

Missing Middle Initiative – Revolving Loan Fund

Facilitating access to finance for farmers’ organizations in Bangladesh

Performance Report

1.0 OVERVIEW

Since March 2018, FAO Bangladesh has been facilitating access to finance for smallholder farmers through the pilot project, ‘Increasing Access to Finance for Farmer Organizations’. The project is part of the Missing Middle Initiative (MMI) funded by the Global Agriculture and Food Security Program (GAFSP). The project is implemented in collaboration with the Sara Bangla Krishak Society (SBKS) – a national apex of 55 producers’ organizations (POs). The project develops the capacity of POs to access value chains, markets, technology, information and finance. As a result, the POs are now in a position to conduct collective activities, such as bulk buying inputs, bulk selling produce as well as operating of common facility centres and **revolving loan funds**. The project provides ongoing backstopping support for all of these activities.

As the report will show, the revolving loan funds (RLFs) have been a successful way to facilitate access to finance for smallholder farmers. This access to finance has led to increased incomes and has also had many positive spill over effects of benefit to the entire community.

1.1 Business planning through *RuralInvest*

The MMI project began by working closely with SBKS to develop a cohort of farmer business facilitators (FBFs) to support POs in the process of business planning, implementation and financial management. The FBFs and farmers’ organization (FO) members were trained to use the FAO software *RuralInvest* to develop business plans to invest in a specific value chain or commodity. The FO members came together as a group and used the *RuralInvest* toolkit to prepare their business plans in a participatory manner. The plans are for community businesses facilitating improved market access for a particular value chain or commodity.

All FOs that went through this business planning and value chain selection process have now graduated to the level of producers’ organizations. This change of denomination reflects that they are now actively involved in a specific value chain or commodity and are moving towards more commercial activities.

1.2 First round of grants – organizational development and common facility centres

In 2019, all 55 POs signed their first letter of agreement (LoA) with FAO, with each PO specifying in which value chain or commodity they intended to invest. Through these LoAs, they received technical assistance grants of USD 500 for the organizational development of their PO. This allowed them to procure the services of their local farmer business facilitator (FBF) to strengthen their organization. Through this first round LoA, they also received pilot grants of USD 1,500 to establish common facility centres (CFCs) for their organization. These CFCs support members in accessing markets, value chains, information and technical knowledge. More details on the CFCs are provided later in this report.

Through the technical assistance grant, the POs gained skill in both organizational management and accounting. They then used the MMI pilot grant to invest in common facility centres and collection points which have reduced production costs significantly. The FBFs are empowered to continue strengthening and supporting SBKS member POs to successfully invest in their respective value chains.

1.3 Second round of grants – revolving loan funds established

In April 2020, FAO Bangladesh signed a second round of LoAs with 40 champion POs. These were POs who had developed strong institutional maturity as a result of the first round of LoAs. The focus now was to support the establishment of a revolving loan fund (RLF) mechanism within each PO—making it possible for individual smallholder members to invest in their chosen value chain. The RLFs were built up from a combination of members’ shares/subscriptions and savings as well as funds received from external sources, including these second round MMI grants. Each PO received a grant of USD 18,000 for the RLF, plus USD 2,000 for additional strengthening of common facility centres. As a result of this support, the POs are now able to serve as financial service providers for their smallholder farmer members.

1.4 Management of funds

In September 2020 the POs started issuing loans to members from the RLFs. As of the 30th of June 2021, 39 POs have successfully completed the first loan cycle.

In order to ensure the long-term sustainability of the RLF mechanism, SBKS has been empowered to serve as the custodian of the fund. Practically speaking, this is how it works:

- Through a letter of agreement the RLF grant is transferred from FAO to each individual PO, with POs accepting the responsibility to ensure accountability for funds, avoiding any conflicts of interest;
- The fund is disbursed among members based on their business plans and other eligibility criteria;
- At the end of the loan cycle, members repay the funds to the PO;
- The PO in turn sends the funds, plus a 2% service charge, to SBKS for an accounts check, as well as a review of institutional maturity;
- If all books are in order, loan performance is good and the organization is performing well, SBKS returns the funds to the PO for a second cycle of disbursement to members;
- The same process continues for each new cycle with proper accounts keeping taking place every step of the way.

