



FINANCIAL SERVICES FOR WOMEN



Colophon

COMMISSIONED BY:

- The Food and Agriculture Organization of the United Nations (FAO), within the framework of the Capacity Building in Rural Finance (CABFIN) partnership comprising FAO, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the International Fund for Agricultural Development (IFAD), the United Nations Capital Development Fund (UNCDF), the World Bank, the World Food Programme (WFP) and the Consultative Group to Assist the Poor (CGAP);
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LIST OF ABBREVIATIONS

AGRA	Alliance for Green Revolution in Africa
AFI	Alliance for Financial inclusion
AFR	Access to Finance Rwanda
AIF	African Improved Food
BABC	Bugesera Agri-Business Company
BDS	Business Development Services
BK	Bank of Kigali
CABFIN	Improving Capacity Building in Rural Finance partnership
CAFSP	Cellule d'Appui au Financement de la Santé
DCED	Donor Committee for Enterprise Development
DRC	Democratic Republic of Congo
EAX	East African Commodity Exchange
FAO	Food and Agriculture Organization of the United Nations
FGD	Focus group discussion
FI	Financial institution
FMO	Entrepreneurial Development Bank (the Netherlands)
FSP	Financial service provider
FtF	Feed the Future Initiative (USAID)
FtMA	Farmer to Market Alliance
GMO	Rwandan Gender Monitoring Office
ICCO	Inter Church Development Cooperation Organization
IFC	International Finance Cooperation
IPA	Innovations for Poverty Action
JP RWEE	Joint Programme on Rural Women's Economic Empowerment
KCB	Kenya Commercial Bank
MIGEPROF	Rwandan Ministry of Gender and Family Promotion
MINAGRI	Rwandan Ministry of Agriculture and Animal Resources
MFI	Microfinance Institution
NAIP	Rwandan National Agriculture Investment Plan
NpM	Platform for Inclusive Finance
NUR	National University of Rwanda
NWC	Rwandan National Women's Council
PAR	Portfolio at risk
PO	Producer organization
PRODEV	Promotion et Développement Villageois Rwanda
PSTA4	Strategic Plan for Agricultural Transformation 4
RAB	Rwanda Agricultural Board
RGCC	Rwanda Grain and Cereals Cooperation
ROSCA	Rotating Savings and Credit Association
RWAMREC	Rwanda Men's Resource Centre
SACCO	Savings and credit cooperative
S&C	Savings and Credit Group
SHG	Self-help group
SME	Small and medium enterprise
UN	United Nations
UOB	Urwego Opportunity Bank
USAID	United States Agency for International Development
VCA	Value Chain Analysis
VSLA	Village Savings and Lending Association
WB	World Bank
WEAI	Women's Empowerment in Agriculture Index
WFP	World Food Programme
YARA	Norwegian chemical company



EXECUTIVE SUMMARY

SUMMARY OF LESSONS LEARNED

The purpose of this study was to analyse the position of women in the maize and bean value chains in Rwanda, as well as the current and potential role of financial service providers (FSPs) in strengthening the positioning of women in these chains. The study used the women's economic empowerment framework for the conceptual analysis, while similarly looking at overall financial inclusion indicators. This was all done within the context of a value chain analysis.

Specific objectives included:

- **Identifying key constraints on women – especially as smallholder producers and traders – in participating effectively in the maize and mixed bean value chains and in accessing finance**
- **Identifying and comparing trends in women's participation and access to finance in the maize value chain versus the bean value chain**
- **Showing pathways for women to grow their businesses with the support of financial services, particularly those services linked to the value chain**
- **Showing how access to finance contributes to women's economic empowerment**
- **Exploring business cases for FSPs to serve female clients in the value chains**

The value chain concept provided a framework for analysis and explained the different functions in the value chains for bean and for maize, including the roles of men and women. The analysis showed how the available financial services not only reached women but also benefited and empowered them.

A desk study, which accompanied the fieldwork and value chain analysis, showed that the enabling environment in Rwanda is very conducive to the promotion of women in agriculture. Government policies support the economic inclusion of women, and clear implementation strategies have been defined. However, women still experience challenges and constraints in terms of access to land and farm inputs, equipment, training, finance and market channels. Strong time constraints also exist due to double burden, as well as limited power in negotiations on decisions between members of their households (known as 'intra-household bargaining power'). In this case the decisions are on use of resources and income. Furthermore, women still have less access to larger loans for inputs, trading and aggregation. However, the study also showed that in the recent past, access to finance and participation of women in cooperatives has helped overcome such challenges.

Both men and women in Rwanda face constraints in accessing markets and finance. However, men have more access and control over agriculture resources at household level compared with women. Cultural practices leave lower-value subsistence crops to women and attribute cash crops to men. Moreover, women have less access to agricultural investments, technologies and assets to transform subsistence to market-oriented production; they are assumed to have lower capacities and fewer skills, as well as lack self-confidence to engage in negotiation with bigger buyers. These constraints are due to unequal power relations at family level. They also exist because of





the double burden of women who need to attend to domestic responsibilities, which limits their possibilities to participate in meetings and to trade outside the local community. The observations from the FAO country gender assessment on agriculture were also noted in the maize and bean value chains.

Both in the bean and the maize value chain, women's participation is found mostly at the production stage, where they provide the bulk of labour. The presence of women is less pronounced in input supply, trading and marketing. The maize value chain is more structured and commercialized. This allows women not only to benefit more from marketing opportunities but also from the training and financial services channelled through the cooperatives that are operational in the chain.

SUMMARY OF CONCLUSIONS ON THE MAIZE VALUE CHAIN

Maize is an important food crop and increasingly important as a cash crop in Rwanda. It is still partially organized informally based on a spot market, but it is increasingly structured for commercial buyers in the chain. It offers interesting opportunities, especially for seed production and in serving the niche markets provided by commercial buyers that have linkages with the World Food Programme (WFP). A lack of quality input supplies and mechanization is a challenge in increasing production and reducing post-harvest losses. This affects women relatively more because of their lower intra-household bargaining power, greater time constraints and limited suitable equipment. The production of maize is labour

intensive, with women playing a key role in the labour supply. Currently, the chain offers opportunities for women's participation, especially through informal and cooperative structures. The cooperatives provide a gateway to markets and services for women, and the Rwandan context is conducive to such participation. Women's economic empowerment was observed at household and cooperative levels: women participated in decisions on resources at home, and more women had cooperative leadership positions in the recent past (45 percent). Women benefited from the chain's structured organization and the link with financial services. This is especially the case when women were organized in culturally accepted solidarity groups¹.

It was observed that off-takers have no specific strategies to include women. Given the aforementioned constraints, value chain facilitators should ensure that women maintain their position in the maize value chain and can benefit from further professionalization. For this, women need to get better access to quality inputs and also become involved in the mechanization of production and pre- and post-harvest handling. Financial services could stimulate such continued involvement through designing products that can be acquired and used by women.

¹ A solidarity group is an informal group of women that decide to save together and guarantee each other to get a loan. The group differs case by case by mostly focusing on savings mobilization towards a stronger focus on jointly acquiring a loan.





SUMMARY OF CONCLUSIONS ON THE BEAN VALUE CHAIN

At the start of the study, it was assumed that women played a more dominant role in the less-commercialized bean value chain. The Government of Rwanda assumed that this chain could have a positive impact on women's empowerment and could benefit from household food security. The study only partially confirmed this. The bean value chain certainly contributes to food security at household level. However, it offers only a limited number of economic opportunities for women, because the market is very poorly developed and FSPs shy away from financing bean production. The value chain is characterized as an informally organized chain, mostly serving home consumption and to a limited extent serving the local market. Production is constrained by use of low yielding seeds, low quality inputs and lack of any mechanization in the chain. Sales are mostly targeted at the local market, with limited sales beyond this and with very little commercialization. Bean processing is virtually non-existent. Some attempts to transform this chain into a market-oriented value chain have started with some companies showing interest in beans for export and the World Food Programme (WFP) looking at the markets for urban consumption and exports. Women currently play an important role in this chain, although this is limited to production and pre-and post-harvest handling. Men are most active in bulking and trading. Mostly informal financial services are accessible and these are able to cover the current financing needs in the chain. The chain currently offers very few prospects for sustainable formal financial services.

Formal financial services are hardly available for bean producers as bean production is not perceived to be a profitable business. If the bean value chain becomes more commercial, formal financial services will become increasingly important in servicing the chain. When the chain is geared towards a structural market, access to quality seeds becomes more important. Improved bean seeds for production would benefit women, who could be motivated to become agro-dealers and seed suppliers. Financial services could stimulate this development by providing credit for women for improved seed production and to invest as agro-dealers. In addition, financing small equipment for harvesting and better storage facilities could help professionalize post-harvest handling and improved storage. Other suggestions to maintain the position of women in the chain include gender-sensitive capacity building

schemes to increase production– for example through Farmers Field Schools (FFS) – promotion of gender inclusive producer organizations and targeted ways to increase access to finance.

CONCLUSION ON WOMEN'S EMPOWERMENT IN THE MAIZE AND BEAN VALUE CHAINS

Overall, the study showed opportunities for women in both value chains. Women's empowerment in both chains was noted at household level, where women have an increasing say in the use of resources, especially when the production is geared towards the market. It was also observed that women may not have the incentive to grow a business, for example by professionalizing production through mechanization, when they do not have control over additional income earned. On some occasions, it was noted that women's increased earning caused conflicts and stress at household level. While women play an important role in bean production, it appears that their role and influence in the maize value chain, especially through cooperatives, is growing faster. Women make up to 45 percent of leadership positions in the maize cooperatives but only 33 percent in the bean ones, as shown in Table 8. One of the reasons for this discrepancy could be that beans are produced largely outside the atmosphere of the cooperatives and are mostly for home consumption and local markets.

CONCLUSIONS ON FINANCIAL SERVICES IN THE VALUE CHAINS

Overall, financial inclusion in Rwanda is high, even in rural areas, especially through the vast outreach of the Umurenge network and the growing use of digital financial services. However, formal lending for agricultural value chains still lags behind. For female producers, financial services are primarily obtained through informal finance or through linking informal with formal FSPs. Eventually, women who want to grow their businesses in the value chain will need access to larger loans for improved seeds, pre- and post-harvest handling, trading and aggregation. The formal FSPs have no specific strategies or products that address the constraints on women. There are a few exceptions, however, such as Duterimbere, a microfinance institution (MFI), which tries to address the demands and needs of women in its strategies and product design. The system currently being developed in the maize chain seems to combine the benefits of informal and formal services through the organization





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of solidarity groups in cooperatives. Women are saving in the safe and culturally accepted environment of the group while at the same time having access to formal individual savings accounts and larger loans, both as groups and individuals. The maize value chain offers them access to these services in an integrated manner, and this accelerates the benefits of each of the elements in the chain. It also provides a growth path for women to access bigger loans. The combined interventions of the different actors, including the Farmer to Market Alliance (FtMA), off-takers, cooperatives and FSPs, are well coordinated to support value chain finance.

Informal financial services are very important in both value chains. These services include the traditional savings and credit societies, savings groups supported by NGOs and embedded finance provided by input suppliers, traders and processors. Access to formal financial services is much more limited in the bean value chain than in the maize one. Formal financial services are provided mostly in the maize value chain. The maize value chain therefore offers women better access to a variety of financial services than the bean chain.

The FtMA model showed that further professionalization, integration and commercialization of a value chain does not necessarily have to lead to the exclusion of women. Factors that contributed to these positive developments were:

- **Strong government support for gender mainstreaming in Rwanda;**
- **Strong awareness of the need for women's participation with partners on the ground;**
- **Supportive development partners such as WFP;**
- **Integration of informal with formal systems that facilitates culturally accepted participation of women;**
- **FSPs that wish to promote a focus on women as a business case.**



SUMMARY OF CLIENT RESPONSES

Client responses show that women are accessing formal financial services for some of their agricultural activities, especially for maize. Women mentioned that they receive different forms of informal finance, especially from the traditional savings and credit groups. They like low amounts with few requirements to borrow, timely processing of loans and trusted relationships with savings and credit groups. Through the FtMA model, which facilitates the linking of informal groups with cooperatives in the maize chain, women are better served by combining the easily accessible informal systems with formal finance channelled through cooperatives.

In general, female respondents are very positive about the loans provided by FSPs through cooperatives and solidarity groups. Women in cooperatives and saving groups have the same rights as their male peers, including access to agricultural loans and accompanying services. Sixty percent of the respondents obtained agricultural advice, and almost 50 percent received business development support. Such accompanying services are highly appreciated by the women. Easy access to financial and other services has increased crop productivity and benefitted women economically. In turn, this has resulted in higher incomes and additional investments for all cooperative members. The extra income generated from their maize crops was used for household needs such as agricultural investments, health, food, housing and school fees.

Similar trends in the bean value chain could not be identified as this chain offers fewer opportunities for cash income. Very little formal credit is available in this chain for women. Small amounts of loans are often provided in kind, but female farmers rely mostly on informal channels to receive credit. Unfortunately, informal credit cannot always satisfy the credit needs of women aspiring to grow their bean businesses.

The study showed that single women face difficulties in meeting requirements for accessing loans for inputs and harvesting. In cooperatives without solidarity groups, it was a challenge for these women to save the required amount needed to receive such

a loan. Overall, the field surveys noted that single women experience fewer benefits from participating in a well-organized value chain.

This same observation was noted with de facto single-headed households in which men are away for long periods. Single women face difficulties in accessing labour for farming activities that require heavy manual labour; hiring labour is also too expensive for many of them. They have less family labour, and this leads to constraints in land preparation and planting. At the end of the season, these single women face labour constraints for harvesting and post-harvesting operations.

Most FSPs interviewed indicated that they had tried to develop services in line with women's needs – such as through the cooperatives and solidarity groups – but that many gaps remain. According to all female respondents, the ideal financial products include features such as limited or no collateral requirement, the possibility of receiving loans in kind, loans through solidarity groups and links to mobile payment systems. These respondents also mentioned they would appreciate loans for pre- and post-harvest activities as well as small loans for equipment that can be handled by women and save labour.

The data shows that in some FSPs women receive almost the same amount and size of agricultural loans (both group and individual loans) as men. In the case of Duterimbere, the share of women taking out individual agricultural loans is increasing. For other FSPs, sex-disaggregated data were not easily available. MFIs, such as Duterimbere and Ejoheza, provide loans with low or flexible collateral requirements and offer loan products directly to individuals and groups of cooperatives. In the case of Duterimbere, individual loan sizes to women are increasing, both for businesses and for individual agri-loans. Duterimbere, Ejoheza and Urwego Opportunity Bank (UOB), also participate in the system developed by the FtMA model. This combines the easy accessibility and self-control of the informal system with potential access to larger loans through the FSPs.





REFLECTIONS ON EMPOWERING WOMEN

The focus group respondents indicated that women have increased their influence at household level. They have more say on the use of the income from maize, either independently or along with their husbands. Women experience more respect and often have an equal say within the household on the use of resources. However, it is useful for men and women to be sensitized on equal participation in and fair division of household activities.

While women have gained more equality in household positions with regard to decision and control over resources, an unequal division of labour still prevails. Women have a double burden with considerably longer working days, and most of the caring tasks are their responsibility. In addition, they are paid less than men for seasonal labour, having to work more hours to earn the same amount.

Women's participation in formalized value chains has opened the door to their economic empowerment. Female respondents mentioned that they increasingly participate as cooperative members, especially in the maize value chain. Participation in cooperatives has assisted female producers in accessing inputs and credit. They have been able to engage in economic opportunities and participate in membership and leadership positions. Currently, women represent 45 percent of cooperative leadership in the maize chain; meanwhile, their numbers in leadership positions in cooperatives focusing on beans have increased. Compared with the 2016 desk study on the maize value chain, a positive trend in female participation in leadership positions and marketing deal negotiations was noted.

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RECOMMENDATIONS FOR CHAIN SUPPORTERS, FINANCIAL SERVICE PROVIDERS AND THEIR INVESTORS

This section provides a set of recommendations that could stimulate an increased focus on women by FSPs and investors, based on observations and conclusions from the study. These recommendations can also stimulate products for women to grow their businesses through access to finance. The last paragraph features an explanation of the requirements for MFIs that want to pursue the business case for investing in women.

GENERAL RECOMMENDATIONS FOR CHAIN ACTORS AND SUPPORTERS

- A better collection of sex-disaggregated data on the participation of men and women at different levels in the value chain. This refers to women's participation in cooperatives as well as their use of financial services, not only for credit but also for savings and other services.
- An agreement by all chain stakeholders should be made on the importance of equal participation of women in the chain. In the case of Rwanda, government agencies as well as cooperatives support women's involvement, so this is a good starting point for such equal participation.
- Approaches to facilitate gender participation should be further developed. These include developing women's capacities to improve their marketing and negotiation skills, meet contract specifications and be trusted clients and respected business partners. It also means to fully understand the facilities of the East African Commodity Exchange (EAX) to store products and sell at opportune times. In other words, women should be enabled to fully participate in the marketing processes in the chain.
- Off-takers and buyers should be encouraged to develop specific strategies to support women. Private companies are primarily concerned with the most cost-effective way to obtain a high quality and quantity of primary goods. The ability of commercial lead firms or institutional buyers to negotiate contracts conditional on increased

female participation in producer organizations (POs) is questionable. However, sensitization among buyers on the relevance of such greater participation could be initiated by WFP and other development actors supporting the chain.

- The current system developed by FtMA to link producers to buyers and connect formal FSPs with savings groups is very effective in reaching female maize producers. This could be replicated in other value chains such as the bean chain, once it becomes more commercialized. In addition to access to finance, the system can be introduced to build knowledge for women on how to engage in markets and value chains, including negotiation on prices and safe ways to transport goods and money.
- FtMA's model can be used to operationalize Rwanda's new National Financial Inclusion Strategy (2019–2024), which aims to capitalize on the vast coverage and use of savings and credit groups by women, and link these informal structures to more formalized financial systems. The FtMA model shows that the cooperative can be a good channel for different types of services for women: agri-extension services, financial literacy training and market linkage services, which are combined with financial services. Lessons learned from this programme can be shared widely in Rwanda.
- A similar integrated approach used in the maize chain could be adopted by promoters of the bean chain for when the business volumes in the bean value chain grow. A combination of capacity building, market linkage and finance will help women to transition to higher value niche markets, including value addition activities. Combining beans and maize production in cooperatives could also be a viable strategy.

RECOMMENDATIONS FOR FSPS

- Sex-disaggregated data should be captured that includes average loan sizes for both sexes, as well





as risk profiles of products provided to women compared with men. Only detailed portfolio data for both sexes will allow for a meaningful comparison and can underline the business case for investing in women.

- Services should be tailored to the needs of women and products that take into account their disadvantages should be considered. Women should participate in the discussion and design of financial products with the features that they need.

These include:

- Loans with flexible collateral requirements and access to accompanying non-financial services;
 - Small asset loans with flexible collateral options that assist women in acquiring equipment to reduce production or harvesting labour. The nature of these assets would be such that high collateral would not be required, and women could comfortably use the equipment themselves;
 - Loans to support single women for input and labour costs, because these women have smaller plots and less access to labour;
 - Loan provision in a context that is culturally easier for women, for example through informal groups;
 - Loan development that supports the further integration of women in the value chain, for example through their promotion as input dealers; longer-term asset loans for gender friendly mechanization of production.
- Financial products should support the function of women in the value chain. The model of linking savings groups to MFIs is very useful in this respect because it allows women to be actively involved in the financial product distribution and repayment.

- Carefully monitor the effects of increased access to finance on improved productivity and profitability for women.
- Financing activities should be managed and handled by financial intermediaries or savings groups within cooperatives, not directly by the cooperatives. Many cooperatives do not have sufficient capacity to manage and administer loans properly. Doing so can increase the risk and divert their attention from their core business of buying and selling produce.
- While the study has found limited use of digital payment systems in the maize and bean value chains, ongoing developments show promising results in:
 - Digital payment systems that use mobile phone and agency banking and the introduction of mobile wallets;
 - Tracking and tracing of the produce flow in the value chain, including new systems now being introduced in the maize value chain by WFP;
 - Digital credit assessment for agricultural loans as being developed by the Inter Church Development Cooperation Organization (ICCO)

These developments could also be beneficial for female actors in the chain, as these data would improve the acquisition and analysis of gender data as well as accessibility of services closer to the women and in the groups. Women could also build up historical track records through better data storage.

New initiatives for reaching out to women with digital financial services should be carefully followed for learning and improvement. Promotion of such systems could be taken up by FSPs, including those that use savings groups and savings and credit cooperatives as agencies in rural areas.





BUSINESS ARGUMENTS FOR DELIVERING FINANCIAL SERVICES TO CLIENTS

The study concluded that the structured value chain approach, combined with a conducive enabling environment, offers significant opportunities for women in the value chain, especially for maize. The initial assumption that women do not benefit when the value chain formalizes does not stand. Women can, however, benefit through commercialization of a value chain when the appropriate organization of a chain through actors such as FtMA is in place.

All FSPs mentioned that they perceive women as better clients who are more reliable with repayments and are more loyal to the institution. The findings of the study though show a mixed picture in terms of male and female repayment performance. Some financial service providers actively promote serving more women. As detailed data is not available – only for Duterimbere – the perception of women as better clients cannot be fully confirmed. In the case of Duterimbere, women show better repayment performance for agricultural and especially individual loans. For other loans the picture is mixed. Only Duterimbere has an explicit focus on women throughout its organization and has installed adequate data collection systems to measure women's performance.

Any FSP that wants a business strategy that includes women should integrate this into its organizational strategies, staffing policies, product development and delivery mechanisms, as well as into its promotion and marketing. Furthermore, the organization must have a learning approach and continuously assess whether services are actually reaching and benefiting women.

Formal FSPs often lend through cooperatives but must deal with challenges resulting from their governance and management, which is often weak. It is not yet clear if the growing participation of women has reversed this situation. However, early indications from FSPs are that cooperatives with more female leaders perform better. Some formal buyers have also complained about the quality of governance in cooperatives and have indicated that, when cooperatives have more female leaders, they seem to perform better and are better at repaying loans. It would be interesting to compare available data from other sources.

When the business case also considers social impacts, such as higher food security and better education of children, social investors see that investing in women can create high social returns and higher institutional outreach. The field study indicated that when women have a greater say in use of income, they are more likely to invest in food security and children's education. Such trends are confirmed by international studies. Investors that look beyond mere economic performance could be triggered to stimulate investments for women by their partner MFIs. These social investors are usually at the forefront of investing in women. ■





1. INTRODUCTION: CASE STUDIES ON FINANCIAL SERVICES FOR WOMEN

1.1 INTRODUCTION AND BACKGROUND

This research document aims at better understanding access to finance and its implications for rural women through a study of women's participation in value chain finance in Rwanda. It focuses on the analysis of the maize and bean value chains². It was carried out by NpM, Platform for Inclusive Finance (NpM). The case study research was commissioned by the Food and Agriculture Organization (FAO) of the United Nations, within the framework of the Capacity Building in Rural Finance (CABFIN) partnership, and the World Food Programme (WFP) in collaboration with NpM.

The NpM group recognizes the important role that female farmers play in agricultural production. It simultaneously observes that women do not often access financial services for agriculture and, in particular, that larger loans would improve their participation in the agricultural value chain. Because of this mismatch, the group seeks to understand the gender-related social, economic and cultural barriers that women face in relation to accessing such services.

Members of the Improving Capacity Building in Rural Finance (CABFIN) partnership all work in research and

development for financial inclusion, especially in rural areas. They supported the case study work to better understand and guide improved financial services for women.

NpM and CABFIN members wish to further understand the root causes of women dropping out – or being de facto excluded – from accessing financial products and services in cases where agricultural value chains increasingly professionalize; also where they become more vertically and horizontally integrated or more commercially-oriented. This exclusion may have negative implications for women involved in the value chains, given that increased access to financial services can contribute to their economic empowerment. This is evidenced in case studies and supported by a broad range of literature – especially Gender performance indicators manual: How well are we serving women? (Women World Banking, 2013) and Financial Inclusion studies (IPA, 2017).

NpM is composed of 13 members based in the Netherlands. They all share a commitment to expanding access to finance to regions inadequately provided for and traditionally excluded demographics, including youth and women. NpM supported the set-up of a rural finance expert group, which includes the following members: FMO, Triple Jump, ICCO, Rabobank Foundation, Triodos Investment Management, Oxfam Novib and Oikocredit.

NpM commissioned case studies on three relevant areas related to women in agri-finance:

- **Women's participation in savings and credit cooperatives in Ethiopia**
- **Suitable agri-finance products for women in Vietnam**
- **Value chain finance (VCF) for women in Rwanda**

1.2 ANALYTICAL FRAMEWORK ON WOMEN'S EMPOWERMENT

The case studies are composed of two elements:

1. A desk study on documents such as policy and technical papers of the specific country and national statistics on women's access to financial services, as well as studies on the value chain;
2. A field study consisting of qualitative interviews and focus group discussions (FGDs).





WOMEN'S ECONOMIC EMPOWERMENT

The study uses a Reach–Benefit–Empower framework alongside a women's economic empowerment analytical lens to help understand the effect of financial services for women. The focus is on economic empowerment even though this is intertwined with social empowerment. Several international institutions, especially those like FAO and the Donor Committee for Enterprise Development (DCED) that are active in economic development, use the concept of women's economic empowerment. They use slightly different wording, but stress the complementarity of the economic and social components. According to Golla et al (2011; cited in Markel, E, 2014);

"A woman is economically empowered when she has both: (a) access to resources: the options to advance economically and (b) agency: the power to make and act on economic decisions." ▶

Access to productive resources includes access to assets such as land and equipment, as well as to, for example, agricultural and financial services. If only access to resources is addressed, women are not yet empowered since they are also confronted with making decisions about the use of these resources, and with norms and traditions that need to be challenged.

Agency is defined as the ability to make autonomous choices and transform those choices into desired outcomes. It includes control over resources and income, but also capabilities and self-confidence. (DCED)

² The term 'value chain' is used in a loose manner for easy reading. From a technical standpoint, maize and beans represent sectors that comprise multiple distinct value chains.

