activities funded through RDDP matching grants
1	LFFS Indongozi	Rwamagana	Karenge	
2	GIRUMUKAMO RURAMIRA	Kayonza	RURAMIRA	Purchase of equipment.
3	GIRAMATA RURAMBI	Kayonza	NYAMIRAMA	Purchase of equipments

4	IMBEREHEZA	Kayonza	NYAMIRAMA	Purchase of equipment's
5	ABADAHIGWA MU BWORDZI GAHINI	Kayonza	GAHINI	Purchase of Cans, Alcohol guns, Lactometer, water tanks, cowsheds
6	TERIMBERE MWOROZI	Kayonza	GAHINI	Purchase of equipment's
7	JYAMBERE MWOROZI	Kayonza	NYAMIRAMA	Purchase of Equipment's
8	ABATANGAMATA	Kayonza	NYAMIRAMA	Purchase of equipment's
9	ISHEMA Jersey	Kayonza	Kabarondo	Purchase of equipment's
10	INZIRAGUHINYUKA LFFS	Nyabihu	Jenda	Purchase of Milk Cans (50L), Milk Cans (10L), Milk Cans (20L), Bicycles, Lactometer, Thermometer Infrared, Fridge and Alcoholgun
11	TWITEZIMBERE LFFS	Nyabihu	Rambura	Purchase of Tricycle Motorbike (LIFAN), Cooler Machine (500L), Milk Cans (50L), Lactometer, Thermometer infrared and Alcohol Gun
12	GIRAMATA BONEZA	Rutsiro	Boneza	Milk collection equipments
13	LFFS Tworore Kijyambere Nyundo	Nyanza	Muyira	Purchase of milk cans, bicycles and milk quality testing equipment
14	ITSINDA LFFS GIRAMATA SIMBI	Huye	Simbi	Purchase of Milk transport equipment
15	ISHYIRAHAMWE LFFS TWONGERE UMUKAMO MBAZI	Huye	Mbazi	Purchase of milk handling equipment
16	COOPERATIVE INSHONGORE ZA HUYE	Huye	Tumba	Purchase of milk handling equipment
17	Indangamirwa mu Bworozi bw'Inka zitanga umukamo	Ruhango	Kabagari	Purchase of Fridge, Milk cans, Bike, Shelves, tables, counter, chairs for milk zone
18	koperative ZIRAKAMWA MUKO	Gicumbi	MUKO	Buying milk tank and milk cans
19	ITSINDA JYAMBERE MWOROZI	Gicumbi	GITI	Buying milk coller and milk cans

20	ITSINDA ISANO MURAGO	Musanze	GATARAGA	Buying milk equipments
21	ITSINDA GIRAMATA IMBONERA	Musanze	CYUVE	Buying milk equipments
22	ITSINDA ONGERUMUKAMO ZIRAKAMWA	Musanze	CYUVE	Buying milk equipments
23	ITSINDA TERIMBERE MWOROZI	Musanze	MUSANZE	Buying milk equipments
24	ITSINDA NTIZIGASONZE	Musanze	NYANGE	Buying milk equipments
25	ITSINDA ABAHUJE	Musanze	GATARAGA	Buying milk equipments (cans, water tanks, cowsheds)
26	ITSINDA ABADAHIGWA	Musanze	MUSANZE	Buying milk equipments
27	ABADATANA BUTARO	Burera	Butaro	MCP and a cooler 500L

A5. New employment opportunities created by LFFFS groups

<i>No</i>	<i>LFFS Group</i>	<i>New jobs</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Youth</i>
1	Abadahigwa Mu Bworozi Gahini	Permanent jobs	3	1	2	2
		Temporary jobs	7	4	3	1
2	Abadatana Butaro	Permanent jobs	3	3	0	0
		Temporary jobs	2	2	0	0
3	Abahuje Gataraga	Permanent jobs	2	2	0	0
		Temporary jobs	4	2	2	4
4	Abakundinka Nyange	Permanent jobs	2	1	1	1
		Temporary jobs	0	0	0	0
5	Abatangamata Nyamirama	Permanent jobs	3	2	1	1
		Temporary jobs	8	5	3	1
6	Giramata Imbonera Cyuve	Permanent jobs	2	1	1	1
		Temporary jobs	5	5	0	0
7	Giramata Rurambi Nyamirama	Permanent jobs	3	3	0	0
		Temporary jobs	10	8	2	1
8	Girumukamo Mworozi Ruramira	Permanent jobs	3	3	0	1
		Temporary jobs	6	3	3	1