This mechanism allows for regular monitoring of accounts, which is especially important in the early stages of the process of building the RLF. It also empowers SBKS to serve the POs and continue strengthening trust and communication among the network. As a result, SBKS is well positioned to continue providing robust support to POs through its cohort of FBFs even after the project finishes.

1.5 Monitoring

This report presents the progress and performance of the first cycle of MMI RLF loans. The project followed a participatory approach in collecting information through regular monitoring visits and virtual meetings. The project used *.collect* app data collection tools to gather quarterly monitoring data and performance scores. The project also used an e-credit app to track financial progress.

2.0 PROGRESS OF MMI REVOLVING LOAN FUNDS

2.1 Disbursement of MMI grants for revolving loan funds

As of June 2021, the project had disbursed a total of USD 720,000 in revolving loan funds to all 40 eligible POs. Among them, 15 POs are investing in safe cattle fattening, 4 in pond fish culture, 2 in pen

fish culture, 3 in potato production, 1 in *Sonali* chicken rearing, 1 in duck rearing, 1 in chilli production, 6 in seed villages, 2 in dairy and milk processing, 1 in maize production, 1 in mixed horticulture and 3 in vegetable production. The POs provided loans to their members according to their business plans. The number of PO members benefitting from the first cycle of loans ranges from 20 (from a chicken rearing PO) to 70 (from a pen fish culture PO). A total of 1,088 producers (45% female) received MMI loans from their respective POs for a cycle duration ranging from 3 to 12 months.

Table 1: Disbursement status of MMI RLF loans by value chain

Value chain	# of POs	Average loan size (BDT)	Number of borrowers			Loan cycle length (months)
			Male	Female	Total	
Community based beef cattle fattening	15	73578	151	162	313	4
Community based <i>Sonali</i> chicken rearing	1	78000	6	14	20	3
Community based duck rearing	1	40000	1	43	44	6
Community based potato production	3	77000	49	14	63	4
Community based paddy seed production	4	50142	75	52	127	4
Community based seed production: mung bean	2	34667	42	51	93	4
Community based fish farming: pond culture	4	47250	83	45	128	6
Community based fish farming: pen culture	2	25627	72	46	118	6
Community based dairy farming	1	126000	1	11	12	12
Milk products processing	1	75600	16	4	20	4
Maize cultivation	1	50400	22	8	30	4
Community based chili production	1	77000	16	5	21	6
Mixed horticulture	1	72000	10	11	21	4
Vegetable production	3	60205	49	29	78	6
Total	40	57040	593	495	1088	

2.2 Institutional maturity ratings

Significant improvements have been made in three categories of institutional maturity by most of the POs as compared to the project's baseline survey. Table 2 below shows that the surveyed POs scored 34.35 out of 40 in general institutional maturity. This indicator includes leadership, recognition of members, member meeting attendance and governance. This was an increase of 6% from their score in September 2020. The accounts keeping score was 24.4 out of 30, a 10% increase from September 2020. Note here that the score was revised and is now on a new scale, details below. The performance of POs in managing value chain businesses was 22.22 out of 30, a 24% increase from September 2020. Overall performance increased by 130% from the baseline and 12% from the September 2020 assessment. Note that this score was also revised according to new scale. With the backstopping support of SBKS to POs and compliance with the LoAs, the institutional maturity ratings of POs increased remarkably.

Table 2: Average score by institutional maturity rating

Indicator	Average performance score			% change in score	
	Baseline (out of 80)	Sep '20 (out of 80)	June '21 (out of 100)	From baseline	From Sep '20
A.1 Institutional maturity rating: General (Max 40)	47%	81%	85%	79%	4%
A.2 Institutional maturity rating: Accounts keeping (Max 30**)	35%	74%	80%	129%	8%
B. Value chain project rating (Max 30**)	19%	60%	74%	283%	22%
Total score	37%	74%	80%	115%	8%

***From the project's inception until September 2020, performance scores were measured on a scale from 1 to 80. There were 16 indicators, each worth 5 points. In March 2021, the M&E team added four additional indicators, each worth 5 points, leading to a new total score of 100. The additional 4 indicators are: (i) financial reporting; (ii) adopting the RLF strategy, under A.2; and (iii) CFC sustainability; and (iv) VCC sustainability under B: Value chain project rating.*

2.3 Loan performance

As of the 30th of June, 2021, 39 POs had proceeded to a second cycle of disbursement. All of these 39 POs had a loan recovery rate of 100% from the first cycle. The other 10 POs (out of 40) are still in the first cycle only because the cycles differ in length (from 6-12 months) depending on the nature of the value chain. The second cycle includes the same first cycle borrowers as well as 32 new borrowers. The second cycle also incorporates the interest earned from the first cycle as well as the income earned through the common facility centres.

