## FINANCIAL EDUCATION

## Booklet 4 of 4, Section III: Borrowing

TEXT HIGHLIGHTED AND BOLDED IN GREEN IS INTENDED TO INFORM THE FIELD AGENT OF INSTRUCTIONS TO BE PROVIDED TO THE GROUP DURING GROUP EXERCISES.


You can use the information and exercises in this manual to plan how to work with farmers to develop their agro-enterprises. Every farmer group and every situation is different, so this manual does not try to tell you exactly what to do. Instead, choose those items that you think the farmers need and can benefit from, and use this manual as a basis for building your own series of learning events so you can pass this information on to farmers.

It is important to adapt the exercises, field lessons and quizzes to suit your own situation. Before teaching these materials, review and modify the following elements to your own local situation:

- Names of people, villages, and groups
- Currency
- Amounts of the items shared in the examples. These amounts could vary based on the target group's income levels. If the amounts are either too large or too small, participants may not feel that these tools apply to them.
- Stories. There may be more relevant examples for your community that will better communicate the objectives.
- Items being bought and sold.
- Types of income generating activities.
- When items are sold, based on the local seasons.

Wherever possible, work in a participatory manner with the farmers. This means you should make sure that it is the farmers who are gathering and analyzing information and making decisions that will affect them. Your role is to facilitate their learning, not to do the job for them.

Cover photo: Michael Stulman/CRS

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## SECTION III - BORROWING

At some point in their lives, most people will borrow money. Borrowing is a way to do something today for which you do not currently have the money. It can help you to expand your business. Borrowing can help you to access critical resources during an emergency. If used wisely, borrowing can be a very effective tool to develop your livelihood activities. It carries risks. Borrowing too much money or borrowing money for unnecessary items could lead to problems with debt. This section will provide an overview of the essential concepts and steps that you should consider before deciding to borrow money:

Lesson 8: Borrowing Concepts. The basic concepts you should know before borrowing money.

Lesson 9: My money vs. someone else's money. The costs of borrowing money.

Lesson 10: Your ability to take on a loan. The principles of responsible borrowing, and how to decide whether to take on a loan and for which amount.

Lesson 11: Comparing financial services. Different types of financial services and the criteria you should use to evaluate different loan options and the basic concepts behind how a lender evaluates a loan.

## LESSON 8. BORROWING CONCEPTS

People borrow money for three primary reasons:

1. To invest,
2. To respond to an unexpected emergency, or
3. To consume.


Investing: Many people borrow money to make an investment in their own income generating activities or even to invest in someone else's income generating activities. A loan can provide you with the resources to respond to a promising business opportunity. A good investment can create a profit, which can be used to repay the loan and the interest. Sarah took out a loan to buy better seeds for her vegetables. Sarah expects that these improved seeds will bring increased yields of her vegetables and thus more profit. With her increased profits, Sarah can repay the loan and its costs.


Responding to an unexpected emergency: When an emergency occurs we need money quickly. If you don't have enough money in savings, you may need to borrow money to meet these expenses.

Consuming. Some people borrow money to purchase an item today which they do not have the money to purchase through savings or their income. Some people borrow more during the lean season to make up for the decreases in income during that period. Sometimes it makes good business sense to make these purchases. A loan could help you buy something that costs less today and which could be more expensive later, such as certain products right after the harvest.

In general, loans for investment will earn income that you can use to repay the loan. Loans for consumption and emergencies do not bring new income and must be repaid from another source. When taking out any loan, it is important to think about how you will repay the loan.


Zablon has three bags of maize in his store after harvest. It is September and the school fees for his children are now due. Zablon is considering selling his maize to pay for the school fees. Zablon has the option to join a savings group where he can access a loan to pay for the school fees. If Zablon takes this loan, he can continue to store the maize for another month, by which time its value will increase by $50 \%$. In the end he would earn more money, enough to pay back the loan, the interest and have some money left over. ${ }^{9}$
» What should Zablon do? Should he use a loan to pay for his children's school fees? Why or why not?
Answer: Zablon should take the loan. He has a good plan to repay the loan. In fact, taking the loan would allow Zablon to increase the amount of money he earns from selling his maize. Even though the loan is for consumption purposes (school fees), by taking the loan, Zablon will be able to allow his investment to increase in value.

## BASIC BORROWING TERMINOLOGY

There are several key terms related to borrowing money. This section will give you more information about these key words and phrases.

[^0]A loan is something that you borrow for temporary use and promise to repay within a certain timeframe. It can be cash or goods. Farmers borrow goods, such as seeds, fertilizer and other inputs. If a person borrows cash, usually that loan must be repaid as cash. If seeds are borrowed that loan can be repaid in seeds, cash, or something of similar value. The loan principal is the original amount of the loan. It does not include interest.


A lender is the person or institution that gives the loan. A borrower is the person or institution that receives the loan. When the lender gives the cash or other inputs to the borrower that is called a loan disbursement.


The interest is considered a cost of borrowing. Jacob borrowed 10,000 with an interest rate of $5 \%$ per month. He has to pay 500 every month in interest as the cost for the loan. The outstanding loan principal is the amount or balance of a loan that remains to be paid. If Jacob has repaid 4,000 of his 10,000 loan (excluding interest charges), then his outstanding loan principal is 6,000. Loans must be repaid within a certain period of time, called the loan period or term.


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When a lender makes a loan to an individual, group or business, the lender takes a risk. The lender wants to be sure that the borrower will repay the loan. Collateral is a form of security or guarantee that the borrower provides to the lender. If the borrower does not repay the loan, the lender will take the collateral as repayment for the loan.


Many formal financial institutions require that the borrower provide proof of ownership of the collateral, such as an ownership title for a plot of land. A warehouse receipt is another type of collateral. A warehouse receipt is a certificate that shows that you have a particular good of a specified quality and quantity stored in a specified location.

Some lenders use savings as collateral. Many savings groups allow members to borrow up to a defined multiple of their total savings. For example, in Sarah's savings group, members can borrow up to three times their accumulated savings. With 10,000 in savings, Sarah can borrow a maximum of 30,000. If the member does not repay the loan, the group will use the savings to repay part of the loan. Banks that use savings as collateral will freeze your access to the savings until the loan is repaid. If you secure a loan with collateral, the value of the collateral should be similar to the value of the loan. For example, Jacob needs a loan for 50,000. The lender has asked Jacob to provide collateral for this loan. The collateral that Jacob provides should be worth roughly the same amount as the loan, approximately 50,000.

A guarantee is a form of collateral. A guarantee is when one person promises to repay a loan for another person, if the borrower does not repay the loan. When a person co-signs a loan for someone else, the co- signer guarantees that the borrower will repay the loan. The co-signer is equally responsible for the repayment of the loan and the payment of interest as the borrower. The co-signer must repay the loan if the borrower does not repay the loan.

A default is when a borrower does not repay a loan. If the co-signer does not repay the loan, it could decrease the co-signer's ability to take out a loan of his own in the future. Formal financial institutions request a guarantor when the borrower is new and does not have a history with the bank. They request a guarantor if the borrower has no collateral.


Group loans are a form of guarantee for the lender. In a group loan, the group guarantees the loans of all the other group members and in effect co-signs the loans of each group member. If one group member does not repay, the other group members are responsible to repay the loan.


For example, Jacob's neighbor, Mohammed, borrowed 50,000 to be repaid in 5 months from a local MFI. The MFI required a guarantor for the loan. Jacob agreed to help his friend and co-sign as a guarantor. By signing the guarantee, Jacob is promising to repay Mohammed's loan if he is unable to repay.

Co-signing or guaranteeing the loan of another person is very risky since you are putting your own money and assets at risk. Only guarantee loans when you know the person very well and are confident the borrower can and will repay the loan.

Before co-signing a loan, ask yourself, "If I could, would I give this person this loan with my own money?"

## QUIZ FOR LESSON 8. BORROWING CONCEPTS

1. Collateral is (check all that apply)
a. What you buy with the money received from a loan.
b. An asset that the borrower provides to the lender that can be used if the loan is not repaid.
c. The guarantee of another person to repay the loan if the borrower cannot.
d. A warehouse receipt.
2. True or false

A loan disbursement is the time the borrower has to use the loan.
a. True
b. False
3. Match the terms with the correct definitions:

| 1. Principal <br> 2. Interest - | a. The fee for use of the money of the loan. <br> 3. A form of collateral when one person <br> befault <br> 4. Guarantee - |
| :--- | :--- |
| promises to repay another person's loan. <br> c. The amount borrowed. <br> d. When the borrower does not repay his or <br> her loan. |  |

Answers are located on the inside back cover of the booklet.

## FIELD EXERCISE 8. BORROWING CONCEPTS

## OBJECTIVE

After this module, trainees will be able to:

- Describe the responsibilities of borrowing.
- List credit terminology and all the parts of a loan.
- Explain the different types of costs for taking out a loan (in addition to principal and interest).


## EQUIPMENT NEEDED

| STANDARD | OPTIONAL |
| :--- | :--- |
| - Flipchart paper or large pieces of | - Laminated A4 or letter paper sized cards, with |
| paper. | images of needs and wants. Suggested images <br> (as found on pages 118, 119, and 120 - one |
| - Marker pens. | per page, with the definition on the reverse |
| - Tape, twine, or string. | side): (a) loan/loan principal, (b) lender/ <br> borrower, (c) interest, (d) loan period or term, <br> - A4 size note cards or similar <br> (e) collateral, (f) guarantee/co-signer, (g) loan <br> sized pieces of paper. |
|  | default, (h) group loan, (i) loan disbursement, (j) <br> loan repayment; and (k) grace period. |

## EXPECTED OUTPUTS

- Group member can describe the responsibilities of borrowing, credit terminology, and all the parts of a loan.
- Group members can describe the indirect costs connected to taking out loans.


## TIME

- 60 minutes, split into two sessions (meetings)
- The first session will be 40 minutes and will focus on introducing the borrowing concepts.
- The second session will be 20 minutes and will focus on explaining the loan terms.


## PREPARATION

- Prepare flipchart paper with the definition for a loan and the reasons we borrow money.


## SUGGESTED PROCEDURE (40 MINUTES)

8.1 Split the group into small groups of 3-4. Have each group answer the following 4 questions. After 5 minutes of discussion have the groups share their answers.
" How many of you have borrowed money?
" What did you like or dislike about the experience?
" How did you repay the loan?
" What would you do differently next time you borrow money?
8.2 Tell participants: We are going to do an exercise linking words together.

Demonstrate the exercise by asking three participants to say whatever comes into their minds when you say a common, familiar word (e.g., school, water). When you say the word water, participants should say things such as wet, rain, cool, refreshing to drink, makes plants grow, etc. When everyone understands the exercise, say: Now let's try the same thing again. Tell me what comes into your mind when I say the word loan.
8.3 Write down 4 to 5 participant ideas on the flipchart sheet. Review their answers and ask:
» Based on these ideas, what is the definition of a loan?
Allow 3-4 volunteers to answer, then post the definition of a loan.

Loan: A loan is something - either money or another item - that a person has borrowed for temporary use and promises to repay. After a defined period of time, the money or goods (such as seeds) must be repaid to the lender, usually with interest or a fee charged for use of the money.
8.4 Say: The lender could be a bank, a group, an MFI, or a person. Interest is a fee paid for the use of the money, which is normally a percentage of the loan principal. A borrower pays this interest to the bank, group, MFI, or the individual, who lent the money.

### 8.5 Then ask:

" Why do you borrow money?
Take note of the examples that the participants give and make sure they have identified the three main reasons for borrowing: to invest, to respond to an unexpected emergency, and to consume. Write these down on a flipchart sheet.

## WHY WE BORROW

1. To invest
2. To respond to an unexpected emergency
3. To consume

### 8.6 Say:

" Only in one of these cases do we generate money to repay the loan. Which is it? Why?

Loans for investments will earn income that you can use to repay the loan. Loans for consumption and emergencies do not bring in new income and must be paid back from another source.
" Aside from borrowing, where else can you find money to respond to an unexpected event or emergency?
Answer: By using your savings.
8.7 Read the following story to the group and have the group respond to the question at the end.

Zablon is a farmer in the village of Ralang. It is September and he has 3 bags of maize in his store after harvest. School fees for his children are now due, so Zablon is thinking about selling his maize to pay for the school fees. Right before he sells the maize, a savings group is organized in Ralang and he becomes one of the first members. Now he has the option to ask for a loan and use this money to pay his children's school fees. This loan would allow him to continue to store the maize for a month, by which time its value will go up by $50 \%$. He could then sell the maize at this higher price and have enough to pay back the loan, the interest, and have some money left over.

Ask the participants:
" What should Zablon do? Should he use a loan to pay for his children's school fees or should he sell his maize to pay the fees? Why or why not?

