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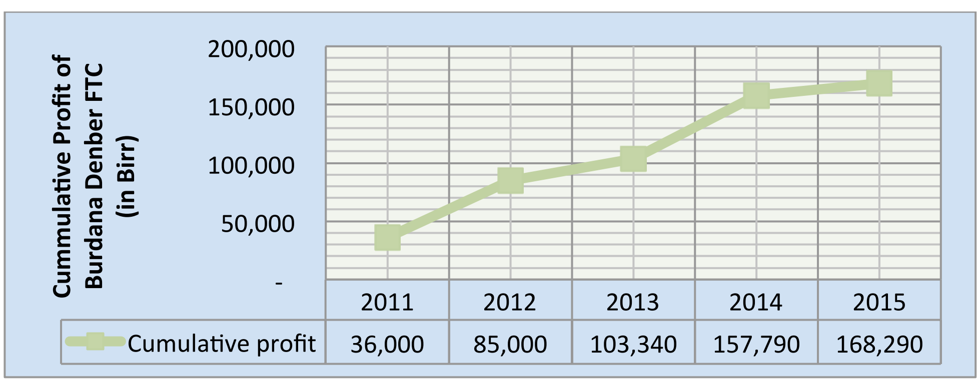
Income Generation by FTCs for Sustainable Extension Delivery through Loan Guarantee Fund (LGF) Scheme



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Income Generation by FTCs for Sustainable Extension Delivery through LGF Scheme

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Executive Summary

Agriculture is the major contributor to Ethiopian economy in terms of national food security, GDP, export, raw materials, and source of livelihoods for majority of the population. With the recognition of these contributions on the one hand and existing gaps on the other hand, the Government of Ethiopia is committing efforts to the sector. Particularly, the government has established one of the largest agricultural extension systems in the world. Farmers Training Centers (FTCs) are established in rural Kebeles to play the central role of extension service delivery.

The FTCs are established and run with government budget for basic infrastructure, salary of extension workers, and operational activities. The Kebele farmers are expected to contribute land, labor and other in kind contributions both in establishing and running the FTCs. FTC Management Committee (FTC-MC) Members is the important body whose members are the Lead DA, elected farmers, and the Kebele Chairperson. The FTC-MC undertakes the overall management of the FTC activities including local resource mobilization.

However, it has been recognized that government budget and local contributions alone cannot enable all the FTCs to sustainably provide extension services and even to be functional in many cases. A long term solution considered is to engage FTCs in revenue generation activities that at the same time play the role of demonstration of technologies and improved practices.

Sasakawa Global 2000 (SG 2000) Ethiopia implemented Loan Guarantee Fund (LGF) scheme under the financial support provided by the Bill and Melinda Gates Foundation (BMGF). The project started in 2011 targeting 154 FTCs in 20 Woredas of nine regions (Oromia, Amhara, SNNPR, Gambela, Benisngul Gumuz, Somali, Harari, Diredewa and Tigray). The objectives of the LGF were (i) to operate as an extension arm of FTCs by establishing successful demonstration of profitable agricultural business enterprises which serve as a learning platform; (ii) to enable FTCs to engage in cost-recovery activities that will move them towards financial sustainability and ultimately ensure their independence from tight government budget.

By the end of the project in 2015, totally 147 of the 154 target FTCs received loan at least once up to a maximum of ET Birr 70,000. A few FTCs also received repeat loans as their enterprises expanded. The FTCs utilized the loan for enterprises in fattening, dairy, poultry, vegetable production, fish production, coffee seedling raising, bee keeping (Honey) and crop production, with varying degrees of success in terms of overall management, earnings, loan repayment, learning platform, technology transfer, etc.

At the presence of varying degrees of success at the levels of FTCs, FSPs and other local partners, there is a need to systematically analyze and present the LGF approach, achievements and challenges in order to learn for future scale-up as well. Accordingly, the following major findings of the systematic analysis and synthesis are summarized below.

Innovative practice with spill-over. The SAEDE project introduced an innovative LGF scheme that facilitated access to credit for P/FTCs through a link with financial service providers, followed by package of trainings in financial record keeping, business management and business planning. The LGF scheme has created almost a new path and practices in this regard. Most importantly, the spill-over effect is significant in that even the FTCs that were not LGF participants have learnt from the participant FTCs.

Income generation and asset building. Successful FTCs have started the path of financial self-sustainable through LGF scheme. FTCs covered by the LGF scheme have generated better revenue and covered their operational costs. By the end of the project, the sampled FTCs generated annual average revenue of Birr 22,550, which was much higher compared to the baseline when almost each FTC generated less than Birr 1,000 per year. The top 20% generated annual average revenue of Birr 40,000.

Net profit has also improved. By the end of the project, the sample FTCs generated annual average profit of Birr 8,055. This average profit is equivalent to the average annual amount regional governments are planning to budget for each FTC. The top 20% generated annual average profit of Birr 26,000.

High difference between SAEDE project FTCs and non project FTCs has been observed. Even among the SAEDE project FTCs, the mean income ratio of LGF participant to non-participant FTCs is very high. During the final year of the SADE project, LGF participant FTCs earned 2.71 and 2.12 times of revenue and profit, respectively, compared to non-participant FTCs. The gap during the early life of the project was even larger and narrowed down through time partly due to the spillover effect and government efforts to scale up FTC enterprise development.

Beyond Income: Serving as Learning Centers. The implementation of LGF scheme improved capacity, financial self-sustainability and autonomous status of FTCs which is the widely recommended strategy as part of decentralized public sector extension delivery. For instance, SAEDE Project FTCs have had better access to demonstration land and established better performing income generating enterprises than non-SAEDE FTCs. Moreover, SAEDE project has addressed the skills and knowledge gaps of the extension agents through providing package of trainings and related supports. As a result of this, better implementation and use of improved agricultural technologies was observed in project FTCs, which in turn led to improved productivity of crops.

Major Strengths in Design of the scheme. The design had had both strengths and weaknesses. The major strengths of the design are the strong partnership with clear responsibilities, accessible FSPs that share the development objectives, inclusion of incentives (guarantee and interest) and disincentives (partial guarantee up on default), and integrated capacity building.

Major Weaknesses in Design of the scheme. The first and more of scope issue is that all the target participants were FTCs for whom business models were so new that the MCs had not had enough experiences and incentives to quickly translate into adequate models to be replicated. Furthermore, too many FTCs were targeted to be closely followed up at pilot level. No leverage (i.e., additional financial resources) from FSPs was indicated in the design.

Major Gaps and Challenges in the Implementation. The major gaps and challenges include delayed repayments, delayed start up, DA turnover or reshuffling, management problems and inefficiencies, cost of loans, moral hazard problems (both from FCPs and MCs), risks and external factors.

Sustainability. Firstly, based on the skills and experiences gained, the FTCs have realized adequate capacity in managing FTC enterprises. Regardless of participation in the scheme, FTCs have generally shown growing interest to be engaged into revenue generation. Secondly, the government has become more committed to allocate adequate land and other supports to FTCs so that they manage sustainable enterprises. Furthermore, there are directives by Regional Agricultural Bureaus to integrate incentives for DAs from FTC enterprise profit so that the DAs are more committed. Despite the favorable factors for sustainability, efficiency of the LGF utilization is still diluted by the hangover of the previous delayed repayments and lack of special treatment by FSPs.

In conclusion, although not all participating FTCs have gained financial self sustainability, with realistic criteria and taking into account the success rate of LGF participating enterprises in developing countries and the approach's being new, the progress can be generally categorized as successful. At least one best FTC enterprise is realized in each Woreda and this ensures sustainability of the scheme conditional on the continued follow up from pertinent government offices and FSPs.

1. Introduction

1.1 General Background

Agriculture is the major contributor to Ethiopian economy in terms of GDP, export, raw materials, and source of livelihoods for majority of the population. Agricultural development efforts are continuously required in order to enhance these contributions. With the recognition of its roles and existing gaps, the Government of Ethiopia is committing large resources to agricultural sector. Particularly, the government has established one of the largest agricultural extension systems in the world.

Farmers Training Centers (FTCs) play the central role in extension delivery. According to this approach, an FTC is established at each rural Kebele to serve about 1,000 households on average. At each FTC, the government has assigned three or more Development Agents (DAs) with college education in plant science, livestock, natural resource management, and in a few cases in irrigation. In addition to continuous visits to farmers, the DAs do have the role of managing demonstration plots at the FTCs. For this reason, an FTC is expected to be allocated demonstration plot of about 2 hectares from the Kebele. An FTC is also supposed to have basic buildings and furniture for office, training room as well as possible livestock barn and stores.