The performance of MMI-RLF as presented in Table 3 demonstrates the success of the RLF approach.

Table 3: At-a-glance performance of MMI-RLF

Indicator	Values	Remarks
A. OUTREACH & MEMBER SATISFACTION		
1. # of active borrowers	1,088	100% of borrowers are active which indicates appropriateness of the approach
2. # of women borrowers	495	45% of the borrowers are women
3. Attendance rate	100%	Indicates satisfaction with the quality of PO services and commitment to PO
4. Retention rate	100%	Indicates long-term relevance and satisfaction with the quality of PO services and commitment to PO
B. PORTFOLIO QUALITY		
1. Repayment rate	100%	As compared to the microfinance industry rate of 98.49%
2. Portfolio at risk	0%	As compared to the microfinance industry which allows for 5-6%
3. Arrears rate	0%	Indicates efficient portfolio management
4. Loan Loss Rate	0%	Indicates efficient portfolio management
C. PRODUCTIVITY		
1. # of loans per farmer accountant	28	The industry average is 254 per loan officer
2. Amount of loan per accountant (BDT)	1,551,488	The industry average is 2,500,000-3,000,000 per loan officer
D. EFFICIENCY		
1. Cost per borrower (BDT)	481	The industry average is BDT 1,000-1,200
2. Cost per member assisted (BDT)	315	The industry average is BDT 800-900
2. Cost per unit of money lent (BDT)	0.008	The industry average is BDT 0.15-0.20
E. PROFITABILITY and SUSTAINABILITY		
1. Operational self-sufficiency (OSS)	291%	The industry average is 110-120%
2. Financial self-sufficiency (FSS)	274%	The industry average is 105-110%
3. Return on assets	3%	Positive trend indicates longer-term sustainability

N.B.: Industry averages were calculated based on reports of Credit Development Forum, Palli Karma-Sahayak Foundation and the Institute of Microfinance.

3.0 SUSTAINABILITY MEASURES

The issue of sustainability in MMI-RLFs has several dimensions, which are interrelated and complementary: (i) institutional sustainability; (ii) financial sustainability; and (iii) borrower sustainability. Strong institutions are key for strong financial accountability. Access to finance ensures borrowers are able to invest in their selected value chain, ensuring more sustainable livelihoods. Economically empowered borrowers are more invested in their organization's continued growth, in both the success of the RLF and other PO activities. They also have more income and can contribute more savings to the organization.

3.1 Institutional sustainability

The PO's institutional sustainability is its capacity to continue successfully implementing the MMI RLF in the long term. The following section explains the key elements of this sustainability and reports on progress in each area.

3.1.1 Revolving loan fund strategy

The RLF strategy is made up of the following elements which give it a competitive advantage:

- The RLF is community owned and community-led with independent loan and social audit committees ensuring accountability and SBKS providing hands-on technical support throughout the process in order to make investments successful;
- In order to qualify for a loan, PO members must have a viable business plan. SBKS and FAO provide support in the preparation of these business plans;
- Loan disbursement is seasonal and repayment is only required after harvest, with repayment calendars tailored to different value chains;
- The fund has a competitive single-digit flat interest rate of 9% and a cost of capital that is lower than other options;
- Interest accrued from the fund remains with the producers' organization.

SBKS developed this strategy through a participatory approach. The POs have been working as financial service providers and are responsible for taking all reasonable steps to follow the RLF strategy and avoid any conflicts of interest in the implementation process. In compliance with the RLF strategy and LoA, POs only approved the loan applications of borrowers who fit the eligibility criteria, kept promissory notes, had a personal commitment to their investment, provided a signed security cheque, a National Identity Card and a photo.