After the group has had some time to discuss the answers and emphasize the following points:
" While the loan is not for a productive purpose, Zablon has a plan to repay the loan.
" Taking the Ioan would allow Zablon to increase the amount of money he earns from selling his maize by waiting until the prices are higher. If he sold his maize now, he would lose more in profits than he would pay in interest on a loan. That means that he would actually lose money in the long run.

## REVIEWING DEFINITIONS AND TERMS (20 MINUTES)

Tell participants: We have discussed the definition for the word 'loan.' Before we talk more about borrowing, we need to understand some basic terms about loans. In this activity, each of you must select a card. Each of the cards has a photo that matches one of the terms that was discussed earlier.

Place on the wall pieces of paper with the various terms about loans. After each participant has selected a card, say:
" You have three minutes to find the correct match for your term.
After the three minutes are up, ask each participant to explain in their own words what the terms mean. Ask participants to provide an example of when they have seen someone deal with one of those terms.

Repeat the exercise.
Table Field Exercise 8.1: Lending terms
DEFINITIONS
The principal is the
original amount of
the loan.
Interest is the amount of
money that the borrower
pays to the lender for
the use of the loan. This
payment is in addition
to paying back the loan
amount (principal).
Collateral an item of
value that the borrower
pledges to the lender
in case the borrower
is unable to repay the
loan (could be land,
savings, etc.).

| A Guarantor or a Co- |
| :--- |
| signer is a person who |
| will repay the loan in |
| case the borrower cannot |
| pay. This person may be |
| required to co-sign the |
| loan agreement with the |
| borrower. |
| The loan term is period |
| of time that the borrower |
| has to use the loan and |
| repay it |

# LESSON 9. <br> MY MONEY VS. SOMEONE ELSE'S MONEY 

## COSTS OF LOANS

Borrowing has costs. You should think about these costs and how these costs will impact your profit before taking a loan. There are three primary costs associated with loans: fees, interest, and indirect costs.

Fees are charged by financial institutions for various activities. These activities can include the loan application, early repayment of a loan, transferring funds from a savings account to the loan account, making late payments, and others.

Interest is the fee you pay the borrower for using the money. It is calculated as a percentage of the loan amount and can be applied for any time interval: day, week, month, year, or over the total loan period. It is very important to know the time period for calculating the interest (per day, per month, etc.) and to calculate the total cost of the interest before choosing to take the loan. Some lenders may just tell you their fee for use of the loan, rather than use an interest rate.

Jacob takes a loan for 50,000 with a loan period of four months. The total interest payment Jacob will pay on this loan 10,000. The lender could tell Jacob this same overall interest fee in a number of different ways. The fee would be the same if the lender told Jacob the fee for the 50,000 loan was $5 \%$ per month or $60 \%$ per year over the four month loan period (a total of 20\%).

Indirect costs are not charged directly by the lender to the borrower. They are still necessary for the borrower to pay to access and manage the loan. These costs can include transportation costs to and from the lender to receive the loan and make loan repayments. If the lender is far away, you may need to take time away from working or selling your goods. If the loan is a group loan, the time spent in loan meetings is a cost, as is the amount you have to pay should another member default.


## INTEREST: FLAT RATE VERSES DECLINING BALANCE RATE

Interest rate can be either flat or declining. A flat interest rate loan has an interest amount that remains the same for the duration of the loan without taking into consideration that periodic payments reduce the amount loaned. Jacob borrowed 50,000 at a monthly flat rate of $5 \%$, with equal monthly installment payments over a 10 month period.

Question: How much will Jacob pay each month?

To calculate this amount we take the total amount of the loan and divide it by the number of payments due.

Total Amount of Loan

> = Principle Installment payment

Number of payments due

Answer: $\frac{50,000}{10 \text { months }}=5,000$

Jacob will pay 5,000 in principal payments each month for a total of 10 months.

Question: How much will Jacob pay in interest for the loan?

To calculate this amount we take the total amount of the loan and multiply it by the interest rate to get the monthly interest payment.

Total amount of loan $x$ interest rate $=$ interest payment
In this case, $50,000 \times 5 \%$ monthly interest $=2,500$ in interest per month.
To calculate the total interest to be paid, add each 2,500 payment for a total of 10 months: $2,500 \times 10=25,000$.

Answer: At the end of the 10 months, Jacob will have paid 25,000 in interest on his loan.

Table Lesson 9.1: Repayment schedule for a flat interest rate loan shows the repayment schedule for Jacob's flat interest loan of 50,000 at an interest rate of $5 \%$ per month. A repayment schedule shows when interest and principal payments are due and the amount to be paid at each payment.

Table Lesson 9.1: Repayment schedule for a flat interest rate loan

| MONTH | INTEREST PORTION OF PAYMENT | LOAN PRINCIPAL PORTION OF PAYMENT | TOTAL PAYMENT | OUTSTANDING LOAN PRINCIPAL |
| :---: | :---: | :---: | :---: | :---: |
| Disbursement | 0 | 0 | 0 | 50,000 |
| 1 | 2,500 | 5,000 | 7,500 | 45,000 |
| 2 | 2,500 | 5,000 | 7,500 | 40,000 |
| 3 | 2,500 | 5,000 | 7,500 | 35,000 |
| 4 | 2,500 | 5,000 | 7,500 | 30,000 |
| 5 | 2,500 | 5,000 | 7,500 | 25,000 |
| 6 | 2,500 | 5,000 | 7,500 | 20,000 |
| 7 | 2,500 | 5,000 | 7,500 | 15,000 |
| 8 | 2,500 | 5,000 | 7,500 | 10,000 |
| 9 | 2,500 | 5,000 | 7,500 | 5,000 |
| 10 | 2,500 | 5,000 | 7,500 | 0 |
| Total payments | 25,000 | 50,000 | 75,000 | - |

For the flat interest rate loan, the loan principal and the interest payment is the same for each loan payment. At the end of the 10 month period, Jacob will have paid a total of 25,000 in interest on his loan.

Note that Jacob makes the same interest payment of 2,500 each period.

On a declining balance loan, the interest amount to be paid decreases as the loan principal is paid off (principal balance decreases with each payment). Therefore the interest amount is recalculated each month based on the amount of principal outstanding after the previous month's payment. The borrower pays less interest overall on a declining balance loan than on a flat interest rate loan. However; declining balance loans are more complicated to calculate because the amount of interest to be paid, and therefore the total loan payment, changes every month. While you are better off with a declining balance loan because you pay less interest on the loan, they may not be always available.

Jacob borrows 50,000 later in the year. This time the loan is based on a declining balance calculation. The loan has a monthly interest rate of $5 \%$, with equal principal installments of 5,000 per month over the 10 month loan period.

Table Lesson 9.2: Repayment schedule for a declining balance loan

| MONTH | INTEREST PAYMENT | LOAN PRINCIPAL PAYMENT | TOTAL PAYMENT | LOAN PRINCIPAL OUTSTANDING |
| :---: | :---: | :---: | :---: | :---: |
| Disbursement | 0 | 0 |  | 50,000 |
| 1 | 2,500 | 5,000 | 7,500 | 45,000 |
| 2 | 2,250 | 5,000 | 7,250 | 40,000 |
| 3 | 2,000 | 5,000 | 7,000 | 35,000 |
| 4 | 1,750 | 5,000 | 6,750 | 30,000 |
| 5 | 1,500 | 5,000 | 6,500 | 25,000 |
| 6 | 1,250 | 5,000 | 6,250 | 20,000 |
| 7 | 1,000 | 5,000 | 6,000 | 15,000 |
| 8 | 750 | 5,000 | 5,750 | 10,000 |
| 9 | 500 | 5,000 | 5,500 | 5,000 |
| 10 | 250 | 5,000 | 5,250 | 0 |
| Total payments | 13,750 | 50,000 | 63,750 | - |

Note how the interest payment decreases each month as Jacob pays off his loan. At the end of the 10 months, Jacob will have paid 13,750 in interest on his loan. This amount is 11,250 less than the 25,000 he paid on the 50,000 loan that used a flat interest rate calculation.

If Jacob made a late payment or missed a payment in either scenario, he would likely be charged a late or a missed payment fee. Interest could be charged on those fees.

Note how the monthly interest payment decreases each month as the outstanding loan balance decreases.

## the different ways to repay a loan

The loan principal is repaid according to the terms agreed upon between the borrower and the lender before the loan is disbursed.

- Equal installments: An equal installment payment is where the amount borrowed is paid in periodic installments of equal amounts. The installment period can be any period of time. In the previous example, Jacob had a monthly principal installment of 5,000 per month for 10 months.
- Balloon payment: A balloon payment is when the amount borrowed is paid in a lump sum at the end of the loan term. In this type of loan arrangement the borrower will likely still make periodic interest payments.
- Grace period: A grace period is when there is a period between when the loan is disbursed and when the borrower must start repaying the loan. Sometimes a lender will give the borrower a defined period of time before the borrower must start repaying the loan principal. A grace period can be helpful for agriculture or other business loans because a farmer needs money to plant. He likely will not start generating income to be able to repay the loan until he sells his crops after harvest. In most cases, interest must be paid during the grace period. For example, if Jacob took out a loan with a grace period of 2 months, his loan principal and interest payments would look like Table Lesson


## 9.3: Repayment schedule for a loan with a grace period.

Table Lesson 9.3: Repayment schedule for a loan with a grace period

| MONTH | INTEREST <br> PAYMENT | LOAN PRINCIPAL <br> PAYMENT | TOTAL <br> PAYMENT | OUTSTANDING <br> LOAN PRINCIPAL |
| :---: | ---: | ---: | ---: | ---: |
| Disbursal | 0 | 0 |  | 50,000 |
| $\mathbf{1}$ | 2,500 | 0 | 2,500 | 50,000 |
| $\mathbf{2}$ | 2,500 | 0 | 2,500 | 50,000 |
| $\mathbf{3}$ | 2,500 | 6,250 | 8,750 | 43,750 |
| $\mathbf{4}$ | 2,500 | 6,250 | 8,750 | 37,500 |
| $\mathbf{5}$ | 2,500 | 6,250 | 8,750 | 31,250 |
| $\mathbf{6}$ | 2,500 | 6,250 | 8,750 | 25,000 |
| $\mathbf{7}$ | 2,500 | 6,250 | 8,750 | 18,750 |
| $\mathbf{8}$ | 2,500 | 6,250 | 8,750 | 12,500 |
| $\mathbf{9}$ | 2,500 | 6,250 | 8,750 | 6,250 |
| $\mathbf{1 0}$ | 2,500 | 6,250 | 8,750 | 0 |
| Total payments | $\mathbf{2 5 , 0 0 0}$ | $\mathbf{5 0 , 0 0 0}$ | $\mathbf{7 5 , 0 0 0}$ |  |
| $\boldsymbol{y}$ |  |  |  |  |

## BORROWING MONEY RESPONSIBLY

Having access to a loan can be a great opportunity to expand your business and earn more income. It is also a risk. Before taking a loan it is important to evaluate the benefits compared to the costs and risks of taking the loan.

In general, a good loan helps the borrower to invest in a business, respond to a family emergency, and improve their living conditions sooner than without the loan. It is something that the borrower can repay.

A bad loan costs more money than what the borrower will earn from the business investment, forces the borrower to go deeper into debt, or is difficult for the borrower to repay.

Even if you would earn more than the loan costs on the investment, if a loan is disbursed too soon before you need the funds, you may use the money on other purchases. If the loan is disbursed too late, you may no longer have need of the money because the investment opportunity has passed.

For example, David wants a loan to buy inputs to make crafts that will be sold for the winter festival. With the money he receives from the loan, David will purchase the inputs he needs to make the crafts. The local MFI agrees to give David the loan, however, they are not able to disburse the funds until two days before the winter festival. At that late time, David would not be able to make his crafts and sell them before the festival. After the festival, there is little demand for the crafts. In this example, David would be better off not to take the loan.

As a second example, Sarah's cousin Mercy sells goat meat in the market. Every morning, Mercy buys meat to sell for the day from Trader Tom. Trader Tom allows Mercy to buy the meat on credit that she must repay at the end of the day with an interest rate of 5\%. If she doesn't repay trader Tom at the end of the day, Mercy must pay an additional 5\% of interest the next day. Mercy usually buys the meat for 5,000 and sells it for 5,750 . She sells in the market 5 days a week. Last year, Mercy joined a savings group with other ladies in the market. The group will have its share out soon, and Mercy is trying to decide what to do with her money. She has saved 15,000 over the past year by saving 250 each week. She plans to use her savings to start raising chickens. One of the other members of her savings group suggested that Mercy could use savings to stop buying her goat meat on credit to save more money.
" What should Mercy do?
Using the skills she had learned in her previous financial education courses, Mercy looked at her current business income and expenses.