The FTCs are established and run with government budget for basic infrastructure, salary of extension workers, and operational activities. In addition to the land contribution, the farmers are expected to make labor and other in kind contributions both in establishing and running the FTCs. To this end, FTC Management Committee (FTC-MC) Members is the important body whose members are the Lead DA, elected farmers, and the Kebele Chairperson. The FTC-MC undertakes the overall management of the FTC activities including local resource mobilization.

However, it has been recognized that government budget and local contributions alone cannot enable all the FTCs to sustainably provide extension services and even to be functional in many cases. A long term solution considered is to engage FTCs in revenue generation activities that at the same time play the role of demonstration of technologies and improved practices.

On the other hand, it has been difficult to realize sustainable enterprise for two major sets of reasons. Firstly, there had been inadequate experience, skills and attitude to exercise sustainable business models at FTC level. This calls for piloting profitable FTC enterprises by addressing the gaps. Secondly, access to adequate amount of finance was limited. In Ethiopia, access to finance is one of the critical gaps in the agriculture sector as a whole. Without access to finance it is difficult to enhance agricultural extension services in a sustainable way. Access and demand for credits are incompatibly addressed in rural part of the country. From financial sector perspective, rural credits involve high administrative cost. The agriculture sector is less attractive for credit providers as compared to other sectors due to its low financial transactions and higher risk and administrative cost. The farming activities are also characterized by very low profits due to lack of economies of scale in land use and poor use of improved farming practices and technologies.

1.2 Background of the Project

Sasakawa Global 2000 (SG 2000) Ethiopia implemented Loan Guarantee Fund (LGF) scheme under the financial support provided by the Bill and Melinda Gates Foundation (BMGF). The project started in 2011 targeting 154 FTCs in 20 Woredas of nine regions (Oromia, Amhara, SNNPR, Gambela, Benisngul Gumuz, Somali, Harari, Diredewa and Tigray). The objectives of the LGF were (i) to operate as an extension arm of FTCs by establishing successful demonstration of profitable agricultural business enterprises which serve as a learning platform; (ii) to enable FTCs to engage in cost-recovery activities that will move them towards financial sustainability and ultimately ensure their independence from tight government budget.

The LGF scheme was implemented under the tripartite agreement between SG 2000, Financial Service Provider (FSP) such as Micro-Finance Institutions (MFIs) and Regional Agricultural Offices. The partners also include the zonal and Woreda levels of the FSP and Agricultural Offices. The LGF initiation facilitated loan for FTCs so that they establish revenue generating enterprises. In addition to the fund, SG 2000 facilitated the provision of capacity building trainings and technical backstopping in the areas of enterprise selection and business plan preparation as well as financial management. The partners such as Financial Service Providers (FSPs) and respective agricultural offices did have the roles of introducing innovative approaches and practices; providing guidance and advices to the borrowing FTCs and monitoring the progress of the enterprises as per the tripartite agreement. The management of the FTC enterprises were undertaken by the FTC Management Committee (FTC-MC) that comprise a Lead DA, Kebele Chairperson and other elected farmers.

Since 2011, a total of 154 FTCs were targeted and a total loan portfolio of ET Birr 10,850,000 channeled through partner FSPs. The FSPs were mainly Micro Financial Institutions (MFIs) in all regions except Tigray Region where Primary Cooperatives (PCs) and Saving and Credit Cooperatives (SACCOs) provided the financial services.

Table 1. Number of Target FTCs by Regions

Regions	Number of Target Woredas & FTCs		Number of FTCs Served to date
	Woredas	FTCs	
Oromia	4	47	41
Amhara	4	42	42
SNNP	2	37	37
Tigray	2	10	10
Somali	4	6	6
Benishangul	1	4	4
Harari	2	3	3
Gambella	1	2	2
D/Dawa	2	3	2
Total	**22**	**154**	**147**

Source: Progress Report of PPP and MA Theme of SG 2000 Ethiopia, as of December 2015

By the end of the project in 2015, totally 147 of the 154 target FTCs received loan at least once up to a maximum of ET Birr 70,000. A few FTCs also received repeat loans as their enterprises expanded. The FTCs utilized the loan for enterprises in fattening, dairy, poultry, vegetable production, fish production, coffee seedling raising, bee keeping (Honey) and crop production, with varying degrees of success in terms of overall management, earnings, loan repayment, learning platform, technology transfer, etc.

At the presence of varying degrees of success at the levels of FTCs, FSPs and other local partners, there is a need to systematically analyze and present the LGF approach, achievements and challenges in order to learn for future scale-up as well.

2. Conceptual and Analytical Framework

2.1 Providing and Financing Extension Services

Agricultural extension service is a function of providing the required and demand-based knowledge and skills for rural men, women and youth in a non-formal, participatory manner with the objective of enhancing their capacity to undertake farming operations to improve productivity and quality of life. Agricultural extension systems for rural development are aimed at linking people and institutions to promote better sharing of agriculture-related technologies and knowledge. The system integrates farmers, agricultural educators, researchers and extension workers in order to enable them to harness knowledge and information from various sources to improve livelihoods.

Although there is a growing consensus in the role of extension service in agricultural development in developing countries, there remains a considerable debate on the best way to provide and finance agricultural extension. How to finance is partly determined by the extension approach used. There is a growing recognition that traditional supply-driven or top-down approach is not working. Alternatively, the demand-driven agricultural extension system is favored. It is characterized by market-based agricultural extension, public agricultural extension and organizational-based extension. But all these elements commonly face failures unless innovative financing is in place.

Firstly, due to the public good nature of extension services, the market fails to efficiently allocate the services. Secondly, the government may fail due to capacity, bureaucratic procedures, attitudes, etc. Thirdly, organizations may fail due to “free-rider” problem and accountability issues, in addition to factors responsible for government failure.

IFPRI suggests different strategies to overcome the failures. Alternative strategies to overcome market failure include public sector intervention and collective action; treating extension delivery as a component of overall poverty alleviation strategy; and contractual arrangements. Strategies to Overcome Government Failure include: decentralization of extension agencies; increased autonomy of extension agencies; contracting extension services and involving farmers in awarding the contracts; using funding mechanisms such as cost recovery to encourage farmers to express their demands; using management techniques such as new public management to emphasize responsiveness to clients; using participatory extension method.

Thirdly, alternative strategies to overcome organization failure are strengthening management capacity and the internal accountability mechanisms as well as strengthening the capacity of FBOs to articulate farmers’ demands. In general, decentralized public sector intervention, with capacity strengthening of FBOs and cost recovery methods, is the widely recommended strategy.

2.2 Rationale and Conditions for LGF Approaches for Rural Enterprises

2.2.1 Forces necessitating LGF Approaches

Credit or Loan Guarantee Fund is a growing approach in agriculture and Micro, Small and Medium Enterprises (MSMEs). The LGF is an institutional arrangement aimed at facilitating access by MSMEs to lending from formal financial institutions. LGFs ease the interaction between businesses and formal financial institutions.

A loan guarantee simply substitutes part of the collateral required from a borrower; if the borrower fails to repay, the lender can resort to partial repayment from the guarantor. Although LGFs are relevant to all business sectors of the economy, many, especially in developing countries, are applied to agriculture and rural MSME development.

The forces behind the emergence and growing roles of LGFs in the world can be summarized under four major interrelated factors. These are the presence of information asymmetry (adverse selection and moral hazard), need to diversify risks, lack of collateral, and specific development objectives.

a) Overcoming information asymmetries

Information asymmetry is the situation in which one party in a transaction has more or superior information compared to another. This often happens in transactions where the borrower knows more than the lender, although the reverse can happen as well. Information asymmetry is a core reason why financial institutions are generally reluctant to provide loans to MSMEs (such as FTC enterprises in our case). In most instances, MSMEs are unable to provide information on their creditworthiness –they tend to lack appropriate accounting records and collateral. Or they are at start up phase for which accounting records are obviously absent. This leads to uncertainty on the business's expected rates of return and the integrity of the borrower. Gathering such information on SMEs can be challenging and costly. It is even more difficult to anticipate the creditworthiness of the new forms of startup enterprises (such as the newly piloted FTC enterprises).