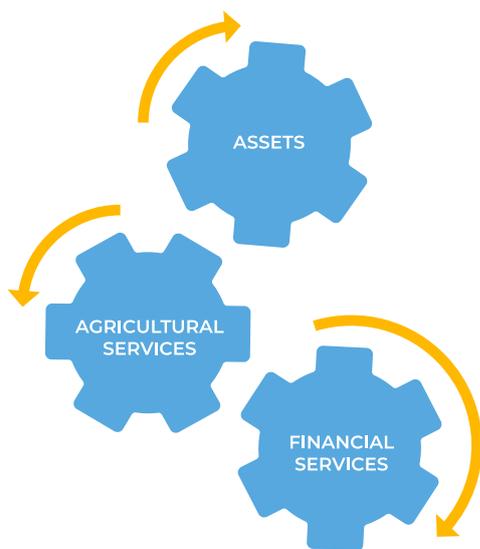


Fig.1 - Access to productive resources

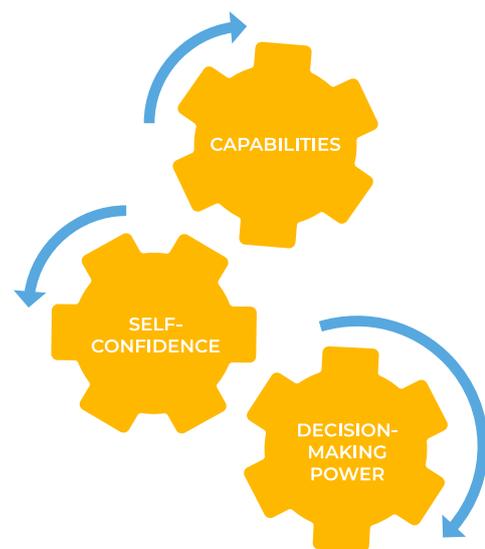


Fig.2 - Power and agency

According to FAO (2016a), the main components of women's economic empowerment are access to productive resources and power and agency. These are visualized in figures 1 and 2.

THE REACH-BENEFIT-EMPOWER FRAMEWORK

The present study uses the Reach-Benefit-Empower framework, which was developed by IFPRI (Meinzen-Dick et al., 2017). The framework is meant to be used 1) to formulate objectives related to reaching, benefiting and empowering women; 2) to design strategies to achieve these objectives, aiming at women as well as men, at household and community levels, but also at (staff of) financial service providers and 3) to monitor the results at the three levels of reach benefit and empower. While the women's economic empowerment framework is consistent with the Alliance for Financial Inclusion's (AFI) Financial Inclusion Core Set of Indicators for financial services (AFI, 2013), it is more focused on access to and control of productive resources by women. The Consultative Group to Assist the Poor (CGAP, 2019) recognizes the relevance of this framework in understanding whether financial services increase women's bargaining power and agency.

There is an important distinction between reach, benefit and empower. Simply reaching women, by including them as clients of financial services, as members of a financial cooperative or in financial

literacy training, does not ensure that they will benefit in terms of improved (socio-economic) well-being. Neither does it ensure that they will be empowered to take decisions, including financial ones. In general, projects should aim to go beyond merely reaching women: they should also strive to empower them, to strengthen their ability to make strategic life choices, including financial ones, and to put those choices into action. In the context of this paper, this implies access to financial and non-financial services such as extension services, business development services as well as market access. This is explained in the framework below. The impact on women's economic empowerment through access to these services is a key area for observation in this study.

Reach: women as clients of financial institutions (FIs) or as members/leaders of savings groups

In order to assess to what extent women are reached by the services, questions such as the following were asked: How many women are using the services? How accessible are financial services to women? What triggers a higher uptake and participation of women? Are operational strategies in place that specifically address women?

Benefit: the relevance of financial products and services and growth perspectives for women

To understand the benefits of financial services for women and their potential to grow their businesses, the following questions were asked: What are the typical services used by women? How are women saving? What types of loans do they use? Why do ▶





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TABLE 1. AUTHORS' ADAPTATION OF THE REACH–BENEFIT–EMPOWER FRAMEWORK

	REACH	BENEFIT	EMPOWER
OBJECTIVES	Include women as clients, or more active clients, (of an MFI or bank) or as members of a saving and credit cooperative (SACCO) and complementary non-financial services	Increase women's socio-economic and financial well-being	Strengthen the ability of women to make strategic life choices, including financial decisions, and to put those choices into action in the form of expenditures and investments
STRATEGIES	Invite women as clients and members; seek to reduce barriers to participation, implement a quota system for the percentage of female clients and/or participation in training	Design a service considering gendered needs, preferences, and constraints to ensure that women benefit from the service. Build capacities of service providers and ensure the support from husbands as well as community leaders	Enhance women's decision-making power in households and communities by applying a couple's approach; address key areas of gender inequality (or disempowerment of women) by sensitizing men and women
INDICATORS	Number or proportion of women using a service, e.g. getting a (larger) loan, having a savings account, attending training, joining a saving and credit cooperative (SACCO), receiving business advice or financial literacy training	Sex-disaggregated data for positive/negative outcomes of the acquired financial service such as productivity, income, assets, nutrition and time use	Women's decision-making power, e.g. over agricultural production, income or household food consumption, reduction of outcomes associated with disempowerment such as. gender-based violence, time burden and restricted mobility

Table 1 summarizes the Reach–Benefit–Empower framework as adjusted by the authors to suit the case studies presented here on women's access to financial services.





women usually receive smaller loans and group loans? (USAID, 2015) How could women benefit from larger loan sizes, including individual loans?

The analysis takes a deeper look at: a) the features of financial services, b) marketing strategies and delivery channels c) the costs and benefits of each of these for women and d) the challenges faced in making financial services accessible to them. When available, sex-disaggregated data on services were analysed. The focus of the study is to identify key constraints for women to effectively access financial services and to participate in economic activities. It also aims to show how women can apply for larger individual loans to grow their businesses.

Empower: contribution to women's economic empowerment

As already mentioned, evidence suggests that enabling access to financial services for women is necessary but not sufficient to ensure their economic empowerment. For this reason, the study will evaluate how access to finance may lead to women having increased control over productive resources by asking:

- Have gender norms on women's ownership of assets (or shared ownership) changed?
- Have norms on gender inequalities such as women's time burden and restricted mobility changed?
- Have women's leadership capacities been strengthened?
- How are women represented in the service provider (as employees and management)?

BUSINESS CASE CONSIDERATIONS FOR PROVIDING MORE SERVICES TO FEMALE CLIENTS

The case studies also identified any business arguments that were used for financial service providers to provide services to women. The intention was to understand whether there was a clearly articulated business case for FIs to specifically reach out to women with adapted strategies, products and credit delivery models. The hypothesis is that if FIs provide more services to female clients, this would not only contribute to the greater economic empowerment of women but would also to the

improved outreach and profitability of the institutions. In every case study, the following questions were asked: What are the economic advantages (added value) for women to have access to more financial services? What are the business advantages for FSPs of having more women in their portfolios?

An underlying hypothesis is that women's might lose their position in the value chain when the chain commercializes. However, participation in cooperatives and groups improves their value chain linkages and their access to financial services from formal FIs. These can be assessed by analysing the maize and bean value chains, which have different levels of aggrupation of women. ■





2. JUSTIFICATION AND SCOPE OF THE STUDY

2.1. CONTEXT OF THE STUDY AND SELECTION OF THE VALUE CHAINS

Rwanda is an internationally recognized world leader in promoting gender equality principles and women's empowerment (https://en.wikipedia.org/wiki/Gender_equality_in_Rwanda). In the aftermath of the 1994 genocide, the government undertook radical and far-reaching reforms, such as introducing gender-sensitive policies to all sector programmes. This was to address the political, social, legal and economic status of women.

Of particular importance were legal reforms to give women property rights and to enable them to inherit property and land (FAO, 2016b).

While policies and strategies in Rwanda have been generally advantageous for gender mainstreaming, many issues still need to be addressed. Rwanda wants to transform its agriculture into a market-oriented sector, involving both men and women, to realize the full growth potential for food and cash crop production. The overall strategy for transformation in the agricultural sector is explained in the Program Appraisal Document for the Transformation of the Agricultural Sector Program 4, PSTA4 (World Bank, 2018). It includes gender mainstreaming as a key element. A more detailed description of the policies and challenges of the position on women in agriculture is provided in Chapter 4.

The study was carried out in collaboration with the Farmer to Market (FtMA) programme managed by WFP in Rwanda. The cooperatives involved in the field study were mostly selected from this programme. FtMA is part of an international programme to stimulate linkages between smallholder farmers and markets. It is operational in Tanzania, Kenya, Rwanda and Uganda and steered by WFP in Rwanda.³ The focus in Rwanda is to stimulate these linkages in the maize and bean sectors. Smallholder farmers are helped to receive the appropriate information on market potential,

investment and agricultural expansion as well as support from seed to market. This increases their capacity to produce and sell marketable surplus to increase their income. The maize value chain is based on long-term linkages between suppliers (farmers), buyers and other key market players (such as suppliers of finance, inputs and technical expertise). The aim of the programme is to increase production, productivity and profitability for smallholder farmers. It also strives to build their capacity to be reliable market players and have increased resilience through more secure markets and access to financial services, including insurance.

Additionally, WFP and FAO are among the four UN agencies engaged in the Joint Programme on Rural Women's Economic Empowerment (JP RWEE), which aims to secure rural women's livelihoods and rights based on four interrelated outcome areas: (1) improved food and nutrition security, (2) increased income to secure their livelihoods, (3) enhanced leadership and participation in rural institutions and in shaping laws, policies and programmes and (4) gender-responsive policy environments for the economic empowerment of rural women. The WFP country office is collaborating intensively with JP RWEE, and the programme fits very well with Rwanda's overall policies on the integration of women in agricultural development, as further explained in Chapter 4.

Maize and beans were selected for the present research. Both are very important crops for Rwanda, especially for women. The nature of their value chain systems are distinct, with maize being more commercial and organized while beans are more of a home consumption crop and therefore less linked with financial services. Maize is both an emerging food chain in Rwanda and an important staple crop for food security and trade at local and regional markets. Maize production in Rwanda is also steadily growing (ICCO, 2016). Maize offers attractive opportunities for growth within specific value chains in the maize sector. There is an institutional market for both maize seed and high-quality maize, in particular for WFP, also linked to the company African Improved Food (AIF). The need is for aflatoxin





free maize, among others, for the production of maize flour for baby foods. Beans are very important for nutrition in Rwanda, and women are especially involved in the production process. It is an important staple food primarily managed by women. Beans are primarily used for home consumption, but there are commercial growth opportunities, such as with specialty beans. There are also opportunities for investment for improved bean storage. Both these opportunities are hindered by lack of financing, although WFP and a few other buyers are currently exploring these.

2.2 OBJECTIVES OF THE STUDY AND CONCEPTUAL FRAMEWORK

The study hopes to inspire FSPs to improve their product offer to the maize and bean value chain, and to guide the FtMA programme in promoting women's participation. It also hopes to inform NpM members, WFP and CABFIN partners on their gender mainstreaming strategies. The overall purpose of the study is to analyse the position of women in the maize and bean value chains and the existing and potential role of FSPs in strengthening the position of women in the chains. This is in order to:

- Identify key constraints on women especially smallholder farmers and traders in the maize and mixed bean value chains to participate effectively in these chains and to accessing finance;
- Identify trends in women's participation and access to finance in the two chains and compare trends between them;
- Show pathways for women to grow their businesses with support of financial services, including those services tied to the value chain;
- Show how access to finance contributes to women's economic empowerment;
- Explore business cases for FIs to serve female clients.

For a better understanding of the role of women in the two value chains, the results of the gender-sensitive value chain analysis (FAO, 2016a; AgriProFocus, 2014) were used as an analytical framework (WFP, 2019) Based on detailed desk studies, an analysis was made of both the position of women and the role of financial services in the value chains. The study seeks to describe the use of different types of financial services and how this affects the position of women in the chain. For a systematic analysis of the different cases, the Reach–Benefit–Empower framework (Meinzen-Dick et al., 2017), explained in the introduction of this report, will be used.

2.3 SET-UP OF THE REPORT

The report starts with an introduction of the general context of women in agriculture in Rwanda in Chapter 4. The maize value chain and the position of women within it is then explained in Chapter 5, based on the desk study and field study results. The field study results will describe: 1) to what extent women are reached by financial services, 2) if and how women benefit from the services and 3) if indeed these services contribute to their empowerment. In Chapter 6 the recently undertaken bean value chain analysis is explained. This includes detailed responses by clients of the eleven cooperatives, three of which are mostly focused on bean production. Chapter 7 briefly compares both value chains, and Chapter 8 explores the available financial services in these chains based on the desk study and on interviews held with the FSPs operating in the chain. The FSPs' perception of the business arguments for serving women are also assessed in this chapter. Finally, the last chapter of the report presents conclusions and recommendations. ■

³ Collaborating parties in the FtMA programme are World Food Programme, Syngenta, IFC, Bayer, AGRA, YARA, GrowAfrica, CAFSP, and USAID.





3. METHODOLOGY AND DATA COLLECTION

The data collection for the analysis of the position of women in these value chains was undertaken in three different steps, as found in the inception report (FAO and NpM, 2019). The steps are briefly presented below.

3.1 DESK STUDY

The desk study research included key document reviews on:

- The role of women in agriculture in Rwanda;
- The role of men and women in the maize and bean value chain and their relative access to resources, including to finance;
- Information on the FtMA programme;
- An analysis of the financial services within the value chains. These services included formal and informal ones as well as in-kind or “embedded” finance, where financial services are combined with other services in the value chain, such as with input supply. This analysis is based both on desk research and on data from key FSPs.
- The Programme Appraisal Document for the Transformation of the Agricultural Sector Program 4, PSTA4 (World Bank, 2018);
- The National Strategy on Women and Youth Access to Finance (2016–2020) (MIGEPROF, 2016) and the draft new Financial Inclusion Strategy 2019–2024 (AFR, 2019).

3.2 DETAILED DATA ON KEY FINANCIAL SERVICE PROVIDERS IN THE CHAIN

The second source of information was in-depth interviews with key stakeholders involved in financial services for actors in the maize and bean value chains.⁴

These included:

- Formal financial service providers such as banks (for example Kenya Commercial Bank ([KCB]) and Urwego Opportunity Bank [UOB]) and MFIs including Duterimbere and Ejoheza;
- Off-takers such as companies or cooperatives, or larger traders that provide input loans or other types of advances in cash or in-kind. Such companies include African Improved Food, Heineken and Sarura;
- The FtMA programme team of, especially staff that have developed the linkages in the maize value chain;
- Informal financial service providers, such as family members or neighbours, and saving and credit groups.

The few formal FIs relevant to the chain were all interviewed.⁵ Information on informal financial services was obtained from the in-depth maize and beans value chain analysis (VCA) and from the FGDs. Obtaining information on informal financial services in Rwanda was difficult and, as some types of informal finance are officially forbidden. Even so, it was observed that women use these types of services.

In addition to the interviews, sex-disaggregated data and specific financial products for women in the chain were analysed. If available, they were based on sex-disaggregated data on the use of financial products.

3.3 THE CLIENT PERSPECTIVE

Data on the client perspective were collected in the regions where WFP maize value chain interventions are taking place. Specific areas⁶ were identified in collaboration with the FtMA team.



3.3.1 FOCUS GROUP DISCUSSIONS

FGDs were held with representatives of the different segments of women, such as single and married women separately as well as men separately. They were selected out of the members of 14 producer cooperatives, of which eight are involved in the maize value chain and six in the bean chain. (For further information on FGD responses, see chapters 5 and 6.) A limited number of men were interviewed in both value chains for comparison. The recent bean value chain analysis served as a reference for client information because FGDs were also used in that study. For the discussions, a semi-structured interview guide was used. They took place with three to five representatives of cooperative leaders and members, which included men, female heads of households and married women.

3.3.2 DIGITAL SURVEY

For the collection of quantitative data, the KoBoToolbox (<https://www.kobotoolbox.org/>)⁴ was used. This toolbox is a free, open-source suite of tools for data field collection. KoBo provided online surveys that were also accessible offline when the team was in the field.⁷ The same questions were asked for the maize and the bean value chains, thereby allowing a comparison of access to finance for men and women. ■



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⁴ The questions in the questionnaires are related to the Reach–Benefit–Empowerment Framework and can be found in the inception report (FAO and NpM, 2019)

⁵ An open, but guided, interview methodology is used. Please refer to the inception report (FAO and NpM, 2019)

⁶ Areas selected for the FGDs were the Kamonyi, Muhanga, Nyagatara, Gatsibo and Rwamagana districts.

⁷ Detailed questionnaires can be found in the inception report (FAO and NpM, 2019), available on request.



4. COUNTRY CONTEXT ON WOMEN IN AGRICULTURE IN RWANDA

4.1 INTRODUCTION AND POLICY CONTEXT

The overall situation of women in agriculture in Rwanda is described in this chapter. Sources used include policy documents on agricultural transformation (World Bank, 2018), the FAO study on women in agriculture (FAO, 2016b) and other sources, as mentioned in Annex 1.

All documents show that the Government of Rwanda is very supportive in addressing equal participation of women at all levels of society. The Women's Empowerment in Agriculture Index (WEAI) score for Rwanda is high. In PSTA4 it is recognized that women perform the bulk of the labour in agriculture (World Bank, 2018); however, they lack the means to purchase high quality seeds and install proper storage facilities, so the losses remain high. Gender mainstreaming is a strong political commitment of the government. Interventions under PSTA 4 make specific gender responsive provisions to target women and design solutions that are tailored to gendered needs and challenges. Specific activities are proposed to further women's economic empowerment (World Bank, 2018).

The gender strategy is also pronounced in the National Agriculture Investment Plan (NAIP), the guiding strategy for the development of the agricultural sector. This focuses on (1) crop and livestock intensification, (2) extension and professionalization of farmers, (3) value chain promotion and (4) institutional capacity building. It has a gender-sensitive monitoring and evaluation framework, with indicators related to sex-disaggregation and women's empowerment. In addition, training for both male and female farmers on gender equality and gender-based violence is delivered through Farmer Field Schools (FFS). These schools use an innovative group-based learning approach originally developed by FAO.

The Government of Rwanda established relevant institutions to ensure implementation of its gender policies. The Rwandan gender-support system

comprises the Ministry of Gender and Family Promotion (MIGEPROF), the Gender Monitoring Office (GMO) and the National Women's Council (NWC).⁸ Also established was the Rwanda Men's Resource Centre (RWAMREC), a civil society organization that promotes positive masculinity.

Despite these supportive initiatives, one shortcoming is the lack of sex-disaggregated data. This affects the depth of understanding of the level in which gender is mainstreamed in agriculture. As noted by FAO, limited capacities in gender analysis and planning for effective gender mainstreaming in all sectors is still a constraint. In addition, there is a limited budget to address women's empowerment through specific interventions. Another problem is the low number of female extension workers in the agricultural sector, with women only accounting for 18 percent of all workers in 2014 (FAO, 2016b).

The government has agreed to a comprehensive set of commitments to ensure women's participation in the agricultural sector (FAO, 2016b), as shown in the box on page 29.

⁸ MIGEPROF is responsible for policy orientation and hands on support in gender analysis and mainstreaming as well as lobbying and advocacy. GMO supports gender auditing while the NWC is mandated to ensure that rural women are mobilized and fully participate in development initiatives.





Rwanda government commitments to improve the position of women in agriculture:

- Ensure equal rights of women and men in rural development and engage them equally in planning, implementation and monitoring of all development activities;
- Ensure that women's unpaid work especially in rural areas is valued appropriately;
- Undertake gender-sensitive measures to transform subsistence agriculture into market-oriented agriculture and empower farmers, especially women with appropriate knowledge and skills for food production and processing;
- Help women to organize into self-help groups (SHGs) and cooperatives in order to obtain equal access to economic opportunities through employment and self-employment;
- Promotion of agriculture cooperatives for women farmers and reinforcing equal representation of men and women at all levels in mixed cooperatives;
- Ensure women and men have equal rights to inherit their parents' properties, economic resources and other family benefits;
- Guarantee women and men equal access to agricultural credit, marketing facilities, required technology, equal treatment and benefits from agrarian reform;
- Facilitate timely access to credit and financing by micro-, small- and medium-scale enterprises, especially those run and managed by women.

This list is relevant for promoting the position and participation of women at all levels in the agricultural production process and in the value chain.





4.2 CHALLENGES FOR THE FULL PARTICIPATION OF WOMEN IN AGRICULTURE

While substantial progress has been made in gender mainstreaming over the past decades in Rwanda, including in the agriculture and rural sector, there is still a gap between men and women in accessing agricultural and rural resources and services. Rwanda still faces challenges in reaching gender equality in food security and agriculture (USAID, 2015). Some factors negatively affecting the participation of women are described below.

DOUBLE BURDEN AND POSITION IN THE HOUSEHOLD

Women agriculturalists are mostly subsistence farmers and spend more time on farming activities than men on planting, weeding, harvesting. They also carry out many post-harvest and other mainly manual activities, including sawing. Because they also undertake household duties, women have high workloads compared with men. According to the United States Agency for International Development (USAID) domestic responsibilities such as collection of firewood and water, cooking and recurrent household duties can take considerable time in rural areas. Ongoing tests of gender-responsive mechanization to ease post-harvest handling, such as sawing machines, have considerably reduced women's workload in areas where they have been tested. These, however, have not yet been widely introduced.

As documented in the desk research, the marital status of women influences their level of access and control over agricultural resources. Female heads of household – including widows, divorced and separated women – were found to have more access to and control over critical agricultural and rural resources, knowledge and opportunities than married women. They are also more likely to be economically active because they have to take the lead on their livelihoods. However, they are the most food insecure due to their access to smaller portions of land, overall lower levels of assets and consequentially a lower capacity to access financial services.

ACCESS TO LAND

Culturally, land is controlled by men, and their crops are therefore allocated more land. Although women legally own land, some cultural barriers hamper the effective implementation of official law and policy to give equal rights. Men are still seen as head of household and main owners of the land, especially in rural areas (FAO, 2016b). Protections in the law apply only to legally recognized, monogamous marriages. According to FAO (2016b), estimates suggest that 60 percent of Rwandan women enter into non-formal partnerships and, without a legal marriage, have no claim on their husband's assets. This includes land or land held jointly for themselves or their children. Women in polygamous marriages, which, although illegal, are common in Rwanda, are in a similar position (FAO, 2006). The government's response to this is to promote legal marriage, for example through clustering of weddings in rural areas.

CONTROL OVER INPUTS, CROPS AND INCOME

The Agriculture Gender Strategy (developed by the Rwandan Ministry of Agriculture and Animal Resources; MINAGRI, 2010) indicated that, at family level, conflicts often arise due to competition between cash and food crops. This becomes a gender issue because women manage food crops, while men are heavily involved in cash crops, with the latter having the potential to earn a higher income. A study undertaken for the Feed the Future Initiative (FTF) notes that women lack access to new technology such as tractors and modern farm inputs that could also assist in improving climate resilient agriculture. The study observed that men are perceived as decision makers in the family and that women should follow those decisions. This implies that culturally men decide on the use of inputs and income earned. According to the FAO country assessment, women are not expected to earn more than their husbands; when they do earn more, it can lead to conflicts and even violence within the household. Thus, the money earned by women's labour is not always beneficial for women. Nevertheless, when women control household income, evidence shows that health and nutrition improve and that children's school attendance increases (USAID, 2015). This could be an important argument for persuading FSPs that aim at poverty alleviation to invest in women.





LIMITED PARTICIPATION IN AGRO-PROCESSING AND SMALL AND MEDIUM ENTERPRISE (SME) OWNERSHIP

Female entrepreneurs mostly operate in the informal agricultural sector. They run smaller firms in the services sector and operating in lower value-added sectors such as food crop production, small home-based businesses or local retail sales. Compared with men, there are fewer women in the formal and bigger agriculture business. This is because many of them face challenges like the required consent of their husbands to engage in business, limited access to formal financial services and limited access and control over land. Available data indicate that, as the degree of formalization increases, women's share of business ownership decreases.⁹

ACTIVE, BUT LOWER PARTICIPATION OF WOMEN IN COOPERATIVES AND ACCESS TO FINANCE

In Rwanda, agricultural cooperatives have been effective in alleviating poverty and reducing social exclusion. There were 2 033 registered agricultural cooperatives in 2016. Women represent 44 percent of the membership of these cooperatives, while they constitute 52 percent of the rural population. This percentage is relatively high compared with most other countries. However, the percentage is lower for women in executive positions –only two of the 14 representatives in the Confederation of Agriculture Cooperatives are women. The maize value chain study notes similar tendencies of low female representation and cooperative governance. It was observed in the March 2019 field study, however, that the trend is towards more women being involved in cooperative leadership positions. From the FGD data, 45 percent of women were members of executive committees and 50 percent participated in supervisory committees in the cooperatives (See Table 5).

To summarize, while both sexes in Rwanda face constraints in accessing markets and finance, men

have more access and control over agriculture resources at household level. Cultural practices leave lower-value subsistence crops to women and attribute cash crops to men. Furthermore, women appear to have limited decision-making power and negotiating with buyers over sales and prices. Moreover, women have lower access to agricultural investments, technologies and assets to transform to market-oriented production. They also lag behind in some capacities and skills, as well as in confidence. These constraints are largely due to the unequal power relations and negative cultural norms at family level. They are also due to the double burden of women in attending to household chores, which limits their options to participate extensively in meetings and to trade to the community. These observations from the FAO country gender assessment (FAO, 2016b) on the agriculture and rural sector were also noted in the maize and bean value chains, which are presented in the following sections. As concluded by IPA (2017) that broader social constraints related to intra-household bargaining power and women's social status may continue to limit the broader impact of financial services on women's inclusion. Respondents from the FGDs also indicated such limitations, especially for married women. ■

⁹ According to the survey conducted by the National University of Rwanda (2013), for 414 sampled SMEs, of which 12.8 percent were in the agriculture sector, women owners of business constituted 21.8 percent. An IFC and Rwanda Chamber of Women Entrepreneurs study (2008) showed that the majority of women entrepreneurs are engaged in the retail sector (82 percent), with the rest focusing on the services (16–17 percent) and manufacturing sectors (1–2 percent).





5. THE MAIZE VALUE CHAIN AND POSITION OF WOMEN IN THE CHAIN

5.1 OVERALL ANALYSIS OF THE MAIZE VALUE CHAIN

This section presents information from studies undertaken by ICCO (2016, 2017) on the maize value chain in Rwanda and their financial services. This is followed by the results of the field survey undertaken in March 2019.

Around 85 percent of the total maize production is accounted for by smallholder farmers. These farmers primarily sell in small quantities to small-scale, under-capitalized traders. These producers and rural-based traders suffer from low margins, poor access to credit and inadequate storage facilities. The maize marketing system of in Rwanda is complex, consisting of thousands of small assemblers, brokers, medium-scale wholesalers, large wholesalers,

transporters and retailers. Currently, 89 percent of maize producers are in organized cooperatives, mostly for access to inputs and other services. These cooperatives play an increasingly important role in buying and selling maize. The FtMA programme has contributed to this trend.