Table Lesson 9.4: Mercy's current weekly business income and expenses

|  | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INCOME |  |  |  |  |  |  |
| Goat meat sales | 5,750 | 5,750 | 5,750 | 5,750 | 5,750 | 28,750 |
| EXPENSES |  |  |  |  |  |  |
| Goat meat loan | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 25,000 |
| Loan interest | 250 | 250 | 250 | 250 | 250 | 1,250 |
| Total | 5,250 | 5,250 | 5,250 | 5,250 | 5,250 | 26,250 |
| Income minus expenses | 500 | 500 | 500 | 500 | 500 | 2,500 |

Mercy calculated that she pays Trader Tom 250 per day or 1,250 per week in interest.

Table Lesson 9.5: Mercy's weekly business income and expenses without
borrowing money for meat


If Mercy uses 5,000 of her share out to buy the goat meat on Monday morning, instead of buying the meat on credit, Mercy could save an additional 1,250 each week. Mercy could use her income from Monday to buy the goat meat Tuesday morning.

Recently, Mercy has not had enough meat to sell throughout the day. Using her marketing skills she calculated that her customers would buy $50 \%$ more meat if it were available. Mercy only has enough money to invest 5,000 in her business. Mercy will use her 5,000 in savings to buy the meat. She will also purchase another 2,500 of meat on credit.

Table Lesson 9.6: Mercy's weekly business income and expenses with borrowing money for meat

|  | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INCOME |  |  |  |  |  |  |
| Goat meat sales | 8,625 | 8,625 | 8,625 | 8,625 | 8,625 | 43,125 |
| EXPENSES |  |  |  |  |  |  |
| Purchasing goat meat with own money | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 25,000 |
| Goat meat loan | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 12,500 |
| Loan interest | 125 | 125 | 125 | 125 | 125 | 625 |
| Total | 7,625 | 7,625 | 7,625 | 7,625 | 7,625 | 38,125 |
| Income minus expenses | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 5,000 |

By making an additional investment in her business, Mercy is able to increase the amount of money she takes home. Mercy could save some of her additional surplus (income minus expenses) and invest it to grow her business (to buy more meat) or to make her business more profitable (to buy more of the meat with her savings instead of credit).

As we have seen, sometimes borrowing money is a good choice because it allows us to make an investment that we could not make without the loan. Taking out a loan without fully understanding its impact can be very costly. It is important to know the total costs of the Ioan and how much more money you can expect to earn from your business investment.

## BEFORE YOU BORROW MONEY, YOU SHOULD HAVE THE ANSWERS TO THE FOLLOWING QUESTIONS.

## BOX 3. QUESTIONS TO ASK BEFORE BORROWING MONEY

1. What is the repayment schedule? (e.g., weekly, monthly, etc.)
2. Is there a grace period? If there is no grace period, when will I start generating income from this investment?
3. What is the repayment amount for the principal?
4. What is the repayment amount for the interest?
5. How much will I need to repay each time (the monthly installment and interest payment)?
6. What is the total amount of interest to be paid?
7. When will I receive the money (or when will the money be disbursed)?
8. Does this timing work with your need for the money? Is this too early? Too late?
9. What sources of income or savings will I use to repay the loan?
10. If you are borrowing to buy a tool or piece of equipment, will the object outlive the Ioan and continue to earn money?
11. Can I charge a price for the goods I buy with the loan that is high enough to repay the loan and give me a profit?
12. Do I need to guarantee the Ioan with collateral? If so, what?
13. What are the consequences if I fail to repay?
14. If it is a group loan, what are the consequences if other group members fail to repay?
15. From whom will I get the Ioan?
16. How much do I need to borrow?
17. What is the total cost of the loan?
18. The total amount of interest to be paid?
19. The total amount of fees?
20. What are the other costs?
21. Is this my best option to borrow?
22. What other options do I have to borrow this money?
23. Do I have the money to repay the Ioan?

## QUIZ FOR LESSON 9. MY MONEY VS. SOMEONE ELSE'S MONEY

1. Which of the following are characteristics of a 'bad loan'? Select all that apply.
a. A loan that responds to an emergency.
b. A loan that will be difficult to repay.
c. A loan with greater costs than what it will earn from the business investment.
d. A loan that can help to improve living conditions.
2. Look at the following repayment schedule. Select all of the different characteristics that apply to this loan.

| MONTH | INTEREST <br> PAYMENT | LOAN PRINCIPAL <br> PAYMENT | TOTAL PAYMENT | OUTSTANDING <br> LOAN PRINCIPAL |
| :---: | ---: | ---: | ---: | ---: |
| Disbursement | 0 | 0 |  | 100,000 |
| $\mathbf{1}$ | 5,000 | 0 | 5,000 | 100,000 |
| $\mathbf{2}$ | 5,000 | 0 | 5,000 | 100,000 |
| $\mathbf{3}$ | 5,000 | 10,000 | 15,000 | 90,000 |
| $\mathbf{4}$ | 5,000 | 10,000 | 15,000 | 80,000 |
| $\mathbf{5}$ | 5,000 | 10,000 | 15,000 | 70,000 |
| $\mathbf{6}$ | 5,000 | 10,000 | 15,000 | 60,000 |
| $\mathbf{7}$ | 5,000 | 10,000 | 15,000 | 50,000 |
| $\mathbf{8}$ | 5,000 | 10,000 | 15,000 | 40,000 |
| $\mathbf{9}$ | 5,000 | 10,000 | 15,000 | 30,000 |
| $\mathbf{1 0}$ | 5,000 | 10,000 | 15,000 | 20,000 |
| $\mathbf{1 1}$ | 5,000 | 10,000 | 15,000 | 10,000 |
| $\mathbf{1 2}$ | 5,000 | 10,000 | 15,000 | 0 |
| Total $\boldsymbol{P a y m e n t s}$ | $\mathbf{6 0 , 0 0 0}$ | $\mathbf{1 0 0 , 0 0 0}$ | $\mathbf{7 5 , 0 0 0}$ |  |
| $\boldsymbol{y}$ |  |  |  |  |

a. Equal interest installment payments
b. Balloon payment
c. Grace period
d. Declining balance rate
e. Flat Interest rate
f. Fees
3. Which of the following is the correct definition of a grace period?
a. The period between when a loan is disbursed and when the borrower must start repaying the loan.
b. The period between when the loan is disbursed and when the borrower completes repayment.
c. The period between when the loan is disbursed and when the borrower pays off half of the Ioan.

Answers are located on the inside back cover of the booklet.

## FIELD EXERCISE 9. <br> MY MONEY VS. SOMEONE ELSE'S MONEY

OBJECTIVE

- Demonstrate the costs of borrowing money.
- Practice comparing different loan options in different situations.


## EQUIPMENT NEEDED

STANDARD

## OPTIONAL

- Flipchart paper or large pieces of paper.
- Marker pens.
- Tape, twine, or string to hang flipchart paper
- Paper (play) money
- Laminated A4 or letter paper sized card with image of mobile phone


## EXPECTED OUTPUTS

- Group members understand the benefits of making a purchase with money they have saved, instead of with money they have borrowed.
- Group members have practiced calculating the various costs and comparing different loan options with different needs.


## TIME

- 120 minutes in 4 sessions of 30 minutes each.
- The first 30 minute session will focus on comparing savings vs. borrowing using the example of a savings group vs. a moneylender.
- The second 30 minute session will focus on how to use a calculator.
- The third 30 minute session will focus on calculating the repayment amount.
- The fourth 30 minutes session will focus on comparing a flat rate vs. a declining balance Ioan.


## PREPARATION

- Draw the images on the flipchart paper or other paper.
- Prepare the 20 pieces of play money to use for the game.


## SUGGESTED PROCEDURE

9.1 Post the flipchart paper with the "Saving vs. Borrowing" so that everyone can see (see below). Have 20 pieces of paper that will symbolize 1,000 notes for this activity. Tape eight (8) of these notes to the Moneylender side of the flipchart paper. Invite 2 volunteers to the front of the room.

Say: Let's go back to the farmer family we developed in lesson 2. I will need two volunteers to play the roles of Jacob and his friend, Robert, who both need money to buy the bicycle. Volunteers, you will move money away from the picture or place it on the picture depending on the story that I read about Jacob and Robert. Ready?


## INSTRUCTIONS FOR VOLUNTEERS:

| January | Jacob saves 2,000 | Give Jacob 2,000 and instruct him to tape the notes under the savings group picture |
| :---: | :---: | :---: |
|  | Robert gets 8,000 from the moneylender | Give Robert 8,000 notes to hold |
| February | Jacob saves another 2,000. | Give Jacob 2,000 and instruct him to place them under the savings group picture |
|  | Robert, however, has to pay the moneylender 2,000 for his first payment. | Tell Robert to tape 2,000 under the moneylender picture |
| March | Jacob saves another 2,000 | Give Jacob 2,000 and instruct him to tape the notes under the savings group picture |
|  | Robert pays the moneylender 2,000 | Tell Robert to tape 2,000 under the moneylender picture |
| April | Jacob saves another 2,000 | Give Jacob 2,000 and instruct him to tape the notes under the savings group picture |
|  | Robert owes 2,000 | Instruct Robert to tape 2,000 under the moneylender picture |
| May | Jacob saves another 2,000 | Give Jacob 2,000 and instruct him to tape the notes under the bank picture |
|  | Robert pays the moneylender 2,000 for May but still owes $\mathbf{2 , 0 0 0}$ more in interest on the loan. | Instruct Robert to tape 2,000 more under the moneylender picture. And ask him about the interest payment. When he says he does not have the money then ask him where it should come from. |

9.2 At the end, your flipchart paper should look like this:

9.3 Clap for the volunteers and ask them to return to their places. Ask:
" What is the difference between the 10,000 at the bank and the $\mathbf{1 0 , 0 0 0}$ at the moneylender's?
Answer: The money on the bank's side belongs to Jacob, while the money from Robert now belongs to the moneylender. Robert has paid 10,000 for an 8,000 bicycle, whereas Jacob will only pay the cost of the bicycle. The money from the moneylender was obtained quickly, while the savings took time to accumulate. The money from the moneylender had a cost, while the savings is free. Jacob can choose to purchase the bicycle with his savings. Robert now has a bicycle.

Ask:
" If Robert and Jacob bought their bicycles for personal convenience, would you recommend saving or borrowing?

If Robert and Jacob were able to earn 200 per week by renting the bicycle out for transportation, would you recommend saving or borrowing?
9.4 Tell participants: I am going to read several statements, please stand up if you agree with the statement and remain sitting if you do not agree.

If there are different opinions among the group, allow some discussion to hear everyone's viewpoints. Remember to stay mindful of the time though.

## Say:

- Any time you can take out a loan, you should.
- Using borrowed money is more expensive than using your own money.
- There are no consequences from missing a loan payment as long as you eventually repay the loan.
- A loan can help you invest in your business.
- There's no such thing as a bad loan.
- Loans are a necessary part of life.
- I, or someone I know, is currently repaying a loan.
- I have, or someone I know has, taken out a loan to repay another loan.
9.5 Thank participants and say: We will now calculate the different costs of taking out a loan. We will start with interest. Can someone share with the group the definition of interest that we previously discussed? Allow the group to come to work together to arrive at the answer.

Answer: The amount of money that the borrower pays to the lender for the use of the loan. This payment is in addition to paying back the full principal.

Say the following: Some lenders will tell you a specific money amount that must be paid in addition to the loan principal. Many lenders will explain interest as a percentage of the principal, such as $2 \%$ per week or $5 \%$ per month.

Sarah wants to take out a loan for 20,000. The interest rate is $\mathbf{2 \%}$ per repayment. How much will Sarah pay in interest per repayment?
" What information does Sarah need to calculate the amount of interest she must pay for each loan repayment?
Answer: Loan principal and interest rate.)
Ask the participants: Calculate this amount using the calculator function on a mobile phone.

## TEACHING TIP:

For each question, ask the group if anyone knows the answer before working with the group on the exercise.

## INSTRUCTIONS ON HOW TO USE A CALCULATOR

Say: The best way to calculate the interest amount is to use a calculator. You can purchase a calculator in the market; however, most cell phones have a calculator function, too. When you do these calculations, do each calculation three times to make sure that your answer is correct. Involve other members of your household, such as your husband, wife, or older children. If you and they get the same answer each time, then you likely have the right answer.

Ask everyone to calculate these numbers following these instructions:

- The interest calculation is $20,000 \times 2 \%$
- On a calculator $2 \%$ is point zero two (.02)
- Using the calculator on a mobile phone type two zero zero zero zero times point zero two equals.
- This is written symbolically as $20000 \times .02=$

Each mobile phone is a bit different. First go to your mobile phone's calculator mode. Don't hesitate to ask for someone else's help if you haven't used it before - it's easy to learn!

Use diagram to the right as a visual guide for a mobile phone.
Say to participants: What answer do you get?
Answer: The correct answer is 400.

Have a number of people share their answers.
9.6 Say: What if the interest rate was $5 \%$ ? How much would Sarah pay per repayment with a $5 \%$ interest rate on a loan for $\mathbf{2 0 , 0 0 0}$ ?

