Graduation with Resilience to Achieve Sustainable Development

GRAD was a five-year USAID-funded project designed to help the Government of Ethiopia find sustainable solutions to chronic food insecurity. The project supported households enrolled in the government's Productive Safety Net Program (PSNP) to increase income, diversify livelihoods options, and build resilience. CARE Ethiopia led a consortium that included REST, ORDA, CRS/MCS, Agri Service Ethiopia, and SNV. In addition, GRAD partnered with 11 microfinance institutions (MFIs) and savings and credit unions[1] to improve access to financial services among chronically food insecure households. The project worked in 16 districts in Amhara, Tigray, Oromia and SNNPR.

GRAD Learning Brief # 7

Micro-finance Loan Terms and Conditions: Appropriateness for Value Chain Engagement of PSNP Households

GRAD's Value Chain and Financial Services Approach

GRAD provided technical and business skills training to clients, built producer collectives, supported input supply, and facilitated external market linkages. When a client was ready, GRAD provided assistance in business plan development and linked the client to a financial institution. Eight microfinance institutions (MFIs) and three rural savings and credit cooperative (RuSACCO) unions provided loans to GRAD clients for investments in five targeted value chains: livestock (meat), honey, vegetables, pulses, and malt barley.

Background / Problem

At the start of GRAD, the project signed memoranda of understanding (MOUs) with its partner MFIs specifying interest rates and lending methodologies to be applied in all GRAD-supported loans, as well as specific loan repayment terms. GRAD support enabled many PSNP households to obtain loans, and their livelihood investments were largely profitable. However, some households struggle to repay their loans on time, while others choose not to take loans at all. While this can be due to a variety of factors, one factor was thought to be a disconnect between the terms and conditions of the loan products and the needs and schedules of the respective value chains. To better understand these dynamics, GRAD commissioned a study to identify gaps between the available financial products offered by MFIs and the needs of clients based on the cash flow realities of the selected value chains. This Learning Brief summarizes the study's[2] findings from the livestock, honey, and vegetable value chains, and provides additional GRAD analysis, based on more recent experience and studies.

An Overview of Loan Structure

Loans should be structured based on client demand, capabilities of the provider, value chain realities such as production cycles and market demand, and risk management requirements (to ensure repayment). The core components of a loan are size, term (length of the loan), repayment terms, lending modalities, collateral requirements, and pricing (i.e. interest and fees). The following sections provide an overview of each of the core parameters of loan products, along with the variety in terms for GRAD-supported loans.

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[1] Dedebit Credit and Savings Institutions (DECSI) in Tigray, Amhara Credit and Savings Institutions (ACSI), Ras Gayint, Lidet, and Rib Unions in Amhara, Oromia Credit and Saving Shares Company (OCSSCO), Metemamen MFI and Buso Gonefa MFI in Oromia, and Sidama MFI, Omo MFI and Meklit MFI in SNNPR.

[2] The study was conducted in June-July 2014 by the Association of Ethiopian Microfinance Institutions - Ethiopian Inclusive Finance Training and Research Institute (AEMFI-EIFTRI)

Loan size

The *size* of the loan should be commensurate with the investment required as outlined in the business plan and should be large enough (along with personal resources contributed by the borrower) to cover both the initial investment and any additional inputs needed throughout the production process. The maximum size of GRAD-supported 1st round loans ranged from 4,000 birr for most Oromia and SNNPR MFIs, to 5,000 birr from RuSACCO Unions in Amhara, and 8,000 birr from ACSI and DECSI.

Loan term and repayment terms

The *term* of the loan refers to the period over which the loan must be repaid in full, with interest, while the *repayment terms* refer to how the repayment is structured—i.e. when the borrower needs to begin repaying the loan principal and interest. For a loan that is harmonized with the value chain cycle, repayment should begin only after the business investment has begun generating returns.

GRAD-supported loan terms for most MFIs are limited to one year, as financial institutions lack liquidity as well as experience with longer-term loans. Only ACSI and DECSI, provide longer-term loans for livestock and honey. RuSACCO Unions provided three-year loans for livestock and honey. All institutions offer one-year loans for vegetables, with the exception of DECSI, which provides a two-year loan. "Grace periods" (the period before repayment begins) range from six months (for one-year loans) to one year (for longer loans).