Figure 3 shows that the maize value chain marketing passes through two distinct channels: the spot market and the institutional market channel. As it passes through these channels, processing companies and institutional buyers, such as WFP and related companies sell to it, and the East African Commodity Exchange (EAX) serves as a platform to facilitate transactions and storage (of which, according to AFRACA/FAO (forthcoming) 60 percent of its members are producer organizations) and the Rwanda Grain and Cereals Cooperation (RGCC). Women feature more in the spot market channels

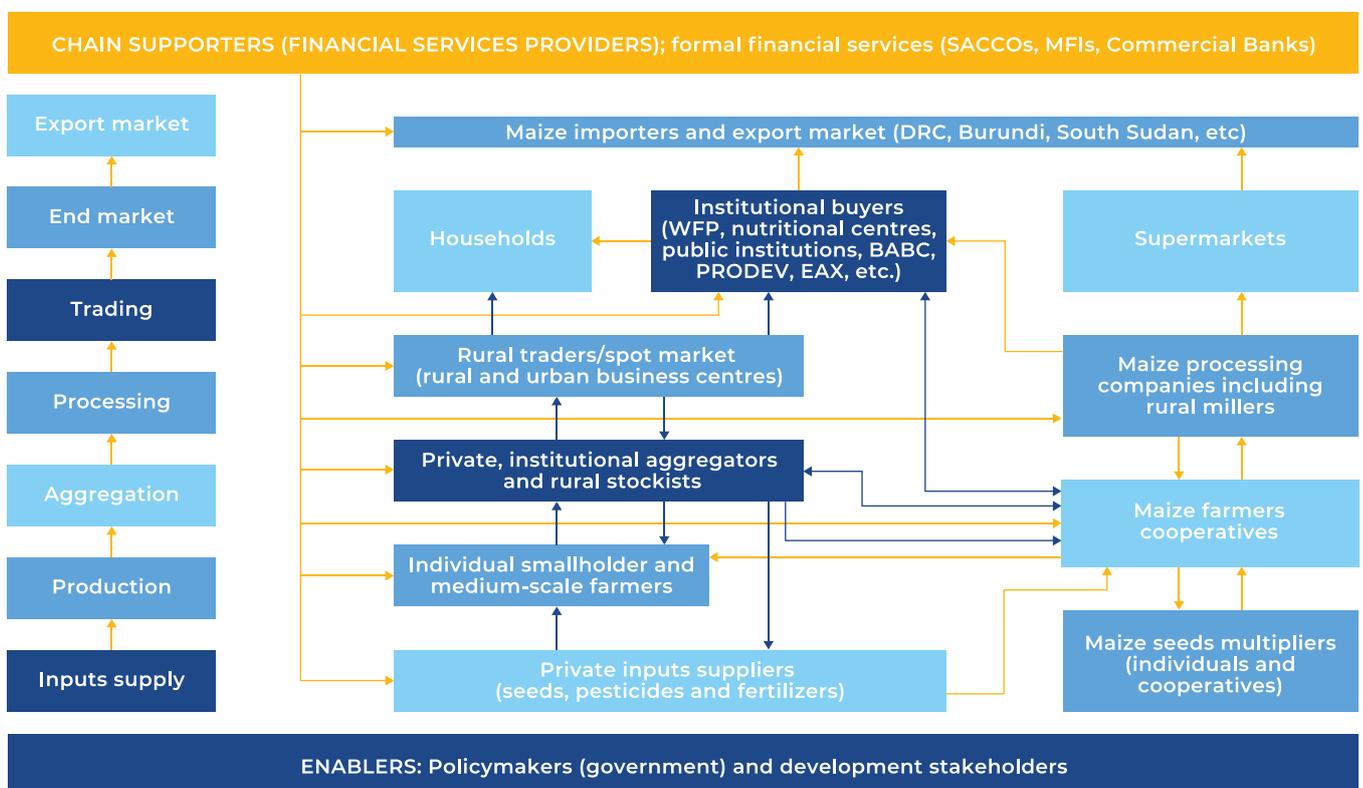


Figure 3. The value chain map for maize, including financial services





because these channels are less formalized and allow for smaller informal transactions.

In 2017 the maize value chain offered a net profit of RWF 40 000/acre for smallholder farmers, about RWF 80/kg for the farmers in 2016 (ICCO, 2016). For aggregators the net addition was RWF 15/kg. The average earnings per smallholder on maize were relatively small but have improved through selling to bigger buyers with facilitation of the WFP. As per 2019 farmers participating in the WFP can make an average net profit of RWF 200 00/acre, so a farmer with a one-hectare field can make around RWF 500 000/season of maize cultivation¹⁰.

The maize value chain studies undertaken by ICCO (2016, 2018) showed that gender gaps exist, although the numbers of female cooperative members and board members are relatively high. Officially, it is required that women should occupy 30 percent of cooperative board positions. Often this percentage is reached (for example, 45 percent of women in leadership positions as shown in Table 5). However, women are still lagging behind men in accessing services, land and other inputs. The role of women in other functions in the value chain such as input supply, production, post-harvest handling and marketing is different from that of men, as explained below. All observations are from the study undertaken in 2016 and 2017 by ICCO. In the results of the FGDs undertaken in 2019 for the current study it was observed that the position of women in cooperatives is changing positively. This is further elaborated in Paragraph 5.2.

INPUT SUPPLY

For smallholder farmers, small agri-dealers are the primary source of inputs. The input supply business is undertaken mainly by men (ICCO, 2016)¹¹ About 65 percent of smallholder farmers use improved seeds from registered seed suppliers. An imbalance

in decision-making powers at household level still prevails, limiting women's use of inputs. Female-headed households in particular, with very limited purchasing power, use their own saved seeds. This is cheaper but also fluctuates in productivity, and these seeds usually have a lower yield compared with improved seeds.

Fertilizer is mostly imported. The majority of smallholder farmers claim that the prices are not affordable to them, although there are different subsidies provided for fertilizer and other farm inputs through government and NGO programmes. Cooperatives can establish contracts with suppliers and provide members with inputs to pay back at harvest time. The maize value chain study claims that inputs are equally distributed to members without gender exclusion, so access to input through a cooperative is relatively easy, also for women. Women do, however, still face additional challenge, related to intra household bargaining power and heavy household duties which sometimes makes it difficult for women to use the inputs allocated to the household. Other farm chemicals like as pesticides, herbicides and fungicides are widely available through rural and urban traders, although these are not always used correctly when no proper guidance is provided.

¹⁰ From informal discussions with WFP field team; RWF 1000 is EUR 1 in 2019

¹¹ Of the interviewed input suppliers, fewer than 12% were women.





PRODUCTION OF MAIZE

This is still at relatively low levels due to challenges in input supply, as well as low mechanization. Most smallholder farmers rely on manual labour for production. Planting and weeding in particular is done by women, usually in the form of unpaid labour. Labour constitutes the biggest proportion of production cost, even when it is unpaid: it costs a woman time that cannot be used on other income earning activities or household duties. The study revealed that female respondents compared with male ones do not consider machinery as important for production purposes. In the FGDs undertaken in the ICCO study (2016), women indicated that machinery is not suited for them because it is heavy and difficult to handle. Women fear that they might lose their position in the chain when mechanization which targets mostly men is introduced. One solution to be considered is designing equipment that can be handled by women and is easily accessible for them. Financial services could then help women purchase such tools.

POST-HARVEST HANDLING AND STORAGE

Women play an important role in post-handling and storage. Due to poor post-harvest handling, wastage of 12–18 percent is recorded (ICCO, 2016) Equipment for this handling could reduce these losses while at the benefiting women through saving them time. This, however, has not yet been widely introduced.

In terms of marketing, most small-scale farmers sell their maize immediately after harvest, and do so individually and at low prices in order to meet their household's immediate cash demands. Farmers, especially women, mentioned that they prefer to sell fresh maize, which demands fewer expenses related to post-harvest drying and packaging. Traders pay farmers in advance for the fresh maize; however, the sale of fresh maize did not have strong government support in 2016. Fresh maize (on the cob) sales have seen an increase since 2018 driven by concerns of processors to ensure the acquisition of a quality, aflatoxin-free product. Although this still represents a small percentage of total national maize sales, its popularity is increasing.

A relatively small percentage of farmers (23 percent) market their produce via cooperatives. Usually, these cooperatives have limited financial capacity to pay in cash at harvest time. Cooperatives are heavily reliant

on public institutional buyers such as the Rwanda Agricultural Board (RAB), MINAGRI, RGCC and the WFP for the marketing of their produce. The ICCO study (2016) showed that, in 85 percent of the cases, men are engaged in market and contract negotiations, while 67 percent of them have leadership positions in the cooperatives. Women seem to be excluded when it comes to the marketing and negotiation of supply contracts. Most respondents argued that women are not naturally good at negotiations, which would cause a delay or be a handicap.¹²

While women are equal members of cooperatives, they hold fewer representative positions and less-influential board positions (they often work as secretaries), as observed in 2016. It was also noted that women were less involved in financial management. Some female respondents indicated loss of confidence in the cooperative leadership based on suspicion of financial mismanagement, although it was difficult for them to prove such cases. As they do not want to be associated with mismanagement of funds, this negative experience could hinder women from fully participating in board positions.

The recent survey for this study among the biggest off-takers of maize in the FtMA programme steered by WFP (for example African Improved Food [AIF], PRODEV, EAX, SARURA company and RGCC) showed that most of these off-takers do not have a specific strategy for increasing female participation. They buy mostly from cooperatives but experience severe constraints related to heightened incentives for individual members in side-selling. This is even the case when contracts are in place between producer organizations (POs) and off-takers. The cooperatives face governance and management issues. Some off-takers provide training on maize production to farmers and provide some post-harvest equipment with subsidies channelled through the POs. Buyers also have some direct contact with women wholesalers who have received loans from commercial banks. Within the cooperatives there are some individual women that act as aggregators and buy from other members. The buyers interviewed also observed that women became more involved in cooperatives that are trading in maize, and they saw this as a positive development. The positive reaction of buyers to the greater involvement of women could be built upon at this value chain segment to facilitate further gender participation.

¹² Quotes from focus group respondents in the maize value chain.





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5.2 THE CLIENT PERSPECTIVE IN THE MAIZE VALUE CHAIN

5.2.1 SCOPE

This section describes the responses of female clients in the maize value chain from the field survey undertaken in 2019. The responses show their appreciation of the value chain as a whole as well as the financial services within it. The analysis is based on data from eight producer organizations in Rwanda's Southern and Northern provinces. These cooperatives focus on the maize value chain and often rotate maize with beans. They can be sorted into two groups depending on crop rotation:

- Those in the southern Province operate from marshlands (public assets) allocated to them by the districts to produce consumption maize or maize seed in crop rotation with vegetables and beans;
- In the Eastern Province, cooperatives operate in both marshlands and uplands and produce consumption maize in crop rotation with single-variety bush beans.

FGDs have taken place in the eight maize cooperatives with leaders and members, both male and female (with married and single women separately). This provided information on participation in the chain, the financial services needed and used by each of these groups, the benefits gained and the challenges faced. Data collection from individual members by means of a KoBo survey took place in the same cooperatives. The answers of these 145 respondents provided

quantitative information. The study found that answers from the KoBo survey were very much in line with the outcomes of the FGDs. The sample was not random, as the interviews were with members of cooperatives targeted by the WFP; however, farmers were selected randomly within these cooperatives. As the total sample size was limited, results are more indicative than statistically sound. The graphs in this text use the KoBo survey data. The focus of this analysis is on organized farmers involved in the formalized maize value chain. In this value chain, the maize is sold predominantly via producer organizations to large buyers (companies and off-takers). Other value chain actors, such as local traders and small processors, are less present in the field study.

It was found that the division of tasks in the maize value chain is slightly different between men and women. Both men and women work in the field, but women play a vital role in post-harvest handling: shelling, grading, winnowing and quality control to meet the requirements specified by the buyer. This work is generally done as unpaid labour.

This chapter starts with an extensive analysis of the maize value chain field study responses. The analysis is based on the Reach–Benefit–Empower framework, as explained in Section 1.2.

5.2.2 RESPONSE OF FEMALE CLIENTS IN THE MAIZE VALUE CHAIN

Representation of men and women in producer organizations

In the eight maize cooperatives selected for the study, women reported to be more active in maize ▶



production than men, accounting for 55 percent. This is explained by the fact that women were the first to embrace working in farmers' groups before, following the reinforcement of the law, they formed into cooperatives. . Many cooperatives are situated in marshlands, which are public assets. Such terrain has always been used for social initiatives aimed at vulnerable groups. Women's groups or associations were the first to benefit from exploiting marshland areas. When the law on cooperatives was promulgated, cooperatives were considered the legal structures to which the use of marshlands was entrusted. AS cooperatives provide room for both men and women to be members, men took the opportunity to join; however, in most cases, they remained outnumbered by women. Table 2 shows the participation of men and women in the eight cooperatives visited during the field research.

Production of maize seeds and consumption maize

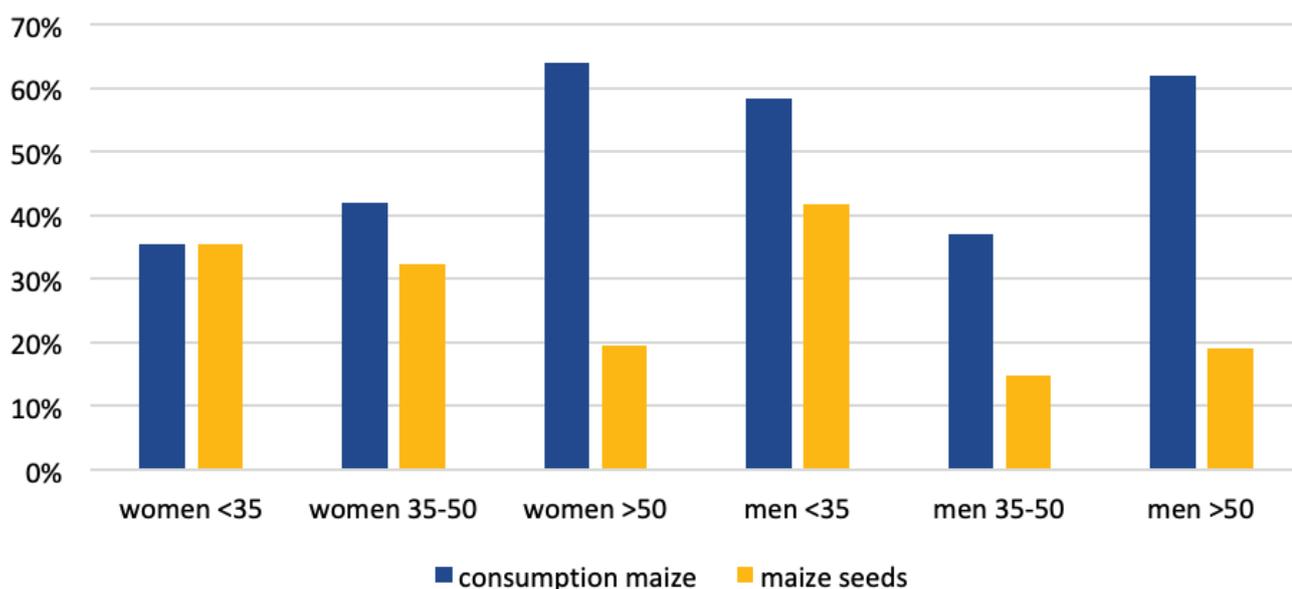
In the eight maize cooperatives, maize is produced both for consumption and for seeds. Graph 1 shows the percentage of production of these two crops across different age groups. Although all age groups produce consumption maize, relatively more young farmers produce maize seeds. Consumption maize is more important for older men and women, most probably because they have larger numbers of dependents in their family.

The cooperative as the gateway to services
For women, membership of a cooperative is the gateway to agricultural and financial services. Among the consulted cooperatives, it was revealed that a maize growers' cooperative can play multiple roles, such as maize producer, local agri-dealer accredited by RAB/MINAGRI, local capacity builder, aggregator, market facilitator, primary processor and financial facilitator. As members, women can benefit from each role, based on their interests,

TABLE 2. PARTICIPATION OF MEN AND WOMEN IN MAIZE GROWING COOPERATIVES

NAME OF COOPERATIVE	COOPERATIVE MEMBERSHIP			
	Total	Women	Men	% Women
IMPABARUTA	824	519	305	63
COAMALEKA	1015	547	418	54
TUZAMURANE CYEZAT	811	463	348	57
CAMARU	34	30	4	88
KOHIKA	47	32	12	68
COOPCUMA	280	96	184	34
COOPROMASSA	174	70	104	40
TUZAMURANE MWURIRE	48	30	18	63
TOTAL/AVERAGE	3 233	1 787	1 393	55





Graph 1. Percentage of farmers cultivating maize and maize seeds per subgroup

financial capacities and cultural perceptions around the division of labour. Cooperatives are identified by local development partners (NGOs, government projects) as channels for easy transfer of knowledge and technologies: they promote best agricultural practices through extension workers and farmer promoters at village level.

5.2.3 REACH: ARE WOMEN USING AND ACCESSING THE FINANCIAL SERVICES IN THE MAIZE VALUE CHAIN?

Key questions for REACH:

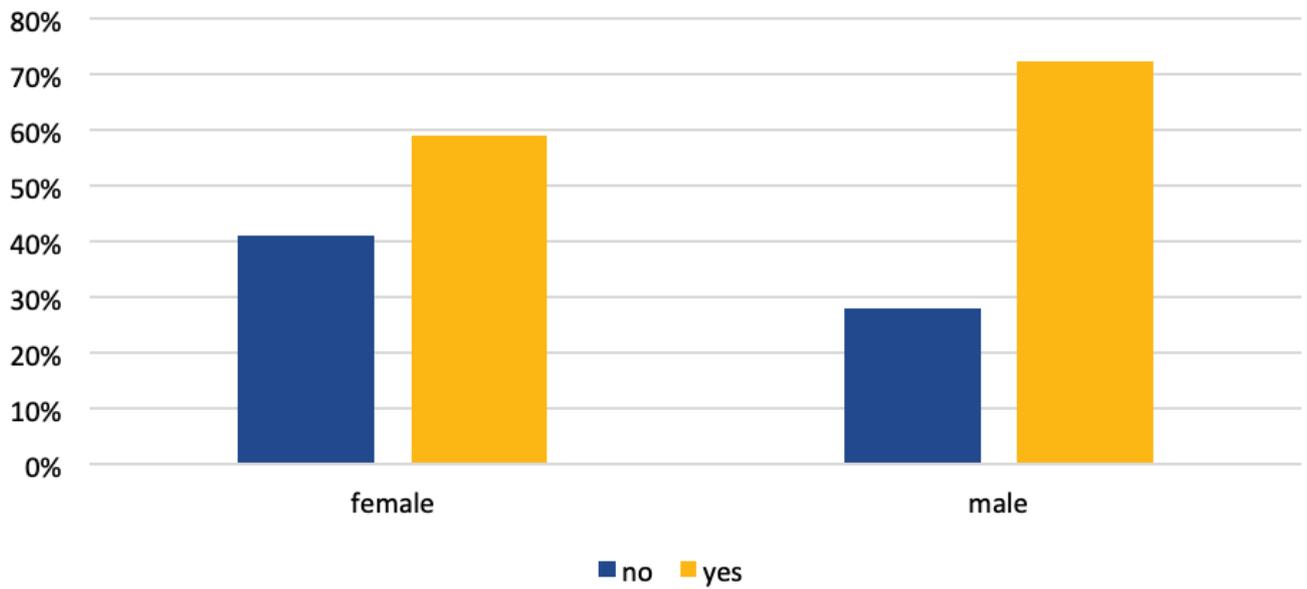
- When are financial services needed and for what?
- Which financial services are available and by whom are they used?
- Are certain groups of people, such as women, excluded?

Maize farmers need additional sources of finance at all the different stages of the cultivation season. At the start of the season, money is needed to buy

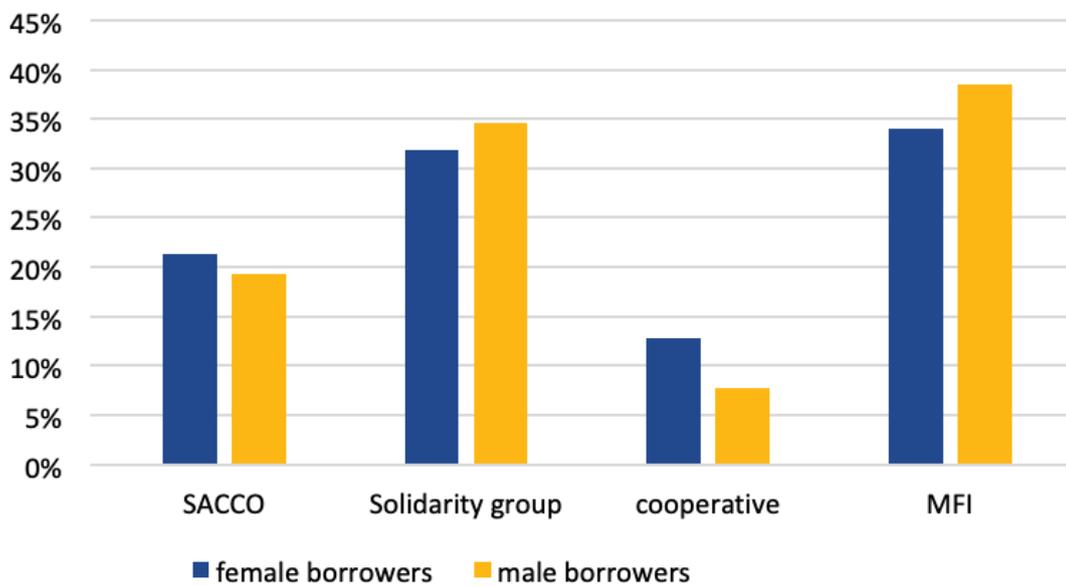
inputs such as (improved) seeds and fertilizers. During the growing season, pesticides are often needed. At harvest time, money is needed to pay labourers for harvest and for post-harvest handling. A lack of timely and/or sufficient financing causes delays in carrying out activities. This means that farmers are unable to buy sufficient volumes of improved inputs for the area cultivated. This was also observed in the maize value chain. The KoBo data reveal that the average amount of credit taken by women is slightly higher than that taken by men: for women, RWF 111 353 (EUR 111) and men RWF 86 360 (EUR 86).

The sources of capital invested in maize production are reported to be incomes from other businesses, tontines¹³, personal savings and family and friends, as well as saving or solidarity groups within the cooperative. Sometimes the cooperative arranges loans for its members, contracting a loan with an MFI and redistributing it among members.¹⁴ Reportedly, many women request these loans. For loans to individuals in the groups, cooperatives are guarantors to access loans (in cash) from FIs. In the FtMA project, maize growers' cooperatives partner with Clecam Ejoheza, Duterimbere and KCB, and some of the cooperatives were engaged in FtMA's solidarity group promotion programme. Please refer to Chapter 8 for a further explanation of this model.

When asked about the major source of finance, it ▶



Graph 2. Share of maize farmers by sex receiving inputs on credit



Graph 3. Main source of credit according to male and female respondents





appeared that MFIs are most important and that solidarity groups come second (see Graph 3). This may mean that these solidarity groups are also an important source for satisfying credit needs not covered by the formal financial sector. Savings and credit cooperatives (SACCOs) were also noted as an important credit source although they often face liquidity constraints.

Another potential source of credit is the buyer (company or off-taker), as shown in Chapter 6 on financial services in the maize and bean value chains. Respondents from the KoBo survey, however, did not use such forms of credit.

The possibility of being a member of a producer organization has tremendously increased women's access to savings and loan services. Still, they are behind compared with men. Unlike men, women fear taking big loans and cannot easily fulfil the conditions required to get the loan. Very few women have taken a loan in their own name. There are conditions such as providing collateral and a 15–18 percent annual interest rate, and the former can be problematic for women. Although legally married women have equal rights on their properties, most husbands do not sign for their wives, and when the man signs, it is on condition that he will manage the loan. Cultural norms continue to be a barrier; often with no support from their husbands, married women cannot access loans that require collateral. Women who disagree with their husbands about using the family assets as collateral generally end up giving in to their husband's demands.

A specific challenge mentioned by women is finding funds for investments for their own small business activities outside the maize value chain. These include selling potatoes and keeping small livestock like chickens and rabbits. Without additional funds, it is difficult for them to invest in further land, animals or production equipment.

Single women face specific constraints in accessing financial services. Specifically, they have difficulties meeting requirements for accessing loans for inputs. In cooperatives without solidarity groups,

approximately 50 percent of single women did not manage to save the required 10 percent needed to access the loan. When single women participated in solidarity groups, it was easier for them to get a loan.

Another specific constraint for single women relates to payment for labour. In the Impabaruta cooperative, single women reported facing challenges, especially during highly labour-intensive harvesting and drying operations. Subsequently, they need more harvest loans to meet the costs during these intensive periods, as well as for primary processing.

Overview of REACH-Results as compared with five years ago

During FGDs, cooperative members were asked to point out changes in their situations over the past five years. Table 3 shows the responses of the members in the different cooperatives.

¹³ A *tontine* is an informal savings group where members bring agreed savings amounts together per week or month and one member gets the total amount (on a rotating basis, so eventually all members get the full amount once).

¹⁴ Also refer to the system for linking MFIs, cooperatives and savings groups explained in Chapter 8.





TABLE 3. CHANGES INDICATED BY MEMBERS OF DIFFERENT COOPERATIVES, OBTAINED FROM FGDS

COOPERATIVE	REACH
IMPABARUTA	<ul style="list-style-type: none"> 90% of the women have accounts in their own names in the IMF Clecam Ejoheza or a SACCO for the purpose of a loan or savings. This is different from five years ago, when access to finance was difficult for both men and women.
COAMALEKA	<ul style="list-style-type: none"> Women apply for input loans. All members contract inputs loans through saving groups in Clecam Ejoheza.
KOHIKA	<ul style="list-style-type: none"> All women (32) have accounts in the Bank of Kigali (BK) and Duterimbere.
CAMARU	<ul style="list-style-type: none"> All 30 women applied for an inputs loan from Duterimbere Microfinance.
TUZAMURANE CYEZAT	<ul style="list-style-type: none"> 50% of women have accounts in Clecam Ejoheza and a SACCO. The remaining women use tontine as a source of finance.
COPROMASSA	<ul style="list-style-type: none"> All women (70) have accounts in a SACCO. There is a fund allocated to SACCOs to support women's economic empowerment at community level. Women are benefitting from loans from this fund because no collateral is required.
COPCUMU	<ul style="list-style-type: none"> 96 female members have accounts in Duterimbere Microfinance, and all of them contracted an inputs loan with the same MFI.
TUZAMURANE MWURIRE	<ul style="list-style-type: none"> Women organized in saving groups and able to save the basic saving of 10% have access to an input loan from the Copedu MFI.