From the view point of the potential lender, lending and follow up administrative unit costs tend to be higher for smaller firms. Obtaining information requires more resources as a percentage of the underlying loan. Visiting borrowers and monitoring their activities is expensive and not always economically rational when a loan size is small.

Adverse selection is another problem stemming from information asymmetry. In this context, adverse selection starts with the market phenomenon whereby the probability of default increases with the interest rate. As interest rates increase, safer borrowers are driven out of the lending pool while riskier borrowers remain. This leads to an increasingly riskier portfolio of loans. For this reason, banks are reluctant to raise the interest rate above a certain level. Instead, they prefer to maintain the quality of the borrower pool.

Both adverse selection and lending administrative costs can result in a selection process based only on firm-size and collateral. As a consequence, profitable projects that don't meet these conditions may be unable to obtain financing, resulting in a suboptimal allocation of credit. LGFs can help banks overcome information asymmetries by aiding accurate identification of lending risk and improving banks' ability to make appropriate lending decisions.

The relatively controversial issue is whether LGFs reduce moral hazard, which is also the consequence of asymmetric information. In this case, moral hazard is a situation in which a party that is protected in some way from risk will act differently than if they didn't have that protection. There are two main mechanisms through which the problem arises. Firstly, since credit guarantees insure FSPs against incurring losses from default, they are enticed to give loan to seemingly risky borrowers. Also, because of asymmetric information, credit guarantee schemes attract a sizable portion of risky borrowers, which results in inefficient resource allocation. Theoretically, this potential problem could be especially worse the larger the guarantee coverage is. The second mechanism is the potentially low follow up and administrative efforts of the FSPs since the loan is guaranteed. On the other hand, there is also a contrary argument that in situations where the FSPs are much concerned about their repayment reputations, the presence of guarantee less likely causes moral hazard, especially when it is partial guarantee. Therefore, LGFs, with proper implementation arrangements, do generally help to overcome the problems of information asymmetry.

b) Diversifying or transferring risk

Financial institutions often have a difficult time assessing smaller firm risk due to a lack of information. Moreover, micro and small enterprises are more vulnerable making it lending to them to carry higher risks. LGF can be a mechanism of risk transfer and diversification. By covering part of the default risk, a lender's risk is lowered – guarantees secure repayment of all or part of the loan in case of default. In essence, LGF schemes absorb an important share of borrower risk. The schemes can also compensate for factors such as insufficient collateral.

c) Reducing collateral requirements

Banks' lending decisions traditionally tend to be based on the amount of collateral available. Collateral reduces lending risk. Arguably, a borrower who is willing to offer a higher level of collateral has a higher intention of repaying the underlying loan. Additionally, collateral provides insurance to a bank – if the firm defaults on its loan, the bank has recourse to the collateral used to obtain the loan. Selling the collateral allows the bank to recover part or all of the value of the defaulted loan. However, many micro and small enterprises do not possess enough assets to cover the collateral requirements of banks. Thus, deficient collateral is one of the main reasons small firms are unable to obtain credit, unless arrangements such as LGFs are in place.

d) Fulfillment of specific development goals

As the role of guarantee funds is to promote development of certain sectors of the economy, the priority is given to projects with major impact on specific sectors (such as agriculture in our case), environmental protection, regions, small and medium-size enterprises, start-up enterprises, etc.

2.2.2 Recommended Conditions for LGF

The presence of the forces calling for the LGF intervention alone does not automatically justify the intervention as there are required conditions to be fulfilled for successful LGF interventions. The European Business and Innovation Centre Network (EBN) recommends the following generic criteria to for successful implementation of LGF:

- Sufficient level of initial capitalization and prudent financial management;
- Clear definition of acceptable credit risk;
- Risk evaluation capacity and high level of independence;
- Classification of undertaken risk;
- Monthly risk monitoring;
- Close cooperation and regular contact with commercial banks;
- A maximum level of provided guarantee not exceeding 75%;
- Own contribution of the borrower;
- A specialized institution to manage the fund.

Oversight and evaluation:

- Regular and permanent oversight and evaluation. The guarantee society must know the value of guarantee at any time;
- Correct evaluation and measurement of predictable risks;
- Evaluation of multiplying effect, in correspondence with the accepted risk exposure;
- Prevention of potential distortions that guarantee funds may produce on the market;
- Guarantee role in reducing the cost of funding and compensating the lack of loan security.

2.3 Key Performance and Outcome Indicators

The key LGF performance indicators vary widely among the different stakeholders in a guarantee arrangement. The most important key performance indicators of a guarantee arrangement are:

i. Accelerated access to loan finance (or investments) for specified development priority groups;
ii. Reduced interest rates for borrowers because of the partial risk coverage for the lender;
iii. A recovery performance of the guaranteed portfolio that does not decline in spite of partial risk coverage to avoid reputational risk.
iv. Stable programme fund (with low guarantee calls) that is not reduced by loan defaults or high administrative expenditures and associated cost overruns.
v. Achievement of the intended development objective

2.4 International Experiences in LGF

Partial loan guarantees are a comparatively new instrument in agricultural development finance. Following the introduction of credit guarantee systems in Japan in 1937, their use spread first throughout Europe and the Americas in the 1950s, and then to Africa, Asia and Oceania in the 1960s and 1970s. A recent count found 2,250 CGS in almost 100 countries (Green, 2003), where maximum guarantee coverage (%) ranges from 50-80%.

The emergence of guarantee funds in Africa is relatively very recent. Nagarajan and Meyer (2005) provided an inventory of 20 systems in 16 countries, but as the systems had been operating for only a short time, few conclusions could be drawn. Nagarajan and Meyer concluded that several programs had issued too few guarantees and were terminated. Terminations occurred primarily because of poor performance and poor implementation, which led to high costs and defaults. Even where guarantee systems were relatively active, they made little impact. To date GFs operate in many countries of sub-Saharan Africa. Most of these are capitalized and managed by the public sector, but some are under private corporate management. Among the guarantee funds with regional coverage, some have been driven by donors and their desire to enhance finance for farmers and the rural sector in Africa. In others, the business objectives are primarily commercial and focus on facilitating large international foreign direct investment inflows. By far the most visible of these is the AGRA GF supported by the Bill & Melinda Gates Foundation.

3. Description of the LGF Scheme of SAEDE Project

3.1 The SAEDE Project

The LGF scheme is the major integral component of the SEADE project that aimed to contribute to improve income and food security of smallholder farmers and pastoralists in Ethiopia through more knowledge-based and farmer-driven P/FTCs. The SAEDE was designed following a diagnostic study (conducted by IFPRI) of Ethiopia's extension system. The study had mainly recommended promoting a farmer-driven extension system through broadening the extension service delivery, improving linkages, strengthening skills of extension agents and farmers, motivating extension agents and equipping FTCs as well as setting a performance management system for the extension sector. The recommendations were classified into two major components and implemented by the two partner NGOs (SAA and OA) in collaboration with the MoA. SAA's component of the project focused on strengthening extension delivery by promoting innovative agricultural technologies including crop and livestock production, postharvest and agro-processing, technical training for extension agents and farmers, capacity building of P/FTC-Management Committees (P/FTC-MC), and promoting public private partnerships for market and credit access.

P/FTC is an entry point of the SAEDE project and all interventions of the project are geared towards capacitating and strengthening P/FTC either directly or indirectly. P/FTC is designed to serve as a demonstration compound where improved agricultural technologies and practices demonstrated and information shared for farm households. The LGF scheme was, therefore, designed to enable FTCs to enhance the extension service delivery in financially sustainable way.

3.2 Rationale of the LGF for FTCs

Farmers Training Centers (FTCs) which are focal for the extension service delivery in the country are affected by inadequate budget allocation. While they are expected to enhance innovation and technology dissemination, they are neither financially self-sufficient nor have access to loan. Both demand and supply side challenges contributed for the lack of finance. This necessitated an innovative approach of loan provision to FTCs to allow them play active role in the extension delivery while ensuring their own financial self-sufficiency.

With this understanding, Sasakawa Global 2000 (SG 2000) has played an important role in bridging the supply and demand gap in rural financial service provision. Through a project supported by Bill & Melinda Gates Foundation, SG 2000 has initiated a program in 2011 to financially empower Farmers Training Centers (FTCs). SG 2000 Ethiopia established revenue generating enterprises at the FTCs using a Loan Guarantee Fund (LGF) scheme, in which credits were channeled through rural financial institutions.