3.1.2 Standard operating procedures

Following the spirit of the RLF strategy, standard operating procedures (SOPs) were developed in Bengali. They were developed following the guidance of the FAO Inclusive Rural Transformation and Gender Equality Division (ESP) and with the support of Palli Karma-Sahayak Foundation (PKSF) and SBKS. These SOPs ensure the smooth implementation of the RLF strategy, taking into account the associated risks. The specific objectives of the SOP are to: (i) develop revolving loan fund management guidelines in line with the rules of the Government of Bangladesh; (ii) identify areas of risk considering different savings and loan products and develop risk mitigation guidelines; and (iii) improve the capacity of PO members to follow and implement the guidelines. The SOPs cover the following areas: loan disbursement and collection procedures; borrower eligibility criteria; savings requirements; loan products; loan duration; role of loan committee; payback period; interest rate/service charge; documents to maintain; monitoring mechanism; and an auditing and delinquency management/delayed repayment/default/overdue control mechanism.

All 40 POs have been following the SOPs to successfully disburse and recover loans.

3.1.3 RLF Management

A loan subcommittee (LSC), under the guidance of the PO's executive committee, oversees loan management aspects including borrower selection, loan disbursement and realization. This all takes place according to the RLF guidelines developed by SBKS. LSC members jointly verify the savings and loan record of all selected loan applicants, as well as their commitment to PO activities, their membership profile, bank account number, experience and personal investment in their respective value chain. The loan sub committee and executive committee of POs keep records of each loan disbursement. The POs gave priority to youth and female farmers during the formation of the loan sub committees.

All POs disburse loans through the individual bank accounts of the loan applicant and recover the loans with interest in the same way. FBFs of SBKS conducted a series of face-to-face and virtual trainings on SOPs for the LSC members. Through this training, the LSC members learned how to apply the SOPs, the cross matching of individual ledgers of members, pass books, general ledgers, daily collection registers and cash books, savings, and loan reporting.

3.1.4 Accounts keeping

The POs keep books of accounts following general accounting principles. They use vouchers, cash books and ledgers. They prepare receipts and payment accounts, bank reconciliation statements, income-expenditure statements and balance sheets. POs use SBKS' standard templates for membership application forms, members' pass books, members' registers, members' personal ledgers, loan application forms, loan disbursement sheets and savings and loan realization sheets. As of June 2021, 38 out of 40 POs kept books of accounts with sufficient supporting documents. The other 2 POs have kept accounts but they need some improvement in maintaining uniform book keeping. They were requested to update their accounts by mid-July, 2021.

Table 4: PO accounts keeping performance

Indicator	# and % of POs per score						Total
	Good		Satisfactory		Moderate		
Savings collection	19 FOs	(48%)	19 FOs	(48%)	2 FOs	(5%)	40
Daily banking	18 FOs	(45%)	15 FOs	(38%)	7 FOs	(18%)	40
Book keeping	25 FOs	(63%)	13 FOs	(33%)	2 FOs	(5%)	40
Financial reporting	14 FOs	(35%)	21 FOs	(53%)	5 FOs	(13%)	40

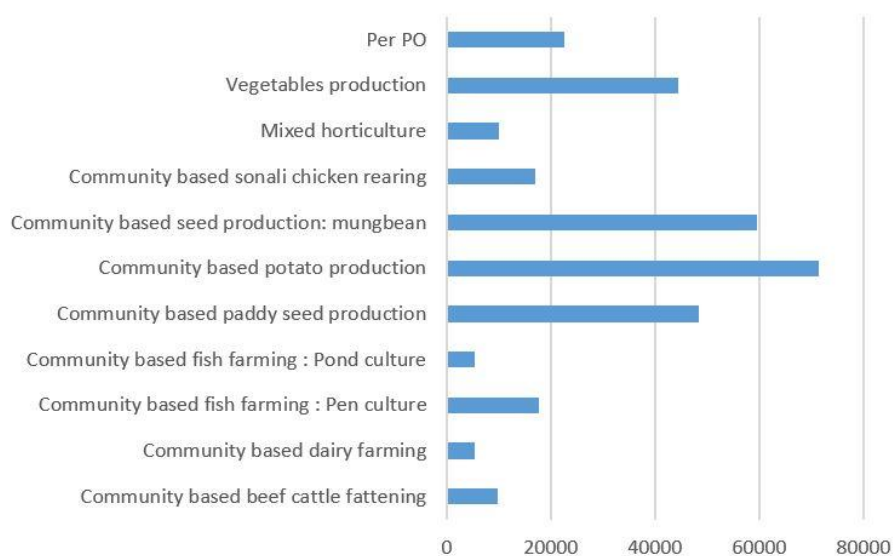
3.1.5 Installation and operation of common facility centres