Repeat the calculation as above.
The interest calculation is $20,000 \times 0.5$. The correct answer is 1,000 .
Say: What if the interest rate was $10 \%$ ? How much would Sarah pay per repayment with a $\mathbf{1 0 \%}$ interest rate on a loan for $\mathbf{2 0 , 0 0 0}$ ?

Repeat the calculation as above.
The interest calculation is $20,000 \times 10 \%$. On a calculator $10 \%$ is point one. Using a regular calculator, $(20,000 \times .1=)$. The correct answer is 2,000.
" Say: Which of these interest rates would you prefer to receive? Why?
Answer: The lower interest rates are cheaper.
() Ask the participants: Why is it a good idea to calculate the interest before taking a loan?
Answers:

- To verify accuracy of the interest amount that the lender provides.

- To understand the costs of the loan before taking the loan. This understanding is important when deciding whether to take out the loan.
- To compare the costs of different loan options.
9.7 Tell participants: On many loans, you must make the interest payment for each period. Sarah's loan for $\mathbf{2 0 , 0 0 0}$ has a $\mathbf{2 \%}$ interest paid weekly for four weeks. How much interest will Sarah have to pay by the time she fully repays her loan in four weeks?
» How much is Sarah's interest payment for each repayment?
Answer: 20,000 X . $02=400$ per repayment
" How many repayments does Sarah have on her loan?
Answer: 4 weekly payments
" How much interest will Sarah pay? Ask a member of the group to make
the calculation on a calculator. Then explain to the group how to make the
How much interest will Sarah pay? Ask a member of the group to make
the calculation on a calculator. Then explain to the group how to make the calculation.
Answer: 400 per week $\times 4$ weekly payments $=1,600$.
" What is the difference in the total interest paid of the loan that is $2 \%$
paid weekly over four weeks and the loan that is $8 \%$ paid monthly over one month?
Answer: 8\% interest paid per month for one month. 20,000 X . $08=1,600$. One interest payment of 1,600 equals a total interest payment of 1,600. There is no difference. Both loans pay a total of 1,600 in interest.


## TEACHING TIP

If someone has trouble making the calculation, help that person to calculate the correct answer before moving on.

[^1]
## BOX 4 TEACHING TIP FOR USING A MOBILE PHONE TO CALCULATE

Since most people can easily access a mobile phone, it is simplest for everyone to make the interest calculation using the calculator function on a mobile phone. If some of the participants understand multiplication these calculations are completed as follows:
" What if the interest rate was $10 \%$ ?
To calculate $10 \%$ of any number move the decimal point one place to the left, or take off one 0 .
" What is $\mathbf{1 0 \%}$ of $\mathbf{1 , 0 0 0}$ ? Answer: 100
Similarly, to calculate $1 \%$ of any number, move the decimal 2 places to the left, or take off two O's.
" What is $1 \%$ of 20,000 ? 200
" What is $1 \%$ of 35,000 ? 350
" What is $1 \%$ of 150,000 ? 1,500
To calculate the interest amount, first calculate $1 \%$ of the loan principal. Then multiply that number by the amount of interest.
" Sarah's interest is how much? $\mathbf{2 \%}$.
To calculate the $2 \%$ interest amount, we multiply what we calculated as $1 \%$ of the interest by 2 .
" What is $\mathbf{2 \%}$ of $\mathbf{2 0 , 0 0 0}$ ?
$1 \%$ of $20,000=200$.
$200 \times 2=400$.
9.8 Split the group into 3 groups and give each group one option to calculate. Tell
the group: Sarah has a few choices for her loan and we are going to help her decide which loan option is best. Calculate the total interest payment for your loan. Remember to first calculate the interest payment and then add up the total amount of interest to be paid.

- Group 1: 20,000 loan at 5\% interest paid per month for one month.
- Group 2: 20,000 loan at 3\% interest paid bi-weekly (every other week) over four weeks.
- Group 3: 20,000 loan at 8\% interest paid per month for one month.

Ask the groups to share their answers. The answers are calculated as follows:
5\% interest paid per month for one month.

- $20,000 \times .05=1,000$. One interest payment of 1,000 equals a total interest payment of 1,000.

3\% interest paid bi-weekly over four weeks

- $20,000 \times .03=600$. Two interest payments every two weeks over four weeks' time. Total interest payment is $2 \times 600=1,200$.
$8 \%$ interest paid per month for one month
- $20,000 \times .08=1,600$. One interest payment of 1,600 equals a total interest payment of 1,600.


### 9.9 Ask the group:

" Which loan has the lowest interest payment?

- 5\% paid monthly over one month,
- $3 \%$ paid twice over four weeks, or
- 8\% paid monthly over one month?

Answer: 5\% paid monthly.
Which loan has the second lower interest payment?
Answer: 3\% paid twice over four weeks.
What do you need to ask about interest rates when taking out a loan?
Answer: The frequency and over what time period the payments will be made.
What does this lesson teach you about interest rates?
Answer: The lowest interest rate may not always lead to the cheapest loan.
9.10 Say: Many lenders can say the same thing in different ways, such as paying 8\% interest monthly or 2\% interest weekly. they can tell you things in ways that can make one option seem better, such as a $2 \%$ interest weekly loan compared to a 5\% interest monthly loan. As we have seen from our calculations, the $5 \%$ monthly interest loan is really the cheaper option.
9.11 Tell participants: Now we're going to look at how much Sarah must repay each week.

Have two groups of participants play the role of the lender and two groups of participants play the role of Sarah (the borrower). Give each lender 20,000 (in play money or counters) to give to the borrower. Give each borrower 2,000 for the interest payments. The total interest payments are 1,600 so the borrowers should have 400 remaining at the end of the exercise. Be sure to have an assortment of 100,500 , and 1,000 in play money notes, or different objects representing different amounts.

Say: Remember, Sarah is taking out a loan for 20,000 with a weekly repayment and a $\mathbf{2 \%}$ weekly interest payment. Sarah will repay the principal in 4 equal installments. Borrowers, you do not want to pay any more money than is required. Lenders, you want to be sure that Sarah fully repays the amount that is due. After each step, complete that step on the loan repayment schedule on the chart together with the group.

Read these instructions: Sarah goes to the lender to receive the loan disbursement. The lenders should give Sarah the 20,000 loan. This week is called the "disbursement week."

| WEEK | LOAN PRINCIPAL <br> PAYMENT | INTEREST <br> PAYMENT | TOTAL <br> PAYMENT | OUTSTANDING <br> LOAN PRINCIPAL |
| :---: | :---: | :---: | :---: | :---: |
| Disbursement |  |  |  | 20,000 |

Say: Borrowers calculate together the amount of your weekly repayment. Make the repayment to the lender.

Say: Lenders calculate together how much the borrower should repay you each week.

Note, the lenders should complete the calculation on a calculator: $20,000 \div 4=5,000$ principal +400 interest $=5,400$ repaid weekly.

Ask the lenders if they received the correct amount from the borrowers. If the borrower underpaid, the lender must ask for outstanding amount. If the borrower overpaid, the lender should tell the borrower how much he overpaid.

## FACILITATOR'S NOTE

The participants can use the play money to help them calculate the repayment amounts. Help the participants make the calculations.

Complete the week 1 repayment of the repayment schedule together with the group. Ask the group members to give you the information to complete each box. If needed, help the group members to make the calculation.
$\left.\begin{array}{|c|c|c|c|c|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL PAYMENT - } \\ \text { INTEREST PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$

Repeat for weeks 2-4. Call out each week one by one and have the borrowers give the lenders the appropriate amount of money. After each week, complete the next line in the repayment schedule.
$\left.\begin{array}{|c|r|r|r|r|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL PAYMENT - } \\ \text { INTEREST PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$

Ask the borrowers what was the total amount they paid for the loan.
Ask the lenders how much they received and if they received
Facilitator's Note: The borrowers should the correct amount.

Ask if the group members have any questions.
complete the calculation on a calculator:
$400 \times 4=1,600$ [interest]
$+20,000$ principal
$=21,600$ ).
\(\left.$$
\begin{array}{|c|r|r|r|r|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\
\text { PRINCIPAL } \\
\text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST } \\
\text { PAYMENT }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\
\text { (LOAN PRINCIPAL PAYMENT - } \\
\text { INTEREST PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\
\text { PRINCIPAL }\end{array}
$$ <br>
(PREVIOUS BALANCE LESS <br>

LOAN PRINCIPAL PAYMENT)\end{array}\right] .\)| 20,000 |
| :---: |
| Disbursement |

Tell participants: Now we're going to see what happens when the loan has a grace period. Sarah takes the same 20,000 loan with a weekly repayment and a $\mathbf{2 \%}$ weekly flat rate interest rate. This time, however, the lender is giving Sarah a 2 week grace period.
" Who can say what a grace period is?
Answer: It's the period between when a person receives a loan and when they must start repaying the loan.

Say: Most lenders require that you continue to make interest payments during the grace period. We're going to replay the game and give Sarah a grace period this time.

Remember, Sarah is taking out a loan for 20,000 with a weekly repayment, a two week grace period, and a $2 \%$ weekly interest payment. Sarah will repay the principal in 4 equal installments. Borrowers, you do not want to pay any more money than is required. Lenders, you want to be sure that Sarah fully repays the amount that is due. After each step, complete that step on the loan repayment schedule on the chart together with the group.

Read these instructions: Sarah goes to the lender to receive the loan disbursement. The lenders should give Sarah the 20,000 loan. This week is called the disbursement week. Complete the disbursement line in the loan repayment schedule together with the group.
" What is the total number of weeks?
" How many weeks does Sara have to repay the loan?

| WEEK | LOAN <br> PRINCIPAL <br> PAYMENT | INTEREST <br> PAYMENT | TOTAL PAYMENT | OUTSTANDING LOAN <br> PRINCIPAL |
| :---: | :---: | :---: | :---: | :---: |
| Disbursement |  |  |  | 20,000 |

Say: Borrowers calculate together the amount of your weekly repayment. Make the repayment to the lender.

Say: Lenders decide together how much the borrower should repay you each week.
Ask the lenders if they received the correct amount from the borrowers. If the borrower underpaid, the lender must ask for the outstanding amount. If the borrower overpaid, the lender should return the extra money paid.

Facilitator's Note: The participants can use the play money to help them calculate the repayment amounts. Help the participants make the calculations.

Facilitator's note: The lenders should complete the calculation on a calculator or mobile phone: $20,000 \mathrm{x}$ $.02=400$ interest.

Complete the week 1 grace period of the repayment schedule together with the group. Ask the group members to give you the information to complete each box. If needed, help the group members to make the calculation.

| WEEK | LOAN <br> PRINCIPAL <br> PAYMENT | INTEREST PAYMENT <br> (LOAN AMOUNT <br> DISBURSED * 2\% <br> INTEREST) | TOTAL PAYMENT <br> (LOAN PRINCIPAL <br> PAYMENT - INTEREST <br> PAYMENT) | OUTSTANDING LOAN <br> PRINCIPAL |
| :---: | :---: | :---: | :---: | :---: |
| (PREVIOUS BALANCE LESS |  |  |  |  |
| LOAN PRINCIPAL PAYMENT) |  |  |  |  |

9.12 Complete the week 2 grace period of the repayment schedule together with the group. Ask the group members to give you the information to complete each box. If needed, help the group members to make the calculation.

| WEEK | LOAN <br> PRINCIPAL <br> PAYMENT | INTEREST PAYMENT <br> (LOAN AMOUNT <br> DISBURSED * 2\% <br> INTEREST) | TOTAL PAYMENT <br> (LOAN PRINCIPAL <br> PAYMENT - INTEREST <br> PAYMENT) | OUTSTANDING LOAN <br> PRINCIPAL <br> (PREVIOUS BALANCE LESS <br> LOAN PRINCIPAL PAYMENT) |
| :---: | :---: | :---: | :---: | :---: |
| Disbursement |  |  |  | 20,000 |
| $\mathbf{1 - G r a c e ~ p e r i o d ~}$ | 0 | 400 | 400 | 20,000 |
| $\mathbf{2 - G r a c e ~ p e r i o d ~}$ | 0 | 400 | 400 | 20,000 |

9.13 Complete the week 3 repayment of the repayment schedule together with the group. Ask the group members to give you the information to complete each box. If needed, help the group members to make the calculation.
$\left.\begin{array}{|c|r|r|r|r|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST PAYMENT } \\ \text { (LOAN AMOUNT } \\ \text { DISBURSED X 2\% } \\ \text { INTEREST) }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL } \\ \text { PAYMENT - INTEREST } \\ \text { PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \hline \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$
9.14 Repeat for weeks 4-6. Call out each week one by one and have the borrowers give the lenders the appropriate amount of money. After each week, complete the next line in the repayment schedule.
$\left.\begin{array}{|l|r|r|r|r|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST PAYMENT } \\ \text { (LOAN AMOUNT } \\ \text { DISBURSED X 2\% } \\ \text { INTEREST) }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL } \\ \text { PAYMENT - INTEREST } \\ \text { PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$
9.15 Ask the borrowers: What was the total amount they paid for the loan.