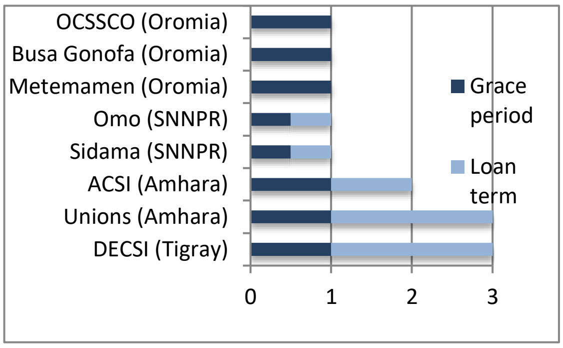

Figure 1: Loan terms for livestock and honey VCs

Lending modality and collateral requirements

The *lending modality* indicates how the loan is provided and is closely related to the *collateral requirements*, which refer to the guarantees provided by the borrower that he/she will repay the loan on time and in full. Collateral requirements are a useful means for the lender to minimize its risk, but need to be carefully designed in order not to pass undue burden or risk onto the client.

Most GRAD-supported loans use a group collateral system, by which a loan is provided to an individual but a group is held accountable for the repayment. This approach can be useful for very poor households but tends to punish best performers who must wait for others to pay. Only DECSI uses an individual lending methodology (also without physical collateral).

Pricing

The *pricing* of the loan refers to the interest rate and any other applicable charges (e.g. service fees), all of which are a means for the lender to recover its costs, cover its risk, and earn a profit, while accounting for inflation. Interest rates vary, and some MFIs charge interest on declining balances (where the interest is charged only on the remaining balance), while others have a flat rate (where the interest is charged on the full loan, whether partially repaid or not).

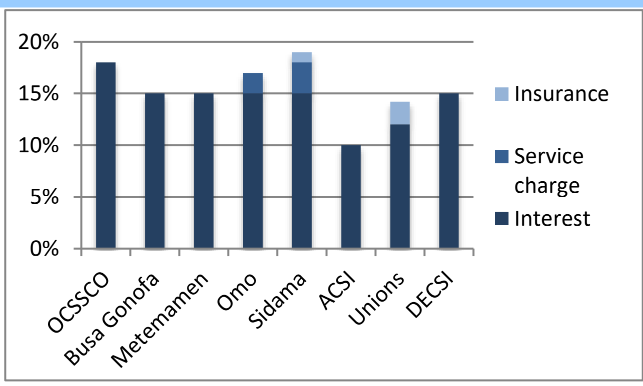

Figure 2: Loan pricing

Interest rates on GRAD-supported loans varied by institution: ACSI offered the lowest rate of 10% (to match the negotiated rate for HABP loans), while OCSSCO has the highest rate (18%). Most common is an interest rate of 15%. Stronger MFIs (such as ACSI and DECSI) offer interest rates on a declining balance, while other MFIs offer flat rates, which are easier to calculate manually. Compulsory savings and a life insurance premium are sometimes built into the loan. A 4,000 birr loan can yield as little as 3,200 birr net after compulsory savings, insurance, and service charges are deducted.

Survey Findings on Value Chain Characteristics and the Appropriateness of Financial Products[3]

Livestock Value Chain: Livestock fattening [4] is the most common livelihoods activity undertaken by GRAD households in all regions.

Value chain requirements and timing of returns:

- Clients investing in livestock fattening require capital to purchase the sheep, goats, or oxen, as well as feed, veterinary inputs, and other expenses. Livestock prices vary by region, season, and animal type and condition, but the cost of purchasing a sheep or goat for fattening is typically around 425-600 birr while the cost of purchasing a young ox for fattening is 2,000-3,000 birr when the market is favorable. Input costs vary depending on the availability of fodder, but typically range from 90-120 birr for shoat fattening to 600-1000 birr for ox fattening.
- Fattening time requirements differ depending on the type of animal and the type of production envisioned. Seasonality is as follows: a) Shoat fattening can be done in put to three cycles per year, e.g. June-September, October-December, and January-April, to coincide with market demand around holidays, and b) ox fattening done per a six month cycle (e.g. purchase in March, use for plowing, fatten, and finish by September's Meskel holiday).