9	Imbere Heza Nyamirama	Permanent jobs	6	4	2	3
		Temporary jobs	11	5	6	1
10	Indogozi Karengye	Permanent jobs	3	1	2	0
		Temporary jobs	12	10	2	0
11	Inziraguhinyuka Jenda	Permanent jobs	12	8	4	2
		Temporary jobs	25	17	8	5
12	Isano Murago Gataraga	Permanent jobs	3	2	1	1
		Temporary jobs	3	1	2	1
13	Ishema Jersey Kabarondo	Permanent jobs	3	2	0	0
		Temporary jobs	10	8	2	1
14	Jyambere Mworozzi Giti	Permanent jobs	3	3	0	0
		Temporary jobs	1	1	0	0
15	Jyambere Mworozzi Nyamirama	Permanent jobs	3	2	0	0
		Temporary jobs	13	11	1	1
16	Twongere Umukamo Mbazi	Permanent jobs	14	5	9	9
		Temporary jobs	1	1	0	0
17	Ntizigasonze Gataraga	Permanent jobs	2	2	0	0
		Temporary jobs	4	3	1	3
18	Ongera Umukamo Nyange	Permanent jobs	2	2	0	0
		Temporary jobs	4	2	2	4
19	Abavugururamukamo Rwaniro	Permanent jobs	4	3	1	3
		Temporary jobs	0	0	0	0
20	Terimbere Mworozzi Gahini	Permanent jobs	3	2	1	1
		Temporary jobs	13	11	2	1
21	Terimbere Mworozzi Musanze	Permanent jobs	2	2	0	0
		Temporary jobs	3	2	1	2
22	Umukuzanyana Kivuye	Permanent jobs	1	1	0	0
		Temporary jobs	0	0	0	0
Total for 22 LFFS		Permanent jobs	82	55	25	25
		Temporary jobs	142	101	40	27
Average per LFFS Group		Permanent jobs	4	3	1	1
		Temporary jobs	6	5	2	1

A6. Activities /interventions funded to participating cooperatives

1.	TERIMBERE MWOROZI COOPERATIVE-MBARE	Nyagatare	KARANGAZI	Purchase of milk cooling tanks, plastic tanks and dam sheets
2.	KIREBE KAMATE ZIRAKAMWA COOPERATIVE (KKZ)	Nyagatare	RWIMIYAGA	Buying vehicle/milk tank truck
3.	COOPERATIVE MATIMBA TWORORE KIYAMBERE(MATWOKI)	Nyagatare	MATIMBA	Buying a cooler, cans, stainless steel milk buckets and water tanks
4.	MUFCOS Cooperative	Kayonza	MURUNDI	Buying of a truck for milk transportation
5.	Twiyororere Kiyambere	Nyanza	Muyira	Buying milk truck tank
6.	INDAKEMWA MUGANDAMURE	Nyanza	Busasamana	Buying Pasteurizer
7.	Jyambere Mayaga Cooperative	Nyanza	Kibirizi	To purchase milk transportation truck
8.	KIDACO Cooperative	Huye	Kinazi	Milk processing plant

A7. List of participants in KIIs and FGDs

Annex 1. Partners participants in RDDP Matching Grant Impact Assessment

Name of the Person	Institution/Location	Position	Contact Number
Ndagijimana A. Alexis	RDDP	Project Manager	0788307563
Kayiranga Martin	RDDP	M&E Specialist	0788786381
Gisagara Emmanuel	RDDP	Access to Finance Specialist	0788355141
NSENGA Nelson	RDDP	Access to Finance Specialist	0781523962
Ntivuguruzwa Telesphore	RDDP	Nutrition Specialist	0788520217
Musonera Emile	BDF	Grant Manager	0788306844
Rutagengwa John	BDF	Grant Manager	0788308518
Karibwende Emmanuel	Nyagatare District	RDDP Field Officer	0788726266
Musabyimana Viviane	Gatsibo District	RDDP Field Officer	0788454186
Thomas NIYITEGEKA	Kayonza District	RDDP Field Officer	0788473071
Munganyese Florence	Gicumbi District	RDDP Field Officer	0788416153
Dufatanye Venuste	Burera District	RDDP Field Officer	0783615564