Ask the lenders: How much they received and if they received the correct amount?

Ask if the group members: Do you have any questions?

Facilitator's note: The borrowers should complete the calculation on a calculator or mobile phone. $400 \times 6=2,400$ [interest]

$$
\begin{aligned}
& +20,000 \text { principal } \\
& =22,400
\end{aligned}
$$

| WEEK | LOAN PRINCIPAL PAYMENT | INTEREST PAYMENT (LOAN AMOUNT DISBURSED X 2\% INTEREST) | TOTAL PAYMENT <br> (LOAN PRINCIPAL PAYMENT - INTEREST PAYMENT) | OUTSTANDING LOAN PRINCIPAL <br> (PREVIOUS BALANCE LESS LOAN PRINCIPAL PAYMENT) |
| :---: | :---: | :---: | :---: | :---: |
| Disbursement |  |  |  | 20,000 |
| 1 - Grace period | 0 | 400 | 400 | 20,000 |
| 2 - Grace period | 0 | 400 | 400 | 20,000 |
| 3 | 5,000 | 400 | 5,400 | 15,000 |
| 4 | 5,000 | 400 | 5,400 | 10,000 |
| 5 | 5,000 | 400 | 5,400 | 5,000 |
| 6 | 5,000 | 400 | 5,400 | 0 |
| Total Paid | 20,000 | 2,400 | 22,400 |  |

" What are the differences between the loan with the grace period and the Ioan without the grace period?
Answer: You have more time to generate income from your investment before you start repaying your loan. You pay more interest for being allowed to use the loan money longer.

For farmers, a longer grace period can be helpful if you are using the loan to plant crops because it takes a few months before the harvest will come in and you are able to start earning income on your investment. The additional interest will increase the overall cost of the loan.

## FLAT RATE VERSES DECLINING BALANCE

### 9.16 Say to the participants:

" The last two examples used an interest rate that is called "flat interest rate." Can someone tell me why it is called a flat interest rate?
Answer: The same amount of interest is paid each period, regardless of your loan balance.
" Does anyone know what a declining balance rate is and how it differs from a flat interest rate?
Answer: The amount of interest paid decreases as your principal balance remaining due decreases (declines).
9.17 Say: Let's look again at Sarah's loan of 20,000. This time she has a $2 \%$ declining balance interest loan, with a 2 week grace period. The loan is paid in four equal weekly installments after the grace period. Get back into your groups and be sure to take turns with who is the lender and who is the borrower.

Say: Borrowers, you do not want to pay any more money than is required. Lenders, you want to be sure that Sarah fully repays the amount that is due to you. After each step, complete that step on the loan repayment schedule on the chart together with the group.
9.18 Read these instructions: Sarah goes to the lender to receive the loan disbursement loan. The lenders should give Sarah the 20,000 loan. Complete the disbursement line in the Ioan repayment schedule together with the group.

| WEEK | LOAN <br> PRINCIPAL <br> PAYMENT | INTEREST PAYMENT <br> (OUTSTANDING LOAN <br> PRINCIPAL * 2\% <br> INTEREST) | TOTAL PAYMENT <br> (LOAN PRINCIPAL <br> PAYMENT - INTEREST <br> PAYMENT) | OUTSTANDING LOAN <br> PRRINCIPAL |
| :---: | :---: | :---: | :---: | :---: |
| (PREVIOUS BALANCE LESS |  |  |  |  |
| LOAN PRINCIPAL PAYMENT) |  |  |  |  |

9.19 Complete the week 1 grace period of the repayment schedule together with the group. Ask the group members to give you the information to complete each box. If needed, help the group members to make the calculation.

| WEEK | LOAN <br> PRINCIPAL <br> PAYMENT | INTEREST PAYMENT <br> (OUTSTANDING LOAN <br> PRINCIPAL X 2\% <br> INTEREST) | TOTAL PAYMENT <br> (LOAN PRINCIPAL <br> PAYMENT - INTEREST <br> PAYMENT) | OUTSTANDING LOAN <br> PRINCIPAL |
| :--- | ---: | :---: | ---: | ---: |
| (PREVIOUS BALANCE LESS |  |  |  |  |
| LOAN PRINCIPAL PAYMENT) |  |  |  |  |

9.20 Complete the week 2 grace period of the repayment schedule together with the group. Ask the group members to give you the information to complete each box. If needed, help the group members to make the calculation.
$\left.\begin{array}{|c|r|c|c|c|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST PAYMENT } \\ \text { (OUTSTANDING LOAN } \\ \text { PRINCIPAL X 2\% } \\ \text { INTEREST) }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL } \\ \text { PAYMENT - INTEREST } \\ \text { PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$
9.21 Complete the week 3 repayment of the repayment schedule together with the group. Ask the group members to give you the information to complete each box. If needed, help the group members to make the calculation.
$\left.\begin{array}{|c|r|c|c|c|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST PAYMENT } \\ \text { (OUTSTANDING LOAN } \\ \text { PRINCIPAL X 2\% } \\ \text { INTEREST) }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL } \\ \text { PAYMENT - INTEREST } \\ \text { PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$
9.22 Complete the week 4 repayment. Remind the group that starting in week 4, the interest amount paid should start declining.
" Ask the group, How will you calculate the week 4 interest payment using a declining balance interest?
Answer: Take the outstanding loan principal and calculate the interest on this amount. 15,000 (outstanding loan principal) x . 02 (interest rate) $=$ 300 (interest).
$\left.\begin{array}{|c|r|r|r|r|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST PAYMENT } \\ \text { (OUTSTANDING LOAN } \\ \text { PRINCIPAL X 2\% } \\ \text { INTEREST) }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL } \\ \text { PAYMENT - INTEREST } \\ \text { PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \hline \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$
9.23 Repeat for weeks 5-6. Call out each week one by one and have the borrowers first calculate the interest payment and then give the lenders the appropriate amount of money. After each week, complete the next line in the repayment schedule.
$\left.\begin{array}{|l|r|r|r|r|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST PAYMENT } \\ \text { (OUTSTANDING LOAN } \\ \text { PRINCIPAL X 2\% } \\ \text { INTEREST) }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL } \\ \text { PAYMENT - INTEREST } \\ \text { PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \text { (PREEIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$
9.24 Ask the borrowers: What was the total amount they paid for the loan?

Ask the lenders: How much they received and if they received the correct amount?

Ask if the group members: Do you have any questions?

Note: The borrowers should complete the calculation on a calculator or mobile phone:

$$
\begin{aligned}
400+400+400+300+200+100 & =1,800[\text { interest }] \\
& +20,000[\text { principal }] \\
& =21,800[\text { total cost }]
\end{aligned}
$$

$\left.\begin{array}{|l|r|r|r|r|}\hline \text { WEEK } & \begin{array}{c}\text { LOAN } \\ \text { PRINCIPAL } \\ \text { PAYMENT }\end{array} & \begin{array}{c}\text { INTEREST PAYMENT } \\ \text { (OUTSTANDING LOAN } \\ \text { PRINCIPAL X 2\% } \\ \text { INTEREST) }\end{array} & \begin{array}{c}\text { TOTAL PAYMENT } \\ \text { (LOAN PRINCIPAL } \\ \text { PAYMENT - INTEREST } \\ \text { PAYMENT) }\end{array} & \begin{array}{c}\text { OUTSTANDING LOAN } \\ \text { PRINCIPAL }\end{array} \\ \text { (PREVIOUS BALANCE LESS } \\ \text { LOAN PRINCIPAL PAYMENT) }\end{array}\right]$
9.25 Ask: What are the differences between the loan with the flat interest and the loan with the declining interest?

Answer: With a declining balance interest payment you pay less interest on your loan.
Say: Many banks and MFIs offer declining balance rate loans. Most informal lenders - such as moneylenders or savings groups - will use a flat interest rate because it is much easier to calculate and is easily understood by everyone.
9.26 Tell the participants: We have just looked at a few different ways to calculate interest. As noted previously, the lender will make these calculations for you. It is important that you know how to make these calculations to verify the lender's calculations and to understand the total cost of the loan. Interest is just one of the costs of a loan. Let's take a look at the other costs of Sarah's loan for 20,000.

Sarah wants to take out a loan for 20,000 with a flat interest rate of $2 \%$ per week. The MFI, "We Give Loans," just opened a branch close to Sarah's village. The loan officer has recently come to the market to start a group. The group meets weekly. Before receiving the loans, each person must attend $\mathbf{3}$ weekly meetings, where they will save some money and learn more about the loan process. Sarah must save 20\% of the loan principal she wants before the MFI will disburse the loan. She will receive the 20\% savings back after every member of the group repays their loans. The loan is disbursed on week 1 of the loan cycle and each person has 4 weeks to repay the Ioan in equal installments. Each Ioan has an application fee of 500. The meetings are held about 5 kilometers from Sarah's home, which takes Sarah 45 minutes to walk each way. Each meeting lasts 1 hour.
9.27 Before continuing, make sure that the group understands all of the terms used in the story. If someone does not know what a term means have the group work together to answer the question. Specifically ask for group members to share their definitions of each of the underlined words.

Loan principal: The Ioan amount.

Installments: Periodic payments on a loan. An equal installment means that each installment is the same amount.

Loan disbursal: The time the borrower receives the loan.

Repay or repayment: The amount paid to the lender to return the loan principal.

Interest rate: The percentage that the lender charges the borrower to use the money.

Tell the group that: You need to determine all of the costs of Sarah's loan. You should divide into three small groups.

- Group 1 should determine and quantify all of the costs linked to the weekly meetings.
- Group 2 should determine and calculate all of the monetary costs linked to the loan.
- Group 3 should calculate the cost of the collateral. When would the collateral be at risk? What would happen if Sarah had more collateral than required?

Read the story again and ask the group:

- List all of Sarah's costs.
9.28 After the groups are separated and have received their assignments, read the story again slowly. Give the groups 5 minutes and then invite a member of each group to present what they found. If possible, write the responses on a flipchart paper, the responses should look like the following:

Table Field Exercise 9.1: Indirect Loan Costs

| ITEM | COST |
| :---: | :---: |
| Weekly meetings | - Time to attend meetings. <br> - Do I lose income to attend the meeting because I cannot work or must close my business to attend? <br> - Or must I pay someone else to work for me while I am away? <br> - Meetings are 1 hour <br> - Travel to and from meetings <br> - Can I walk or must I pay for a ride? What happens if it rains? <br> - Travel to and from meetings is 45 minutes each way. In total, Sarah spends 1.5 hours to attend each meeting. |
| Collateral | - Savings of $20 \%$ of loan $(20,000 \times .2=4,000)$. While it is used as collateral, I cannot use that money for something else. <br> - If a member of the group does not repay, you may lose the 4,000 CFA or more if the amount to be repaid by the remaining members is higher. If you save more than 4,000, you could lose the extra savings if a member of the group does not repay. |
| Loan costs | - Total interest to pay 1,600 ( $2 \%$ per week over 4 weeks) <br> - Application fee - 500 <br> - Cost of not being able to use savings for something else during the time period of the loan. |

9.29 Tell participants: In summary, there are many costs to a loan. There are the amounts you directly pay for the principal, interest, and fees. There are costs that come out in other ways and may require money that you may not pay directly to the lender, such as your time, the time that you must close your business, or cost to travel to a meeting. Although these additional costs may not be part of the cash payment, they are real and should be considered when choosing a lender.
" Ask the group: What are the advantages and disadvantages of a group guarantee?

Split the group in two and have one group determine the advantages and the other group determine the disadvantages. After a few minutes, have the groups share their answers and allow for other members of the group to add any additional information.

If the group is literate, you could create a chart as in "Table Field exercise 9.2:
Advantages and Disadvantages of Group Guarantees." Be sure that all of these points are discussed.

Table Field Exercise 9.2: Advantages and Disadvantages of Group Guarantees

## ADVANTAGES

- Able to receive a loan without a large amount of collateral or with very little collateral, usually savings.
- Can meet with the loan officer in a place close to your home.
- Lower interest rates than what is available from other local moneylenders.
- Responsible to pay for the loans of other group members.
- The MFI can take legal action if a single member does not repay against the entire group.
- Can lose your mandatory savings to cover any group member that does not repay his or her loan.
- Group meetings can take a lot of time.
- Members may not always know each other well.


## LESSON 10. <br> YOUR ABILITY TO TAKE ON A LOAN

To decide if you can take out a loan you need to calculate the amount of debt you can afford. The first step is to examine your budget for the entire year using the seasonal calendar. Use the exercises that you learned in the lessons on income, expenses, and budgeting to answer the following questions to help you evaluate your ability to take on a loan:

Income: How much money do you earn in a typical month? If your income is seasonal, what is the average amount of income you earn each month? Do you have other family members who contribute to the household income? If so, how much do they earn?