3.3 Objectives of LGF

The objectives of the FTC's Loan Guarantee Fund (LGF) scheme are:

i) To increase FTCs' income generation capacity by encouraging market oriented production,
ii) To increase competitive and flexible financial access and support FTC-based enterprise development,
iii) To enable FTCs enhance innovation and technology dissemination to the farming community.

3.4 Design and Implementation Arrangements

3.4.1 The Intervention Model

The commonly used key design indicators under LGF programs are type of guarantee, eligible FSPs, and leverage. The type of guarantee under the LGF component of SAEDE is partial guarantee which is one of the commonly practiced types of guarantees in the world. The LGF seeks to reassure FSP that in the event of default by FTC covered by a guarantee, the project would meet the loss incurred by the lender up to a maximum of 80% of the amount in default.

Regarding the eligible FSPs, the scheme was based on initial in-depth study of the potential partners. According to the initial study, there were two types of FSPs- Micro-Finance Institutions (MFIs) and Cooperatives. However, these financial intermediaries were not evenly distributed across all regions in the country. Consequently, three models were proposed to channel credit to FTCs.

The first identified model was using MFI's in regions where MFI's outreach is close to FTCs. This model was found to be feasible in all regions except in Afar. The second proposed model was using SACCO Unions, when loan guarantee agreements could not be made with MFIs. This model was potentially applicable in Oromia, Tigray and Amhara regions. The third and relatively less applicable was strengthening and using existing or newly formed FTC-based primary cooperatives. This was tentatively anticipated to be applicable mainly in Afar where neither MFIs nor strong cooperatives were readily available at the time of the study.

Finally, the scheme commenced by using the first model (i.e., MFIs) in all regions except in Tigray and Afar. In Tigray, although MFI is also feasible, the second model (i.e., SACCO) was used. Unfortunately Afar was dropped from the scheme as the first two intermediary types were not available. Not to rely on the third tentative intermediary, the scope of the pilot nature of the scheme could not allow investing in creation and strengthening of new forms of intermediaries.

3.4.2 Implementation Arrangement and Partnership

Based on the identified models, SG 2000 selected the specific FSPs in each region to extend loan to project FTCs. The FTCs were expected to come up with feasible business plan and enterprises to request for loans. This required them to have active Management Committee (FTC-MCs) to follow and supervise day to day activities of the FTCs. The FTC-MCs were established in each FTC, and SG 2000 provided them several trainings on business plan preparation, record keeping and others.

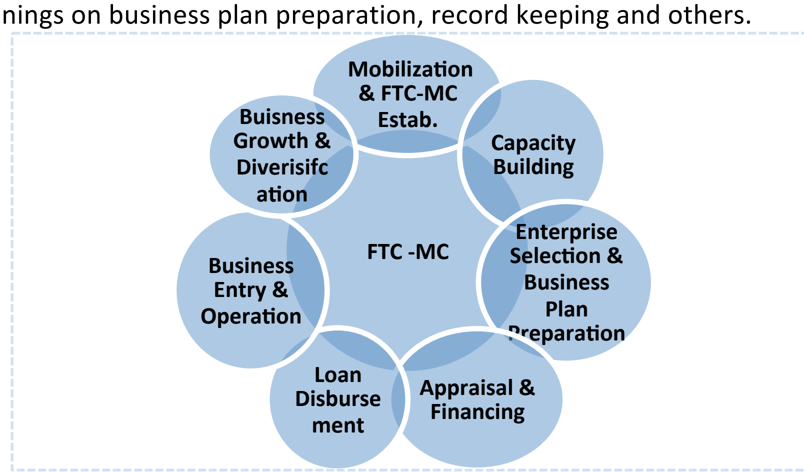


Figure 1. Stage and Cycle of FTC Level Business Enterprise Development using the LGF

Under the LGF approach unique partnership and collaboration were established with major implementing partners, as summarized below:

Table 2. Major Implementing Partners and their Roles

Implementing Partners	Summary of Major Roles of Partners
Bill and Milinda Gates Foundation (BMGF)	• Funding Partner
Saskawa Global 2000-Ethiopia: Mainly the Public Private Partnership and Market Access (PPP-MA) Theme with technical support from other themes[1]	• Establish an account in the name of SG2000 at the head office of the respective FSPs and deposit the agreed up on amount, called the "Loan Guarantee Fund" • Assess and recommend potential borrowers and provide non financial Business Development Services (BDS) in collaboration with other implementing partners • Follow-up and technical support to ensure the proper loan utilization by project participants • Review the effectiveness of the initial mobilization, social promotion, training and supports by the FSP and subsequent loan disbursements • Regularly monitor the progress of the scheme and ensure timely repayment of loan and transfer of the to the consecutive borrower (the same or other client FTCs) • Work with stakeholders and other development partners to ensure the proper monitoring and management of the program as well as its continuity in the respective Woredas
Regional Agricultural Bureaus and respective Offices in project zones and woredas	• Assists in the targeting, identification and selection of participating FTCs • Recommends and distributes appropriate technologies • Monitors and follows up the overall project implementation • Work with other partners to ensure the continuity of the scheme
Woreda Steering Committee (WSC)	• Coordinates implementation of the scheme at the Woreda level • Facilitate the mobilization of stakeholders and partners • Monitor progress of activities and render backup supports
FTC-Management Committee (MC)	• Undertakes overall management of the FTC Enterprise
Financial Service Providers (FSPs)	• Participates in assessment and selection of beneficiary FTCs • Provides financial services including saving and credit, follows up loan repayment • Keeps records of FTCs, maintains appropriate database • Collaborates in provision of trainings and relevant Business Development Services (BDS), and related roles
Oxfam America	• Resourcing P/FTCs with basic facilities, putting in place a community owned P/FTC management system, building capacity of development agents, improving the DA career path and strengthening the extension M&E system so that it promotes learning and future improvements to the extension sector.

The implementing partners have had mutual benefits from successfully implementing the scheme. All of them have been interested in fulfilling their development objectives. The FSPs, in addition to their development objectives, have had financial benefits from implementing the scheme.

[1] The CPE theme also played some roles in technical support particularly in crop enterprises. The livestock enterprises, however, got limited support from the theme as livestock was not the main focus of the theme.

3.4.3 Guarantee Amount and Interest Service Charge

The FSPs have worked to ensure the management of the revolving fund within the target Woreda for the target FTCs during the project life and beyond. The partnership with Financial Service Providers (FSPs) is based on risk sharing and mutual benefits. The risk sharing arrangement was made by the agreement that the project would cover up to 80% of defaults, while the remaining 20% would be borne by the respective FSP. With international comparison, the 80% guarantee is one of the highest guarantee coverage proportions. There are two types of mutual benefits. The first is the overlapping development objectives of the FSPs and the project in serving the rural enterprises. The second benefit is the service charge the FSP receives in return to its financial and non-financial Business Development Services (BDS) while fulfilling the objectives in which both parties are interested. The interest rates were slightly less than the average interest rates MFIs charge and range from 10% to 15%. This is partly because of the security of the guarantee. In addition to the fund, the project supported the loan recipient FTCs in terms of capacity building towards successful management of the enterprises. Overall, given the high guarantee coverage, the mutual benefits and the BDS elements directly supported by the project, the arrangement can be categorized as one of the attractive schemes from the viewpoint of an FSP in its design. The issues in the course of implementation will be discussed in the next chapter.

Alternatively, size of the guarantee (i.e., 80%) has to gradually decrease in order to foster free initiative. But this has not been considered in the design, partly due to short period of implementation.

4. Achievements, Challenges and Lessons Learned

4.1 Major Achievements

4.1.1 FTC enterprise Management Practice

It is of recent experience for FTCs to manage income generating enterprises in an organized and formal manner. Most FTCs even had not had Management Committees (MCs), let alone business management skills before. The SAEDE project introduced an innovative LGF scheme that facilitated access to credit for P/FTCs through a link with Micro-finance institutions, followed by package of trainings in financial record keeping, business management and business planning. The LGF scheme has created almost a new path and practices in this regard. Most importantly, the spill-over effect is significant in that even the FTCs that were not LGF participants have learnt from the participant FTCs.

The types of enterprises established by P/FTCs for generating revenue have increased over the years. There were only three major types of enterprises practiced by the P/FTCs in 2012. However, in 2014 the type has increased and reached six. With fish and seedling enterprises, there were more than 8 different enterprises by the end of the project. Cattle fattening and crop production (depending on the major staple crop specific to each Woreda) have been the most dominant types of enterprises.