Name of the Person	Institution/Location	Position	Contact Number
Munyemana Sostene	Musanze District	RDDP Field Officer	0788944348
Mbyayingabo Alexandre	Nyanza District	RDDP Field Officer	0788409790
Rudasingwa Fidele	Rubavu District	RDDP Field Officer	0782396301
Giraneza Andre	Nyabihu and Ngororero Districts	RDDP Field Officer	0788308148
Mukakimenyi Gisele	Ruhango District	RDDP Field Officer	0788875004
Munyanzeza J M Noel	Rutsiro District	RDDP Field Officer	0788621934
Kayigamba Aphrodis	Huye District	RDDP Field Officer	0788421460
Muhayimana Cyprien	Kayonza District	Director ANRU	0788632187
Niyitegeka Thomas	Kayonza District	DARO	0788473071
Uwera Peace	Kayonza District	BDF Officer	0788496865
Ngirinshuti Fabien	Nyagatare District	DARO	0788692978
Mugabo Ben	Nyagatare District	BDF Officer	0788212799
Niyigena Lois	Rutsiro District	DARO	0788773417
Ndagijimana Magnifique	Rutsiro District	BDF Officer	0783496590
Ikizuru Innocent	Rwamagana District	DARO	078845669
Mukeshimana Venant	KIDACO Cooperative Huye	President	0788563176
Gashagaza George	Kamate Zirakamwa Coop Nyagatare	President	0781545343
Rutaboba Gaspard	MATWOKI Cooperative Nyagatare	President	0787053915
Sebudandi Stephano	MUFCOS Cooperative Kayonza	President	0788573902
Rurangangabo Joel	Terimbere Mworozzi Coop Nyagatare	President	0788639872
Niyonkuru Immaculee	Indakemwa Cooperative Nyanza	President	0788850092
Ngiruwonsanga Samuel	Twiyororere Kijyambere Nyanza	Manager	0782514761
Safari Ernest	COOEZOMI Cooperative Gakenke	President	0784018630

Annex 2. Participants in FGDs-RDDP Matching Grant Impact Assessment

District		Names of Participants	Organisation/Group	Phone number
1	Burera	Mvuyekure Rwagara Celestin	LFFS Abadatana Butaro	0783314107
	Burera	Turikumpungenge Josue	LFFS Abadatana Butaro	
	Burera	Nikuze Chantal	LFFS Abadatana Butaro	0786785439
	Burera	Nikobahoze Cyprien	LFFS Abadatana Butaro	
	Burera	Mukamurenzi Alphonsine	LFFS Abadatana Butaro	0785487480
2	Gicumbi	Bimuriza Seraphine	LFFS Abakundinka Ruvune	0788728652
	Gicumbi	Uwera Seraphine	LFFS Abakundinka Ruvune	0786851741
	Gicumbi	Nsengimana Servilien	LFFS Abakundinka Ruvune	0783604798
	Gicumbi	Ikundabayo Hyacinthe	LFFS Abakundinka Ruvune	0786953512
	Gicumbi	Karwangire Aloys	LFFS Umukuzanyana Kivuye	0785387503
	Gicumbi	Ntamugabumwe Evaliste	LFFS Umukuzanyana Kivuye	0786868410
	Gicumbi	Maniriho Aphrodice	LFFS Umukuzanyana Kivuye	0783824483
3	Musanze	Twizerimana Jean Dieu	LFFS Duterimbere mu bworozi	0781775869
	Musanze	Mukabashayija Anatalie	LFFS Duterimbere mu bworozi	0788447319
	Musanze	Nyiragasanzwe Philomene	LFFS Duterimbere mu bworozi	0782915217
	Musanze	Mukeshimana Josephine	LFFS Duterimbere mu bworozi	0783335761
	Musanze	Mutoni Louise	LFFS Duterimbere mu bworozi	0783971784
	Musanze	Ntirenganya Desire	LFFS Terimbere mu bworozi	0783738966
	Musanze	Ngaboyimanzi Adrien	LFFS Terimbere mu bworozi	0783337376
	Musanze	Umurerwa Evelyne	LFFS Terimbere mu bworozi	0783444190
	Musanze	Nkurikiyimana Felecien	LFFS Terimbere mu bworozi	0785052604
	Musanze	Bizimana J.Damascene	LFFS Terimbere mu bworozi	0788630096
	Musanze	Mukamana Flomile	LFFS Terimbere mu bworozi	0782954293
	Musanze	Mbunjinka Speciose	LFFS Terimbere mu bworozi	0780707423
	Musanze	Kabera Leonard	LFFS Terimbere mu bworozi	0782624566
	Musanze	Mbangute Apolinaire	LFFS Terimbere mu bworozi	0782408778
	Musanze	Karekezi Anastase	LFFS Terimbere mu bworozi	0789018857
Musanze	Karimba J.Baptiste	LFFS Terimbere mu bworozi	0789286090	