The CAMARU cooperative facilitated input loans from agro-dealers and from middlemen/women for harvesting operations. Members saw an increase of crop productivity with the use of improved inputs, and this had a positive effect on their household well-being. Members also benefitted through the cooperative from training in post-harvest handling techniques, financial literacy and loan management.

Female members of the KOHIKA cooperative realized that women who were fearful of contracting loans five years ago had now easily become borrowers of up to RWF 500 000 (approximately EUR 500). Also, single women had improved their livelihoods and were now able to connect their homes to electricity and to pay school fees for their children.





5.2.4 BENEFIT: HOW DO WOMEN BENEFIT FROM FINANCIAL SERVICES IN THE MAIZE VALUE CHAIN?

Key questions for BENEFIT:

- How do women benefit?
- Are women satisfied with the content and quality of the service? Is the service adapted to their specific needs?
- Are accompanying services (business development advice, inputs, technical assistance and access to markets) provided with the service?
- Does the service contribute to the development of women's businesses?

Women in the cooperatives say they benefit from the financial services. Those women in cooperatives and saving groups indicate that they have the same rights as their male peers. This cornerstone principle of cooperatives has created a big opportunity for women in accessing agri-loans and accompanying capacity-building programmes. Easy access to financial and other services increased their volume of production and subsequently incremental sales. This resulted in higher incomes and additional investments for all male and female cooperative members.

Maize is one of the priority crops promoted by the MINAGRI. Members of maize growing cooperatives consulted in this study reported benefiting from Nkunganire (a subsidized input supply programme, supported by a network of local agri-dealers at district level, accredited by the MINAGRI). Increased income can also be generated because the harvest is bulked by the cooperative. This income can contribute to better food security and nutrition. It can also be used for asset building, such as buying pieces of land and livestock – assets the cooperative members did not have before.¹⁵

As shown in the box on page 40, members from all cooperatives interviewed (male and female) report to have benefitted from financial services.

The women interviewed were in general very positive about the loans provided by cooperatives. The loans are highly appreciated the solidarity groups. Some cooperatives have organized solidarity groups among their members, and both women and men manage to obtain a loan much easier. However, not all cooperatives provide loans to their members. Most female members of cooperatives formed traditional informal savings and credit groups such as tontines to raise additional savings for investments. Women find tontines easy, as they do not require collateral and men have less control over women's activities within them. With loans from tontines, women are able to make their own decisions and use the loan in the way they wish.

According to the women interviewed, the ideal financial products should have the following characteristics:

- No collateral required: in general women lack collateral to secure an individual bank loan;
- In-kind loans for inputs and/or harvest, to be reimbursed at harvest;
- Solidarity groups loans, whereby the individual members obtain a loan based on the mutual guarantee of the group members.
- Low interest rates and a loan repayment period long enough to sell the produce;
- Loans to purchase production tools and equipment, including those for post-harvest activities.
- Agricultural insurance for small farmers, bundled with loans;
- Access to mobile banking technology

Accompanying non-financial services of business development advice, access to inputs or markets and technical assistance are also provided through the cooperatives. Although men and women have equal access to training, it was reported that, when husbands and wives are both members of a cooperative, the men are more keen to attend the training sessions, while the women are left to carry out household activities. Women remarked that it is difficult for them to attend full-day training sessions ▶

¹⁵ These improvements were mentioned by women in the FDGs.



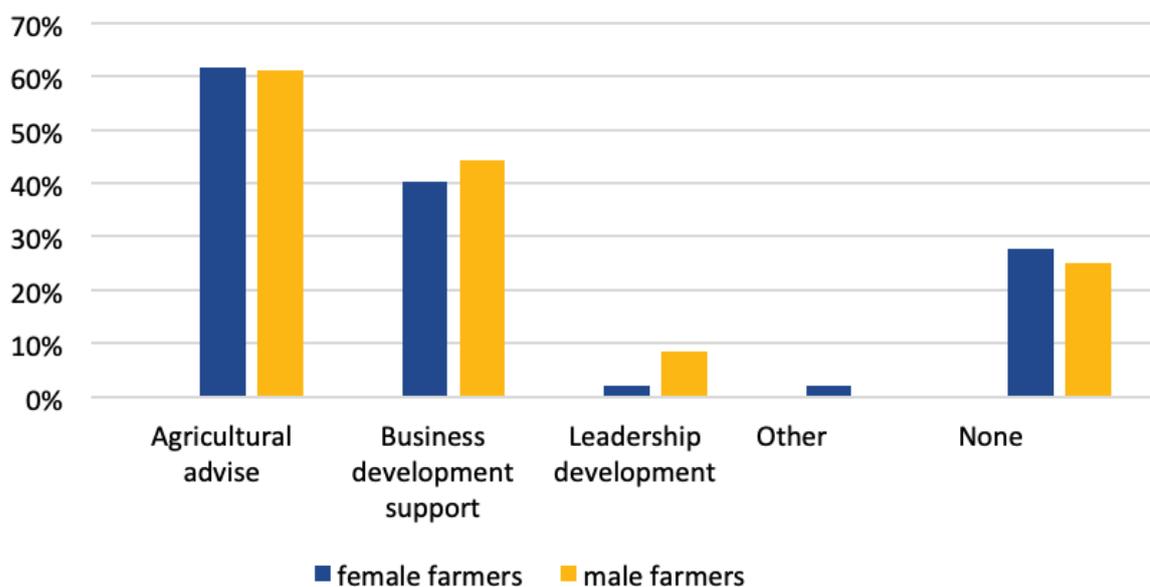
due to their household duties. They suggest that half-day sessions would be more suitable, as these would allow them to save time for their duties. Only women in the cooperative leadership could easily attend training sessions. Social structures such as 'umugoroba w'ababyeyi' (women's evening gatherings) could be an alternative channel to reach out to women. These structures were promoted by the central government to give an exclusive space to women to discuss specific issues that impact their livelihoods, and they have been implemented countrywide.

Graph 4 shows that women have benefitted considerably from additional services provided by the cooperative. Among all maize farmers, 60 percent of the respondents obtained agricultural advice, and almost 50 percent received business development support. Between men and women, the difference in access to training and extension services is not large – except in the case of leadership training, which is pursued more by men than women (although even less than 10 percent of the men received this training). About 25 percent of the respondents did not obtain any non-financial service, which is about the same percentage for men and women.

Does the service contribute to the graduation of the businesses of women?

In the FGDs, many participants (women as well as men) expressed how their business had developed positively because the establishment of the cooperative. This was particularly the case because the linkage had been made with a large buyer and that finance for their economic activities was then easier to obtain.

Graph 4. Share of maize farmers having received specific non-financial services





“I am Mujawamariya Modesta, a member of the Coopcuma cooperative, with 290 members – 104 women and 186 men. In this cooperative, we have grown maize, beans and soya beans since 2008. In the beginning, our production systems were disorganized: we were mixing many crops on the same plot and each member was handling the harvest at his/her home because we had not secured an off-taker or buyer. This had a negative impact and the volumes we produced remained small. Personally, I used to supply only 100 kg from my plot to the cooperative because I was not that motivated and wasn't trained. In 2016, through the cooperative, we started working with different local capacity builders who provided training on improved farming techniques and post-harvest handling as well as on the concepts and principles of gender equality and complementarity between men and women. From that time onwards, I had clear goals. In 2016, my production increased, and I supplied 300 kg; in 2017 I produced 1 megaton (Mt), while in 2018 I supplied 1.8 MT from the same plot. We benefitted from the linkage to markets with good prices thanks to WFP.

As I increased the volumes of my production, I managed to get out of poverty and moved from marginal settlements to a community settlement by the main road where I constructed a residential house. I got it connected to the water supply pipeline and electricity and bought two cows. Now I am a proud woman and I employ two permanent workers who work on my plots in the marshland, plus one worker who looks after my livestock. All these achievements were possible because of the cooperative through which I gained knowledge and many skills.”

Mujawamariya Modesta
COOPCUMA

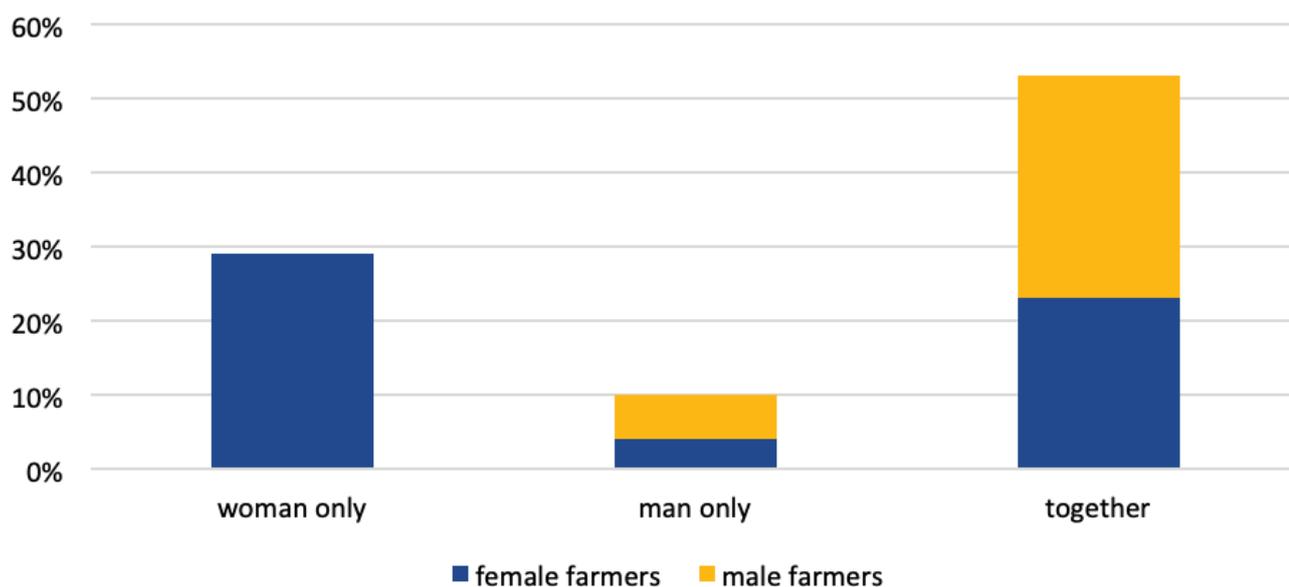




TABLE 4. OVERVIEW OF BENEFIT RESULTS COMPARED WITH FIVE YEARS AGO, ACCORDING TO FGDS

COOPERATIVE	BENEFIT
IMPABARUTA	<ul style="list-style-type: none"> • Currently, women have the same right to contract loans in their names as men, except for some households where both husband and wife are both members. • Women highly appreciate the financial services provided by Clecam through their saving groups.
COAMALEKA	<ul style="list-style-type: none"> • Before, some members could not afford to cultivate the available land, but thanks to access to loans, those members increased the land under cultivation as well as their income.
KOHIKA	<ul style="list-style-type: none"> • Women who were fearful of contracting loans five years ago are currently borrowers and take loans of RWF 500 000. • Crop productivity has increased following capacity building through the cooperative. • Single women were able to connect their homes to electricity and to pay the school fees for their children. • Some women started to aggregate maize and beans as a business using loans provided by BK.
CAMARU	<ul style="list-style-type: none"> • Increase in women's well-being. • Contracted loans were signed in women's names. • All 30 women were trained in financial literacy.
TUZAMURANE CYEZAT	<ul style="list-style-type: none"> • Before, women expected all their needs to be met by their husbands, but now women take care of their essential needs like clothes and kitchen materials themselves. • Crop productivity has improved following the training. Before, maize was considered a staple crop; now it is a cash crop. • Women were trained in post-harvest handling techniques for maize.
COPROMASSA	<ul style="list-style-type: none"> • Single women benefitted from training, which enabled them to acquire knowledge in post-harvest handling, planning and financial literacy. • Women have access to a market at a good price.
COPCUMU	<ul style="list-style-type: none"> • Loans are registered in the name of female members. • Incomes were increased due to the use of adequate inputs paid by an input loan.





Graph 5. Who decides on use of income from maize sales?

TABLE 5. PERCENTAGES OF WOMEN IN THE DIFFERENT GOVERNANCE STRUCTURES OF THE COOPERATIVE

NAME OF COOPERATIVE	EXECUTIVE COMMITTEE				SUPERVISORY COMMITTEE			
	total	women	men	% women	total	women	men	% women
IMPABARUTA	5	2	3	40	3	1	2	33
COAMALEKA	5	3	2	60	3	1	2	33
TUZAMURANE CYEZAT	5	2	3	40	3	2	1	67
CAMARU	5	4	1	80	3	2	1	67
KOHIKA	5	2	3	40	3	1	2	33
COOPCUMA	5	2	3	40	3	2	1	67
COOPROMASSA	5	2	3	40	3	1	2	33
TUZAMURANE MWURIRE	5	1	4	20	3	2	1	67
TOTAL/AVERAGE	40	18	22	45	24	12	12	50



TABLE 6. OVERVIEW OF EMPOWER; RESULTS OF COMPARISON OF CURRENT SITUATION WITH THAT OF FIVE YEARS AGO, ACCORDING TO FGDS

COOPERATIVE	EMPOWER
IMPABARUTA	<ul style="list-style-type: none"> • Women have gained respect in their family compared with five years ago because they contribute to its economic development. • Women are involved in the leadership of the cooperative.
COAMALEKA	<ul style="list-style-type: none"> • Currently, husbands and wives take decisions together as a result of women's participation in the household economy. • In general, all female members reported to have gained respect in their homes.
KOHIKA	<ul style="list-style-type: none"> • Women now account for two out of five members of the executive committee.
CAMARU	<ul style="list-style-type: none"> • The cooperative is led by a woman. • Men have come to realize that women are equally capable of performing and leading; women gained the respect of their husbands in their homes, pushing men to consider women's wishes and suggestions.
TUZAMURANE CYEZAT	<ul style="list-style-type: none"> • More women can now attend public gatherings than before. • The number of women in the leadership of the cooperative has increased. • The cooperative currently has a gender commission.
COPROMASSA	<ul style="list-style-type: none"> • Women are more aware and active than ever as a result of training, mobilization and sensitization. • Women participate in cooperative decision-making
COPCUMU	<ul style="list-style-type: none"> • Both women and men are actively participating in the general assembly of the cooperative. • At household level, women have become considerably more respected by their husbands and children.
TUZUMURANE MWURIRE	<ul style="list-style-type: none"> • Two out of three supervisory committee members are women. • Husbands and wives discuss and agree on the use of incomes in their households. • Women gained more respect at home because of the loans that helped them increase the income generated by maize.





5.2.5 EMPOWER: HOW DO FINANCIAL SERVICES CONTRIBUTE TO THE EMPOWERMENT OF WOMEN IN THE MAIZE VALUE CHAIN?

Key questions for EMPOWER:

- Who decides on the use of the financial service in the household?
- Who decides on the use of the revenue resulting from it?
- Has the position of women in the family improved?
- Has the position of women in the cooperative improved?

At household level

The survey showed that as a result of cultural barriers, women in cooperatives take smaller loans than their husbands. The Kohiika cooperative reported that, so far, only five married women had taken one. In the Copromassa cooperative, women contract loans in agreement with their husbands; this is confirmed by both male and female respondents. This pattern was reported in all cooperatives: without support from their husbands, married women cannot access ordinary loans. It is easier for them to access loans through solidarity groups.

Decisions on loan applications and the use of revenues generated from maize production are important to consider for each agricultural season. The cultural dimension and relation dynamics in each household determine the level of effective communication between husband and wife. This subsequently positively or negatively affects women's access to incomes.

Graph 5 shows that women have considerable influence on the use of the income from maize, either independently or along with their husbands.

The following cases in the boxes show positive changes connected to better financial access in the relations between men and women as a result of maize production. Women are now consulted more often on joint decisions, and the income for household needs has increased.

In the Kohiika cooperative, male and female members have equal rights to all services offered. However, in general men take bigger loans than women. Women mostly fear taking big loans that require collateral. They find them very risky and fear that the collateral may have to be sold in the case of insolvency. For this reason, they stress the importance of joint husband and wife decision-making

In the Camaru cooperative, decisions on the use of the income generated from maize production are taken in mutual consultation between wife and husband. Men have come to realize that women are as capable of delivering as men. Women have also gained the respect of their husbands, pushing men to consider the wishes of women.

In the past, the women in the Tuzamurane cooperative expected that every need would be met by their husbands, but now women are able to meet some of these needs themselves. Incomes generated from maize production are now used for access to health insurance, to pay school fees, to make additional investments in agriculture, to buy livestock and to save for next season.

At cooperative level

Cooperatives are an entry point for women's economic empowerment. Before the cooperative movement, rural women were just workers on the family land. With the law on the creation and management of cooperatives, all farmers (men and women of all age groups) obtained the same rights to become members and to have access to the benefits offered through these collective structures. A noticeable increase of women's representation in the membership and leadership of farmers' cooperatives consequently took place.

Women are well represented in the leadership of their cooperatives. Table 5 shows how women constitute ▶





Camaru cooperative in Nyagatare district serves as a good example of female representation. When interviewed about this situation, members reported that the cooperative is led by women because men are not active enough in Camaru's activities. Leaders reported having observed that, when a loan was in the husband's name, it was not as well repaid as it was when in the wife's name. This fits with the trend of women being good borrowers compared with men. Men in the cooperative have come to realize that women are as capable of delivering as they are. The women earned their husbands respect at home, which also pushed men to consider the wishes of women.

on average 45 percent of executive committee membership and 50 percent of the supervisory board. Women are also very active in solidarity groups. These groups are similar to these traditional social structures in which women are very active.

In the Tuzamurane Cyeza cooperative, women operating in farmers' cooperatives are trusted by their peer members to be more active in membership and leadership. They are more involved in maize production and aggregation. Such lucrative activities help them to earn good incomes.

In the Tuzamurane Mwurire cooperative, when the cooperative contracts a loan, the members benefit from it and can even solve other family issues such as paying school fees for children. Members declared that, in general, their livelihoods had improved; they even gained access to bank loans, which was not the case before they joined the cooperative. Women in their homes gained more respect just because of the loans that assisted them in reaching new levels of involvement. An example of this is in them meeting household needs, which earned them respect from husbands and children.

BRIEF CONCLUSIONS ON THE MAIZE VALUE CHAIN

Maize is an important food crop and increasingly important as cash crop in Rwanda. It is still partially and informally organized based on a spot market,

but it is increasingly structured for commercial buyers. It offers interesting opportunities, especially in maize seed production and serving niche markets provided by commercial buyers and with WFP facilitating linkages. Quality input supply and lack of mechanization is a challenge for growing production and reducing post-harvest losses. This affects women relatively more because of their lower intra-household bargaining power, higher time constraints and limited suitable equipment. The production of maize is labour intensive, with women playing a key role in providing such labour. The chain currently offers opportunities for participation of women, especially through the informal and cooperative structures. The cooperatives provide a gateway to markets and services for women, and the Rwandan context is conducive to such participation of women. Women's economic empowerment was observed at household and cooperative levels, with women participating more in decisions on resources at household level and more recently taking leadership positions in cooperatives (45 percent). Women benefited from the structured organization in the maize value chain and the chain's link with financial services. Benefits were seen in particular when women were organized in solidarity groups, a practice which is culturally accepted for them.

It was observed that off-takers have no specific strategies for including women. Given the aforementioned constraints on women, care should be taken that women maintain their position in the chain and can benefit from further professionalization. For this, women need to get better access to quality inputs and also become involved in mechanization of production and pre- and post-harvest handling. Financial services could stimulate such continued involvement by designing products that can be acquired and used by women. ■





6. THE BEAN VALUE CHAIN AND POSITION OF WOMEN IN THE CHAIN

6.1 INTRODUCTION AND ANALYSIS OF THE BEAN VALUE CHAIN.

The information in this chapter is obtained from the bean value chain study undertaken concurrently in collaboration with ICCO and WFP. The study provided important field information through FGDs with producers.

Beans have been selected among the six priority crops under the recent PSTA4 (WFP, 2019).¹⁶ In Rwanda, the bean sector is important for food security and nutrition, and at the same time is seen as a sector with the potential to empower rural women. Recent data from ICCO and WFP (2019)¹⁷ show that, in Rwanda, beans are produced on 485 260 ha and provide 32 percent of the total dietary calorie intake as well as 65 percent of the protein intake. They are also a major source of carbohydrates and essential micronutrients. For centuries, beans have been produced in the country, mainly for food security at household level. They are grown by an estimated 95 percent of Rwandan farmers. The biggest portion of the harvested beans are still consumed at home (76 percent) or stored for seeds (20 percent), while a small portion (four percent) is exchanged for acquiring other products. Because of a growing urban population, the demand for beans has been constantly increasing. There are no official data on imports of beans, but there is evidence of informal imports from neighbouring countries such as the Democratic Republic of the Congo, Uganda and Tanzania, as identified in the draft value chain study.

The bean value chain is composed of both subsistence and semi-commercial segments. Most bean producers in Rwanda are small-scale subsistence farmers, tilling less than 0.50 ha of land. The subsistence character of the chain implies smallholder farmers become the main consumers of their own product. Most of these producers operate individually and keep their own seeds for the next cropping season. Most bean farming activities in this category are done by women, who usually employ traditional mixed bean seeds characterized

by very low productivity, cultivated on very small plots of land on which they mix crops or rotate with others. Production depends on family labour, and the women decide which areas are to be cropped. Women have the main responsibility for production to feed the family, and they allocate almost all the yield for household consumption. They use mostly traditional farming systems and use neither fertilizers nor pesticides. Most of them cannot satisfy their own household demand, which makes them net buyers on the local market. Women producers may sell at low prices immediately after harvest to meet their immediate cash demands, such as school fees, health and other household requirements.

In the semi-commercial segment of the chain, the produce is sold to primary traders or aggregators in rural markets. These roles are dominated by men, and they operate at small distances from the farms. Primary traders will keep the beans and sell locally, including some that are resold as seed for the next cropping season. Beans may also be collected and bulked by farmers' cooperatives. When the beans are sold to urban areas, more actors will be involved, and the chain becomes more business oriented. Wholesalers who are based in and around Kigali receive their supplies from a network of aggregators. Retailers will typically collect beans from wholesalers or directly from primary aggregators. Overall, the bean chain is relatively simple, with fewer actors involved than in the maize chain. However, with a growing demand from urban centres, the chain is starting to be more commercialized and complex. The average gross margin for production of bush beans per acre is RWF 50 000/ha and for climbing beans is 100 000/ha. Local market prices for bush beans is RWF 46/kg and for climbing beans is 60 / kg . This implies that a farmer were to sell 100kg of beans (roughly one-tenth of an acre of production), she would earn an average of EUR 5 net income. Compared with this, the minimum loan amount available through solidarity groups is only around EUR 10.

The medium- and large-sized farms that produce beans for commercial purposes are relatively few, and are mostly dominated by men. They use commercial grade fertilizer, improved seeds and chemicals, rely





more on hired labour, and typically cultivate over 50 hectares.

The five key functions identified along the beans value chain are (1) input supply, including seed multiplication, (2) bean production, (3) aggregation, (4) trading and (5) consumption. The beans value chain study undertaken by ICCO and WFP, has noted a remarkable absence of the processing function in the beans value chain in Rwanda.

Women are active along all the segments of the beans value chain. Figure 4 shows all the functions in the chain and the relative dominance of men or women in the specific activities. It seems that most of the farming and specific post-harvesting functions, such as sowing, winnowing and shelling, are to be culturally determined to be only for women.

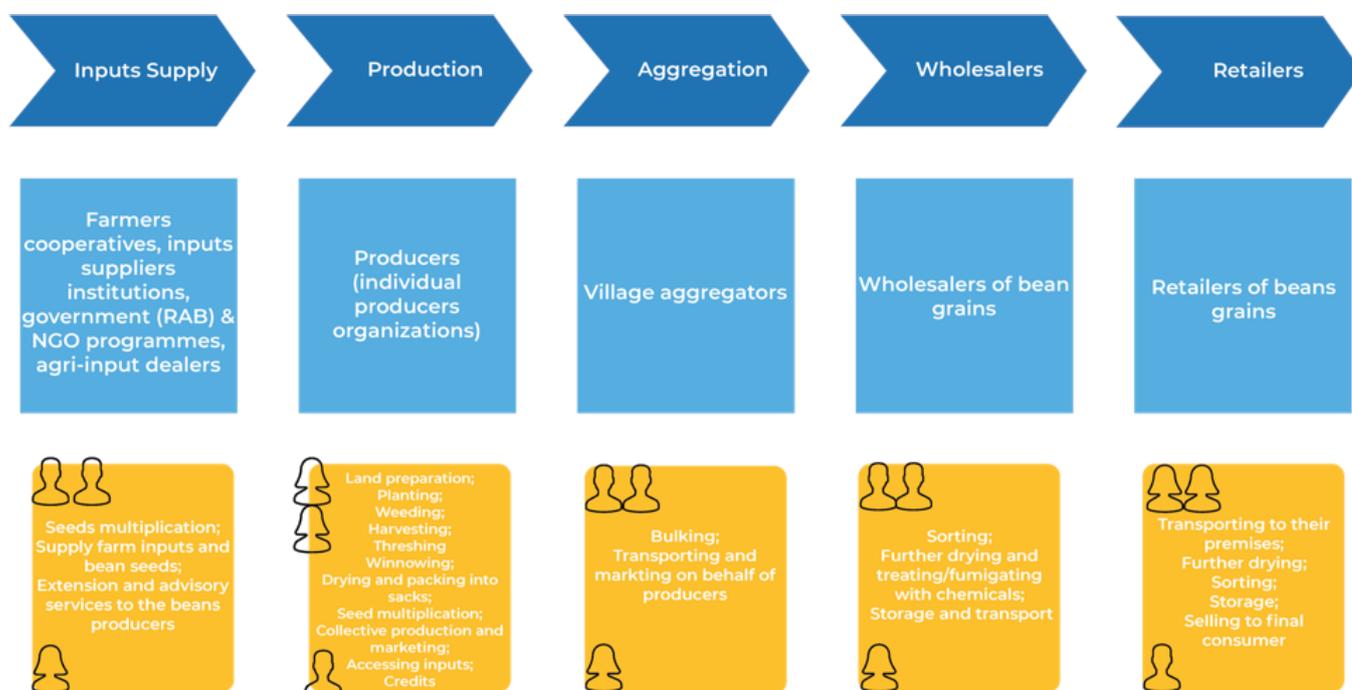
In Figure 4, the number of male and female figures indicates the role of women versus men. Each of the key functions in the chain and the role of women in these is briefly explained below.