Table 3: Types of revenue generating enterprises and number of P/FTCs over the years

Types of Enterprises	Number of P/FTCs by year		
	2012	2013	2014
Crop production	5	19	46
Cattle fattening	6	46	27
Dairy production	1	6	1
Sheep and goat	0	8	13
Poultry production	0	3	0
Honey production	0	0	4

Source: Outcome Monitoring, 2014

There were also some other enterprises established by a few selected FTCs. For instance, seed production was practiced by FTCs in Tulu Guled Woreda, Somali Region, Leka Dulecha Woreda in Oromia Region, Gumer Woreda in SNNPR region, and Dibatie Woreda in Benishangul Gumuz Region. The major seeds included, wheat, ground nuts and potato.

4.1.2 Income generation and asset building

FTCs have started the path of financial self- sustainable through the Loan Guarantee Fund (LGF). Project FTCs, particularly those covered by the LGF scheme have generated good revenue and covered their operational costs. By the end of the project, the sampled FTCs generated annual average revenue of Birr 22,550, which was much higher compared to the baseline when almost each FTC generated less than Birr 1,000 per year. The top 20% generated annual average revenue of Birr 40,000. By the end of the project, FTCs with very high annual revenues included Wakene FTC (Birr 111,000) in Oromia, Burqa FTC (Birr 98,580) in Harari, and Legebuna FTC (Birr 79,875) in Benishangul Gumuz region.

Net profit has also improved. By the end of the project, the sample FTCs generated annual average profit of Birr 8,055. The top 20% generated annual average profit of Birr 26,000. The average profit is equivalent to the average annual amount regional governments are planning to budget for each FTC. For instance, the largest annual government grant per FTC is Birr 20,000 implemented in Amhara Region.

The top 20% FTCs in the SEADE sites generate greater annual profit even than such maximum government grant.

Table 4. Income and Profit of LGF Participant FTCs during 2015

Items	LGF Participation Status			Ratio of Participant to Non-Participant
	Both	Participant	Non-Participant	
Mean Revenue	22,550	25,224	9,319	2.71
Mean Expense*	14,495	16,190	5,054	3.20
Mean Profit	8,055	9,034	4,265	2.12
Profit/Expense Ratio	0.56	0.56	0.84	

**The expenses rarely include the investment aspects such as construction of infrastructure as they were mostly undertaken with the support of the partner NGO, Oxfam America.*

- Regardless of the participation in LGF component, income of all project FTCs dramatically increased from the baseline.
- The mean income ratio of LGF participant to non-participant FTCs is very high. During the final year of the project, LGF participant FTCs earned 2.71 and 2.12 times of revenue and profit, respectively, compared to non-participant FTCs. The gap during the early life of the project was even larger and narrowed down through time partly due to the spillover effect and government efforts to scale up FTC enterprise development.
- However, the participants have not performed better in terms of the rate of return (0.56 vs 0.84). The expense ratio is larger than both the revenue and profit ratios. Furthermore, the profit ratio is the least of all.
- The relatively lower average rate of return of participant FTCs is explained by the following factors:
    - There is likely over reporting of expenses among LGF participants
    - LGF participants have been still under the learning process and facing certain risks to their relatively larger investments
    - A few participants used the loan for investment in infrastructure earlier (particularly in Chilga Woreda) but underutilizing them during the survey period.
    - At lower level of production, revenue of non-participants consists of relatively large proportion of income from sale of grass and other products that do not involve high expense

4.1.3 Trends in profit

Profitability of enterprises has increased from time to time. At baseline even the mean revenue was about Birr 1,000 per FTC and the profit was only some proportion of this meager revenue amount. By 2014, three years later, 22% of the FTCs generated profit amount greater than Birr 9,000. By the end of the project 38% of the LGF participant FTCs generated greater than Birr 9,000 profit per year. However, the proportion of FTCs generating profit amount between Birr 5,000 and 9,000 has declined by the end of the project as compared to 2014 data while that of less than Birr 1,000 increased.

Table 5. Profit Range of LGF-FTCs

Profit Range in ET Birr	End of 2014		End of Project	
	% of FTCs	Cumu lative %	% of FTCs	Cumulative %
>9,000	22	22	38	38
5,000 to 9,000	26	48	13	51
1,000 to 5,000	44	92	23	74
< 1,000	8	100	26	100

4.1.4 Profitability by Major Enterprises

Based on the outcome monitoring survey in 2014, assessment has been made about the profitability (net income) of P/FTCs by types of enterprises in each year. Taking all P/FTCs together, cattle fattening enterprise seems more profitable compared to other types of enterprises. However, the trend of the profitability of cattle fattening indicate that the profit made by the P/FTCs significantly increased during the first two years and declined in the third year in most of the Regions (Annex 1). Please refer table 6 and table in the annex for the details.

Table 6: Average net income (profit) by type of enterprise P/FTCs established

Types of enterprises	2012	2013	2014
	Mean	Mean	Mean
Teff	4.4	276.5	2918.5
Maize	-	2822.0	1160.0
Wheat	175.6	3939.1	398.2
Vegetable	927.8	4852.6	1127.0
Other crops	-111.8	1308.3	5637.4
Seed production	-	-1426.0	822.0
Cattle fattening	2692.1	17691.7	9682.1
Dairy	825.0	-557.5	882.7
Honey production	-	-4876.3	2727.2
Poultry production	-	-479.3	-4936.4
Sheep		4627.4	3849.0
Goat fattening		1011.4	14017.6

Even though, the average net income of P/FTCs for different types of enterprises showed mixed results both positive and negative during the first two years, most of the enterprises made profit except for poultry production in 2014.

4.1.5 Beyond Income: Serving as Learning Centers

The main purpose of FTCs engaging in income generating enterprises is to sustainably serve as learning centers covering their operations with owned income. As envisaged the income generating activities created financial self-sustainability that improved FTCs' capacity to sustainably serve the surrounding farmers with improved extension delivery.

The implementation of LGF scheme improved capacity and autonomous status of FTCs which is the widely recommended strategy as part of decentralized public sector intervention. FTCs covered their operational costs mainly related to technology demonstrations, which is one of the major roles of the FTCs. As a result, FTCs played very important role by providing the required and demand-based knowledge and skills to local farmers in a participatory manner.

The LGF component of SAEDE was the single most important component that differentiates the project woredas from comparable non-project woredas. It was observed that even when they do have other external supports, non-SAEDE FTCs performed less in many elements such as financial record keeping practices which are, indeed, very important in sustainable management of profitable FTC enterprises.

Box 1. A Quick Comparison of FTCs in Project Woredas with FTCs in Nearby Non-Project Woredas

The evaluation team has made a quick field assessment of SAEDE project Woredas and some nearby non-project Woredas to assess and compare differences and spill-over effects between the project Woredas and non-project Woredas. Selection of the adjacent Woredas was made on the basis of similarities between the respective project Woredas and non- project Woredas in socio-economy, infrastructure, climatic conditions, and agro-ecological environments with special focus on accessibility. The field observation was substantiated with interviews and informal discussions with extension agents including with Woreda Agriculture Office Heads and Extension Service Process Owners of the non-project Woredas. Totally five adjacent SAEDE Woredas were compared with their SAEDE counterparts.

Overall assessment focusing on FTCs revealed that that SAEDE Project Woreda P/FTCs had better access and capacity in delivering agricultural extension services as compared to non-project Woreda P/FTCs. Majority of Project P/FTCs had well-furnished office furniture, trained and sufficient number of staff (DAs), adequate demonstration land size and participated in LGF scheme for income generating activities. Table below presents the comparison between the SAEDE Project Woreda P/FTCs and non-project Woreda P/FTCs.

It was observed that even when they do have other external supports, non-SAEDE FTCs perform less in many elements such as financial record keeping practices which are, indeed, very important in sustainable management of profitable FTC enterprises. (More details of the comparison are annexed).