District	Names of Participants	Organisation/Group	Phone number
Musanze	Nirere Vestine	LFFS Ongerumukamo	0783467869
Musanze	Semiryango Jesph	LFFS Ongerumukamo	0783883152
Musanze	Yibutsabe Jacqueline	LFFS Ongerumukamo	0789254142
Musanze	Munyamariba Desire	LFFS Ongerumukamo	0781960083
Musanze	Nkurunziza Faustin	LFFS Ongerumukamo	0781677990
Musanze	Kamashara Faburoniya	LFFS Ongerumukamo	
Musanze	Zigarababiri Boniface	LFFS Ongerumukamo	0785174187
Musanze	Nyiransengimana Ester	LFFS Ongerumukamo	0784865416
Musanze	Kwihangana Erisa	LFFS Ongerumukamo	0784350345
Musanze	Nkurunziza Etienne	LFFS Ongerumukamo	0780710525
Musanze	Nkundibiza Phocas	LFFS Ongerumukamo	0785340325
Musanze	Bayavuge Riberta	LFFS Ongerumukamo	0783219126
Musanze	BUTERA Léuteri	LFFS Giramata Imbonera	0788467613
Musanze	Nyirabarasebanya	LFFS Giramata Imbonera	0787736922
Musanze	Nyirabayavuge Liberata	LFFS Giramata Imbonera	0783219126
Musanze	Mukarubibi Pelagie	LFFS Giramata Imbonera	0785405942
Musanze	Mucocori	LFFS Giramata Imbonera	0788258025
Musanze	Niyibizi Augustin	LFFS Abahuje	078616881
Musanze	Nizane Christine	LFFS Abahuje	
Musanze	Mbabare Celestin	LFFS Abahuje	0783544768
Musanze	Nyirabwage Bernadette	LFFS Abahuje	0780509191
Musanze	Twarayishimye Béatrice	LFFS Abahuje	0784165444
Musanze	Manirakiza Jeanne	LFFS Abahuje	07869230088
Musanze	Sebasore Epimaque	LFFS Abahuje	0783147475
Musanze	Munyembabazi Emmanuel	LFFS Abahuje	0783050357
Musanze	Mukeshimana Gaudence	LFFS Abahuje	07823033496
Musanze	Mbonariza Dorothee	LFFS Abishyizehamwe	0785858575
Musanze	Niyonsaba Emmanuel	LFFS Abishyizehamwe	0786718321
Musanze	Bahimba Pierre	LFFS Abishyizehamwe	0785134822