Common facility centres (CFC) (*Shadharon Sheba Kendra* in Bangla) are at the core of all PO functions. They support the success of the revolving loan fund investments by making the required services available for the borrowers. Instead of buying high-priced inputs from companies, such as fish, cattle and poultry feed, these are produced directly by the POs at these centres. They also provide production logistics such as sorting, grading, packing, storage, transportation, training and retail services.

With the support of MMI pilot grants, 40 POs have established CFCs in accordance with their business plans. The centres have led to reduced production costs. These centres enhance the economic activities of POs and enable smallholders to access farm machineries and inputs at a competitive rate.

Data on the average net income of the last six months from CFCs broken down by value chain is presented in Figure 1.

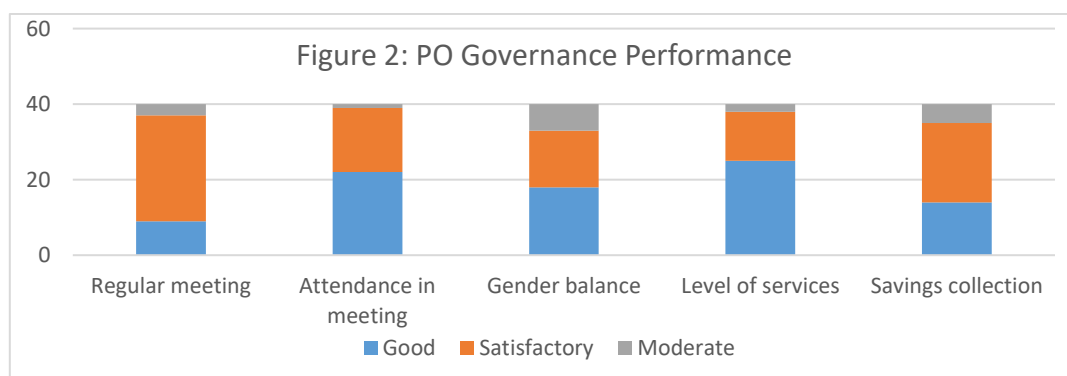
Figure 1: Average income from CFC in BDT by value chain



As of the 30th of June, 2021 these centres generated BDT 15,553,071 (USD 18,358) in service fees. According to the previous performance assessment, 83% of POs were operating fully functional CFCs providing need-based services for their members. Their members were fully satisfied with the services provided.

3.1.6 Governance

Good governance is key to the growth and sustainability of POs and is a basic form of accountability. All POs are registered and have by-laws. They have all adopted the RLF strategy. The executive committee (EC) of each PO consists of minimum six to maximum twelve members with grassroots leadership experience. Around 35% of POs have regular changes to leadership and executive committee members. Approximately 65% of POs have had some changes in their EC, but either the president, secretary or another EC member have remained the same. All POs conduct regular EC meetings. Sixty percent have a fixed date for monthly meetings, which they honour. EC meeting attendance reaches more than quorum. Further, the gender ratio among members and office bearers of the EC and subcommittees is well-balanced for 55% of the POs, while men are over-represented in office bearing positions in 45% of POs. All POs have prepared governance accountability action plans (GAAPs) which are updated on a quarterly basis.



3.1.7 Reporting and Monitoring

The POs prepare a savings and portfolio report using standard reporting forms on a monthly basis. SBKS has developed a group of farmer business facilitators (FBF) with expertise in monitoring and auditing PO activities using the open foris .collect app. The FBFs monitor the progress of POs on a quarterly basis. Further, each PO has an internal audit committee to monitor progress and accounts keeping on a more regular basis.