Expenses: What are your expenses? Which are your large one-time expenses (e.g., buying farm inputs, school fees)? How much do you spend per month on everyday expenses (food, clothes, etc.)?

Savings: What are your saving goals for this year and how much do they cost? (For example, have you decided to create an emergency fund or to purchase several goats)?


Surplus: subtract your expenses and planned savings from your income. You can use a portion of this money to pay back your loans.


The next step is to evaluate the loan terms and the total cost of the loan by answering the questions in "Box 3: Questions to ask before borrowing money" on page 136.

Jacob wants to take a 24,000 loan to purchase a bag of fertilizer. With the fertilizer, he expects to increase the yield of his harvest.

Through the increased yield, Jacob expects that his income will increase by 5,000 a month for the three months after the harvest.

The harvest will come in $\mathbf{2}$ months.

The Ioan has a $\mathbf{3}$ month repayment period and an interest rate of 10\% per month.

Jacob's monthly expenses and savings are 50,000 and his monthly income is $\mathbf{6 0 , 0 0 0}$.

The loan is from the local savings and internal lending group in Jacob's community.
" Should Jacob take the Ioan?
We can find the answer to this question by following the questions and answers in Tables 10.1 and 10.2

First, we need to answer the questions to ask before borrowing money that look at the specific details of the loan.

Second, we need to answer the questions that help Jacob to review his situation and business based on the loan details.

Table Lesson 10.1: Jacob's assessment of the loan

| QUESTIONS TO ASK BEFORE TAKING A LOAN | JACOB'S ANSWERS |
| :---: | :---: |
| 1. What is the repayment schedule? | Monthly, principal + interest |
| 2. Is there a grace period? <br> If there is no grace period, when will I start generating income on the investment? | No <br> After the harvest |
| 3. What is the repayment amount for the principal? | 24,000 loan $\div 3$ months $=8,000$ per month. |
| 4. What is the repayment amount for interest? | 24,000 loan $\times 10 \%$ interest per month $=2,400$ per month |
| 5. How much will I need to repay each time (the monthly installment and interest payment)? | 8,000 loan principal payment $+2,400$ interest payment $=10,400$ |
| 6. What is the total amount of interest to be paid? | Total interest payment $=2,400 \times 3$ months $=7,200$ |
| 7. When will I receive the money? | Immediately. Many savings groups disburse funds the same day they are requested. |
| 8. What sources of income or savings will I use to repay the loan? <br> What is my monthly surplus? | Jacob will use his monthly surplus for the first two months of the loan repayment period. He will use his profits for the final month. <br> 60,000 monthly income - 50,000 expenses and savings $=10,000$ |
| 9. If you are borrowing to buy a tool or piece of equipment, will the object outlive the loan and continue to earn money? | Not applicable in this case. |
| 10. Can I charge a price for the goods I buy with the loan that is high enough to repay the loan and give me a profit? | May be yes or no. |
| 11. What is the increase in profit that Jacob expects to receive as a result of this business investment? | 5,000 increase in income $\times 3$ months $=15,000$ |
| 12. What is Jacob's total expected increase in profits after paying the interest or the total profit of the loan? | Total expected increase in profits 15,000-7,200 $=7,800$ |
| 13. Do I need to guarantee the loan with collateral? If so, what? | Yes. As it is a loan with a savings group, the collateral is Jacob's savings. |
| 14. What are the consequences if I fail to repay? | Jacob will lose his savings. He will possibly lose his ability to take another loan from the savings group. He will possibly lose the trust of others in his community. |
| 15. If it is a group loan, what are the consequences if other group members fail to repay? | Not applicable |

Table Lesson 10.2: Jacob's assessment of his ability to take on the loan

## QUESTIONS TO REVIEW YOUR ABILITY TO TAKE ON A <br> LOAN

1. Is the monthly payment less than or greater than Jacob's monthly surplus?

If it is less than Jacob's monthly surplus, how much is remaining?
2. Should Jacob take the loan?
3. What if Jacob's expenses are 45,000 instead of 50,000? Should Jacob take the loan?

## JACOB'S ANSWERS

It is greater than Jacob's monthly surplus.

No. Jacob should not take the loan where the payments are greater than his monthly surplus.

- Yes. Jacob's monthly surplus is now 15,000. After making the loan payment, Jacob will have 4,600. (15,000 surplus - 10,400 total loan payments).
- While there is not much money remaining after the loan payment, Jacob does have a surplus.

There are many factors to consider before taking out a loan. Understanding the cost of the loan compared to your expected profits and how you will repay the loan will help you to decide when taking a loan will increase or decrease your overall income.

## BOX 5. TIPS FOR MANAGING YOUR DEBT

- Don't let debt prevent you from covering basic expenses, such as food, school fees and other necessary items.
- Keep track of the amount and date of your loan payments.
- The total amount that you will have to pay back (the total sum of your loan payments) should not exceed $20 \%$ of your usual annual income.
- Try to limit borrowing for personal consumption.
- Have a plan for how you will make the loan payments if it will take time before the loan starts generating income.
- Have an emergency plan in place. Know where you can find the money to make a payment, even if you spent more than you expected that month and have no surplus. Borrowing to make loan payments is very dangerous. It can be very difficult to get out of a cycle of borrowing!


## QUIZ FOR LESSON 10. <br> ANALYZE YOUR ABILITY TO TAKE ON A LOAN

Read the following scenario and answer the questions to help Jacob decide if he should take on a loan.

Jacob wants to take out a loan for 50,000 to purchase a donkey to use to plow his farm. The donkey will reduce the labor he needs for plowing, which could be a monthly savings of 1,000. Jacob can add another income stream by selling his services to assist others in plowing, which would provide another 5,000 per month. He would start receiving that additional income as soon as he purchased the donkey. Jacob expects that the donkey will be able to plow for 5 years. Caring for the donkey will cost 1,500 per month in veterinary services and animal feed. Jacob is able to receive a group loan from the local MFI. The loan has a 5 month repayment period with a flat interest rate of $10 \%$ per month. The loan has a mandatory savings requirement of $20 \%$ of the loan amount. He will receive the loan in one month, which will be 2 weeks before most farmers will need his plowing services. His current monthly expenses and savings are 60,000 and his monthly income is 75,000.

## QUESTIONS TO ASK BEFORE TAKING A LOAN

## JACOB'S ANSWERS

1. What is the repayment schedule?
2. Is there a grace period?
a. Yes
b. No
3. If there is no grace period, when will Jacob start generating income on the investment?
4. What is the repayment amount for the loan principal?
a. After one month
b. After two months
c. After three months
d. After four months
a. 50,000 loan $\div 5$ months $=10,000$ per month
b. 60,000 loan $\div 5$ months $=12,000$ per month
c. $50,000 \times 10 \%=5,000$ per month
5. What is the repayment amount for interest?
a. 500 per month
b. 5000 per month
c. 10,000 per month
6. How much will I need to repay each time (the
a. 20,000
b. 15,000
c. 30,000
7. What is the total amount of interest to be paid?
a. 27,000
b. 26,000
c. 25,000
a. One month
b. Two months
c. Three months
a. Monthly surplus
b. Additional profits
c. Loans
d. Monthly surplus plus additional profits
a. 4,500
b. 59,000
c. 14,500
a. Yes
b. No
c. None of the above
a. Yes
b. No
a. 6,000 per month
b. 4,500 per month
c. 5,400 per month
a. 10,000 per month
b. 9,000 per month
c. 4,500 per month
a. Yes
b. No
a. Jacob will improve his savings
b. Jacob will get another loan
c. Jacob will lose his savings
a. Nothing happens
b. Jacob will lose his savings that was given as collateral
c. Jacob will get a large dividend
a. It is more than Jacob's monthly surplus
b. It is equal to Jacob' monthly surplus
c. It is less than Jacob's monthly surplus
a. If there is demand for the plowing
b. If the donkey becomes sick or dies and cannot perform the plowing activities.
c. If the total loan and interest repayments are less than his surplus.
a. Yes
b. No

## FIELD EXERCISE 10. <br> ANALYZE YOUR ABILITY TO TAKE <br> ON A LOAN

OBJECTIVE

- Calculate the level of debt that one can afford.
- Practice calculating debt and weekly payments for loans, based on a case study.


## EQUIPMENT NEEDED

## STANDARD

- Flipchart paper or large sheets of paper
- Marker pens
- Tape, twine, or string to hang flipchart paper
- Paper (play) money or small pieces of paper to use as money.
- 25-30 small bowls (need 5 per group)


## OPTIONAL

- Laminated A4 or letter paper sized cards, with image of (a) income; (b) business expenses; (c) household expenses; (d) savings; (e) loan repayments; (f) Table Field Exercise 10.1: Income, Expenses, Loans, and Savings Worksheet; (g) Table Field Exercise 10.2: Income, Expenses, Loans, And Savings Worksheet, Month 1


## EXPECTED OUTPUTS

- Group members know how to calculate the level of debt that they can afford.
- Group members calculated debt and determined the weekly payments for loans, based on the case study.


## TIME

- 60 minutes divided into 2 sessions of 30 minutes each.
- The first session will focus on the difference between good and bad loans, and questions to ask before borrowing.
- The second session will focus on playing the borrowing game.


## PREPARATION

- Collect bowls/folders, pictures, and play money or counters for the game.
- Bring a copy of the scenarios.
- Write the questions to ask before borrowing on a flipchart paper.


## SUGGESTED PROCEDURE

### 10.10 Ask participants:

" What do you think when i say there are good loans and bad loans?
" What do you think is the difference between a good and bad loan?
After a few answers, read the definitions below, or post a flipchart paper for literate participants.

Good loan: Helps you meet an important need sooner than without a loan. Such needs include investing in a business, responding to a family emergency, and improving your current living conditions. it is something that the borrower is able to repay.

Bad loan: It costs the borrower money, i.e. the interest payments are more than the expected profits. It forces the borrower to go deeper into debt, or is difficult for the borrower to repay.

### 10.11 Ask participants:

" Do you know anyone who took out a "bad loan?" What happened?
10.12 Say: Let us practice distinguishing between good and bad loans. Get into groups of 3-4. I will come around and read a short scenario to each group. You will discuss the scenario in your group and decide whether the loan in each scenario is a "good" loan or a "bad" loan.

If participants are literate, you can write the scenarios out on cards and give them to the groups.

## SITUATION 1

Selina borrows 20,000 to buy vegetables to sell in her village. By the end of the week, she sells all of her vegetables for a total of 30,000 . She has 20,000 to buy more vegetables; 5,000 for her loan payment and 5,000 for her expenses and savings.

## SITUATION 2

Tenneh borrowed 40,000 to buy T-shirts in bulk at a lower price. But after she sold all of the T-shirts for a total of 36,000 , she still owed 4,000 in principal and another 2,000 in interest on the loan.

## SITUATION 3

Jemi borrowed 160,000 to buy a small refrigerator for her snack kiosk. She is able to sell cold drinks and now earns 100,000 more each month. 20,000 of that income is used to repay the loan. In 9 months, when she has finished repaying the loan, she will still have the refrigerator.

## SITUATION 4

Olivete has applied for a loan to make jewelry to sell in her neighborhood at Christmas time. When the loan is finally approved, she realizes she will not have enough time to make the jewelry before Christmas.

### 10.13 Have participants split into three groups. Ask each group to answer

 the question:" What questions should you ask before taking a loan?
After each group has presented, post the following flipchart paper:

## BOX 5. QUESTIONS TO ASK BEFORE BORROWING MONEY

- What is the repayment schedule? (e.g., weekly, monthly, etc.)
- Is there a grace period? If there is no grace period, when will I start generating income from this investment?
- What is the repayment amount for the principal?
- What is the repayment amount for the interest?
- How much will I need to repay each time (the monthly installment and interest payment)?
- What is the total amount of interest to be paid?
- When will I receive the money (or when will the money be disbursed)?
- Does this timing work with your need for the money? Is this too early? Too late?
- What sources of income or savings will I use to repay the loan?
- If you are borrowing to buy a tool or piece of equipment, will the object outlive the loan and continue to earn money?
- Can I charge a price for the goods I buy with the Ioan that is high enough to repay the loan and give me a profit?
- Do I need to guarantee the loan with collateral? If so, what?
- What are the consequences if I fail to repay?
- If it is a group loan, what are the consequences if other group members fail to repay?
- From whom will I get the loan?
- How much do I need to borrow?
- What is the total cost of the loan?
- The total amount of interest to be paid?
- The total amount of fees?
- What are the other costs?
- Is this my best option to borrow?
- What other options do I have to borrow this money?
- Do I have the money to repay the loan?