Loan size: The typical loan sizes of 4,000 birr (often closer to 3,200 birr net after compulsory savings and service charges are deducted) in Oromia and SNNPR are sufficient to purchase 5-6 shoats with enough left over for various input costs, and as such they are appropriate for first-time borrowers in the shoat fattening value chain. These loans are usually not sufficient for cattle fattening. First-time loans of 8,000 birr available in Tigray and Amhara enable the purchase of two oxen for fattening, and appear to be manageable by first-time borrowers. Larger loans (up to 15,000 birr in Tigray) are available for second- and third-cycle borrowers.

Loan term and repayment terms: Existing loan terms offered by all MFIs are appropriate for shoat fattening, a short-term activity that requires 3-4 months on average. In these cases, the 6-month grace periods offered by several financial institutions are feasible, but clients need to time their activities carefully within that period (e.g. ensuring that feed is available and affordable and that the end of the fattening period will coincide with high market demand). For oxen fattening, the terms offered by DECSI and others are optimal: a loan term of two years, with a grace period of one year to give clients the freedom to sell when the market is favorable.

Honey Value Chain

Many households that engage in beekeeping do so as part of a diversified portfolio that also includes livestock fattening or rearing and other economic activities.

Value chain requirements, profitability, and timing of returns:

- Initial investments include beehives, colony transfer, protective equipment such as gloves and veils, shelters, smokers, containers, and chisels. In addition, there are annual input costs, which are modest for transitional hives (around 100 birr to cover bee feed costs), but significant for improved hives (to cover the cost of wax that must be added to the hives).
- Honey harvesting typically takes place once a year, and therefore honey production requires one to two years to turn a profit. Expected production from transitional hives is around 20 kg of honey per hive per year, while production from improved hives can be around 30 kg per hive per year.

Loan size: A loan size of 4,000 birr is sufficient for the purchase of two transitional hives (a low cost but productive technology constructed with local materials), with protective equipment and other input costs. The larger loan sizes available in Amhara and Tigray (8,000 birr) enable greater economies of scale, as additional transitional hives can be purchased (while only one set of protective equipment is needed).

Loan term and repayment terms: Given the cycle of the honey value chain, an MFI that offers only a one-year loan for honey production, with a 6-month grace period after which clients must repay 50% of loan and interest, makes unreasonable demands of its clients. Producers will not have generated any income in this short period of time. As a result of these unfavorable terms, fewer households opt to invest in honey

[3] This study did not consider pulses and malt barley, which are also promoted by the project

[4] Livestock rearing is also common in some GRAD areas but is believed to offer a far lower return on investment and is not encouraged.

production, and those that do often struggle to repay their loans on time. Ideally, MFIs should offer loan terms of two years, with a one-year grace period to correspond to the honey harvesting timeframe.

Vegetable Value Chains

Value chain requirements, profitability, and timing of returns:

- Clients investing in vegetable production need to purchase vegetable seeds, fertilizer, insecticides/fungicides, as well as pay for labor for land preparation, weeding, and harvest. In some locations, accessing irrigation is an additional cost.
- Production cycles depend on the vegetable but typically take place during the *meher* season (May-August) and do not take more than four months. Additional cycles are common where irrigation is available.

Loan size: Available loan sizes (4,000 – 8,000 birr) are appropriate for most producers. Clients with larger fields (and for whom vegetable production is a primary livelihood activity) prefer loans of at least 6,000 birr in order to cover all their investment and operating costs.

Loan term and repayment terms: With the exception of DECSI (which offers a two-year loan for all value chains), all financial institutions offer a loan term of one year, with a grace period of 6 months to one year. These terms are appropriate for vegetable value chains promoted by GRAD.