3.1.8 Human Resources

The cohort of 20 Farmer Business Facilitators (FBFs), each also a member of their community's PO, were trained on leadership, governance, financial management and accounts, business planning, marketing, digital literacy and M&E. Each FBF then trained at least two farmer accountants (FAs) within the FOs they support. Around 110 farmer accountants (internal) and 20 farmer business facilitators (external) have formed a network—the Farmers Accountant Network (FAN). With this network and their business development capacity, FAs and FBFs are in a strong position to backstop the implementation of PO value chain business activities.

Until October 2020, all but a few POs managed their RLFs on a *pro bono* basis. The office bearers did not get any remuneration for performing their duties. After disbursing the MMI RLF, all POs appointed a dedicated farmer accountant to manage the RLF. They receive a monthly honorarium of BDT 2,000-3,000. MMI provided a 3-day training on the RLF standard operating procedures in October 2020. This training support was provided both in person and virtually.

3.2 Financial sustainability

Profitability and sustainability ratios reflect the RLF's ability to continue operating and growing in the future. Operational self-sufficiency (OSS) and financial self-sufficiency (FSS) are the most basic measurements of sustainability, indicating whether revenues from operations are sufficient to cover all operating expenses. The breakeven point of an operation is 100%. The OSS and FSS of MMI-RLFs are 291% and 274%, respectively. These numbers are very promising. The numbers are so high due to the atypically low operating expenses of the MMI RLF—lower than traditional microfinance programs. While making loan decisions, MMI POs are trained to consider the drivers behind OSS and FSS: loan size, portfolio yield, low financial expenses, efficient operations and external factors, such as inflation and market rates. This helps to ensure the high success and sustainability of the MMI-RLF mechanism.

3.3 Borrower sustainability

The overall objective of the MMI-RLF is to improve livelihoods through successful business ventures of smallholder borrowers. Several direct and indirect indicators are used to measure borrower sustainability. The following section reports on a few of these indicators using our available data.

3.3.1 Gender balance and borrower experience

Women make up 62% of the 9,660 smallholder members of the 55 POs of SBKS. The MMI-RLF has been operating among 40 POs with membership totalling approximately 7,500 (60% of them are women). Amongst the members of these 40 POs, 1,088 members (45% female) received a MMI-RLF loan during the first cycle. The findings indicate that around 60% of the female borrowers are investing in livestock rearing, including *sonali* chicken, beef cattle fattening and duck rearing. Around 70% of the male borrowers are investing in crop farming and fish culture. All borrowers have at least 3 years of experience in their selected value chain. As such, they have the basic knowledge and skills required for their business.

3.3.2 Loan utilization and training received

The data showed that all borrowers invested their loans in their planned business. They also practiced bulk buying and selling. As the SBKS-led virtual call centres were established during the early stages of the COVID-19 pandemic, borrowers felt more confident to practice bulk buying and selling. Among 1,054 borrowers, 84% received training on their selected business including community seed village, safe beef cattle production using moringa, community fish culture and safe vegetable production. The POs requested and received training from the Department of Agricultural Extension (DAE), Department of Livestock Services, BADC and Department of Fisheries. This was possible because the POs had already established working relationships with these different government departments. Among the respondents who received training, 93% adopted new production technologies such as good agricultural practices, good aquaculture practices, moringa and biotechnology.

3.3.3 Lower production costs through CFCs

Borrowers experienced a reduction in production costs particularly because of bulk buying of inputs and services provided by the common facility centres (CFCs). On average, production costs reduced by 3.8% per unit per borrower. Potato producers experienced the most significant reduction in production costs—BDT 3,988/acre. Dairy farmers followed (BDT 2564/cattle), then Sonali chicken rearers (BDT 2122/flock of 500 birds) and vegetable producers (BDT 2115/20 decimals of land). All businesses operated in line with the internal rate of return (IRR) from their business plans. The exception here is a few POs investing in cattle, poultry and fish businesses. Unfortunately feed mill operations were delayed as machineries manufacturers could not install all facilities on time due to the COVID-19 pandemic. Table 5 below depicts the reduced cost of production.