Say: These are some very helpful questions to ask before you take out a loan. You should ask as many questions as needed, both to yourself and others, to make sure that the loan helps you achieve your financial goals and you do not lose money on a loan.
10.14 Explain to participants: We often need additional money to pay for our basic needs, our children's education, and other things that we want. Business investments to advance our livelihood, such as expanding our farm production or starting a new business, require money for investment. We have to be careful how much debt we take on. If we never borrow, we might not make much progress. If we borrow too much, we might not be able to repay. Let's play a game to combine everything we have learned.

To play this game, separate the group into teams of 4-5. Each group will need the paper (play money), 5 small bowls to separate the money, and pictures of each of the parts of the story.

Say: Separate into small groups of 4 or 5 . I will give each group five bowls to use to plan out your monthly income and expenditures.
" Thinking back to our lessons on the budget. What items should these bowls represent?
Answer: Income, business expenses, household expenses, savings, loan repayments.

Say: This game will cover 4 months. Each month, I will give you an income of $\mathbf{2 0 , 0 0 0}$. Your monthly business expenses are 5,000 and your monthly household expenses are 7,000 . I will collect these amounts from each team on the first day of the month.
" You are currently repaying a loan of 5,000 per month, which includes interest, for the next 4 months from a previous investment. You will need to make loan payments through month 4 . I will collect the payment on the second day of the month.
" You are encouraged to save each month and to keep some savings set aside for emergencies.
" The team with the most money remaining at the end of the game wins.
If the teams are literate have them use the "Table field exercise 10.1: Income, Expenses, Loans, And Savings Worksheet" in addition to the bowls to track their money. Remind the teams to include money received as loan disbursements as part of their income for the month.

Table Field Exercise 10.1: Income, Expenses, Loans, and Savings Worksheet

|  |  | MONTH 1 | MONTH 2 | MONTH 3 | MONTH 4 | MONTH 5 | MONTH 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Surplus or deficit from prior month (I) |  |  |  |  |  |  |
| B | Income |  |  |  |  |  |  |
| C | Business Expenses |  |  |  |  |  |  |
| D | Household Expenses |  |  |  |  |  |  |
| E | Loan Repayments |  |  |  |  |  |  |
| F | Subtotal expenses $(C+D+E)$ |  |  |  |  |  |  |
| G | Income (B) - expenses (F) |  |  |  |  |  |  |
| H | Savings |  |  |  |  |  |  |
| I | Surplus or Deficit $(A+G-H)$ |  |  |  |  |  |  |

Have the teams count their savings or their total surplus. Be sure that the teams remember the differences between the different elements.

## MONTH 1

- Hand out the income of 20,000 for month 1.
- Collect the business expenses of 5,000 for month 1.
- Collect the household expenses of 7,000 for month 1 .
- Collect the loan repayment of 5,000 for month 1.

Say: Now that each group has paid its expenses decide how much you want to set aside for savings or emergencies.

Ask if any of the groups want to save. If yes collect that amount.

Table Field Exercise 10.2: Income, Expenses, Loans, and Savings worksheet, Month 1
$\left.\begin{array}{|c|c|c|c|c|c|c|c|}\hline & & \text { MONTH 1 } & \text { MONTH 2 } & \text { MONTH 3 } & \text { MONTH 4 } & \\ \hline \text { A } & \text { Surplus or deficit remaining } \\ \text { from prior month (I) }\end{array}\right)$

If there is a surplus at the end of the month, it can either be placed in savings or moved up as surplus for the next month. Ask if there are any questions.

## MONTH 2

- Hand out the income of 20,000 for month 2 .
- Collect the business expenses of 5,000 for month 2.
- Collect the household expenses of 7,000 for month 2.
- Collect the loan repayment of 5,000 for month 2 .
- Ask if any of the groups want to save. If yes collect that amount.

Say: A new seller just opened a stall in the market. He's selling very high quality pots at the greatly discounted price of 1,000. Your family could really use some additional pots.

Have teams decide if they want to purchase the pots. Collect the 1,000 from the groups that purchase the pots and give them a picture of a pot.

Say: It is close to planting season and you need some farm inputs. You can purchase the farm inputs today for 6,000 with a loan payable over 4 months and a 5\% flat interest rate per month. If you buy the farm inputs your income will increase by $\mathbf{2 , 0 0 0}$ during 4 months starting in month 4 . You can purchase
 the seeds later. The seeds may cost more at a later time.

Have teams decide if they want the loan for the farm inputs. If they want the loan, disburse 6,000. Then have them buy the farm input picture for 6,000 . Write the amount of the loan and the month of purchase on the back of the picture.

Teams can use their savings to lower the overall cost of their loan. The farm inputs must purchase is either 6,000 or none.

## MONTH 3

- Hand out the income of 20,000 for month 3 .
- Collect the business expenses of 5,000 for month 3 .
- Collect the household expenses of 7,000 for month 3 .
- Collect the Ioan repayment of 5,000 for month 3 .
- Ask if any of the groups want to save. If yes collect that amount.
- For teams that purchased the farm inputs in month 2 collect a payment of $1,800$ [1,500 principal +300 in interest $(6,000 \times .05=300)]$.

Say: You can still purchase the farm inputs with a loan of $5 \%$. This month the farm inputs have increased to $\mathbf{8 , 0 0 0}$.

Have teams decide if they want to purchase the farm inputs. Give teams that want to purchase the farm inputs the loan for 8,000. Disburse the loans for the requested amounts and give the team the picture of the farm inputs. Write the amount of the loan on the back of the picture and the month of purchase.

## MONTH 4

- Hand out the income of 20,000 for month 4.
- Collect the business expenses of 5,000 for month 4.
- Collect the household expenses of 7,000 for month 4.
- Collect the Ioan repayment 5,000 for month 4. Remind the group that this is the last repayment for this loan.
- For teams that purchased the farm inputs in month 2 , collect a payment 1,800 [1,500 principal +300 interest $(6,000 \times .05=300)]$.
- For teams that purchased the farm inputs in month 3, collect a payment 2,400 $[2,000$ principal +400 interest $[8,000 \times .05=400)]$.

After the game is completed ask the groups,
" What lessons have you learned from this exercise?

## Answers:

- For some purchases, it may be better to wait and pay off existing debts before taking on additional debts.
- Too much debt could leave you with little or no surplus. You will not be able to cover unexpected expenses.
- If you don't really need something - even if it is being offered at a bargain price - it is better not to purchase it. This way you will have money left over for other more important expenses.
10.15 Explain: Although each family has to decide how much debt they can afford based on all sources of income and savings, it is recommended to keep your debt payments at or below $\mathbf{2 0 \%}$ of your income. So, if your monthly income is $\mathbf{2 0 , 0 0 0}$, the total of all of your loan payments should not be more than 2,000 per month.

Using this $20 \%$ guideline, let us figure out together if your teams should borrow a second loan of 6,000 for the farm inputs. We know there is already a loan principal payment of 1,500 per month and an interest payment of 300 . This new loan would add 1,800 per month (principal: 1,500 and interest 300).

### 10.16 Ask:

"
What would be the total amount owed each month if we add the new loan?
Answer: It would be 3,000.
" What is $\mathbf{2 0 \%}$ of their total income?
Answer: It is 4,000, which is $20 \%$ of 20,000 .

Answer: While the total loan amount is technically less than $20 \%$ of total monthly income $(20,000)$ expenses are already at 18,500 so adding 1,800 more will exceed total monthly income.
"
What is the problem with spending all of your available cash on loan payments?
Answer: There is no money left for emergencies or for savings. If you must take many loans to pay for needs, you will have little money to pay for other needs in the future.
10.17 Post the following on a flipchart and discuss each of the points together as a group:

## THE "RULES OF THUMB" FOR TAKING A LOAN

- Don't let debt prevent you from paying for basic expenses, such as food, school fees, and other necessary items.
- Keep track of the amount and frequency of your loan payments.
- The total of all your loan payments should not exceed $20 \%$ of your usual income.
- Try to limit borrowing for personal consumption.
- If you have to start repaying a business loan before the investment brings in more income, have a plan for making the loan payments.


## LESSON 11. <br> COMPARING FINANCIAL SERVICES ${ }^{10}$

Whether looking to finance a business investment or a personal need or want, you have a number of options. The specific options and the quality of their offers will depend on your location, your borrowing history, the collateral you can offer and other elements that could be specific to the financial service provider. Broadly speaking there are two main types of financial services: formal and informal.

## FORMAL FINANCIAL SERVICES

Formal financial institutions provide a wide variety of financial services: Ioans, checking, savings, and insurance services. They are regulated by the government.

Commercial banks: This type of formal financial institution generally serves a wealthier clientele. Interest rates are typically lower than those of moneylenders or microfinance institutions, but the minimum loan size is generally higher than what a smallholder producer can feasibly afford. Loan approval is contingent on having collateral. While commercial banks are engaged in value chain finance, most work with actors that are higher up in the value chain and thus able to meet their collateral requirement. In rare cases, some commercial banks do lend to smallholder farmers.


Microfinance Institutions (MFI): These financial institutions are designed to work with households that have little or no collateral and have smaller borrowing capacity than clients of commercial banks. MFIs can offer loans as small as 25,000. MFI clients can take out loans through a group lending approach, with the group acting as a guarantee for the borrower (a "solidarity guarantee"). While some MFIs provide individual loans, the borrower may need to present collateral, show proof of successfully repaying several loans in the past, and prepare a business plan. One of the main constraints for many MFIs is that their loans have been tailored for entrepreneurs engaged in businesses, such as petty trade. Very few MFIs have loan products for agriculture. MFIs generally charge lower interest rates than moneylenders. They will seek legal means to recover loans that are not repaid on time.


[^2]Agricultural banks. Agricultural banks are generally started as government-owned institutions that provide credit for investments in agriculture and other production activities. The banks are designed to provide loans to commercially viable smallholder farmers and other value chain actors. The availability of services from agricultural banks varies greatly by country.

SAVINGS AND CREDIT COOPERATIVES (SACCO): SACCOS or Cooperative Credit Unions are member-owned and member-governed savings and credit institutions that were primarily developed to empower poor communities to manage their own financial resources. The focus of the SACCO is to encourage savings. Members are encouraged to save and, at an appropriate time, are allowed to borrow from the pooled saving of members. The timeframe for borrowing can be restrictive as savers must first build up their savings before they can access a loan.

Input credit. Agricultural input credit is a short-term form of finance where farmers buy agricultural inputs and services that do not require immediate payment. The farmer goes to the trader and requests an "advance" on farm inputs (seeds, fertilizer, and pesticides), which will be paid at a later date. The purchase price is generally greater than the cash price, to compensate for the time value of money. Often, repayment is linked to the crop harvested, and the farmer usually repays the credit after the crop is sold. While there is flexibility, in many cases, having an outstanding input credit often weakens the negotiating power of a farmer at the time of sale.

## INFORMAL FINANCIAL SERVICES

Informal financial transactions are all loans and deposits that take place outside government regulation or supervision. These services are generally more accessible to people living in rural areas than formal financial services.

Savings at home: This method is a good way to pay for a personal wants or increased consumption. Saving at home can be a difficult way to accumulate savings because it is easy to access the funds to spend on other things or for the money to be stolen.


Borrowing from family members: Relatives often lend each other money at zero or low interest rates. The amounts of funds that can be lent vary greatly.

Moneylenders: These individuals offer small loans that may or may not require collateral at high interest rates. They are usually from the community or the neighborhood making it very easy to access their services. This convenience comes at the price of high interest rates.

Input supplier or customer loans: Vendors can make purchases of goods on credit without providing an immediate cash payment to the seller. In many rural environments, the buyer must repay the seller at the end of the day or a fixed period of time with interest. In some cases, the interest rate is applied daily. Stores that sell inputs and traders who buy the products sometimes offer loans to farmers. Both may require the farmers to sell them the produce at a lower price as a condition of the loan.


Rotating Saving and Credit Associations (ROSCA): Sometimes called "merry-go-rounds" or "Susu," these saving and lending groups traditionally have each group member save a specific amount at either a weekly or monthly interval. Each period, a different person receives the money collected.

Community managed Savings and Lending Groups. These are known as accumulating savings and credit associations (ASCA). These are locally managed informal community groups. Loans tend to be in the range of 5,000 - 25,000 and are repaid with interest. As the group matures and accumulates more savings, the loans become larger.


## CRITERIA FOR EVALUATING FINANCIAL SERVICES

When deciding where to take out a loan, there are four key criteria to consider: Loan size, interest rate/cost, collateral requirement, and your individual needs (such as location/access to funds, when you can receive the money, and whether the organization provides funds for agriculture, etc.). You can create your own criteria based on your needs and important factors.

The following table shows a summary of the various financial services and their financing mechanisms for investment in agricultural production. The table summarizes the approximate loan sizes and terms as well as the ability of smallholder producers to access loans for their production activities. "Table Lesson 11.1: Evaluating financial service providers" provides a broad overview of the different financial services. The conditions in your area may be different.