District	Names of Participants	Organisation/Group	Phone number
Musanze	Samvura J.Bosco	LFFS Abishyizehamwe	0783556747
Musanze	Muhawenimana Floride	LFFS Abishyizehamwe	0791181043
Musanze	Dueatanye Innocent	LFFS Abakundinka	0788557569
Musanze	Mukeshimana Elisabeth	LFFS Abakundinka	0786091536
Musanze	Hagumimana Joseth	LFFS Abakundinka	0783856552
Musanze	Mukamuremyi Adele	LFFS Abakundinka	0782160646
Musanze	Kantarama Béatrice	LFFS Abakundinka	0788615844
Musanze	Uwamaharo Agies	LFFS Abakundinka	0783058117
Musanze	Munyabirori	LFFS Abakundinka	0788370276
Musanze	Ndayambaje	LFFS Abakundinka	0783371608
Musanze	Sinalibonye Fidele	LFFS Ntzigasonze	0783380784
Musanze	Basomingera Daniel	LFFS Ntzigasonze	0786994090
Musanze	Rwasubutare	LFFS Ntzigasonze	0783331347
Musanze	Munyaneza Eric	LFFS Ntzigasonze	0786026209
Musanze	Nyiransabimana Gaudence	LFFS Ntzigasonze	0787006422
Musanze	Munyakabere Sylvestre	LFFS Ntzigasonze	0788633621
Musanze	Ruvuzandekwe Onesphore	LFFS Ntzigasonze	0788727621
Musanze	Uwimana Angelique	LFFS Ntzigasonze	0784051306
Musanze	Harerimana Donat	LFFS Ubumwe ku nka zitanga umukamo	0788686063
Musanze	Nyirabatware Jacqueline	LFFS Ubumwe ku nka zitanga umukamo	0787429128
Musanze	Rwibasira	LFFS Ubumwe ku nka zitanga umukamo	0780401972
Musanze	Nyirabatangana Bernadette	LFFS Ubumwe ku nka zitanga umukamo	0789026350
Musanze	Nyirakamana Vestine	LFFS Ubumwe ku nka zitanga umukamo	0791326133
Musanze	Ayinkamiye Esther	LFFS Ubumwe ku nka zitanga umukamo	07225008982
Musanze	Rugerinyange Felicien	LFFS Ubumwe ku nka zitanga umukamo	-
Musanze	Nsenyiyumva J Damascene	LFFS Ubumwe ku nka zitanga umukamo	07851444223
Musanze	Munyemanzi Fordouard	LFFS Isano Murago	0727854674
Musanze	Rugerinyange Juvenal	LFFS Isano Murago	0787440754
Musanze	Mukasine Venantie	LFFS Isano Murago	0786368029

District	Names of Participants	Organisation/Group	Phone number	
	Musanze	Mukankusi Josephine	LFFS Isano Murago	0787897444
	Musanze	Nyirasafari Beatrice	LFFS Isano Murago	0788763675
	Musanze	Mbanzabugabo Bona	LFFS Isano Murago	0783581024
	Musanze	Nkeramihigo Jean D'amour	LFFS Isano Murago	0783521537
4	Huye	Mukambasade Asterie	LFFS Twongerumukamo Mbazi	0785810119
	Huye	Niwemubyeyi Beathe	LFFS Twongerumukamo Mbazi	0725711629
	Huye	Ndayambaje Joseph	LFFS Twongerumukamo Mbazi	0783118566
	Huye	Nyiraminani Ancile	LFFS Twongerumukamo Mbazi	0783037798
	Huye	Nyiramana Bernard	LFFS Twongerumukamo Mbazi	0788581930
	Huye	Nyiramisago Eugenie	LFFS Twongerumukamo Mbazi	0788750671
	Huye	Ntirenganya Emile	LFFS Abavugururamukamo Rwaniro	0725252680
	Huye	Uwimana Clementine	LFFS Abavugururamukamo Rwaniro	0725385927
	Huye	Murwanashyaka Aphrodis	LFFS Abavugururamukamo Rwaniro	
	Huye	Mihigo Michel	LFFS Abavugururamukamo Rwaniro	0788604757
	Huye	Mukarubanda Felicite	LFFS Abavugururamukamo Rwaniro	0786248543
	Huye	Mporanyimana Faustin	LFFS Abavugururamukamo Rwaniro	0783442240
5	Rwamagana	Habimana Phocas	LFFS Indogozi	0783539908
	Rwamagana	Dusabiman Jean	LFFS Indogozi	0728592001
	Rwamagana	Nkundabera Vincent	LFFS Indogozi	
	Rwamagana	Gashayiza Jean Cloude	LFFS Indogozi	
	Rwamagana	Nkundabera Vincent	LFFS Indogozi	
	Rwamagana	Shirumuteto Vestine	LFFS Indogozi	
	Rwamagana	Nyirabera Sarah	LFFS Indogozi	0728567150
	Rwamagana	Singirumukiza Mariame	LFFS Indogozi	
	Rwamagana	Musemakwere Emanuel	LFFS Indogozi	072627213
	Rwamagana	Mafaranga Janvier	LFFS Indogozi	0725472928
	Rwamagana	Mukankubana Jeanette	LFFS Indogozi	
	Rwamagana	Barayavuga Faustin	LFFS Indogozi	
	Rwamagana	Munyankiko Enose	LFFS Indogozi	0726050237