Table 5: Average cost of production by value chain

Value chain	Unit	Production Cost in BDT			IRR (%)
		Without CFC	With CFC support	Decrease/ Variance	
Community based beef cattle fattening	Per cattle	20,824	20,252	572	21.97
Community based sonali chicken rearing	500 chicken unit	63,660	61,538	2,122	16.75
Community based duck rearing	300 duck unit	31,800	31,164	636	12.43
Community based potato production	per acre	59,820	55,832	3,988	16.86
Community based paddy seed production	per acre	36,540	34,713	1,827	24.62
Community based seed production: mung bean	per acre	18,048	16,544	1,504	10.61
Community based fish farming: pond culture	per 20 decimals	41,755	40,562	1,193	21.31
Community based fish farming: pen culture	per acre	35,805	34,782	1,023	21.81
Community based dairy farming	per cow	28,204	25,640	2,564	13.79
Milk products processing	per 3,000 liters of milk	25,440	24,168	1,272	21.27
Maize cultivation	per acre	25,440	24,592	848	24.04
Community based chili production	per acre	60,935	59,194	1,741	13.30
Mixed horticulture	per acre	49,616	47,844	1,772	22.76
Vegetable production	per 20 decimals	74,025	71,910	2,115	25.47
Average production cost	per borrower	35,326	33,978	1,348	

3.3.4 Household income of borrowers

The ecredit app data shows that average annual household income was BDT 223,570, an increase of 11% from the baseline. This increase is highly encouraging, and with further investment, the project believes it will be able to minimize the impact of the price hike of essential commodities in Bangladesh on smallholder families.

Table 6: Annual household income of borrowers

Category	Annual HH income of borrowers in BDT		
	Rangpur	Barishal	Average
Baseline: December 2018	201,947	199,590	200,950
1st cycle completion: March 2021	222,678	224,462	223,570
Increase in income	20,731	24,872	22,620
% increase in income	10.27%	12.46%	11.26%

4.0 CHALLENGES

PO-led revolving loan operations faced some challenges such as farmers literacy levels¹, inadequate infrastructure and low savings capacity of members. Further, while two farmers accountants were developed in each PO, the farmer accountant dropout rate is still quite high. Though POs formed independent audit committees to oversee financial and decision-making processes, some still need support for these committees to be fully functional. SBKS and the project are aware of these challenges and are looking into how to address them.

5.0 MOVING FORWARD

Despite the fact that the government has an inclusive agricultural credit policy, most smallholder farmers of Bangladesh still don't have adequate access to finance. MMI has created an innovative revolving finance scheme which is seen by stakeholders as a very promising way forward. The Project Steering Committee (PSC) chaired by the Secretary of the Ministry of Agriculture recommended expanding and mainstreaming the project across the country in order to reach more smallholders of Bangladesh. In this context, MMI-RLF needs to address the following:

- **Capacity building of SBKS:** Strong capacity at SBKS level is needed in order to properly oversee and support PO management of RLFs. Though significant progress has been made, POs can still suffer from weak internal controls and monitoring, and may be susceptible to deterioration in portfolio quality, capture by ill-motivated influential persons and even fraud. Further capacity building of SBKS on fiduciary management can address these issues. Audits and benchmarking can promote transparency and increase performance standards. In addition, SBKS could negotiate funds from banks and donors, lobby for policy and legal reforms and monitor performance. At present SBKS is providing its services on a *pro bono* basis by facilitating 20 farmer business facilitators. However, to sustain these activities long-term, SBKS will need to be able to provide remuneration for their staff;
- **Covering remaining members:** With the support of FAO, POs are giving RLF services to about 10% of their members. This is due to limited funds. There is a need to crowd-in additional finance from other sources to cover the remaining members;

¹ According to the MMI baseline survey, 15 % of PO members have secondary education, and only 4 % have graduate level education. Thirty-six percent have had no education.