Table 7. Summary of comparison points of SAEDE and non-SAEDE project P/FTCs

S. No	Comparison Points	SAEDE Project Woreda P/FTCs	Non-Project Woreda P/FTCs
1	Demonstration land size	Majority have satisfactory size	Only few have limited size
2	Office furniture	Majority have well furnished	Few equipped with chairs and tables
3	Number of staff/DAs	Have at least 2-3 DAs	Have at least 1-2 DAs
4	Skill and knowledge of DAs on extension service delivery	Skill and knowledge improved as result of SAEDE	Yet, have skill and knowledge gap on service delivery
6	Income generation	All have started with better income from crop, dairy, fattening, beekeeping, etc…	Only few have started with lower income from crop, dairy, and beekeeping
7	FTC-MC	Majority have active MCs	Only few have inefficient/medium MCs

Source: SG2000-Ethiopia SAEDE Project Field Assessment, July 2015

In general, SAEDE project has created better agricultural extension service delivery system at the FTC level as compared to non-SAEDE project woreda FTCs. For instance, SAEDE Project FTCs had better access to demonstration land and established better performing income generating enterprises than non-SAEDE FTCs. Moreover, SAEDE project has addressed the skills and knowledge gaps of the extension agents through providing package of trainings and related supports. As a result of this, better implementation and use of improved agricultural technologies was observed in project FTCs, which in turn led to improved productivity of crops. Therefore, SAEDE project achieved its objective on 'strengthening the FTCs performance' successfully.

4.1.6 Selected Cases of Success from different Regions

There have been many success stories from different regions. Some of these cases are included here. Together they highlight different dimensions: across different agro ecologies and regions, different years of LGF intervention and start up, different FSPs, etc. The first case elaborates case of Wakene FTC from Oromia Region. The consecutive cases depict summaries of cases from SNNPR, Tigray and Harari regions.

Case1: Enabling Wakene FTC to Become Financially Sustainable through LGF

Debrelibanos Woreda, Oromia Region

Wakene Farmers' Training Center (FTC) is one of the success cases of SG 2000 interventions related to LGF operation. Wakene FTC is located in Debrelibanos Woreda, Oromia Region, 98 kms north of Addis Ababa. Wakene Kebele has 1,250 households and around 6,500 people live in the kebele. The LGF arrangements were made in 2012 through Oromia Saving and Credit Share Company (OSCSCo). A tripartite agreement with shared responsibilities was signed between SG 2000, Regional Bureau of Agriculture and OSCSCo, which followed similar pattern at Woreda level.

Through the LGF arrangement, Wakene FTC received a loan of Birr 70,000.00 to establish income generating enterprises. Preparatory activities for the establishment of FTC enterprises were undertaken. These included construction of basic infrastructures; promoting an enterprising culture among DAs, SMS and FTC-MC; creating synergies among extension services delivery and income generation enterprises.

The operation of the LGF Scheme in Wakene FTC has registered remarkable results. The FTC started small scale income generating activities in fattening as a trial before investing all the loan received through the LGF scheme. The FTC bought two oxen for Birr 16,000.00 and established fattening enterprise. Side by side, the FTC started testing potentially lucrative activities on its irrigable land.

Positive results of the small scale operations made the FTC to engage in more diversified and profitable activities. These included: fattening, shallot & onion production, poultry and fish pond activities along with diversified horticulture.

In 2014, the FTC successfully repaid its entire loan received from the MFI. Additional activities used for diversifying income sources have also resulted in a net profit of Birr 6,000 – from poultry and shallot and onion production. It also earned a net income of birr 22,100 from both old and newly introduced and diversified activities. The profit earned was above three-fold of the interest paid on the LGF credit. Hence, operating these profitable enterprises became essential means towards financial self-sustainability of the FTC. Furthermore, using its additional income the FTC invested in teff production, and also expanded and intensified its poultry and fish pond activities.

Effectiveness of the Intervention

SG 2000 intervention enabled the Wakene FTC to deliver improved extension service to the farmers in the kebele. The FTC managed to establish profitable enterprises and covered its operational costs. Farmers also learned from demonstrations in the FTC and applied it in their farm field.

Its operations gradually grew from fattening to diversified crop production and other enterprises such as fishery. The FTC's income has increased steadily starting from Birr 7,300 to over 45,000. It has paid back its entire loan in three rounds and created its own working capital.

This also allowed the FTC to effectively promote proper cattle feeding practices, furrow irrigation, inter-cropping and raw planting practices to farmers in Wakene and surrounding kebeles.

Currently, the FTC is serving as 'a centre of excellence' to the farmers in Wakene and neighboring Kebeles. Improved fattening demonstrations and enterprises in the FTC enabled farmers to learn and run such enterprises three times in a year. Traditional fattening activities usually takes up to one year for oxen to gain marketable weight. Farmers in the area commonly practice open grazing and local feed based fattening at home. However, through the LGF scheme, the FTC has effectively demonstrated and promoted proper cattle feed preparation for fattening. It has also showed that it is possible to fatten oxen in less than four months by keeping and feeding the cattle under a shade.

Learning from the enterprises at the FTC, many farmers started to engage in fattening business. Less than 50 farmers in the kebele were engaged in fattening business before the LGF program. However, up to the time when this report was produced, the number has significantly increased and reached to about 500 farmers.

Farmers in Wakene kebele managed to earn additional income from their fattening business. With modern fattening practices, farmers sold fattened oxen for over Birr 15,000 in 3-4 months, while they used to sell traditionally fattened oxen for Birr 10,000 in one year.

The FTC has also become a technology center for new and improved farm technologies. Experts from 17 woredas of the region and 18 zonal and regional officials have made experience sharing visits in 2013 and in 2014. In 2015 the FTC registered estimated profit of Birr 98,500

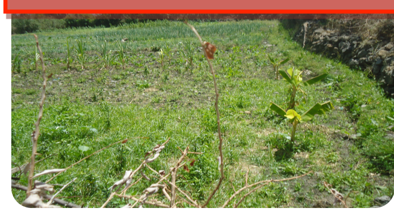
The FTC has also attracted other donors like the "Korean Rural Community Development" that invested Birr 60,000 to tap ground water into a reservoir. The FTC also made demonstrations on vegetable gardening using small irrigation schemes.

Lessons

There are four important lessons that can be drawn from the success of Wakene FTC. The FTC management committee members and the Woreda Office of Agriculture share similar opinion on the factors to the successful results of the FTC's LGF scheme. Some of them are:

(i) Starting small and learning by doing,
(ii) Commitment of DAs and few dedicated members of the management committee,
(iii) Ownership of the scheme as witnessed by close supervision and support by the woreda and its extension agents, and
(iv) Intensive capacity building and technical support with practical training from SG 2000.

Baseline Situation of Wakene FTC



Before the project, the FTC was characterized by poor demonstrations, underutilization of existing water resource, no well organized FTC Enterprise, low community participation in FTC management, and limited technologies

After LGF Scheme

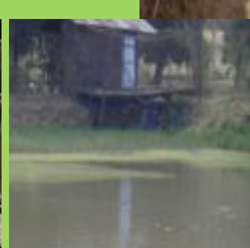
(i)Diversified and profitable FTC enterprises for financial sustainability

(ii)Successful demonstrations and serving as learning platform

Fattening

Vegetable Production

Community participation in maintenance of fish pond



Fish Pond -25,000 fish population

Partners visiting best practices

Field Days for learning

Case2: Enabling Burdana Denber FTC to become Financially Sustainable through LGF Gumer Woreda, SNNPR Region

Summary

Baseline Situation

Before the project, the FTC was characterized by

- Lack of skills and awareness in FTC enterprise development
- Low capacity to use existing water
- Lack of financial resources
- No operational FTC-MC
- Lack of storage facilities

After LGF Scheme

(i)Diversified and profitable FTC enterprises for financial sustainability

(ii)Successful demonstrations and serving as learning platform

The FTC gained profits from enterprises

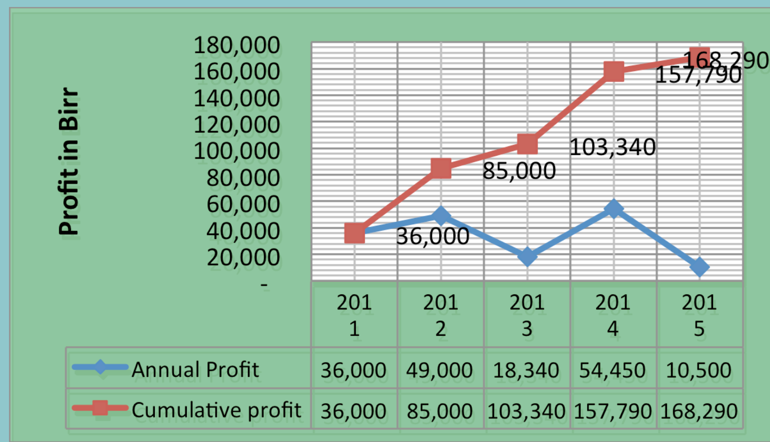
- On average Birr 37,488 profit per year
- Since 2012, the FTC gained cumulative profit of Birr 168,290.