District	Names of Participants	Organisation/Group	Phone number	
6	Rwamagana	Irinigumugabo Tabios	LFFS Indogozi	
	Rwamagana	Mwiseneza Ester	LFFS Indogozi	
	Rwamagana	Nsabimana Isaac	LFFS Indogozi	0790223968
	Rwamagana	Mujawamariya Marie Josee	LFFS Indogozi	
	Rwamagana	Habineza Silas	LFFS Twitezimbere mu bworozi	
	Rwamagana	Mugiraneza J. Claude	LFFS Twitezimbere mu bworozi	
	Rwamagana	Habiyaremye Xavier	LFFS Twitezimbere mu bworozi	
	Rwamagana	Dushimimana Alfred	LFFS Twitezimbere mu bworozi	
	Rwamagana	Mukarukundo Clementine	LFFS Twitezimbere mu bworozi	
	Rwamagana	Mukasangwa Clementine	LFFS Twitezimbere mu bworozi	
	Rwamagana	Bazivamo Antoine	LFFS Twitezimbere mu bworozi	
	Rwamagana	Nduwayezu Bernard	LFFS Twitezimbere mu bworozi	
	Rwamagana	Habimana Phocas	LFFS Twitezimbere mu bworozi	0783539908
	Rwamagana	Hakizumungu Dominique	LFFS Twitezimbere mu bworozi	
Rwamagana	Uwimana Jaqueline	LFFS Twitezimbere mu bworozi		
6	Kayonza	Habineza Xavier	LFFS Imbereheza	0788408214
	Kayonza	Ntakiyimana Felicien	LFFS Abatangamata	0782471710
	Kayonza	Hagenimana J Claude	LFFS Abadahigwa mu bworozi	0789504613
	Kayonza	Katarwa Felicien	LFFS Girumukamo mworozzi	0783263173
	Kayonza	Ndayishima Manasse	LFFS Terimbere mworozzi	0788799020
	Kayonza	Karugarama Domitille	LFFS Ishema Jersey	0725187487
	Kayonza	Ntaganda Jean	LFFS Jyambere mworozzi	0784184635
	Kayonza	Twahirwa Martin	LFFS Giramata Rurambi	0782428423

Annex 3. Partners participants in RDDP Matching Grant Impact Assessment

Name of the Person	Institution/Location	Position	Contact Number
Ndagijimana A. Alexis	RDDP	Project Manager	0788307563
Kayiranga Martin	RDDP	M&E Specialist	0788786381

Name of the Person	Institution/Location	Position	Contact Number
Gisagara Emmanuel	RDDP	Access to Finance Specialist	0788355141
Ntivuguruzwa Telesphore	RDDP	Nutrition Specialist	0788520217
Musonera Emile	BDF	Grant Manager	0788306844
Rutagengwa John	BDF	Grant Manager	0788308518
Karibwende Emmanuel	Nyagatare District	RDDP Field Officer	0788726266
Musabyimana Viviane	Gatsibo District	RDDP Field Officer	0788454186
Thomas NIYITEGEKA	Kayonza District	RDDP Field Officer	0788473071
Munganyese Florence	Gicumbi District	RDDP Field Officer	0788416153
Dufatanye Venuste	Burera District	RDDP Field Officer	0783615564
Munyemana Sostene	Musanze District	RDDP Field Officer	0788944348
Mbyayingabo Alexandre	Nyanza District	RDDP Field Officer	0788409790
Rudasingwa Fidele	Rubavu District	RDDP Field Officer	0782396301
Giraneza Andre	Nyabihu and Ngororero Districts	RDDP Field Officer	0788308148
Mukakimenyi Gisele	Ruhango District	RDDP Field Officer	0788875004
Munyanzeza J M Noel	Rutsiro District	RDDP Field Officer	0788621934
Kayigamba Aphrodis	Huye District	RDDP Field Officer	0788421460
Muhayimana Cyprien	Kayonza District	Director ANRU	0788632187
Niyitegeka Thomas	Kayonza District	DARO	0788473071
Uwera Peace	Kayonza District	BDF Officer	0788496865
Ngirinshuti Fabien	Nyagatare District	DARO	0788692978
Mugabo Ben	Nyagatare District	BDF Officer	0788212799
Niyigena Lois	Rutsiro District	DARO	0788773417
Ndagijimana Magnifique	Rutsiro District	BDF Officer	0783496590
Ikizuru Innocent	Rwamagana District	DARO	078845669
Mukeshimana Venant	KIDACO Cooperative Huye	President	0788563176
Gashagaza George	Kamate Zirakamwa Coop Nyagatare	President	0781545343
Rutaboba Gaspard	MATWOKI Cooperative Nyagatare	President	0787053915
Sebudandi Stephano	MUFCOS Cooperative Kayonza	President	0788573902
Rurangangabo Joel	Terimbere Mworozzi Coop Nyagatare	President	0788639872
Niyonkuru Immaculee	Indakemwa Cooperative Nyanza	President	0788850092
Ngiruwonsanga Samuel	Twiyororere Kijyambere Nyanza	Manager	0782514761
Safari Ernest	COEZOMI Cooperative Gakenke	President	0784018630