INPUT SUPPLY

Producers normally keep part of the harvest apart for the next season's seed but a significant portion of the seed is bought from traders in nearby markets. Women play a very important role in this traditional seed supply. Certified seed multiplication tends to be done mainly by men, who can also attend the required training sessions. Women interviewed indicated that seed multiplication is time consuming and could be better done by men. Interestingly, women think that improved seeds may not yield better production than the traditional mixed seeds. These traditional mixed seeds are much more affordable and less demanding to them.¹⁹

In some areas, farmers are well organized in cooperatives and can obtain a loan for seeds from an FI. After harvesting, the cooperative then repays the loan on their behalf. Overall it is observed that improved seeds account for higher production of beans, although the exact details in percentage growth of production could not be obtained.

Figure 4. Key activities by segment of bean value chain operators in Rwanda (double symbols indicate gender dominations)



¹⁶ Selected food crops under PSTA4 for sustainable livelihoods, food security and nutrition are beans, bananas, maize, cassava, sweet potato and Irish potato.

¹⁷ Data coming from Rwanda Agriculture Board (RAB) pp 23.

¹⁸ ICCO -WFP, 2019. Beans value chain analysis, page 69 and 70.

¹⁹ WFP, 2019. Beans value chain analysis: FGD in Nyagatare, Kirehe, Ruhango and Rubavu.



FERTILIZER

Less than five percent of the farmers interviewed use inorganic fertilizers specifically for beans. Beans that are intercropped with maize generally do receive fertilizer, because maize is always fertilized.

Overall, the rate of adoption of improved and new varieties of seeds as well as inputs and uptake of improved technologies is very low for bean farmers. This is despite the fact that using new technologies – including inoculants, fertilizer and manure – has been shown to yield strong results. The low adoption rate is largely due to the constantly increasing cost of inputs, particularly of fertilizers, which have to be imported. Access to appropriate financing for this still represents a bottleneck that is further exacerbated by production season coinciding with other family financial obligations that take priority, such as school fees.

OTHER INPUTS AND LABOUR

The main production of bean is undertaken through hand labour using hand hoes. The bulk of the work is done by family labour, mostly by women. Some female respondents mentioned that they use farming equipment which is very old and hard to use, while the new and higher quality equipment is reserved for their husbands. Harvesting and post-harvest activities such as shelling, winnowing and sorting, are also undertaken by women as part of unpaid family labour. Casual labour is needed during the intensive planting, harvest and post-harvest periods. Activities that are physically heavy such as ploughing, threshing, transport, loading and storage are mainly reserved for men; this work is usually paid. Most men interviewed in the bean value chain study perceive beans as less profitable and opt for cash crops. They see bean cultivation as a women's responsibility. However, in aggregation and trading, men dominate activities and control resources.

The bean value chain study noted that casual labour is paid differently for men and women. Women are paid a maximum RWF 800/day (EUR 0,8/day), while men are paid between RWF 1,000 (EUR 1) and 1 500/day (EUR 1,5).²⁰ It was argued during the FGDs

that women do not have the same energy as men, and they may have other home obligations that interrupt the work. They are perceived to be less productive and thus receive lower payments. In general, women are more likely than men to hold low-wage, part-time, seasonal employment and they tend to be paid less. At household level, most of the hired labour is controlled by men, who manage decisions and resources from the bean business. Moreover, women are time constrained by other domestic tasks such as caregiving and food preparations. Female-headed households face severe labour constraints because, according to the ICCO study, they typically have fewer active household members and more dependents.

TRANSPORT AND TRADING

These areas are highly dominated by men,²¹ who move around on bicycles and motorcycles to collect beans and sell them to wholesalers or large-scale traders. It appears that the main buyers of beans are public institutions such as prisons, schools, police and military camps, as well as traders, fellow wholesale traders, hotels and a few fresh bean exporters. The bulk buyers are the institutional buyers such as schools and prisons. Usually the trading arrangements are informal and without contractual arrangements. Some traders interviewed in the study were willing to enter into contractual arrangements.

Women are dominant in small-scale trading in rural and urban open markets, where they operate in individual or in informal groups. They do not engage in large trading ventures, mainly due to a lack of capital and involvement in other household responsibilities. Many women are active in sieving and sorting activities during trading operations, mostly as low-paid labourers. In retail, both management and casual labour, the numbers for both genders are fairly balanced. In the North Western region and Kigali food-trading zones, women are slightly more highly represented in bean retail.

PROCESSING

The processing of beans is virtually non-existent in Rwanda. This is with the exception of three initiatives:

²⁰ Observed in the Northern and Western provinces.

²¹ The majority of women interviewed in the bean value chain in the Eastern and Southern Provinces indicated that this activity demands too much time and information and should be done by men.





AIF bean flour production for children's nutrition; Farm Fresh food company packaging bio-fortified precooked beans and Panovita for making bean flour. These initiatives are in their early stages.

The bean value chain is still very informal, and there is limited contracting with bigger buyers. Cooperatives play a limited role. Most bean producers (61 percent) operate in informal farmers' groups. Most of the cooperatives have maize as their primary cash crop and use bean for soil rotation and business. They still suffer from poor governance and weak managerial capacities.²² It appears that women in the few bean cooperatives that are operational are highly represented in decision-making positions. In this way cooperatives and farmer's groups are contributing towards gender equality, empowering women to participate in local economies by improving their visibility and self-esteem.

To summarize, the ICCO bean value chain study concluded that the chain is still very subsistence-oriented. The overall picture shows that the traditional and labour-intensive tasks in production and post-harvest are mostly undertaken by women. Only the bigger marketing tasks and commercial bean production are interesting for men. Women feature more in the local and informal markets, while men dominate larger trade with wholesalers and urban buyers. Traditional values and norms on which gender division of labour is based in some sub-functions of the chain are still prevailing in Rwanda. There are key post-harvest sub-functions that seem to be reserved for women. Women, for their part, feel very comfortable with some of these activities, as confirmed during household interviews and FGDs. At household level, it was observed that power relations are not well balanced, as most women interviewed feel they have less power in trading and resource management decisions which they revealed to be more controlled by men.

With increasing urbanization and a greater focus on healthy eating, demand for beans in Rwanda is expected to increase. Even processed beans could find a market in urban areas of the country, because the number of urban citizens that do not cultivate beans themselves is growing. Women who currently play

a major role in bean production should therefore be targeted specifically by development interventions. These interventions include: capacity development and extension to female bean producers, agribusiness development targeting female input suppliers for seeds, women traders and women dealing with post-harvest handling. Furthermore, promoting equipment that eases women's work burden could be considered to ensure women's continued participation in the value chain. One possible strategy would be stimulation women in groups producing beans or cooperatives that are involved in marketing of the produce. Financial services in the bean value chain could assist in supporting these strategies. Any development interventions in the bean value chain should carefully consider the roles of men and women in project and financial services design.

The bean value chain analysis provided some recommendations that could help strengthen the position of women in the chain. This could be the case even when the chain becomes more commercial and volumes of produces sold to market grow. Some of these recommendations to create benefits for women in a commercialized chain include:

- Increase women's participation in agro-input dealership by through focused training for women; support financial service providers to develop financial product for this.
- Promote group formation such as Village Savings and Lending Associations (VSLAs) and formation of cooperatives among mostly female bean producers to ensure economies of scale and continued participation of women.
- Introduce labour saving small technology for production and harvesting that can be handled by women. Specialized loans could support acquisition of such equipment.
- For beans sold commercially, the bean value chain could benefit from more formal and structural contract arrangements between buyers and sellers. These contracts can serve as a guarantee for future loans.

²² This was not studied in depth in the bean value chain, but the study mainly observed poor cooperative management signs (low meeting frequency as well as lac of record keeping, actions plans, reports and decision-making transparency).





6.2 THE CLIENT PERSPECTIVE IN THE BEAN VALUE CHAIN

6.2.1 SCOPE

Additional to the recent study on the bean value chain, some extra information was included on the position of women in the chain as well as access to financial services. It became clear that hardly any formal financial services were available in the bean value chain. The data on bean production from the field study included producers from cooperatives that were involved in both maize and bean production. There was a total of eight cooperatives, with three that focused only on bean production. The more recent cooperatives also participated in the HarvestPlus programme up to 2017. These participating cooperatives continue with bean production after the programme stopped, although, as the survey data showed, it has been difficult for them to find a structured market. The KoBo survey data cover these three cooperatives, as well as the eight that combined maize and bean producers, as many maize members cultivate mixed beans as a rotation crop. Bean producers mostly use beans for home consumption or sell them on the local markets.

During the field study, data were collected in two ways: by means of (1) a KoBo survey for all the 11 cooperatives and (2) FGDs for all the 11 cooperatives including the three that were part of the HarvestPlus programme. The results of client responses from the bean value chain analysis²³ are also included in this section. The experiences will be described following the logic of the Reach–Benefit–Empower framework, although less elaborately than in the maize example in the previous chapter.

Gender division of labour

Findings from the FGDs show that bean production is an important source of food security, especially in providing protein for families, and that women contribute most to the labour force. However, there is a pronounced gender division of labour in farming and post-harvest tasks, and because of cultural considerations, male and female labour cannot be easily interchanged. In this value chain, women do most of the work, supported by their children. Beans are seen as a women's crop. This is understandable, because part of the bean harvest is for family consumption. Some men do, however, also cultivate beans.

In addition to this, women are time-constrained by other domestic tasks such as caregiving and food preparation. Female-headed households face severe labour constraints because they typically have fewer active members but more dependents. In some areas (especially the northwest), the migration of men to areas with more paid labour has added to the constraint already imposed by gender-specific farming tasks. Findings show that -female-headed households may receive help from male relatives, but only after the men have taken care of their own plots (mostly found in Gatsibo, Kirehe and Ruhango districts). The fact that female-headed households typically farm smaller plots may not compensate for the lower availability of family labour.

Activities at the production stage are not highly disaggregated by gender, meaning that these roles can be performed by men or women. Women do though perform the bulk of work in bean production. Women almost exclusively undertake the weeding and harvesting, while men dominate in land preparation, fertilization, pesticide application, harvest aggregation and wholesaling. The reason for such a division of labour is highly associated with the level of physical energy needed in land preparation (which requires men) and the income received in the marketing. This therefore allows men to control most of the income from beans that are sold at market.

Household and community responsibilities and gender-specific labour requirements imply that female farmers cannot farm as productively as men, and this makes it more difficult for them to increase production when crop prices rise. Depending on cultural norms, farming activities like ploughing and spraying can rely on access to male labour, without which women farmers face delays that may lead to losses in output. For example, women farmers in the Musanze, Gatsibo, Nyagatare and Kirehe districts require male labour for ploughing, but women-headed households often lack male family members who can do the work, and they may not have the cash to hire such labour. As a result, women cultivate smaller plots and achieve lower yields.

Transportation is principally a male-dominated business. This is the case because of the nature of the work involved (driving and loading, offloading, vehicle maintenance). The few women employed in the post-harvest-connected sub-segments are largely involved in storage support duties such as secretarial work (record-keeping) and cleaning. At the post-harvest stage, the number of women performing casual labour is almost three times higher than that of the





men. Most of the activities done at this stage are not so heavy; these may include winnowing, sorting and drying, all of which seem to be reserved for women. At the trading stage of the chain, the number of men becomes slightly higher than that of women, especially at the aggregation and wholesaling levels. Interviews with female traders in Gasogi food business centre (Kicukiro district) revealed that this requires much physical energy, information and networking, which women may not easily manage. Women are most active in winnowing, sieving and sorting levels during trading operations.

“Sowing, weeding, shelling and sorting beans after harvesting is really to be done by women and not by men. By culture, this would be a taboo. We men have other activities requiring more energy, which we are doing well. These include ploughing, loading and transport.. It has to be remembered that women have other responsibilities like taking care of children and cooking..”

A 41-year-old male farmer in Rubavu

“It would be a shame to see a man involved in the shelling, winnowing or sorting of beans, as these activities are obviously to be done by women. We women may reserve other energy-demanding activities to our husbands like ploughing, loading and transporting. Also, activities at the levels of trading, like aggregation and wholesaling are to be done by men. They have networks to gather information, are less busy at home and have managerial capacities to handle all issues.”

A 39-year-old woman in Kamonyi

6.2.2 REACH

Key questions for REACH:

- **When are financial services needed and for what?**
- **Which financial services are available and by whom are they used?**
- **Are women reached by financial services in the bean value chain?**

The field survey indicated that there are hardly any formal financial services in the bean value chain. Informal financial services are available, though, and these are explained in Chapter 8. Important elements for production in the bean value chain are mentioned below:

Seeds

Currently, farmers tend to use their own seed for growing beans; no formal credit is given for this. Producers that intercrop maize and beans sometimes use a general agricultural loan, which is mostly meant for maize but also used for the beans. If the chain becomes commercial on a larger scale, improved seeds could be needed and that purchase could be facilitated by loans. During the time of the HarvestPlus programme, some cooperatives received seeds supplied by HarvestPlus at the beginning of the agricultural season. These loans were reimbursed in kind in the same amount.

Land

Women usually produce beans on small plots close to their homes. The beans that are cultivated in cooperatives are cultivated on marshland leased from the government by the cooperatives. All cooperative members, both women and men, have equal access to the allocated marshland. However, farmers faced challenges caused by floods during the rainy seasons, alternating with drought during the long dry seasons. In fact, the marshlands were not yet developed to make them suitable for agricultural production. This had a negative impact on cooperatives and their members, so improved preparation of marshland could be needed.

Access to markets

Currently bean farmers sell their produce in the local ▶



market as a spot market crop. The eight cooperatives that produce both maize and beans occasionally sell beans on the local market. The cooperatives that focused mostly on the production of beans, got a market through the HarvestPlus programme until the end of 2017 and are now trying to find local markets for the beans. Although the market is there, the returns per kilogramme are lower than before.

Reaching women with financial services

All eleven cooperatives reported that they did not provide any loans to their members for bean production. Partnerships between cooperatives and FIs geared towards bean production did not exist. If cooperatives had a partner relationship with an MFI, it was to obtain loans to produce maize. Although there were no specific loans for beans, members of the FGDs and KoBo survey indicated that general agricultural loans from MFIs or group solidarity loans could also have been used for beans.

Farmers mainly used savings from livestock and crops such as rice and maize to cover the costs of producing beans. Most farmers had accounts at a SACCO for deposit and withdrawal. Participation in saving groups under the cooperative and tontines in the community was common, and finances from these were also able to be used for bean production

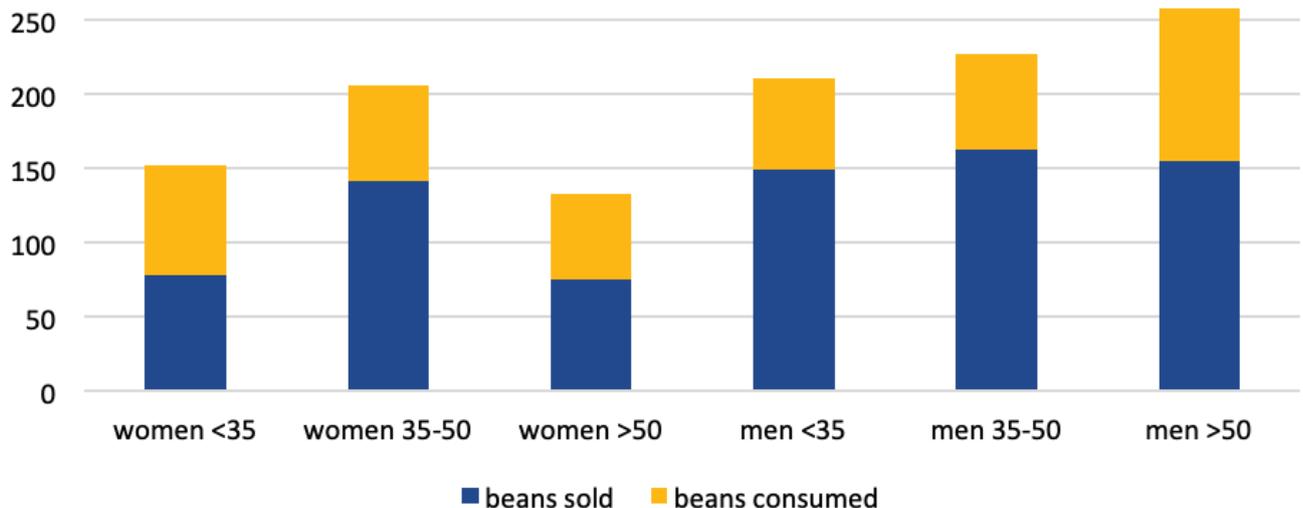
Only one cooperative provided fertilizers and pesticides as an in-kind loan to members. This loan was to be paid at harvest without interest. Both men and women had access to this service, and women could have contracted these loans in their own names.

6.2.3 BENEFIT

Key questions for BENEFIT:

- How do women benefit?
- Are women satisfied with the content and quality of the service?
- Are accompanying services (business development advice, inputs, technical assistance and access to markets) provided with the service?
- Does the service contribute to the development of the businesses of women

Across all cooperatives consulted, both those that grow maize and beans as well as those that focus only on beans, members (men, married women and single women) expressed benefits of working in a structural market also for beans. This was the case in the HarvestPlus programme. Currently the bean market is a spot market with production mostly for home consumption and the local market. The farmers also do not take credit for the production of beans, even though they might take credit for producing maize, which is then also partly used for the bean chain. When the market for beans is well organized, farmers can increase income for investments in livestock, land and production tools, housing and construction and



Graph 6. Average sale and consumption of beans (in kg) by bean-producing farmers, according to subgroup





payment of school fees for their children, according to respondents in the FGDs.

Data from the KoBo analysis

Graph 6 shows that the average production of beans/age subgroup does not vary as much as in maize production, except for women over 50 years of age, who produce substantially less than the other subgroups. Home consumption per subgroup is rather similar. Note that in the study group the percentage of beans for home consumption is lower than the 76 percent national average. This can be explained by the fact that respondents from the Kobo survey were members of the cooperatives linked with the WFP, and therefore already more directed toward the market.

In the bean producing cooperatives, women reported that they found it very important to produce beans as a cooperative. During the time of HarvestPlus, they obtained easy access to the market and were paid

”I joined the Umucyo cooperative in 2007. I started with a harvest of 100 kg of beans. In 2016, I was able to rent some land for RWF 15 000 and I harvested two 200 kg bags of. In 2017, I was able to buy a goat for RWF 25 000, so now I have got something which I can eat easily.”

UWIMANA Rosette from Umucyo

on time. The incomes generated were used to buy household furniture, pay school fees for their children and pay health insurance (mutuelle de santé).

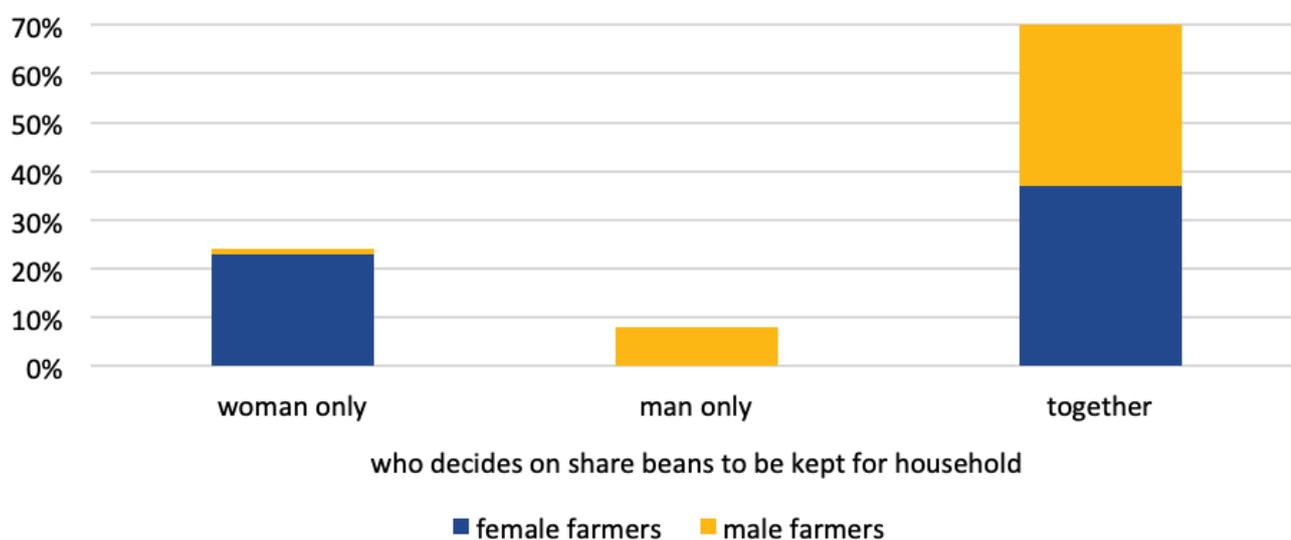
6.2.4 EMPOWER

Key questions for EMPOWER:

- Who decides on the use of the financial service in the household?
- Who decides on the use of the revenue resulting from it?
- Has the position of women in the family improved?
- Has the position of women in the cooperative improved?

Household level

Decision-making at household level depends on the household situation. Because there limited to no special services in the bean value chain, the use of these services is not really an issue at household level. Women have an important stake in decisions on how much bean is to be sold and how much is to be consumed. Graph 7 shows that, according to women, they either take decisions themselves or together with their husbands. A small proportion of men believe that they themselves decide without involving their wife. ▶



Graph 7. Who decides on how much bean to keep for household consumption?





In general, husbands and wives take decisions on the use of income from beans together. However, there are occasions where conflicts arise due to the allocation of income or a lack of transparency on the use of money. In most of these cases, it is the man who takes the decisions alone. However, in some cases, women take decisions without consulting their husbands. Some married female respondents indicated that they struggled to access individual loans, be it for maize or beans. They had conflicts with their husbands, or they needed approval from their husbands, which in most cases was not easily obtained. Some women who had conflicts with their husbands are known to have opened SACCO accounts in their own names without informing their husbands. This was and save money to be used for different household needs.

Cooperative level

Based on the principles governing cooperatives in Rwanda, all members, both men and women, have equal rights. This implies that both men and women have access to services and benefits from their cooperative. Female participation in cooperatives opened the door for them to their economic empowerment. Women were previously prone to do household and unpaid labour work only, but with the cooperative movement, they were able to get out of their homestead and explore economic opportunities such as applying for membership and leadership positions. Cultural norms used to keep women at a low profile and prevent them from being outspoken. The cooperative movement reversed these norms. The representation of women in the cooperative leadership has increased, even though there is

room for improvement. The number differs across cooperatives. On average, the 30 percent level required by law is reached, but one cooperative exceeds this, while another is far below; see Table 7. The percentage of women in mixed cooperatives also involved in beans is presented in Table 2 of the previous chapter on the maize value chain analysis. Women's participation as members and in leadership in the cooperatives focusing on the bean value chain is presented in tables 7 and 8.

SHORT CONCLUSION ON THE BEAN VALUE CHAIN

The bean value chain is characterized as an informally organized value chain mostly serving home consumption and to a limited extent the local market. Production is constrained by use of low yielding seeds, inputs and lack of any mechanization. Sales are mostly targeted at the local market. Some attempts to transform the chain into a market-oriented one have started, with some companies showing interest in beans for export and the WFP looking at the markets for urban consumption and exports. Women currently play an important role in this chain, especially in production and pre- and post-harvest handling. Men are most active in bulking and trading. Most financial services accessible are informal, and these can cover the current financing needs in the chain. Currently the chain offers very limited prospects of sustainable formal financial services. Female farmers, however, indicate they are interested in a more structured market. If the chain becomes more commercial and formal, it would be good to explore strategies to

TABLE 7. MALE AND FEMALE MEMBERS OF THE COOPERATIVES

	Name of cooperative	Total number of members	Number of women	Number of men	% of women
1	UMUCYO	512	234	278	46
2	IZMGM	468	287	181	60
3	ABISHYZEHAMWE	216	112	104	52
	TOTAL/AVERAGE				53





maintain the position of women in it. When the chain is geared towards a structural market, access to quality seeds becomes more important. Women would benefit from improved seeds for seed production so that they can service the market. Women could be stimulated to become agro-dealers and seed suppliers when the chain is formalized. Financial services could stimulate this development by providing funding and insurance for women for improved seed production, and for becoming agro-dealers. Professionalizing post-harvest handling by women and storage could be stimulated through financing small equipment for harvesting that is easy to handle by women and storage that preserves the quality.

Other suggestions to maintain the position of women in the bean value chain include, according to ICCO and WFP (2019): gender-sensitive capacity building schemes, for example through farmer field schools to increase production; the promotion of gender-inclusive producer organizations in the chain; and ways to increase access to finance. ▶

TABLE 8. WOMEN IN THE LEADERSHIP OF BEAN COOPERATIVES

	Name of cooperative	Executive committee (5 members)	Supervisory committee (3 members)	Total seats occupied by women	% of women
1	UMUCYO	2 women	1 woman	3 seats out of 8 seats	37.5
		3 men	2 men		
2	IZMGM	3 women	1 woman	4 seats out of 8 seats	50
		2 men	2 men		
3	ABISHYZEHAMWE	1 woman	0 women	1 seat out of 8	12.5
		4 men	3 men		
	TOTAL NO. OF WOMEN	6 women out of 15	2 women out of 9	8 seats out of 24	33.3



EXPERIENCES WITH THE HARVESTPLUS PROGRAMME

An interesting example of a bean value chain is the production of single-variety seed beans produced for the HarvestPlus programme by three of the producer organizations in the study. HarvestPlus is an international research institution that promotes beans fortified with iron in Rwanda, in partnership with RAB, local NGOs (Imbaraga, DERN, RDO) and producer cooperatives. The programme was really appreciated by farmers in the bean cooperatives. Unfortunately, it concluded in 2017.