- **Sustainability:** The project needs to continue reinforcing institutional, financial and borrower sustainability. It is important to find efficient ways of working that are easy and appropriate to the institutional and individual capacity of SBKS, POs and PO members;
- **MIS development:** A management information system (MIS) is needed that can fit with agricultural cycles, monitor uptake and performance, and improve their design over time. Moreover, a client/producer feedback system is needed to measure satisfaction, service delivery levels, and client needs;
- **Product development:** There is a necessity for mainstream finance sources to develop diversified tailor-made loan and savings products that address the cyclical nature of cash flows for farmers, as well as the longer lead-times before agricultural investments provide a return;
- **Adoption of technologies:** Technological innovations can significantly improve efficiency, lower operating costs and as such play a major role in expanding the program. The project intends to adopt digital tools, such as the apps MicroBanking and eCredit;
- **Partnering with local institutions:** Partnering with local institutions—such as banks as well as non-financial entities, like clinics, schools, post offices, pharmacy chains, or agricultural input suppliers—which already have infrastructure in rural areas, can lead to greater investment and collaboration opportunities for POs;
- **Microinsurance:** There is a need to introduce microinsurance along with loans for the crop, cattle and poultry value chains. SBKS can take out microinsurance policies to cover agricultural portfolios to manage potential losses from weather, disease or price risks.

6.0 CONCLUSION

Despite challenges that are natural to any new and innovative intervention, the MMI revolving loan fund is proving a game changing solution to facilitate access to finance for smallholder farmers. The overall performance of the first cycle of loans is very satisfactory and performance of the second cycle promises to be the same. This success is due to a number of complementary factors.

The RLF strategy is need-based and meets the unique requirements of smallholder farmers. Repayment terms are tailored to value-chain specific production cycles, with repayment only due at the end of the cycle. All parties involved are committed to the success of the RLF, from FAO to SBKS to each individual PO. Significant investment in trust building, leadership, organizational and financial management capacity took place prior to the disbursement of any funds. This has resulted in a high level of trust among PO members as well as between POs, SBKS and the FAO team that is key to the success of this initiative.

Additionally, the project is seeing many positive spill over effects as a result of the success of the RLFs. POs are now not only operating loans, but with their limited resources they are also providing support to their smallholder members in areas such as health and education. During the COVID-19 pandemic, some POs assisted vulnerable families that had lost their jobs or lost a crop season. They helped students by giving stipends and gave warm clothes to poor families during the winter. The POs also linked vulnerable families, irrespective of membership, with social safety net programs of the local government. Poor women and men farmers now have easier access to finance and other services. These social services have strengthened the bonds between members. The experience of the MMI RLF mechanism shows that when smallholder farmers are organized and have access to finance, they can increase their incomes and support the upliftment of their community.

Annexure-1: Ratios

$$\text{Attendance rate} = \frac{\text{No. of active borrowers attended meeting}}{\text{No. of active borrower}} \times 100$$

$$\text{Retention rate} = \frac{\text{No. of active borrowers}}{\text{No. of active members + dropouts}} \times 100$$

$$\text{Repayment rate} = \frac{\text{Amount of loan realized - Prepayment}}{\text{Amount of realizable loan}} \times 100$$

$$\text{Portfolio at risk} = \frac{\text{Outstanding balance of loans with past due}}{\text{Portfolio outstanding including amount past due}} \times 100$$

$$\text{Arrears rate} = \frac{\text{Amount in arrears}}{\text{Portfolio outstanding including amount past due}} \times 100$$

$$\text{Loan loss rate} = \frac{\text{Value of loans write - off}}{(\text{Loan outstanding at start} + \text{Current loan outstanding})/2} \times 100$$

$$\text{No. of loan per farmer account} = \frac{\text{No. of borrower}}{\text{No. of farmer accountant}}$$

$$\text{Amount of loan per farmer accountant} = \frac{\text{Total loan outstanding}}{\text{No. of farmer accountant}}$$

$$\text{Cost per borrower} = \frac{\text{Operating cost for the period}}{\text{Total number of borrower}}$$

$$\text{Cost per member assisted} = \frac{\text{Operating cost for the period}}{\text{Total no. of member assisted}}$$

$$\text{Cost per unit of money lent} = \frac{\text{Operating cost for the period}}{\text{Total amount disbursed}}$$

$$\text{Operational self - sufficiency} = \frac{\text{Operating income}}{\text{Operating expenses + financing cost + provision for loan losses}} \times 100$$

$$\text{Financial self - sufficiency} = \frac{\text{Operating income}}{\text{Operating expenses + financing cost + provision for loan losses + cost of capital}} \times 100$$

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Average assets}} \times 100$$