Annex 4. Participants in FGDs-RDDP Matching Grant Impact Assessment

SN	District	Names of Participants	Organisation/Group	Phone number
1	Burera	Mvuyekure Rwagara Celestin	LFFS Abadatana Butaro	783314107
2	Burera	Turikumpungenge Josue	LFFS Abadatana Butaro	
3	Burera	Nikuze Chantal	LFFS Abadatana Butaro	786785439
4	Burera	Nikobahoze Cyprien	LFFS Abadatana Butaro	
5	Burera	Mukamurenzi Alphonsine	LFFS Abadatana Butaro	785487480
6	Gicumbi	Bimuriza Seraphine	LFFS Abakundinka Ruvune	788728652
7	Gicumbi	Uwera Seraphine	LFFS Abakundinka Ruvune	786851741
8	Gicumbi	Nsengimana Servilien	LFFS Abakundinka Ruvune	783604798
9	Gicumbi	Ikundabayo Hyacinthe	LFFS Abakundinka Ruvune	786953512
10	Gicumbi	Karwangire Aloys	LFFS Umukuzanyana Kivuye	785387503
11	Gicumbi	Ntamugabumwe Evaliste	LFFS Umukuzanyana Kivuye	786868410
12	Gicumbi	Maniriho Aphrodice	LFFS Umukuzanyana Kivuye	783824483
13	Huye	Mukambasade Asterie	LFFS Twongerumukamo Mbazi	785810119
14	Huye	Niwemubyeyi Beathe	LFFS Twongerumukamo Mbazi	725711629
15	Huye	Ndayambaje Joseph	LFFS Twongerumukamo Mbazi	783118566
16	Huye	Nyiraminani Ancile	LFFS Twongerumukamo Mbazi	783037798
17	Huye	Nyiramana Bernard	LFFS Twongerumukamo Mbazi	788581930
18	Huye	Nyiramisago Eugenie	LFFS Twongerumukamo Mbazi	788750671
19	Huye	Ntirenganya Emile	LFFS Abavugururamukamo Rwaniro	725252680
20	Huye	Uwimana Clementine	LFFS Abavugururamukamo Rwaniro	725385927
21	Huye	Murwanashyaka Aphrodis	LFFS Abavugururamukamo Rwaniro	
22	Huye	Mihigo Michel	LFFS Abavugururamukamo Rwaniro	788604757
23	Huye	Mukarubanda Felicite	LFFS Abavugururamukamo Rwaniro	786248543
24	Huye	Mporanyimana Faustin	LFFS Abavugururamukamo Rwaniro	783442240

Participants: technical team from RDDP project and BDF team

Name	Function	Institution
1. NDAGIJIMANA A. Alexis	RDDP Operations Manager	SPIU/RAB
2. KAYIRANGA Martin	M&E Specialist	SPIU/RAB
3. NSENGA Nelson	Access to Finance Specialist	SPIU/RAB
4. NTIVUGURUZWA Telesphore	Nutrition Specialist	SPIU/RAB
5. RUTAGENGWA JOHN	BDF Grant Manager	BDF
6. EMILE MUSONERA	BDF Grant Manager	BDF