The three participating cooperatives were selling their produce to HarvestPlus at the time. Men and women had equal rights to sell their produce. HarvestPlus was buying the harvest for prices than market ones. For example, in 2016 when on the local market 1 kg was worth RWF 350, HarvestPlus paid them RWF 650/kg. In this way, women and men benefitted from higher prices for their produce. In 2017 the market price was RWF 450/kg, but HarvestPlus purchased the single beans at RWF 570/kg. All cooperative members appreciated the training they received, which allowed them to improve their skills in agricultural practices. Moreover, women became more confident in leading other members in the HarvestPlus programme, with seed beans given as an in-kind credit. The HarvestPlus sample is one of the few experiences with a clear focus on bean production for consumption and for the market.

In this programme, farmers produced single-variety seed beans for RAB as part of a formalized value chain. The example of the HarvestPlus programme shows how women can be reached, be empowered by and benefit from single-variety

value chain development programmes. In the HarvestPlus programme, however, there was a high dependence on a single buyer. HarvestPlus played the role of donor, local capacity builder and buyer/off-taker, creating an environment that lacked diversified market competitiveness, while at the same time making small farmers with weak business skills very dependent on it.

After HarvestPlus ended, the cooperatives stopped producing single beans. They are now growing mixed beans, which are sold at local markets at normal market prices. Nevertheless, as a good practice, the experience is still worth sharing and learning from. Cooperative members reported being unaware of the reason behind the exit of HarvestPlus. Because HarvestPlus was an NGO and not a private market puller, apparently it had a timeline for its intervention in Rwanda. However, it seems that no exit strategy had been defined and communicated to the producers. The farmers are now desperately looking for other comparable buyers. Since HarvestPlus closed its partnership with the bean cooperatives in 2017, bean producers have been urgently looking for a similar buyer or off-taker for first grade beans at a premium price. This is much more profitable for the farmers than producing mixed beans for the local markets. Mixed beans are of low value compared with single-variety beans, which have a stronger business potential within the East African region and on export markets. Exports are generally limited to small volumes sent out by SMEs specialized in horticulture exports, such as Garden Fresh and Floris Rwanda. The HarvestPlus programme was also for a select few producing seed beans, which involve higher production care and costs and a much higher final price. This, plus the fact it was a short-term programme, makes it not obtainable for the majority. ■





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7. COMPARISON OF THE MAIZE AND BEAN VALUE CHAINS

In this chapter the bean and maize value chain are compared using data from the KoBo survey.

7.1 CULTIVATION OF DIFFERENT CROPS

From Graph 8 it appears that consumption maize production is quite important overall. However, for female farmers under 50 years of age and male farmers between 35 and 50, other crops are equally or even more important. All farmers also cultivate beans as an important crop.

7.2 THE MAIN SOURCE OF INCOME

Graph 9 shows the main crop for income generation according to respondents (total per subgroup is 100 percent). It appears that consumption maize is the most important crop overall. Second place seems to be shared between maize seed production and other crops (which may be a diversity of crops, including vegetables). These other crops appear to be more important for male producers over 35 years of age, while maize seed production is more popular with younger farmers (both male and female). Mixed beans and single-variety beans are the main crops for only 5–20 percent of the farmers.

7.3 SELLING OR CONSUMING

Graph 10 shows which family member determines how much of the crop should be kept for home consumption. Around 30 percent of the female maize farmers decide on their own. This is a slightly higher number than that for the female bean farmers (20 percent). Around 20 percent of the female maize farmers decide along with their husband; for the female bean farmers, this is almost 40 percent. A small proportion of the female maize farmers have no say on this matter. Among the female bean farmers, there are none without a say.

As for male farmers, the majority in both crops decides together with their wives, about 20–30 percent. Around 10 percent decide alone. Overall, it appears that women have slightly more influence on the use of the crops in the bean value chain compared with the maize chain. It can also be seen that beans are very relevant for food security and nutrient intake at household level.

7.4 USE OF INCOME FROM SALES

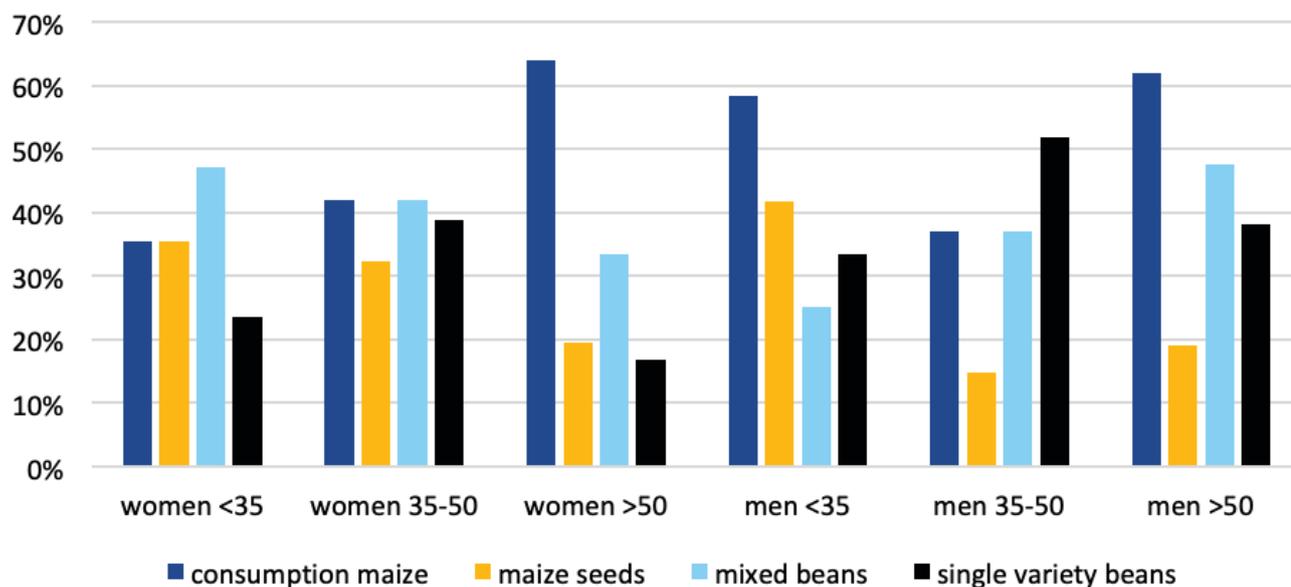
Graph 11 shows that income from maize is most often used for agricultural investments, such as improved seeds, fertilizer and other basic inputs. It can also be used to acquire extra land. The fact that some of the income is used for investment is important. This can be explained in part by the fact that the harvest is bulked by the cooperative and becomes available at one moment, which means income can more easily be used for asset building (such as buying pieces of land and livestock) than when small amounts of money are received over a longer period. Women spend the revenues more on health costs, food and housing than men do, which supports the role of women's income contribution to their family livelihoods.

The high investment in agriculture is also positive for accessing future loans because it stimulates higher production and building of assets.

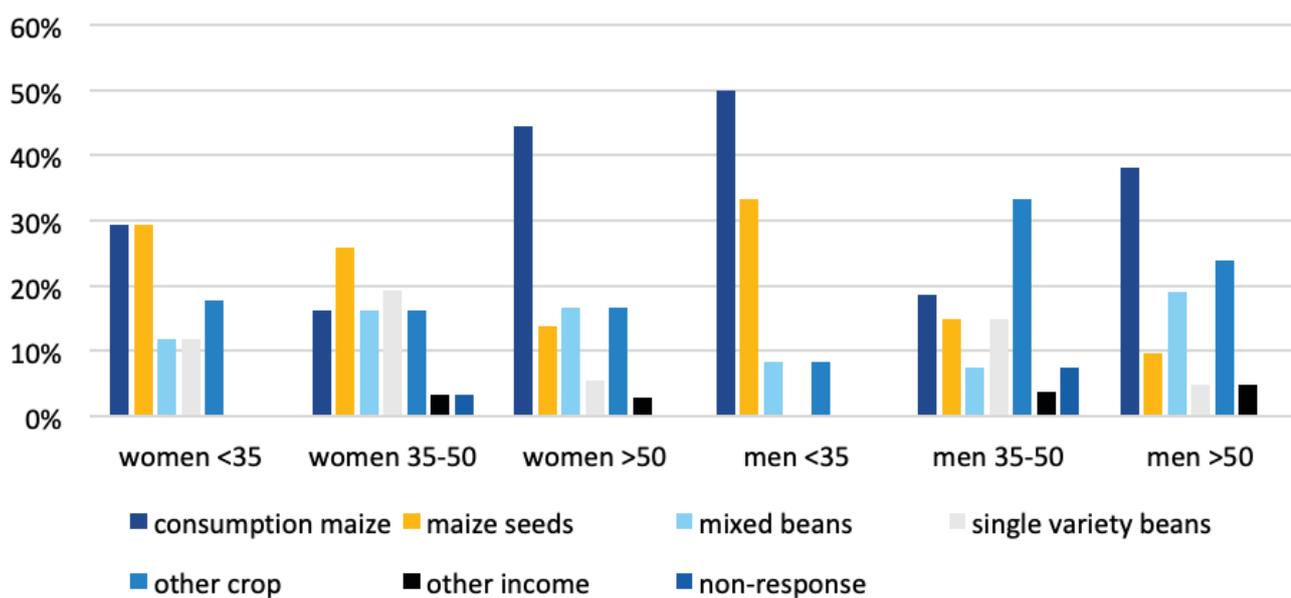
CONCLUSION ON RELEVANCE FOR WOMEN EMPOWERMENT IN THE MAIZE AND BEAN VALUE CHAINS

Overall, the study showed opportunities for women in both value chains. Empowerment in both chains was noted at household level, where women have an increasing say in the use of resources, especially when production is geared towards the market. It ▶



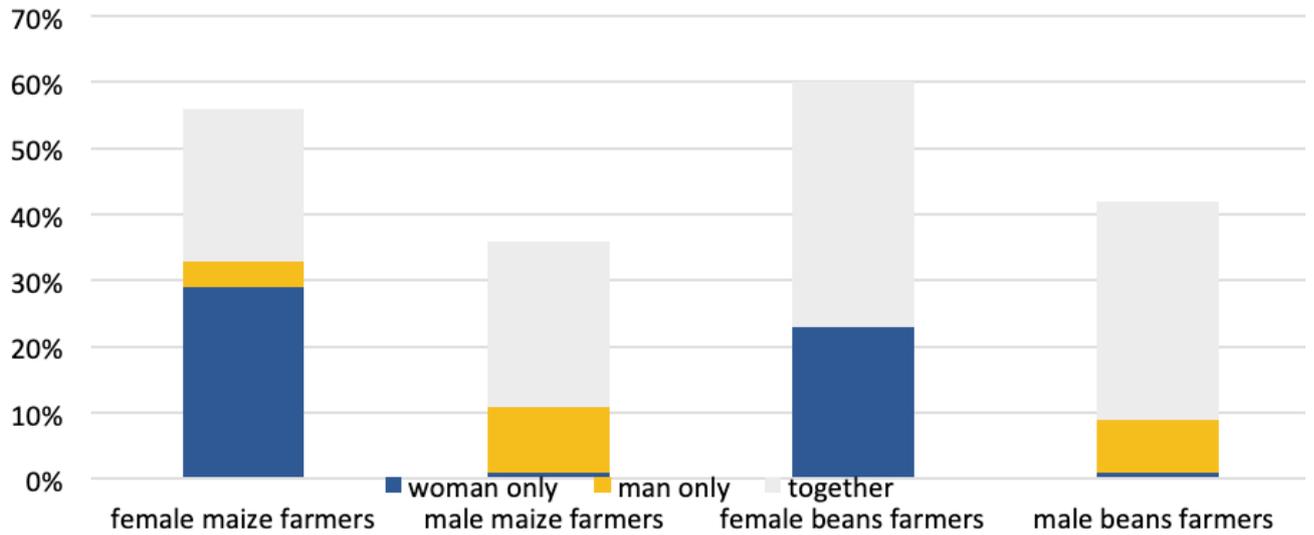


Graph 8. Percentage of farmers in a subgroup cultivating a specific crop

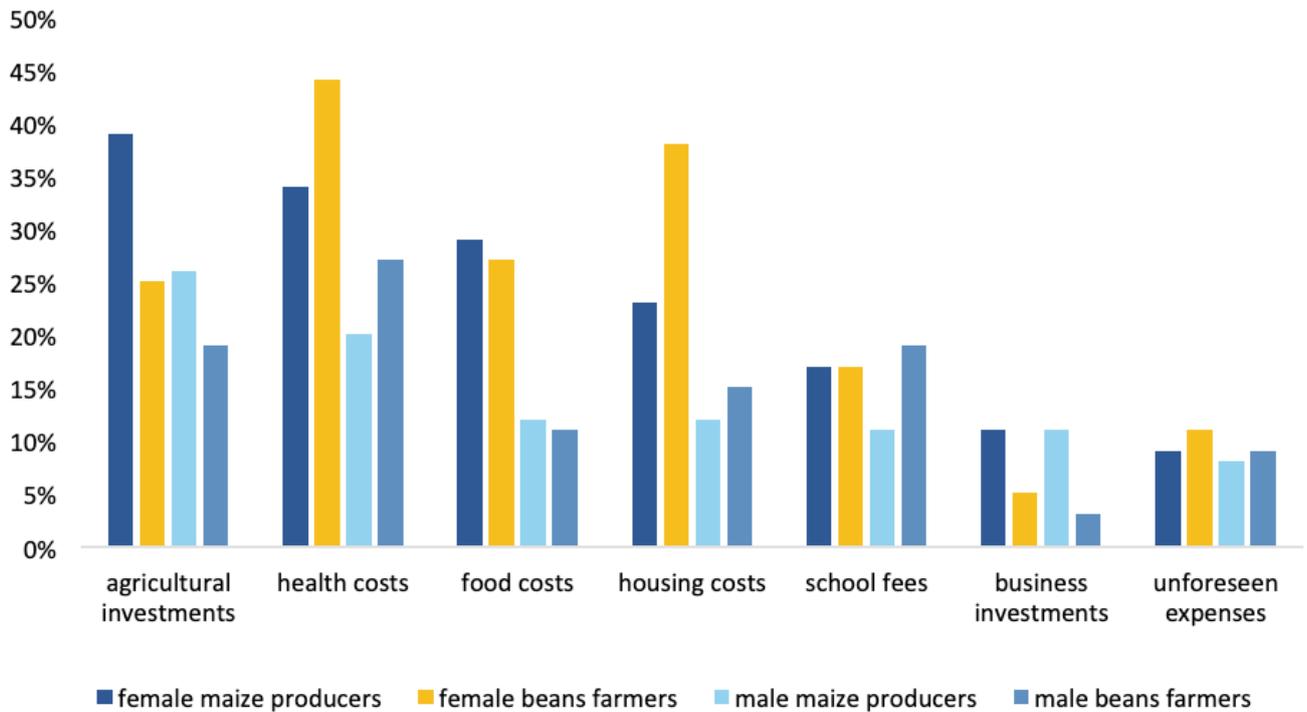


Graph 9. Main source of income per subgroup





Graph 10. Who determines how much of the crop should be kept for home consumption?



Graph 11. Use of income from maize sales





was also observed that women may lack an incentive to grow a business when they do not have control over additional income earned. One example here is professionalizing production through mechanization. On some occasions, it was noted that women's increased earning caused conflicts and stress at household level. While women play an important role in bean production, it appears that their role and influence in the maize value chain, especially through cooperatives, is growing faster. Women take up to 45 percent of leadership positions in the maize cooperatives while only 33 percent in the bean cooperatives. One reason for this discrepancy could be that beans are produced largely outside the atmosphere of the cooperatives and are mostly for home consumption and local markets. Access to formal financial services is also much lower in the bean chain than the maize one. ■



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8. ACCESS TO FINANCE IN THE MAIZE AND BEAN VALUE CHAINS

8.1 INTRODUCTION

Overall, financial inclusion²⁴ is relatively high in Rwanda, with 86 percent of women being financially included compared with 90 percent of men. In the Finscope study of 2016, it is observed that female financial exclusion reduced from 32 percent in 2012 to 13 percent in 2016. The rural–urban distribution in Rwanda is 84 percent to 16 percent, with the Northern Province having the lowest levels of access to formal as well as to informal finance. Women who use the services of formal FIs, such as banks and MFIs, are mostly between 30- and 50-years-old and have regular incomes. Informal financial services also play an important role for women; 53 percent use non-bank financial institutions (NBFIs)²⁵. It is especially young women and women with irregular sources of income that are excluded from formal financial services and resort to informal finance. There are several key barriers for women when it comes to accessing finance (MiGEPROF, 2016). These are limited financial education and access to information, and limited collateral resulting in limited access to formal financial services. On top of that, appropriate financial products for different categories of women are still insufficiently targeted. As mentioned in Chapter 4, women also face additional challenges, such as being concentrated in lower-paying activities, lack of household bargaining power in, competing demands on their time and reduced mobility due to time constraints and social norms (IPA, 2017).

The vast growth in outreach, including in rural areas, can partly be attributed to the Umurenge SACCOs that have been established in every sector. In total, there are 416 Umurenge SACCOs²⁶ that operate locally. They are a frequently used channel for savings mobilization and are used for government money transfers (for example salaries and input subsidies). However, many of them face management challenges and have liquidity issues as well as limited credit products, so they are not used as for loans but mostly for savings mobilization. MFIs and SACCOs have a much more extensive outreach in rural areas than banks.

The informal sector, especially savings and credit groups, are of key importance to women, particularly

those in rural areas. Both the maize and bean value chain studies confirm this. Women use financial services primarily as a risk management strategy to manage household cash flow constraints and food security at household level. Men use financial services to invest and grow their businesses (Finscope, 2016) Women are very appreciative of savings products alongside loans. Other financial services, such as mobile money accounts, insurance and remittances, are less used, especially by women.

The use of mobile money has increased. In 2016, 33 percent of all Rwandan women used a mobile money account. In 2016, around 2.3 million adults in Rwanda used it. This was used mostly though for money transfers from branch to head office accounts and sometimes for savings, because available products are still limited in rural areas. A recent study on client voices (Smart campaign, Mastercard Foundation and Laterite, 2019) shows that mobile phone use in rural areas is close to 50 percent, and almost similar between men and women. Issues of transparency and client protection still need to be addressed in the use of digital services, however. Once the services are streamlined, mobile money could help improve access to them for women while also reducing costs.

In the new Governmental Financial Inclusion Strategy being developed for 2019–2024 (AFR, 2019), draft in process, mobile money is seen as promising for reaching out to the traditionally unbanked, including women. This new strategy focuses on:

- Deepening the usage of financial services for the rural population in terms of products including loans, savings and insurance;
- Increasing access to finance for farmers by linking savings groups to more formalized FIs, expanding and professionalizing the Umurenge SACCOs by building district-level SACCOs (30 in total) to link them with professional support service, professionalizing MFIs and linking them to banks for liquidity constraints;
- Developing appropriate financial products for the rural population and for SMEs, especially in the context of a value chain;





- Enhancing financial education and client protection principles, as stated in the governmental programmes for leaving no one behind;
- Further digitalization into a national payment system, with the aim of becoming a cashless economy and with 80 percent of the adult population using mobile and or smart card systems;

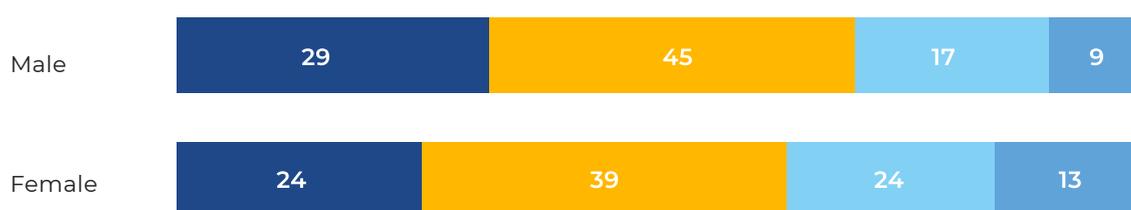
- Addressing institutional gaps and enforcing public-private partnerships (PPP).

In summary, even though Rwanda does relatively well in terms of access to finance for women, access to agricultural finance is still lower for women compared with men (Finscope, 2016). Similar trends can be seen in the financial services in the maize and bean value chains.

Figure 5: Rural-urban inclusion



Figure 6: Male-female inclusion



■ Banked
 ■ Other formal (non-bank)
 ■ Informal only
 ■ Excluded

²⁴ According to the draft financial inclusion strategy, financial inclusion is where individuals and businesses have access to a wide range of useful and affordable financial products and services for which consumers are willing to pay. These are from formal and informal institutions and that meet their needs and are delivered in a responsible and sustainable way.

²⁵ NBFIs can be broadly defined as institutions other than banks that offer financial services but that do not have a banking licence.

²⁶ Umurengo SACCOs are SACCOs that are installed at every village with the support of the Government of Rwanda to ensure financial inclusion. The government is now establishing second-tier district level SACCOs to overcome some of the constraints of the original SACCOs.





8.2 FINANCIAL SERVICES IN THE MAIZE AND BEAN CHAINS

Table 9 presents the different types of financial services in the bean and maize value chains and their respective levels of importance in financing activities: informal finance in groups is mostly used for input finance and for primary producers. Embedded financial services can be used for both input and output finance. Formal financial services through cooperatives usually target aggregation and marketing of produce. Formal financial services also target traders and processors in the chain.

The maize and bean value chains are on different levels of commercialization. This fact affects the demand and supply of financial services in the respective chains. In the maize chain, there are two distinct types of market channels: ones operating in spot markets and the others addressing the contract buyers, primarily institutional buyers.

They both may use the commodity exchange as a reference point, but the contract and institutional buyers are able to set prices and price-setting parameters into the future. These two channels differ in terms of financial service providers serving them; the formal contract and institutional channels are much better served by formal financial institutions because there is market as well as price-setting assurance.

It is remarkable that, in all the market channels of both chains, informal finance dominates over formal finance. Informal services in both chains include local savings and credit groups and financial services linked to or embedded within input supply or marketing systems. These embedded services mean that the services are provided alongside others such as input supply, market linkages or extension services. In the FGDs and field survey, many female producers prefer informal sources of finance to formal lenders. This is partly because they are not aware of what formal FIs offer, and when they are, they are afraid of defaulting and the associated legal and reputational consequences. The informal savings groups are culturally very accepted for women. In addition, these informal groups form a platform for women to exchange and to support each other. Much of the bean production is for consumption or local markets with little financing required, which could be covered by informal finance. Beans are mostly traded in the local community, with informal groups offering women a platform to exchange goods and support each other.

In both value chains, producers require finance for inputs such as seeds, fertilizers and pesticides, as well as for seasonal labour. The financing needs are mostly for short-term working capital loans although the need for equipment was also noted, especially when the chain commercializes. In the bean chain, many women, especially those in female-headed households, would like to expand their bean production but lack the money to purchase land and

+ = low; ++ = medium; +++ = high

TABLE 9. TYPES OF FINANCIAL SERVICES IN THE BEAN AND MAIZE VALUE CHAINS AND LEVEL OF IMPORTANCE

Type of financial service	Bean value chain	Maize value chain	Relevance for women
INFORMAL FINANCE IN GROUPS	+++	+++	+++
EMBEDDED INFORMAL FINANCE FROM INPUT SUPPLIERS, TRADERS	+++	++	++
FINANCE THROUGH COOPERATIVES	+	+++	+
FORMAL FINANCE	+	++	+





inputs (for example seeds, fertilizer and pesticides) or to hire labour. They see the lack of access to credit as one of the most prominent barriers towards improving production. Maize farmers also expressed financing needs related to harvest, production, aggregation and post-harvest operations. Actors in this chain, especially SMEs, who are engaged in processing and packaging required large long-term credit to invest in machinery and facilities, alongside working capital needs. When the chains become more professional, demand for longer-term and higher volumes of loans will grow, and this is not easily met by informal finance. Currently informal finance is still the mayor source of finance in both chains. A summary of the different types of informal financial providers in the chains is provided below.

8.3 INFORMAL FINANCIAL SERVICES IN THE CHAIN

8.3.1 INFORMAL SAVINGS AND CREDIT GROUPS

Rwanda has a large tradition of informal village savings and loan groups, such as tontines and Ibimina.²⁷ They can be found in most areas of the country. In the maize study, it was found that 58 percent of smallholder farmers belong to rotating savings and credit associations (ROSCAs), SHGs or “accumulating savings and credit associations”. For business

credit provided from their internal savings, these organizations charge a mutually agreed flat interest rate that varies between 3 percent and 5 percent per month.²⁸ Normally these loans are short term up to three months. They do not charge interest rates on emergency loans. No collateral is required for small loans below RWF 200 000 (EUR 200). A written letter, signed by the borrower and approved by the group committee, is enough to acquire loans.

The groups also provide saving facilities, which are often difficult for smallholder farmers to access elsewhere, as formal FIs are usually far away. The local savings group is a good alternative to saving at home, according to respondents in the study. The groups operate at village level and typically require their members to meet regularly. Savings are collected from each member and are either deposited in the FI that is closest to them or loaned to other group members.

SHGs have proved to be an effective method for connecting women with formal FIs, even though there are instances of constraints on women’s self-help groups. Limitations include membership fees that may exclude ultra-poor women from joining; other membership criteria would exclude women with a bad track record on repaying loans. The timing and length of meetings may interfere with daily tasks and can be another obstacle to women’s participation. Female traders who move around as well as higher income businesswomen are less interested in joining the groups, which require regular meetings.

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8.3.2 INFORMAL LOANS IN COOPERATIVES

Members of cooperatives can benefit from internal saving and lending systems. Being an active member of a maize cooperative is the only condition for accessing a loan. This type of loan is preferred by 63 percent of the maize producers in the study and is found to occur in bean cooperatives. It responds to their financing needs for farming as well as for their households in a very quick and efficient manner. The average time to obtain a loan is only two days and there are no other obligations, such as collateral requirements. Loan amounts can go up to RWF 200 000 (EUR 200), at interest rates of 2 percent per month. Cooperatives use their own savings, members' contributions and reserves from profits for lending. However, the internal financing sources in both maize and bean cooperatives are still small and cannot service all financial needs of members.

8.3.3 INPUT SUPPLIER CREDIT AND EMBEDDED SERVICES

Input suppliers can provide inputs on cash or credit to farmers. They advance agricultural inputs such as seeds, chemicals and equipment to producers, and agree to be repaid at harvest or any time after the sales of the produce. They normally negotiate to buy at a lower price than the prevailing market price for the crop, thus making their margin on the crop sales after harvest. Most small agribusinesses (inputs dealers and local traders) rely largely on their own funds or informal financing to lend on to producers. The informal finance related to inputs is operating on the margin of what is legally accepted in Rwanda. This makes it very difficult to get information on detail models for this type of finance.