Has become financially self sufficient

- Reinvested in FTC enterprises
- Birr 128, 000 in its bank account by the end of 2014, after paying all the loan

Financed its own operational cost of demonstrations

Beyond income generation, serves as a learning center



Burdana Denber also demonstrated reputation in timely loan repayment and repeat loan utilization.

Case3: Enabling Mesehil FTC to become Financially Sustainable through LGF

Dire Medebay Zana Woreda, Tigray Region

Meshil FTC is found in Medebay Zana Woreda of Tigray Region. It is one of the Model FTCs in the Woreda. The major successes of the FTC include FTC enterprise development using LGF fund since 2013. During the past three years, the FTC diversified its businesses to livestock and crop production. The livestock enterprises include fattening, poultry and beekeeping. The crop components include cereal production (including teff seed multiplication), onion and garlic production. The FTC has been so continuously engaged that at least three items were produced in a year.

No	Year (E.C.)	Enterprise	Unit		Revenue	Expense	Profit	Proft: Exp Ratio
1	2005	Oxen fattening	No	2	12,500	10,000	2,500	0.25
2	2005	Seed multiplication-Teff	quint	4	6,500	3,700	2,800	0.76
3	2005	Onion Production	quint	2	2,000	1,150	850	0.74
4	2005	Honey Production	Kg	25	1,750	-	1,750	
5	2006	Oxen fattening	No	2	12,200	10,200	2,000	0.20
6	2006	Oxen fattening	No	2	14,700	11,600	3,100	0.27
7	2006	Onion Production	quint	2.1	2,520	1,070	1,450	1.36
8	2007	Poultry	No		7,500	1,500	6,000	4.00
9	2007	Garlic Production	quint	2	5,000	1,500	3,500	2.33
10	2007	Oxen fattening	No	2	10,800	9,000	1,800	0.20
11	2007	Cereal Production (Teff)	quint	13	7,750	5,000	2,750	0.55
Cumulative					***83,220***	***54,720***	***28,500***	***0.52***

As can be observed from the table above, the cumulative revenue and profit over that past three years are 83,220 Birr and 28,500 Birr, respectively. The internal rate of return (as measured in profit: expense ratio) is also so attractive that it ranges from 0.20 for oxen fattening in 2007 E.C. to 4.0 for poultry in the same year. Overall, the internal rate of return is about 0.52, meaning each Birr invested resulted in a return of about 0.52 Birr. One of the best practices of the FTC is that it has consistently achieved positive profit from each enterprise by wisely investing according to the resources available. For instance, unlike many of the FTCs in other regions, it limited the optimum number of oxen to be fattened based on its feed resources. It also avoided the temptation to unnecessarily borrowing the upper ceiling amount (Birr 70,000). Instead, it borrowed in two rounds (half each). This way, it avoided both unnecessary excess loan interest and investing beyond optimum amount for a given resources.

Case 4: Enabling Dire Teyara FTC to become Financially Sustainable through LGF

Dire Teyara Woreda, Harari Region

Summary

Profitable Enterprises

- Fattening, vegetables, poultry, and recently fish
- Have become profitable
  - From two rounds of fattening alone in 2006/07 E.C. gained
    - Revenue of Birr 128,000.
    - Net profit of Birr 8,850
  - Income from vegetables and demonstration cereals- Annually Birr 6,000

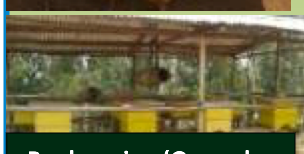
Model FTC- Learning center with its holistic success

Fattening

Water Harvesting pond

Poultry

Fish Pond



Beekeeping (Owned by youth Group in FTC Compound)

Sustainable Crop Demonstrations in FTC

Vegetable production using drip irrigation

4.2 Major Strengths and Weaknesses in the Design

The design had had both strengths and weaknesses. The major strengths of the design are the strong partnership with clear responsibilities, accessible FSPs that share the development objectives, inclusion of incentives (guarantee and interest) and disincentives (partial guarantee up on default), and integrated capacity building.

Despite the strengths, in retrospect it has been learnt that there were major weaknesses. The first and more of scope issue is that all the target participants were FTCs for whom business models were so new that the MCs had not had enough experiences and incentives to quickly translate into adequate models to be replicated. Furthermore, too many FTCs were targeted to be closely followed up at pilot level.

No leverage (i.e., additional financial resources) from FSPs was indicated in the design. It was observed later that even there were common delays of disbursing loan from available guarantee fund itself to FTCs, let alone leverages.

4.3 Major Gaps and Challenges in the Implementation

Despite the successes, the LGF scheme has not been without mutually reinforcing challenges and gaps. The major ones include delayed repayments, delayed start up, management problems and inefficiencies, cost of loans, moral hazard problems, risks and external factors.

The delayed loan repayment was the result of many factors. They are generally classified into two: awareness among MC members and low profitability. As the scheme was new, it was not uncommon for MC members to still consider the loan as grant that could be kept without repaying back. By the mid of the project life, a large number FTCs were observed to unwisely put their money in their saving account while incurring interest expense on the unpaid loan. In very few cases, embezzlement by MC members happened (and legal enforcement measures were taken). This awareness problem was gradually addressed, but it caused irreversible problems by affecting the repayment reputation of FSPs and delayed release of loan to subsequent FTCs (and consequently late start up). Moreover, due to management problems and inefficiencies (to be discussed in the next paragraph), some FTCs encountered low profitability and consequent repayment difficulties. A few FTCS used the loan for unplanned investment activities such as construction and faced liquidity constraint.

Delayed startups have led to inefficiency through forgone production cycles or seasons. Almost all the FTC enterprises are seasonally sensitive and a small delay of startup leads to months of delay in practice. This is common not only for rain fed crop production, but even the fattening enterprises do also follow the same pattern due to combination of feed availability, proper purchase and sale times, which are intermittent or seasonal.

The management problems and inefficiencies were observed among some FTCs despite the integrated capacity building intervention. The management problem is partly attributed to low commitment of some of the MC members. One of the major gaps was observed in livestock management in terms of proper feeding, purchase of improper livestock (with low conversion rate) for fattening, enterprise selection without adequate preparation (especially poultry in Debay Tillat Woreda). While the livestock component was not the main part of Theme 1 interventions, the disproportionately high focus of FTCs on livestock as FTC enterprise became victim of low follow up.

The other source of inefficiency was the tendency of borrowing the ceiling amount of Birr 70,000 while their actual business requires less. As a result, some FTCs had born unnecessary interest expense on unused loan particularly during the early periods. In general, while they are supposed to be cost efficient and also mobilize community contributions, the reported expenses are found to be too high for the output produced. For instance, 26% of the total expense is incurred for salary and wage (outcome monitoring 2014). This is hard to justify given the nature of the businesses and existing structure. Moreover, other unrelated expenses constitute about 7% which is nearly equal to share of fertilizers or seed purchase (Figure 3).