Summary of MFI Loan Products

The following table summarizes the loan products offered by GRAD-supported financial institutions, and provides conclusions as to their appropriateness to clients engaged in different value chains.

Financial institution	Loan size (1^{st} cycle)	Term & repayment terms	Pricing & savings	Method-ology & collateral	Summary
OCSSCO (Oromia)	4,000 birr	• 1-year term (all VCs) • Grace period not specified—up to 1 yr	• 18% flat interest • Compulsory saving	Group (large)	• Loan sizes are appropriate for first-time investments in all VCs • Loan repayment terms are appropriate to the vegetables value chain, and for shoat fattening, but too short for honey (especially the 6-month grace period) and livestock rearing. • Flat interest rates discourage early repayment and are expensive for clients engaging in short-term activities such as shoat fattening • Small group collateral works better than large group collateral
Busa Gonoffa (Oromia)	4,000 birr	• 1-year term (all VCs) • Grace period not specified—up to 1 yr	• 15% flat interest • 400 birr pre-loan voluntary saving	Group (large)	
Mete-mamen (Oromia)	4,000 birr	• 1-year term (all VCs) • Grace period not specified—up to 1 yr	• 15% declining • 400 birr pre-loan voluntary saving	Group (large)	
Omo (SNNPR)	4,000 birr	• 1-year term (all VCs) • 6-month grace period	• 15% flat interest • 2% service fee • Compulsory & voluntary saving	Group (small)	
Sidama (SNNPR)	4,000 birr	• 1-year term (all VCs) • 6-month grace period (all VCs)	• 15% flat • 3% service • 1% insurance • 10% compulsory	Group	
ACSI (Amhara)	8,000 birr	• 3-year term (livestock & honey) • 1-year term (vegetables)	• 10% declining • 1% compulsory every 3 months	Group (small)	• Loan features are appropriate for all VCs • Loan sizes enable upgrading
RuSACCO Unions (Amhara)	5,000 birr	• 3-year term (livestock & honey) • 1-year term (vegetables)	• 12% interest • Insurance 1.7-2.2% • 1% compulsory every 3-6 months	Group (small)	• Loan features are appropriate for all VCs
DECSI (Tigray)	8,000 birr	• 2-year term (all VCs) • 1-year grace period (all VCs)	• 15% declining • Voluntary saving only	Individual	• Loan features are appropriate for all VCs • Loan sizes enable upgrading during the $2^{nd}/3^{rd}$ cycles

WHAT HAVE WE LEARNED

Certain features of the loan can be more easily tied to the value chain than others. *Interest rates*, for instance, are based on the cost to the institution of borrowing money, and are tied to inflation. Loan *sizes* are more likely to be tailored to the needs and capacities of households and their input purchase requirements, up to the maximum capacity of the lender. *Loan term* and *repayment terms* are perhaps the important features to be tied to the timing of the value chain. Current GRAD MFI loans are relatively well suited to the investment needs and cash flow cycles of the GRAD value chains, with the exception of honey. However, there are a number of improvements to be made to improve the profitability of value chain investments for households. Ranked here from the most to the least critical:

Loan term and grace period

The loan term and grace period must be tailored to the timing of sales returns for each value chain. Many financial institutions offer one-year loan terms because of a lack of liquidity[5] as well as a lack of experience with longer-term loans. But terms and grace periods that are too short and force clients to sell when the market is unfavorable simply to make their loan payments on time—or, alternatively, causing clients to be late in their repayments. While GRAD-supported loans typically offer loan terms and grace periods that are appropriate for vegetable production and shorter-term shoat fattening, certain MFIs offer terms that are *not* well tailored to the honey value chain (and to livestock rearing) and need to be reconsidered. It should be noted that, for MFIs that offer flat interest rates, any lengthening of the loan term must come with a change in the pricing. Flat interest rates have no impact on loans that are repaid all at once at the end of the term—for instance, for a one-year loan with a one-year grace period, there is no difference in the interest paid between a flat interest rate and a declining one. However, for any loans with multiple repayments, and especially longer-term loans, the difference between a flat rate and a declining balance can be substantial.