8.3.4 TRADERS' AND INFORMAL BROKERS' CREDIT

Traders have better access to semi-formal or formal financial services because many are based in urban areas and generally have more resources of their own. They often use SACCOs, MFIs and commercial banks to acquire short-term working capital loans, which they lend on informally as advances to farmers. This type of finance is prevailing in the maize value chain. Traders and informal brokers also finance value chain operations, especially during peak harvest seasons. These traders send representatives

to rural areas and provide credit in cash to farmers based on an established buyer–seller relationship. This is found mostly in the maize value chain, where such contractual relationships exist. The mode of repayment is in cash or kind, for example through delivery of maize, with sometimes exploitative interest rates of 5–12 percent per month. Traders can take advantage of weak cooperatives that have no contract with buyers. They can also buy from individual farmers with no capital, limited market information, or links with cooperatives. On some occasions, traders coordinate grain buying and selling and organize transport, and they can provide temporary storage services. To smooth the functioning of all this, they can provide short-term advances to farmers. In general, this type of finance linked to trading is discouraged in Rwanda, especially when de facto high interest is charged on the finance.

Smaller rural traders are mostly self-financed and often act as agents for urban traders. The grain traders, of which 60 percent are women, pay the brokers, who then pay the farmers. Networks of relationships between rural and urban areas and the widespread availability of cell phones enable these informal transactions.

8.3.5 BIG BUYERS AND PROCESSORS

Big buyers and processors can provide finance to their contracted aggregators or local traders by providing short-term working capital through informal loans to secure produce procurement. They can provide short-term capital in return for the first right to procure at harvest. Big buyers in the bean value chain also provide finance to the assemblers or village collectors and even to farmers to ensure enough supply of beans during off-season periods.

The big buyers²⁹ connected to the FtMA programme mentioned that they do not provide input or post-harvest loans to the farmer cooperatives anymore because of previous bad experience with side selling and mismanagement in the cooperatives.³⁰ They prefer to create linkages or tri-partite agreements with formal financial service providers such as KCB, UOB, Equity Bank or Duterimbere and ensure in this way that cooperatives have enough finance for aggregation. Buyers and processors themselves also sometimes require bigger loans from these formal financial institutions.

RELEVANCE OF INFORMAL FINANCE

While informal finance is prevailing in both





agricultural value chains, informal finance has specific challenges, and the costs and benefits are not readily transparent. Informal structures can install high interest rates (5–12 percent/month) and/or have restrictive payment terms such as pre-set, excessively low prices for the commodities. Informal financing in the maize value chain tends to be mostly short-term, seasonal and with smaller amounts compared with formal finance. In the maize study, farmers mentioned that informal financing models could be exploitative, but they still use the financing of local traders and aggregators because of long-standing relationship and to be sure of future finance. The benefits of informal finance include easy access, timely access to credit with low minimum borrowing requirements and low transaction costs for processing of the loans. When connected to traders, informal finance also provides assured buyers for the produce. The informal money-lending system is built on trust between borrowers and lenders. For smallholder farmers, especially for women, it is otherwise extremely difficult to access finance on an individual basis. Smallholder farmers can obtain credit only when they take part in groups or through other types of informal finance.

8.4 FORMAL FINANCIAL INSTITUTIONS IN THE MAIZE AND BEAN VALUE CHAINS

There are some formal financial service providers in the maize and bean value chains, especially those that focus on rural and agricultural finance, such as Duterimbere, Ejoheza and Urwego. Relevant formal financial service providers for the maize value chain include:

- KCB, Equity Bank and Urwego Opportunity Bank, which are banks with a strong rural mission;
- Duterimbere, Ejoheza and Copedu, which are MFIs with a strong rural mission and as well as an explicit focus on rural women;

- SACCOs, which are small cooperatives found in all sectors in Rwanda.

Note that all these service providers supply general agricultural loans which can then also be used to some extent to finance bean production—especially when beans is intercropped with maize. SACCOs do not have tailored products for specific maize and beans value chains. The MFIs have more outreach to the maize and bean smallholder farmers and rural cooperatives compared with the commercial banks. Many of them have closer proximity and the requirements are less restrictive. The high transaction costs of lending to smallholder farmers and associated risks in lending limit many formal FIs entering financing of agricultural value chains.

Formal financial institutions prefer to provide finance via the institutional marketing channels, which was mentioned in the interviews. They perceive this as less risky than the spot market channel, because the contractual business agreements between buyers and producer organizations can be taken as a guarantee for payment on loans. The FtMA alliance operates mostly in this domain. Due to the limited financing capacities, MFIs prefer to finance working capital and rarely finance investment capital. The focus is on short-term working capital provided to farmer producers. However, in the context of the FtMA alliance, MFIs are also willing to finance larger aggregator loans to cooperatives. Most managers of FIs (70 percent)³¹ confirmed that they do not consider beans as a cash crop. They have a negative idea about its profitability and consider it to be too risky to finance producers in that chain. Instead they prefer to finance traders who they perceive as less risky because these have an already available market for the collected beans. The financial institution managers mentioned that they sometimes finance beans in combination with cash crops such as maize and soybeans through general agricultural loan product. The bean value chain study noted that women and men who receive loans through cooperatives have equal access because cooperatives do not have any gender exclusion in distributing credits to their ▶

²⁷ *Ibiminas or tontines are informal rotating savings and credit groups whereby all members of the group contribute a specific amount on a daily or weekly basis and each member of the group receives the full contributions per turn.*

²⁸ *Formal FSPs charge between 18 – 24 percent/year so approximately 1.5 – 2 percent/month*

²⁹ *The term 'big buyer' is used for bigger off-takers*

³⁰ *This was observed directly from interviews with off-takers.*

³¹ *This includes managers of banks as well as of MFIs. cash out services.*





members (ICCO, 2016). Data from MFIs show that 61 percent of loans to farmers in cooperatives were disbursed to women for the years 2015 and 2016.

For smallholders, formal finance can be attractive because the financial procedures are transparent, and risks of exploitation are considerably less than in informal finance.

8.5 REACHING FEMALE CLIENTS WITH FORMAL AGRICULTURAL FINANCE

The information in this chapter is drawn from field research and source data analysis of financial service providers. Through in-depth interviews with the formal financial service providers in the maize and bean value chain, an attempt was made to identify their focus, strategies and outreach to rural women.

The four most relevant service providers were interviewed. The below information is a summary of the interview results according to the indicators below.

- Whether targets are set or strategies developed to attract female clients
- Whether services are provided in such a way that women can easily use them
- The number of women reached by accompanying non-financial services
- The number of women as clients of financial services.
- Whether the marketing and communication strategy is designed so that women feel invited
- Whether gender-disaggregated data have been collected?

8.5.1 STRATEGIES FOR REACHING WOMEN

All formal financial institutions in the maize and bean value chain have a poverty alleviation focus and have included rural and agricultural finance as part of their mission. In addition, some also have a focus on gender. This is most pronounced in MFIs, especially with Duterimbere, which has a mission to provide financial services to low-income entrepreneurs, primarily women.

KCB has an overall strategy to reach the rural population, and it has one employee in Rwanda who focuses on gender mainstreaming in the organization. It has a project with MasterCard Foundation to improve digital payment systems, including small loans. This provides easy and quick loans to women. The bank perceives women to be loyal and committed clients.

UOB has no specific strategy to include women, but acknowledges the fact that women are better clients and respect their commitments. It sees women increasingly participating in cooperative leadership and being involved in negotiations for cooperative loans. The organization plans to apply collateral requirements for individual loans that are easier to satisfy for women and that do not require land titles. Such innovative collateral requirements can include using movable assets, peer guarantee and stricture monitoring of past client performance.

Duterimbere has a strong focus on women, including entrepreneurs and those in rural areas. It acknowledges the relevance of digital services for women, especially in remote rural areas, and therefore digitalization is part of its strategic plan. Duterimbere appreciates female clients as they are more reliable with repayment, and repayment rates of cooperatives that have female leadership are much better. Duterimbere is also working on gender mainstreaming, and aims to achieve 70 percent women participation in all its areas of operations. Duterimbere currently has 18 branches spread across all regions in Rwanda except for the far southwest part of the country.

Ejoheza is a rural based cooperative union with a strong focus on rural poverty alleviation, with special attention on women and youth. Its products are not specifically designed for women, but the organization provides many group loans, which they appreciate. Ejoheza mentioned that it prefers female clients for their good loan recovery but also observes that women are reluctant to take loans.

8.5.2 FINANCIAL SERVICES THAT ARE USEFUL FOR WOMEN

All providers indicated that women's participation in cooperatives is growing. Women use loan products provided to the cooperatives by the FSPs, since these do not require individual collateral. The cooperative negotiates the loan on their behalf, which increases





the chances of getting the loan, since the cooperative is also arranging a market for them. The loans are then channelled to their savings groups.

KCB's digital product, developed with MasterCard Foundation support, specifically considers women's requirements. The loan is not based on collateral or on consensus from the husband for approval. Currently, this product is under testing and is not yet operational.

Duterimbere has a wide variety of products. Some of these are designed with the needs of women in mind, such as linking to VSLAs, or savings groups organized by NGOs, which make internal, savings-based, loans available for women without a formal guarantee.

Duterimbere channels loan products to these groups so that women in the groups can access loans easily. The wide variety of products available through is shown in Table 10 on the next page. It includes loan products for women such as the Tekana product and a special one for women entrepreneurs.

Ejoheza also promotes group systems what they call Azec, whereby savings remain in the group after a first savings cycle. These groups are highly appreciated by women. In general, services most appreciated are those that do not require formal collateral, are flexible and are located nearby to women's homes. Some of the products mentioned in Table 10 respond to these requirements.

Relevant formal financial service providers in the maize and bean value chains identified include:

- Kenya Commercial Bank (KCB) is a leading international bank in agricultural finance in Rwanda. It became operational in Rwanda in 2016, and the operations there are a subsidiary of the main Kenya-based KCB organization, thus operating with the same systems and similar products. In Rwanda, the bank has 12 operational branches, but outreach is mostly achieved through a network of banking agents. . It currently has an ongoing project with MasterCard. Foundation to finance rural areas, including women particularly with the use of digital financial services.
- Urwego Opportunity Bank (UOB) started in 1997 as an MFI and had a strong focus on the rural poor and women. In 2007, it merged with Opportunity International and it became a microfinance bank, retaining its rural focus. In 2017, UOB came under full shareholding control of Hope international, a USA-based development organization. It currently has 18 branches, about 100 agents and over 400 000 clients.
- Duterimbere is one of the leading indigenous MFIs in Rwanda that has development of women entrepreneurship strongly embedded in its mission. It currently has 18 branches and 47 000 clients and aims to achieve 70 percent female clients in all its branches. Duterimbere provides savings, loan facilities and non-financial services, such as financial and business management education. It finances both urban and rural clients and increasingly also focuses on agricultural finance.
- Ejoheza is an MFI that emerged from a cooperative union of six savings and credit cooperatives serving rural clients in the Southern province in Rwanda. It currently has six branches and 68 000 clients, of which 46 percent are women. Ejoheza decided to become an MFI in order to avoid organizational pressure to merge with Umurenge SACCOs, although it has retained its cooperative principles in the organization.
- The Umurenge SACCOs are savings and credit organizations established by the Government of Rwanda to promote access to finance in all areas of the country. Currently, more than 400 Umurenge SACCOs are operating at village level with lending based on local savings mobilization. Their resources are limited, and they cannot provide large numbers of loans.





TABLE 10. FINANCIAL PRODUCTS RELEVANT FOR WOMEN IN MAIZE AND BEAN VALUE CHAINS

Type of product	Target clientele	Credit conditions
KCB		
DIGITAL AGRICULTURAL LOAN	Rural population with strong focus on women	Individual loan based on digital credit scoring, directed to women. This is mostly a short-term loan. The interest rate is the prevailing rate of the bank. The product is not yet operational.
COOPERATIVE AGGREGATION LOAN PRODUCT	Cooperatives that aggregate produce of members for marketing	No clear information
UOB		
GROUP LENDING	Mostly rural and urban resource poor; 60% women	Groups of up to 25, financial literacy training is compulsory, mutual guarantee, weekly repayment, 2.5% interest per month. In cycles of maximum of up to EUR 1 200 per group, mostly for six months to one year.
INDIVIDUAL BUSINESS LOAN	For small urban and rural SMEs mostly for working capital.	For registered business, including securities, up to 170% coverage. For 12–36 months, 18–19% interest rate.
TRADE LOANS	Rural and urban traders	For registered business, including securities, up to 170% coverage. For 12–36 months, 21% interest rate
AGRICULTURAL COOPERATIVE LOANS	For cooperatives involved in maize, rice, coffee and Irish potato	Registered cooperatives that have collateral and sales contracts with buyers. For one season, interest rate 20%.
DUTERIMBERE		
SOLIDARITY GROUPS	For savings groups and solidarity groups	Groups of up to 25, with mutual guarantee, joint savings and weekly repayment. For 6–12 months. Interest rate up to 2%/month.
TEKANA LOAN	Individual entrepreneurs both rural and urban	20% deposit, no collateral, up to RWF 2 million, medium term up to 2 years and with 2% declining interest.





TABLE 10. (CONT.)

Type of product Target clientele Credit conditions

DUTERIMBERE (CONT.)

ENTERPRISE LOAN	SMEs involved in production	Collateral is required and starts with RWF 2 million
AGRICULTURAL COOPERATIVE LOANS	Cooperatives involved in aggregation, but can also be used for cooperative buying inputs.	Registered cooperatives that have some type of collateral, including buyer's contracts, mostly short-term and with prevailing interest rate
FARM "HINGA"	Farmer loans for inputs	Individual farmers that have any assets that can be registered as collateral, seasonal loans at prevailing interest rate.
HARVESTING LOAN "HUMURAMUHINZI"	Farmer loan for harvesting	Individual farmers that have some form of collateral, seasonal loans at prevailing interest rate, up to 40% of estimated production.
MICRO-LEASING	SMEs for equipment loan	Leasing product with registered equipment. Currently mostly for cars and transport means.

EJOHEZA

GROUP LOANS	To solidarity groups or VSLAs	Groups of up to 25 members which meet and save regularly, loans are short term, and maximum interest is 1.5–2%/year.
INDIVIDUAL LOANS	Mostly traders and small SMEs	Individuals with collateral (175% of the loan), short-to medium-term loans (two years) and interest is 2%/month.
AGRICULTURAL COOPERATIVE LOANS	For cooperatives involved in aggregation or livestock	Registered cooperatives, collateral is required but contract with buyer can partly replace collateral, mostly short-term seasonal loans, interest is 1.5–2%/month.





8.5.3 ACCOMPANYING NON-FINANCIAL SERVICES

All formal FSPs provide some form of basic financial literacy training to their clients. This is done mostly in partnership with other actors, such as international donors or local development partners.

KCB provides extension services and business support to clients as well as market linkage support through linking buyers, who are also their clients, to cooperatives. Duterimbere and Ejoheza provide formation support and training to groups, especially in collaboration with development partners such as WFP. Duterimbere also provides business training to women in collaboration with Duterimbere ASBL, which is the founding NGO of Duterimbere MFI and a shareholder in the MFI.

A special system for financing informal groups in cooperatives

Within the context of the FtMA programme, a new strategy has been developed to link savings groups within cooperatives to formal financial service providers. The structure is built on solidarity groups or savings groups of members within a cooperative (producer organizations), and the MFI that provides finance to both the cooperative and the groups.. The cooperative then functions as a second-level guarantee to provide loans to the members in the group by approving the loan requests and ensuring that group members are sound producers (ICCO, 2019).

In this system, the group members have access to three types of credit

- Internal loans – groups save regularly and can grant small amounts of internal credit to their members. These loans are usually modest. Repayment should be done in a period not exceeding three months and with an interest rate varying between five and 10 % per month, defined by group regulations. The members of the group jointly decide on the maximum loan size and other conditions, including penalties for late payment.

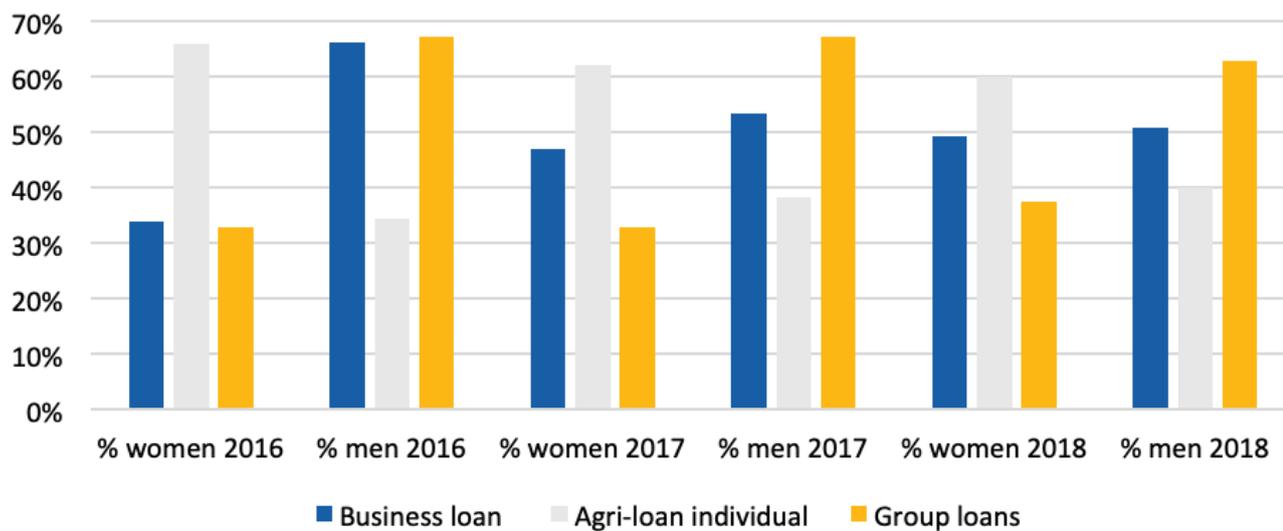
- Cooperative loans – loans from the cooperative to the solidarity groups that are formed among their members. This can come from the cooperative's internal funds or from a loan provided by an MFI to the cooperative for on-lending to its members. The loans are repaid when the cooperative markets the produce of the members.
- Microfinance loans – are accessible when the cooperative groups have saved for some time. They can obtain a loan from the MFI, which is given directly to the group as a solidarity loan. The group must have an account with an MFI. The cooperative supports the solidarity groups' credit applications and agrees to repay from sales of produce from the group members through the cooperative.

The groups can be organized as savings groups by NGOs, such as Care International, or can be based on traditional informal structures such as tontines. The system combines informal and formal financial services and is very much appreciated by women. In this set-up, financial services are combined with non-financial services both to the groups and to the cooperatives. Those services include coaching and training on financial literacy and on business management.

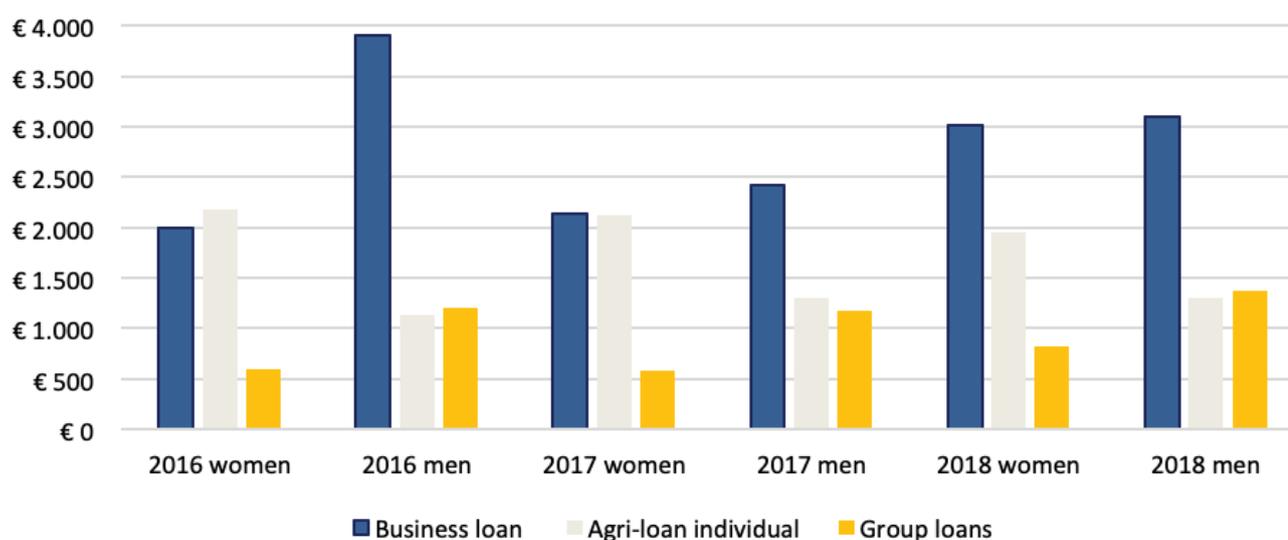
8.5.4 ANALYSIS OF GENDER-DISAGGREGATED DATA OF FINANCIAL SERVICES

It appeared to be difficult to obtain detailed sex-disaggregated data from the financial service providers on numbers and performance of female versus male clients. The most comprehensive set of information was received from Duterimbere, including data on female clients for the different loan segments and repayment performance of women compared with men. The graphs below give detailed information on loans to women based on figures from Duterimbere and Ejoheza for the years 2016, 2017 and 2018.





Graph 12. Relative share of female and male amounts per loan type with Duterimbere 2016 –2018



Graph 13. Average size in euro of different types of loans with Duterimbere 2016 –2018, according to gender





8.5.5 DUTERIMBERE

It can be observed from Graph 12 that more women take individual agri-loans, while men take more business and group loans shown in Graph 13. The latter is related to the relatively big loan sizes for men in 2018 in groups in Duterimbere, which also are interesting for male farmers.

Graph 13 shows that average business loan sizes for women are growing. Duterimbere has growing confidence in its female business clients. It also shows that group loan sizes for men have been growing while individual loans sizes for men have remained stable (agri-loans) or reduced for business loans. Sizes of individual loans for women have been growing, showing some graduation perspective for women that take loans from Duterimbere.

Graph 14 shows that overall repayment performance for women and men is relatively comparable, except for individual agri-loans, where portfolio at risk (PAR) for men is much higher in 2018 (almost 17 percent, compared with 10 percent for women) Overall repayment of agricultural loans was lower in 2018, which could be an indication of a problematic season. Overall, the percentage of PAR for women is almost five percent lower.

8.5.6 CLECAM EJOHEZA

The overall percentage of female borrowers with

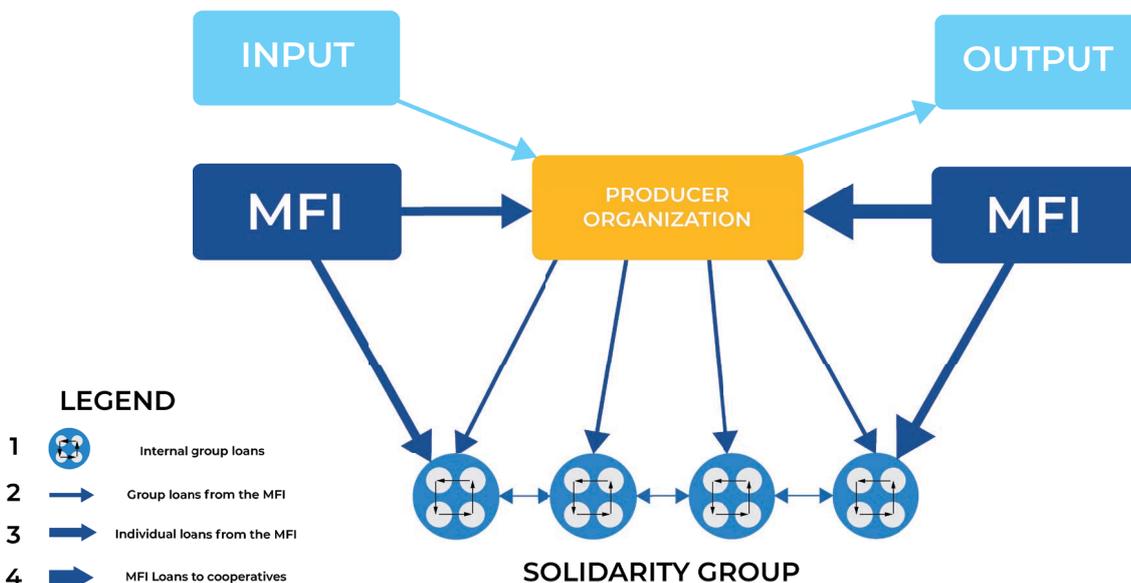
Ejoheza has remained at around 40 percent in the past three years; the average loan size is relatively stable and quite similar between men and women. Ejoheza combines formal finance with linking to savings groups and this is conducive for female clients, as is shown in Graph 15. Ejoheza does not have sex-disaggregated data on repayment performance.

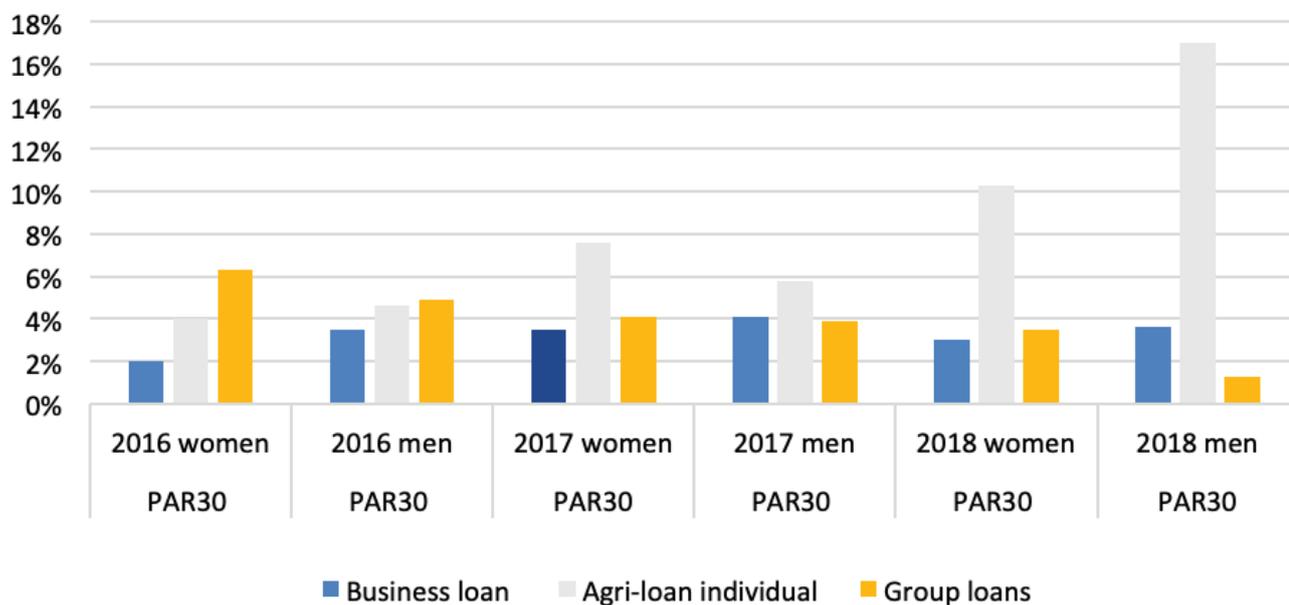
8.5.7 URWEGO OPPORTUNITY BANK

UOB provided data only for 2018. Graph 5 shows the differences in loans for men and women. Apart from business loans, which have a relatively big average size, the other types of loans are very small. Average loan size is below €100, and the clients targeted with these loans are relatively poor. In the case of Uruwego the small loan sizes in groups are less interesting for men.