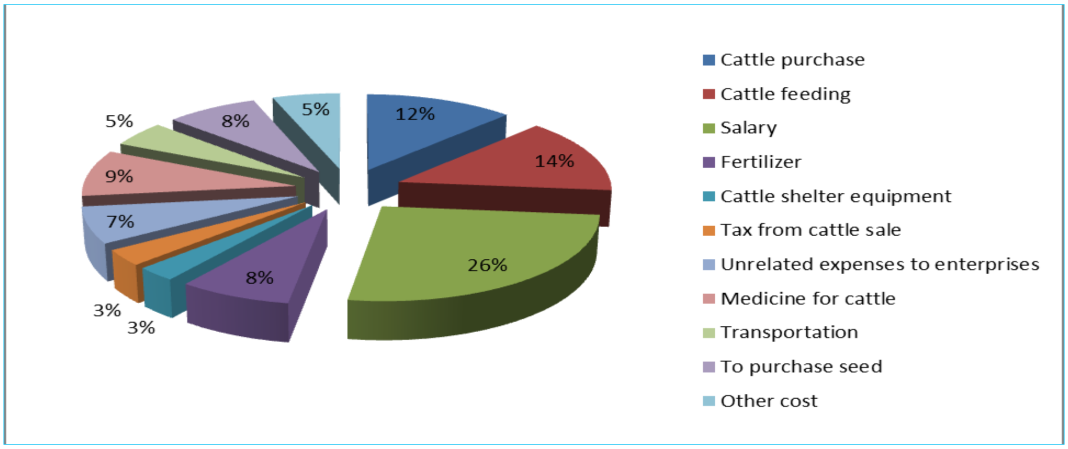


Figure 2: Major cost items of the P/FTCs

Source: Outcome Monitoring 2014

Interest rate is also perceived to be high by FTCs. In principle as long as the loan is guaranteed, the interest rate to the particular borrowers has to be reasonably reduced by the FSPs. Accordingly, the FSPs argue that they have already reduced the rate for the LGF component. The problem is that the FTCs in Oromia (rate, 10% rate) and Amhara (rate, 14%) commonly complain that it is still too high to be interested in the loan. While we cannot conclude whether the rate is high, critical evaluation of this issue reveals two major underlying problems. Firstly, the complaint is exacerbated by the implementation gaps that resulted in lower efficiencies and profits. For instance, in areas where FTCs performed well FTCs were profitable and no complaints were observed. A good case is Gumer Woreda in SNNPR where the interest rate is as high as 15%. The second and related underlying problem is the gap from the FSPs in providing non financial BDSs that worth the service charge (interest income) they charge. As a result, the MC members could not be easily convinced that the FSPs deserve such rate for their minor services. It is worth mentioning that the argument of the MC members is partly attributed to the lower awareness about the inevitability of the service charges.

The other major gap observed from the implementing partners was the moral hazard problem whereby the FSPs commonly failed to adequately provide their expected financial and non financial services. Some of the inefficiencies and wrong business selection problems discussed above are partly attributed to the lack of close follow up by FSPs. Worse, when some of earlier FTCs faced repayment difficulties, the FSPs took adverse measures by resisting loan release to subsequent batch of FTCs, unless earlier ones repay nearly completely, regardless of their ability to repay. This position was held by the FSPs to maintain their repayment reputation in a respective woreda. Neither were they interested to claim for guarantee against defaults for the sake of the reputation concern. This measure by FSPs further worsened efficiency of the LGF from the view point of the scheme objectives.

Contrary to the initial agreement on considerations of write-off for outstanding loan at risk, no intension was observed from FSPs to explicitly categorize the FTCs with repayment difficulties perhaps to maintain their repayment culture. The main problem was not in just lack of such decision, it is rather the repercussion of delayed loan release to subsequent batch of FTCs by making a difficult condition of full repayment by first round FTCs (including those with objective repayment difficulties). Worse, no refinancing was made to the FTCs with repayment difficulties. In general, the FSPs particularly in Oromia and Amhara regions held firm stand about the condition of full repayment by all FTCs prior to release to consecutive batch of FTCs. This firm stand stayed up to the last quarter of the project life when strong negotiations were made to realize the loan release.

Other challenges include market related risks and other external factors. Combined with the gaps in management, most FTCs faced that engaged in fattening reported that they faced market risk in terms of lower market price at the time of sale. There were also incidences of middlemen interference when large number of purchase of livestock is to be made for FTC enterprises at once in Woreda. Critical evaluation, however, show that the risks were not as strong as the other controllable problems discussed above. Even the reported apparent market problem could have partly been mitigated by producing the best quality outputs that could be linked to reliable buyers. But the best qualities were unfortunately compromised due to the gaps in inputs and management.

The other challenge that was common to almost all regions is DA turnover. The fact that LGF approach was new makes the sustainable business operation to be very sensitive to turnover of experienced DAs who were trained in business planning, financial record keeping and related activities. A large number of FTCs reported that activities such as financial record keeping, proper business planning, and follow up were not sustainably undertaken as previously trained DAs left the FTC through reshuffling or other reasons. With less than critical mass of FTC-MC members being familiar with the new LGF approach, the turnover significantly affected the continuity and profitability of FTC enterprises in many cases. For instance by the mid of 2014 the average turnover rate among LGF participant FTCs was 16.4%. Beyond the rates, discussions with FTC-MCs on certain gaps particularly in financial record keeping practices reveal that loss of previously trained and better experienced DA were the major problems. Even when DAs left for educational leaves some FTCs with previously good performance deteriorated in terms of enterprise continuity and financial management. Therefore, the inefficiency outcomes of DA turnover were significant.

4.4 Sustainability

- Based on the skills and experiences gained, the FTCs have realized adequate capacity in managing FTC enterprises. Regardless of participation in the scheme, FTCs have generally shown growing interest to be engaged into revenue generation.
- There is directives by Regional Agricultural Bureaus to integrate incentives for DAs from FTC enterprise profit so that the DAs are more committed
- The government has become more committed to allocate adequate land and other supports to FTCs so that they manage sustainable enterprises. For instance, in Tigray Rregion, regulation is already in place to empower the FTCs to decide on how to manage their own income. Besides, Amhara and SNNPR have allocated Birr 10 to 20 thousand grant per year for each FTC as working capital.
- Despite the favorable factors for sustainability, efficiency of the LGF utilization is still diluted by the hangover of the previous delayed repayments and lack of special treatment by FSPs.

4.5 Success Factors and Lessons

Success under the context of LGF can be defined as the fulfillment of efficient loan utilization, sustainable and profitable business operation as well as demonstration of best practices. The determinants of such success were found to be both internal factors and external constraints. The internal factors are those weaknesses and strengths at the levels of FTCs and implementing partners. The most important internal factors are commitment and capacity of FTC-MC, repayment rate of early batch of borrowing FTCs in respective woreda or region, follow up from implementing partners and available resources. The external factors are those constraints or opportunities beyond the scope of the implementing partners, but which can or cannot be proactively prevented or exploited. Such infrequent and less influential factors are weather related challenges, market constraints and the enabling environments in general. The outcome of a favorable of adverse external factor, indeed, depends on the internal factors (strengths, weaknesses and proactive actions).

- The major strength is that the model works well if commitment of all partners is ensured
- One of the strengths of the scheme was building on strong PPP that supported the whole SEADE activities.
- Commitment of the FTC-MC is the single most important success factor. In addition to the technical competencies, personal characteristics and motivations of the MCs are so crucial for FTC enterprise growth.
- Like any MSE, the FTC enterprises are not immune to failure despite the presence of guarantee.

5. Conclusion and Recommendation

5.1 Conclusion

The assessment show that not all participating FTCs have gained financial self sustainability as envisaged. However, with realistic criteria and taking into account the success rate of LGF participating MSMEs in developing countries and the approach's being new, the progress can be categorized as successful. There is promising progress in terms of transition from entirely grant-worthy level of FTCs to the mix of better credit worthy and self sustainable FTCs. It has resulted in emergence of new thinking towards business model. At least one best FTC enterprise is realized in each Woreda and this ensures sustainability of the scheme conditional on the continued follow up from offices of the Woreda Agriculture and Woreda Administration.

In efforts to replicate the LGF approach, the particular success factors have to be taken into account. The major strength is that the model works well if commitment of all partners is ensured. The unique strength of the scheme was that it built on strong PPP that supported the whole SEADE activities. Furthermore, commitment of the FTC-MC is the single most important success factor. In addition to the technical competencies, personal characteristics and motivations of the MCs are so crucial for FTC enterprise growth.

Finally, like any MSE, the FTC enterprises are not immune to failure despite the presence of guarantee. As the Business Model application to FTCs enterprises is new, the current pilot intervention should not be judged by the identified weaknesses. Rather, similar future interventions have to learn from the gaps encountered in this scheme.

5.2 Recommendation

- The regional agricultural bureaus have to assess and identify other potential FSPs along the value chain. These potentially include PCs, Unions, Rural assemblers, Agro-processors, VSLAs
- SG 2000 has to consider LGF approach in other components of its projects or other levels of its value chain interventions.
- The respective government bodies and the FSPs have to undergo the analysis of credits at risk and take bold measures – write-off or refinancing. Otherwise, MFIs will report "contaminated loans" which may mask the actual progressive achievements. Particularly, if the FSPs are to be changed or diversified, the actual revolving fund has to be clearly known.
- The FSPs have to conceptualize LGFs distinctly from their other forms of lending. The fact that large proportion of the potential default (80% in our case) is guaranteed justifies the separate treatment with regards to certain minimum repayment rate expected at a specific cluster for the whole loan without such guarantee. The MFIs have to increase awareness of their staff on the models of guarantee funds.

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