Size of the loan

The loan size must be large enough—after deductions—for the client to invest in the productive assets and other inputs to make his or her business profitable. Loan sizes supported by GRAD are typically appropriate in size for first-time borrowers, as it is wise for borrowers to start with smaller, lower-risk activities. In Amhara and Tigray, loans are large enough (beginning in the first cycle but especially in subsequent cycles) to enable upgrading, and clients who express a need for much larger loans are probably no longer poor and can access more mainstream MFI credit. However, in Oromia and SNNPR, clients express frustration at the limited opportunities for increased loan size.

Pricing of the loan

While a 15% interest rate (that covers the MFI's cost of borrowing and helps cover inflation) is appropriate for financial institutions' commercial sustainability, the flat rates offered by many of the small financial institutions in SNNPR and Oromia are problematic. When the rate is flat, clients typically end up having to pay more interest than they had expected, and the profitability of their activities is limited. This problem is compounded when compulsory savings and other charges are deducted[6], but the interest is applied to the entire loan. In some instances, at the end of the grace period, rather than paying back 50% of their loan with interest, households can find themselves owing nearly 70% of the amount they actually received.[7] Ultimately, a 15-18% flat interest rate coupled with service charges and other fees results in loans that are prohibitively expensive.

Lending methodology and collateral requirements

While the group collateral methodology is useful for mitigating the lenders' risk while avoiding the need for physical collateral, the group size must be kept small in order to minimize the risk to the borrower. Moreover, in order to provide effective peer pressure, the group must consist of peers and neighbors[8]. Indeed, the survey found that group collateral works well for small groups (comprising 3-8 clients). However, in some cases, the same approach is being applied to larger groups (30+ clients), which poses a challenge given the relatively high likelihood of one person out of 30 defaulting on their loan—and the other group members being precluded from taking another loan until the defaulter has settled his or her loan. One MFI successfully

[5] MFIs often struggle to mobilize substantial savings, and are required by National Bank Regulation to maintain a 20% liquidity reserve for voluntary savings

[6] One charge that is appreciated is for credit life insurance—with a cost ranging from 1% to 2.2% of the loan.

[7] For instance, one MFI provides 4,000 birr loans for livestock fattening, but deducts 10% of the loan amount upfront as compulsory savings. When combined with a 3% service charge, 1% credit life insurance, and 15 birr for the passbook, clients receive only 3,425 birr. At the end of the 6-month grace period, they owe 50% of the loan plus interest (15% flat), which is 2,300 birr, and represents 67% of the amount they received after deductions.

applies a hybrid method whereby a group is used to provide peer pressure, but group members are not prohibited from taking another loan in the event that another member defaults.

GRAD LEARNING

Based on the study findings and GRAD's own analysis, GRAD concludes that:

To provide optimal loans to GRAD clients, financial institutions should:

- **Tailor loan terms to the timeframe of the value chain, which for honey and livestock rearing is more than one year.** This will require addressing the underlying causes of inadequate liquidity (for instance through savings mobilization and potential future loan guarantee funds for smaller MFIs) and lack of experience with longer loans.
- **Provide loans to small groups that can effectively implement group solidarity and mutual accountability without high risks.** This will require addressing the following underlying cause of inadequate staff capacity.
- **Apply interest on a declining balance.** This will require addressing the manual calculation challenges, for upgrade operations so that interest payment calculations are automated, thereby making it easier to introduce interest based on declining balances.

Program implementers and financial institutions should work together to ensure that:

- **Borrowers are trained** in financial literacy, credit management, and savings promotion
- **MFI staff are better aware of the nature of the value chains** and the standard requirements, such as suitability of the environment for the specific value chains, production periods, etc.
- **The loan disbursement and collection timing are aligned** with the production time and market time suitable for the value chains.
- **Close follow-up is provided by both—**for the financial institutions, to ensure that loan terms and repayment requirements are clear, and for the program implementers, to ensure that the necessary supporting services and market access are available.

[1] GRAD is promoting a group loan approach through its VESA groups. Repayment is nearly 100% in most areas.