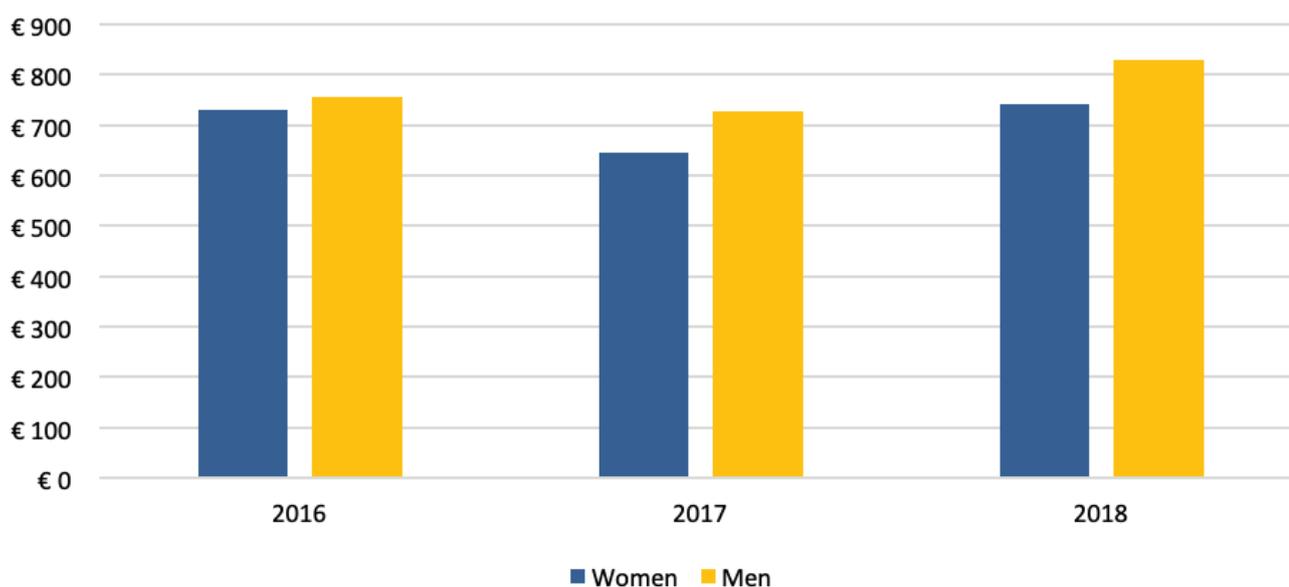
Graph 17 shows that repayment performance on individual agricultural loans for men is relatively poor. This is in line with what was found in Duterimbere. For group loans, women are performing slightly lower on repayment. Overall FIs commented that they see women as better clients because they are more reliable with repayment. Part of the explanation they give is that women are more risk adverse, take smaller loans and have a responsibility for the family; this means they cannot risk losing the option of getting loans in the future. In the FGDs it was not further explored why women are seemingly better at repaying.

Figure 7. Structure of solidarity groups in cooperatives



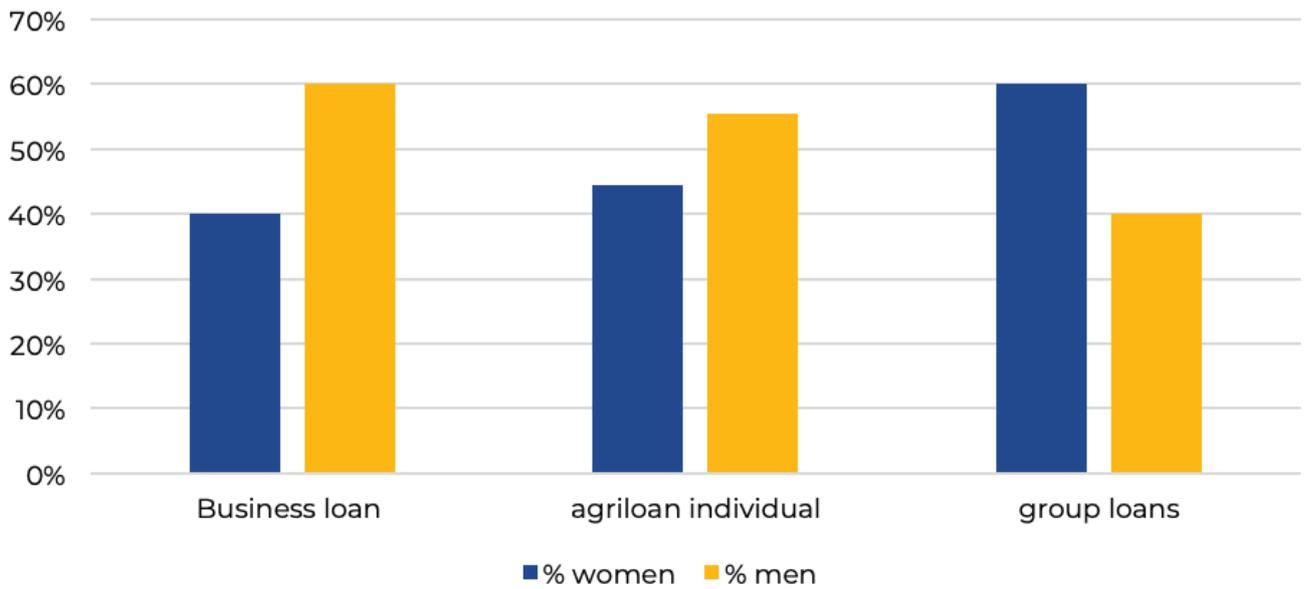


Graph 14. PAR 30 for different types of loans with Duterimbere 2016 –2018, according to gender

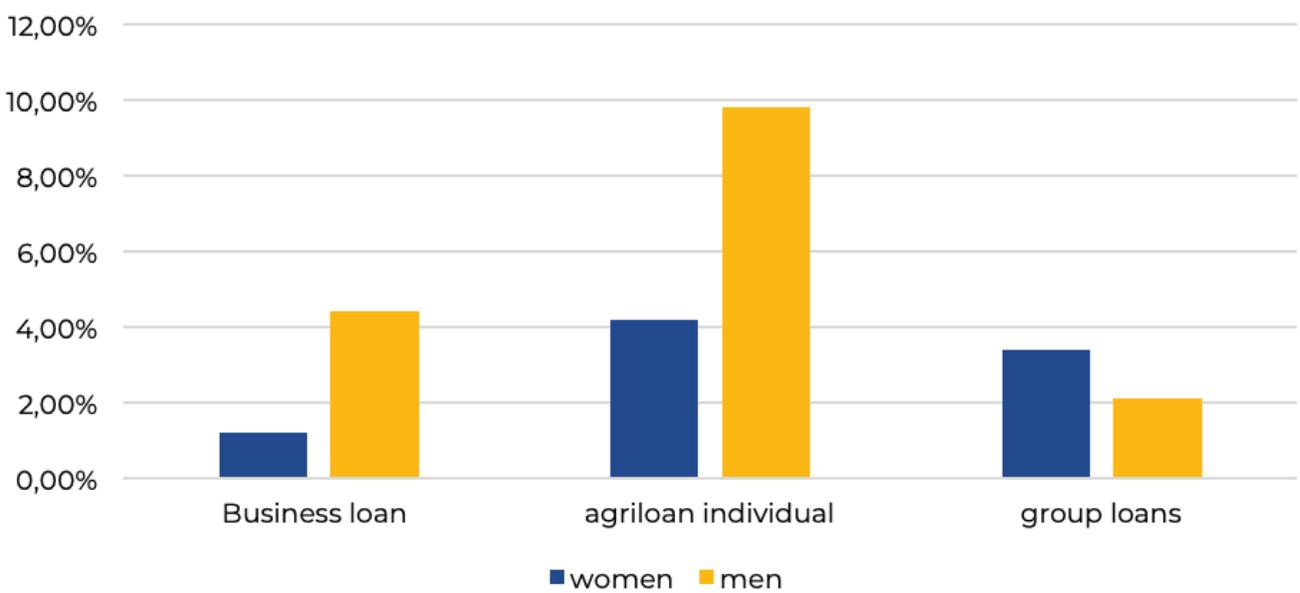


Graph 15. Average loan size in euros with Clecam Ejoheza 2016 –2018, according to gender





Graph 16. Relative share of female and male loanees per loan type at United Overseas Bank (UOB)



Graph 17. Portfolio at risk (PAR).





8.6 MARKETING AND COMMUNICATION STRATEGIES WITH CLIENTS

During the field study, no profound marketing strategies were found – either in terms of general products or those specifically targeting women. Marketing strategies were aimed at promotion of savings; different channels are used for doing this, including linkages to informal savings and credit groups. According to the MFIs, the promotion of loans is not currently needed because of the risk that a higher demand raised by promotion cannot be met. Most of the SACCOs and MFIs face liquidity problems for their lending portfolio. The banks have the required liquidity, but are quite risk averse to giving loans to farmers and farmer cooperatives, which limits their lending to these sectors. Both for MFIs and banks, marketing strategies to reach out to rural markets are not very pronounced.

All the FIs recognize the importance of regular feedback collection in order to gauge the suitability of products for clients. This is important for regularly adapting products to client needs, especially in terms of being responsive to the needs of women. Occasionally, KCB uses feedback to improve conditions relating to loans. It undertakes regular client satisfaction surveys, which are used to improve services in general. Ejoheza staff members regularly attend cooperative meetings where they learn about the needs of the members. Duterimbere undertakes client satisfaction surveys every year and uses these for improving products and designing new ones. Some of its employees also attend cooperative meetings of in order to better understand them.

Conclusions on financial services in the value chains

Overall, financial inclusion in Rwanda is high, even in rural areas. This is through, in particular, the vast outreach of the Umurenge network and the growing use of digital financial services. However, formal lending for agricultural value chains still lags behind. For female producers, financial services are primarily

obtained through informal finance or through linking informal with formal financial services. Eventually women who want to continue to grow in the value chain will need access to bigger loans for improved seed, pre- and post-harvest handling and aggregation. The formal financial service providers have no specific strategies or products to address the constraints on women, with few exceptions, such as Duterimbere, which tries to address the specific demands and needs of women in its strategies and product design. The current system in the maize value chain seems to combine the benefits of informal and formal services through the organization of solidarity groups in cooperatives. Women are saving in the safe and culturally accepted environment of the group; at the same time they have access to formal individual savings accounts and growing loan sizes as groups and individuals. Access to formal savings is another critical element for women, as are the non-financial services that accompany the financial ones. ■





9 SUMMARY OF LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

9.1 SUMMARY OF LESSONS LEARNED

The overall purpose of the study was to analyse the position of women in the maize and bean value chains as well as the existing and potential role of financial service providers in strengthening the position of women in these chains. The study used the women's economic empowerment framework as a conceptual analysis, while similarly looking at overall financial inclusion indicators – all within the context of a value chain analysis.

Specific objectives included:

- **Identifying key constraints on women - especially smallholder farmers and traders – to effective participation in the maize and mixed bean value chains and in accessing finance**
- **Identifying trends in female participation and access to finance in the maize and bean value chain and comparing trends between the two chains**
- **Showing pathways for women to grow their businesses with the support of financial services, including financial services tied to the value chain**
- **Showing how access to finance contributes to women's economic empowerment**
- **Exploring business cases for financial institutions to serve female clients.**

The value chain concept provided a framework for analysis and detailed the different functions in the bean and maize value chains, including the role of men and women. The analysis showed how women

the available financial services not only reached women but also benefit and empower them.

A desk study, which accompanied the fieldwork and value chain analysis, showed that the enabling environment in Rwanda is very conducive to the promotion of women in agriculture, including those in the agricultural value chains. Government policies support economic inclusion of women, and clear implementation strategies have been defined. However, women still experience challenges and constraints in terms of access to land and farm inputs, equipment, training, finance and market channels. Specific gender value chain constraints also include high time constraints. This is due to the double burden for women and their limited intra-household bargaining power on use of resources and income. While women still show lower access to larger loans for inputs, trading and aggregation, their access to finance and participation in cooperatives have recently served to overcome such challenges.

Both in the bean and maize value chains, female participation is found mostly at the production stage, where they provide the bulk of labour. The presence of women is less pronounced in input supply, trading and marketing. The maize value chain is more structured and commercialized, and this offers women more opportunities in marketing. It also offers them the chance to benefit from the training and financial services that are channelled through the cooperatives operational in the chain.

The bean value chain is much less commercialized, focusing mostly on production for consumption and the local market; it is very limited for the external market or bean processing. Formal financial services were hardly available for the bean producers because bean production is not perceived to be a profitable business. At the start of the study, it was assumed that women would play a more dominant role in the less commercialized bean value chain. The government of Rwanda assumed that this chain could have a positive impact on female empowerment and household security. In the study, this has been only partially





confirmed. The bean value chain certainly contributes to food security at household level; however, it offers only limited commercially viable opportunities for women, because the market is very poorly developed and FSPs shy away from the chain.

Informal financial services are very important in both value chains. These services include traditional savings and credit societies, savings groups supported by NGOs and embedded finance provided by input suppliers, traders and processors. Formal financial services are provided especially in the maize value chain; these services are connected mostly to the formalized value chain. Therefore the maize chain offers women better access to a variety of financial services than the bean chain.

In the maize value chain, an interesting model supported by the FtMA programme was practiced. This model combines informal savings groups with cooperatives and formal FSPs. This model shows promising results for women, who now access input loans from savings groups and cooperatives as well as bigger loans from MFIs. Women obtain access to input loans, extension services and marketing of produce. The chain offers them access to these services in an integrated manner, and this accelerates the benefits of each of the elements. It also provides a growth path for women to access bigger loans. The combined interventions of the different actors including FtMA, off-takers, cooperatives and FSPs are well coordinated to support value chain finance.

The FtMA model showed that further professionalization, integration and commercialization of the value chain does not necessarily have to lead to women being excluded. Factors that contributed to these positive developments in Rwanda were:

- Strong government support;
- Strong awareness on the need for women's participation with partners on the ground;
- Supportive development partners such as WFP;

- Integration of informal with formal systems that eases participation of women in a culturally accepted manner;
- FSPs that want to promote focus on women as a business case.

9.2 CONCLUSIONS

9.2.1. REACHING RURAL WOMEN

Client responses show that women are accessing formal financial services for some of their agricultural activities. The data show that in some institutions women receive almost the same amount and size of agricultural loans (both group and individual loans) as men. Traditionally, women find it difficult to access individual loans, due to a lack of collateral and the existence of other barriers. In the case of Duterimbere, an MFI with a strong focus on women, the share of women taking individual agricultural loans increased. For other FSPs, sex-disaggregated data were not available.

Women mentioned that they receive different forms of informal finance, especially from the traditional savings and credit groups. Low amounts with few requirements to borrow, timely processing of loans and trusted relationships with savings and credit groups are very appealing to them. Through the FtMA programme, which facilitates links between informal groups and cooperatives women are better served by combining the easily accessible informal systems with formal finance channelled through cooperatives.

In the bean value chain, very little formal credit is available for women; little credit is used and is generally provided in kind. This implies that female farmers rely on informal channels to receive credit. Informal credit usually comes in small amounts, and unfortunately cannot always satisfy the needs of women aspiring to grow their bean businesses. The study showed that single women face difficulties in meeting requirements for accessing loans for inputs ▶





and harvesting. In cooperatives without solidarity groups, single women were challenged to save the amount needed to receive an input loan.

9.2.2. BENEFITTING WOMEN

Female respondents are, in general, very positive about the loans provided by FSPs through cooperatives and solidarity groups. Women in cooperatives and saving groups have the same rights as their male peers, including access to agri-loans and accompanying services. Sixty percent of the respondents obtained agricultural advice, and almost 50 percent received business development support. Such accompanying services are highly appreciated by the women. Easy access to financial and other services increased crop productivity and benefitted women economically. It has resulted in higher incomes and additional investments for all members of the cooperatives.

Extra income generated from their maize crops was used for household needs including: agricultural investments, health, food, housing and school fees. Similar trends in the bean value chain could not be identified because this chain offers fewer opportunities for cash income.

Overall, the field surveys noted that single women experience fewer benefits from participating in a well-organized value chain. This same observation was noted with de facto single-headed households where men are away for long periods. Single women face difficulties in accessing labour for farming activities that require heavy manual labour and hiring labour is too expensive for many of them. They have less family for labour, and this leads to constraints in land preparation and planting. At the end of the season, these single women face similar challenges for harvesting and post-harvesting operations.

Most of the FSPs interviewed had indicated that they had tried to develop services in line with the needs of women – such as through the cooperatives and solidarity groups – but that many gaps remain. According to all female respondents, the ideal financial products include features such as limited or no collateral requirement, the possibility of receiving loans in kind, loans through solidarity groups and links to mobile payment systems. Female respondents also mentioned they would appreciate loans for pre-and post-harvest activities as well as small equipment loans for equipment that can be handled by women and save labour.

MFI, such as Duterimbere and Ejoheza, provide loans with low or flexible collateral requirements and offer loan products through groups directly to cooperative individuals and groups. In the case of Duterimbere, individual loans to women are increasing, both for businesses as well as for individual agri-loans.

The system developed in the FtMA programme seems to work very well for women. It combines the easy access and self-control of the informal system with potential to access higher amounts of loans through the FSPs. Duterimbere, Ejoheza and UOB participate in this system.

9.2.3. EMPOWERING WOMEN

The focus group respondents indicated that women have increased their influence at household level. They have more say on the use of the income from maize, either independently or along with their husbands. Women experience more respect and often have an equal status in consultation within the household on use of resources. However, it is useful for men and women to be sensitized on equal participation in household activities with fair task division.

While women have gained more equality in household positions with regard to decision and control of resources, an unequal division of labour still prevails. Women have a double burden with considerably longer working days, and most of the caring tasks are their responsibility. In addition, women are paid less than men for any seasonal labour task, having to work more hours to earn the same amount.

Women's participation in formalized value chains has opened the door to their economic empowerment. Female respondents mentioned that they increasingly participate as cooperative members, especially in the maize value chain. Participation in cooperatives has assisted female producers in accessing inputs and credits. They were able to engage in their economic opportunities and participate in membership and leadership positions. Currently, women represent 45 percent of the cooperative leadership in the chain, and 33 percent of the leadership positions in the cooperatives focusing on beans. Compared with the desk study on the maize value chain undertaken in 2016, a positive trend was noted for women participating in leadership positions and negotiations on marketing deals.





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9.3 RECOMMENDATIONS FOR CHAIN ACTORS AND SUPPORTERS, FINANCIAL SERVICE PROVIDERS AND THEIR INVESTORS

Based on observations and conclusions from the study, this section provides a set of recommendations that could stimulate an increased focus on women by FSPs and investors. These recommendations can also stimulate products for women to grow their business through access to finance. In the last paragraph, there is an explanation of requirements for MFIs that want to pursue the business case for investing in women in the value chain.

GENERAL RECOMMENDATIONS FOR CHAIN ACTORS AND SUPPORTERS:

- A better collection of sex-disaggregated data on the participation of men and women at different levels in the value chain is needed. This refers to women's participation in cooperatives as well as their use of financial services – not only for credit but also for savings and other types of services.
- An agreement by all stakeholders on the importance of the equal participation of women in the chain. A good starting point is the case of Rwanda, where government agencies as well as cooperatives support women's involvement.
- Approaches to facilitate gender participation should be further developed. These include: development of women's capacities to improve their marketing and negotiation skills, meeting contract specifications and becoming trusted clients and respected business partners in the value chain, and fully understanding the facilities of East African Commodity Exchange (EAX) to store products and sell at opportune times. In other words, women should be enabled to fully participate in the marketing processes in the chain.
- Off-takers and buyers should be encouraged to develop specific strategies to support women. Private companies are primarily concerned with the most cost-effective way to obtain a high quality and quantity of primary goods. The ability of commercial lead firms or institutional buyers

to negotiate contracts conditional on increase female participation in producer organizations is questionable. However, sensitization among buyers on the relevance of such greater participation could be initiated by WFP and other development actors supporting the chain.

- The current system developed by FtMA to link producers to buyers and connect formal FSPs with savings groups is very effective in reaching female producers in the maize chain. This could be replicated in other value chains such as the bean chain, once it becomes more commercialized. In addition to access to finance, the system can be introduced to build knowledge for women on how to engage in markets and value chains, including negotiation on prices and safe ways to transport goods and money.
- FtMA's model can be used to operationalize Rwanda's new National Financial Inclusion Strategy (2019–2024) which aims to capitalize on the vast coverage and use of savings and credit groups by women, and link these informal structures to more formalized financial systems. The FtMA model shows that the cooperative can be a good channel for different types of services for women: agri-extension services, financial literacy training and market linkage services, which are combined with financial services. Lessons learned from this programme can be shared widely in Rwanda.
- A similar integrated approach used in the maize value chain could be adopted by promoters of the bean chain for when the business volumes in the bean value chain grow. A combination of capacity building, market linkage and finance will help women to transition to higher value niche markets, including value addition activities. Combining beans and maize production in cooperatives could also be a viable strategy.

RECOMMENDATIONS FOR FSPS AND THEIR INVESTORS:

- Capture sex-disaggregated data that include average loan sizes for women and men, as well as risk profiles of products provided to women compared with men. Only detailed portfolio data for both sexes will allow for a meaningful comparison and can underline the business case for investing in women.





- Tailor their services to the needs of women and design products that consider their disadvantages. Women should participate in the discussion and design of financial products with the features that they need. These include:
 - Loans with flexible collateral requirements and access to accompanying non-financial services;
 - Small asset loans with flexible collateral options that assist women in acquiring equipment to reduce production or harvesting labour. The nature of these assets would be such that high collateral would not be required, and women could comfortably use the equipment themselves.
 - Loans to support single women for input and labour costs, because these women have smaller plots and less access to labour;
 - Loan provision in a context that is culturally easier for women, for example through informal groups;
 - Loan development that supports the further integration of women in the value chain, for example through their promotion as input dealers; longer-term asset loans for gender-friendly mechanization of production.
- Financial products should support the function of women in the value chain. The model of linking savings groups to MFIs is very useful in this respect because it allows women to be actively involved in the financial product distribution and repayment.
- Carefully monitor the effects of increased access to finance on improved productivity and profitability for women;
- Financing activities should be managed and handled by financial intermediaries or savings groups within cooperatives, and not directly by the cooperatives. Many cooperatives do not have sufficient capacity to manage and administer loans properly. Doing so can increase their risk and divert their attention from their core business of buying and selling produce.
- While the study has found limited use of digital payment systems in the maize and bean value

chain, ongoing developments show promising results in:

- Digital payment systems that use mobile phone and agency banking and the introduction of mobile wallets;
- Tracking and tracing of the produce flow in the value chain, including new systems now being introduced in the maize value chain by WFP;
- Digital credit assessment for agricultural loans as being developed by ICCO.

These developments could also benefit female actors in the chain as these data would improve acquisition and analysis of gender data, as well as accessibility of services closer to the women and in the groups. Women could also build up historical track records through better data storage.

New initiatives to reach out to women with digital financial services should be carefully followed for learning and improvement. Promotion of such systems could be taken up by FSPs, including those which use savings groups and savings and credit cooperatives as agencies in rural areas.

BUSINESS ARGUMENTS FOR DELIVERING FINANCIAL SERVICES TO CLIENTS

The study concluded that the structured value chain approach, combined with a conducive enabling environment, offers significant opportunities for women in the value chain, especially for maize. The initial assumption that women do not benefit when the value chain formalizes does not stand. They can, however, benefit through commercialization of a value chain when the appropriate organization of a chain through actors such as FtMA is in place.

All FSPs mentioned that they perceive women as better clients who are more reliable with repayment and are more loyal to the institution, although the findings of the study show a mixed picture in terms of male and female repayment performance. Some financial service providers actively promote serving more women. Because detailed data are not available – only for Duterimbere – the perception of women as better clients cannot be fully confirmed. In the case of Duterimbere, women show better ▶





repayment performance for agricultural and especially individual loans; for other loans the picture is mixed. Only Duterimbere has an explicit focus on women throughout its organization, and has installed adequate data collection systems to measure women's performance.

Any FSP that wants to embrace a business strategy including women, should integrate this in its organizational strategies, staffing policies, product development and delivery mechanisms, as well as into its promotion and marketing. Furthermore, the organization must have a learning approach and continuously assess whether services are actually reaching and benefiting women. Such an approach was mostly found in Duterimbere.

Formal FSPs often lend through cooperatives but must deal with challenges resulting from their governance and management, which is often weak. It is not yet clear if the growing participation of women has reversed this situation. However, early indications from FSPs are that cooperatives with more female leaders perform better. Some formal buyers have also complained about the quality of governance in cooperatives and have indicated that, when cooperatives have more women in the leadership, they seem to perform better and are better at repaying loans. It would be interesting to compare available data from other sources.

When the business case also considers social impacts, such as higher food security and better education of children, social investors see that investing in women can create high social returns and higher institutional outreach. The field study indicated that when women have a greater say in use of income, they are more likely to invest in food security and children's education. Such trends are confirmed by international studies. Investors that look beyond mere economic performance could be triggered to stimulate investments for women by their partner MFIs. These social investors are usually at the forefront of investing in women. ■





ANNEX 1: SOURCES

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