Table Lesson 11.1: Evaluating financial service providers

|  | APPROXIMATE LOAN SIZE | INTEREST RATE/ COST | COLLATERAL REQUIREMENT | INDIVIDUAL NEEDS |
| :---: | :---: | :---: | :---: | :---: |
| Commercial Bank | - Large, long-term loans <br> - >500,000 <br> - Enables people to build a credit history | - Location can be far for rural residents <br> - Restricted hours <br> - Long lines in bank, takes time <br> - Lower interest rate | - Requires having savings and / or some property | - Reliability <br> - Privacy <br> - Offer many products <br> - Agriculture loans limited to those who have significant collateral and production levels. <br> - Loan decisions can take some time |
| Microfinance institutions | - 25,000 to $250,000$ <br> - Limited number of loans > 500,000 | - 2-5\% per month on either a flat or declining basis <br> - For group loans: group meeting time and responsibility <br> - To repay the loans of members who default | - For solidarity <br> - Group lending, the group serves as guarantor (collateral substitute) <br> - Some minimum savings <br> - Yes for individual loans | - Closer to rural areas <br> - Faster loan approvals <br> - Group support with solidarity loans <br> - Some saving services <br> - Relatively inflexible products <br> - Limited agricultural lending |
| Savings and Credit Cooperatives | - 2 to 5 times member savings | - 2-3\% per month on either flat or on the declining balance | - Member savings serve as collateral | - Closer to rural areas <br> - Saving services <br> - Relatively flexible products <br> - Limited agricultural lending <br> - Faster loan approvals |
| Savings and internal lending communities (or ASCAs) | - Ability to access smaller loans as needed <br> - Loan sizes limited to the amount saved within the group | - Set by group <br> - Ability to earn dividends on the interest charged on loans offered to other group members | - Member savings. | - Social aspect/group support <br> - Safe place to save in places with limited to access financial services <br> - Loan decisions can be immediate |
| Input credit | - Can be limited to what the borrower can sell in one day | - Interest can be high <br> - Daily repayment requirements | - None | - Limited financial knowledge <br> - Easy availability |
| At home | - Money easily available <br> - Easy to manage | - Little incentive to save consistently <br> - Money at risk for theft or fire <br> - No banking or transportation costs | - None | - Pressure from family members to share money <br> - Less control over spending and saving |
| Moneylender | - Money available easily and immediately | - Some have daily interest rates. <br> - Risky if miss payments | - None | - Easy to get into deep debt |

After you look at the criteria and compare the options available to you, it is helpful to ask the following questions:

1. Which type of financial service offers the loan that best suits your needs and do you meet the minimum loan requirements?

- Think about the type of loan that best fits your needs, including loan size, grace period, and repayment schedule.
- Think about your ability to meet the requirements to access the loan set by the financial institutions. Some commercial banks require that you own property or have collateral of similar value to your loan. Additionally, some banks require that you have a history of successfully borrowing and repaying loans. You may need to consider first taking a smaller loan to build this history that will demonstrate your ability to repay a larger loan.

2. Can you afford both the direct and indirect costs of the loan?

- Carefully calculate all of the direct and indirect costs of the loan.

3. What factor(s) is most important to you in receiving a loan?

- Make sure that your key criteria and needs are met. For example, if you must travel far to access the loan, do you really have the time to make that trip for each loan repayment? If you need the money soon, will the loan be disbursed at the desired time? Depending on how well the options meet your criteria, these other factors could influence your final decision.

Deciding to take a loan is an important financial decision. It is crucial to be as best prepared as possible to ensure a positive and lucrative borrowing experience. Failing to carefully consider the options and choosing an inadequate loan could come at considerable costs and hardship to you and your family.

## HOW LENDERS EVALUATE LOAN APPLICATIONS

When a potential borrower applies for a loan, the lender reviews the borrower's capacity, character, capital, and collateral to determine whether a borrower is likely to repay the loan. These are known as the "four Cs." Understanding how financial institutions evaluate loans will help you to prepare this information before applying for a loan. It can help you assess your ability to take out a loan.

Capacity: Can you repay the loan? Lenders want to be sure that you will be able to make the monthly loan payments. To make this decision, they will compare your income, expenses, and other outstanding loan payments to the requested loan amount. Preparing a budget and analyzing your income and expenses would prepare you for this analysis. Similar to the exercise about Jacob's loan ability, the exercises from "Table Lesson 10.1 and Table Lesson 10.2" can be used. The lender will sometimes ask you about your future income and expenses over a specific period of time. You may need to create a
 specific budget for the timeframe requested by the lender.

Character: What is your history in repaying previous loans? A credit history is a record of your previous debts. In some countries formal financial institutions must report all loans to a central agency. When a person takes out a loan, the bank will check with this central agency to see how the person has repaid prior loans. For individuals without a credit history, some financial institutions offer group loans. In more informal situations, the group vouches for the borrower's character in their willingness to guarantee the loan for the borrower. Similarly, members of savings groups know the members in the group and whether those members will likely repay their loans. Local traders and moneylenders know how you have repaid your previous debts to them.


Typically if there is little information on how you have repaid previous loans, the bank may charge a higher interest rate and initially give you a smaller loan. If you make timely repayments, the lender may give you a larger second loan.

Capital: What do you currently own and owe? Lenders will try to determine the value of the borrower's net worth-the difference between your assets and what you owe. To make this calculation, lenders will first determine the value of your assets or what you own. Then the lender will determine the value of all your debt or money you owe to others. Finally, the lender will subtract the value of what you owe to others from the value of what you own, giving the net worth. Before applying for a loan, it is recommended that you evaluate your own net worth.

Collateral: What property or assets can the lender take if you cannot repay the loan? For some properties, lenders may require a property title, a document usually issued by a government that states who owns the property (land, house, vehicle, etc.). In some countries, when a borrower uses property to secure a loan, the property is listed on a registry that lenders can review to check to see if the same property has already been used as collateral for another loan.


## QUIZ FOR LESSON 11. COMPARING FINANCIAL SERVICES

1. Which of the following are formal financial services? Check all that apply.
a. Money lenders
b. Financial services that are regulated by the government.
c. Commercial banks, microfinance institutions, SACCOS
d. Financial services that are not regulated by the government.
2. Which of the following are informal financial services? Check all that apply.
a. Money lenders
b. Financial services that are regulated by the government.
c. Commercial banks, microfinance institutions, SACCOs
d. Financial services that are not regulated by the government.
3. What are the four criteria for evaluating financial services?
a. Approximate loan size, interest rate / cost, collateral requirement, individual needs.
b. Surplus income, interest rate / cost, friendliness of the field agent, individual needs.
c. Friendliness of the field agent, interest rate / cost, collateral requirement, individual needs.
d. Surplus income, interest rate / cost, collateral requirement, individual needs.
4. What are some examples of individual needs in evaluating financial services?

Check all that apply.
a. Proximity to your home
b. Speed of loan decisions
c. Availability of agricultural loans
d. Flexibility of products
e. Safety of savings
f. All of the above
5. Match the 4 C's with the proper definition.

| 1. Capacity - | a. What property or assets can the lender take if <br> you cannot repay the loan? <br> 2. Character - | b. Can you repay the loan? <br> 3. Capital - |
| :--- | :--- | :--- |
| 4. Collateral $-\quad$c. What do you currently own and owe? <br> d. What is your history in repaying previous <br> loans? |  |  |

Answers are located on the inside back cover of the booklet.

FIELD EXERCISE 11.
COMPARING FINANCIAL SERVICES

## OBJECTIVE

- Demonstrate the different types of financial services available in their community.
- Demonstrate which type of financial service is best for which type of loan.
- Explain how financial service providers evaluate loan applications.


## EQUIPMENT NEEDED

| STANDARD | OPTIONAL |
| :--- | :--- |
| - Flipchart paper or large sheets of | -Laminated A4 or letter paper <br> paper |
| sized cards, with images of <br> - Marker pens | commercial service providers: (a) |
| - Tapenk; (b) MFI; (c) |  |

## EXPECTED OUTPUTS

- Group members have identified various financial services that are available in their community.
- Group members have examined the various loans they may need and considered which financial service is best for which loan.


## TIME

- 30 minutes in one session (meeting)


## PREPARATION

- Prepare chart comparing the different financial services.


## SUGGESTED PROCEDURE

11.10 Ask participants the following questions. If they are literate, write their answers on a flipchart paper. If not, make notes of their answers to yourself to refer to later. Ask:
" If you need a loan, where can you get it from?
Answer: Friends, family members, savings group, supplier, buyer, MFI, cooperative credit union, moneylender, bank, or a combination of these sources.
" What are the advantages of each of these loan sources?
" What are the disadvantages?
Answer: Probe for interest rate, chance of getting the loan, types of loans offered, distance, frequency of repayment, possibility of accessing other financial services, and consequences of non-repayment.

### 11.11 Ask participants:

" In your opinion, what is the best choice for borrowing in the case of an emergency? For consumption? For investment? Why?
11.12 Ask participants where they or members of their community obtain financial services? List the participants' responses down the left side of the flipchart paper.
11.13 Choose 4-5 of the identified institutions (include commercial bank, microfinance institution, SACCO, savings group, and a local informally available resource). Make a new table with these 4-5 institutions leaving enough space in the rows to write. Draw next to the column of institutions another two columns titled loan size available, costs, collateral requirements, and other factors. Ask participants to identify the advantages and disadvantages of each. Write these down on the flipchart paper. In the end your table should look similar to the one
in "Table Field Exercise 11.1: Comparing loan providers" (below). Spend a few moments discussing these differences. Probe whether participants have a preference towards a particular provider and explore why.
11.14 Prepare on the flipchart paper "Table Field Exercise 11.1. Comparing loan providers." Work together as a group to complete the table based on the local environment. Select three of the main sources of financial services identified in step 3. Tell participants that they should create a similar evaluation when they look to take out a loan of their own.
11.15 Ask the group to identify a loan need, amount for the loan, and when the loan would be available. Split the group into 3 groups and have each of the groups evaluate the costs for three likely loan sources. Be sure to include a formal and an informal source of funds.

Table Field Exercise 11.1: Comparing loan providers

|  |  | LOAN 1 MICROFINANCE INSTITUTION | LOAN 2 SAVINGS GROUP | LOAN 3 MONEYLENDER | BANK |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General terms | Amount of loan |  |  |  |  |
|  | Interest rate (for term of loan) per month |  |  |  |  |
|  | Flat or declining |  |  |  |  |
|  | Loan term |  |  |  |  |
|  | Date available |  |  |  |  |
|  | Savings or collateral required |  |  |  |  |
| Payments | Payments frequency |  |  |  |  |
|  | Penalties for late payments |  |  |  |  |
| Fees | Application fees |  |  |  |  |
|  | Administrative fees |  |  |  |  |
| Other costs | Location |  |  |  |  |
|  | Income lost (from closing business to apply for loan ) |  |  |  |  |
|  | Employee wages (for time away) |  |  |  |  |
| Total loan cost | What is the total interest to be paid? |  |  |  |  |
|  | What is the sum of fees and other costs? |  |  |  |  |
|  | Total cost of the loan (add total interest and sum of other costs) |  |  |  |  |

## HOW LENDERS EVALUATE LOAN APPLICATIONS

11.16 Say to participants: Similar to borrowers, lenders have criteria they use to evaluate potential borrowers. By examining these criteria lenders seek to answer one question: Will the borrower repay the loan? If a lender decides that a borrower is risky then they will offer a higher interest rate, a shorter loan term, or will reject the request.
11.17 Ask: What criteria do lenders use to evaluate borrowers before giving them a loan?

Have participants share their thoughts for a few minutes. Be sure to highlight the following key criteria for receiving a loan:

- Collateral (Guarantee) - What assets can you use to secure the loan?
- Capacity to repay - What are your current expenses and income? Remember the $20 \%$ rule?
- Character - How have you repaid previous debts?
- Capital - Is the value of everything you own greater than the amount of all of your debt combined?
11.18 Continue with a group exercise by dividing participants into three groups. Read the following scenarios and have the group members decide if the borrower should receive the loan. For each scenario, be sure to note your evaluation of the borrower's collateral, capacity, character, and capital.


## SCENARIO 1

You are a member of a savings group. During your monthly savings meeting, your neighbor Rachel asks for a loan for 30,000 to purchase inputs for her business. Rachel says that she plans to repay her loan from the increased yields she will receive from the investment of these inputs. Rachel is your neighbor. She is always asking to borrow from you because she is struggling to repay her current debts.

Answer: Rachel may have limited capacity to pay and limited capital because she has additional debts.

## SCENARIO 2

You are a meat supplier. Every morning you sell meat on credit to many of your clients for them to resell for the day. They must repay you for the cost of the meat loan by the end of each day, plus interest. You will not give them another loan until they have repaid you for the meat from the previous day. A new meat seller asks you to give him credit.

Answer: If it is a new buyer the risk is higher because the seller does not know how a newer buyer will repay.

## SCENARIO 3

You are a loan officer for a local MFI. A local farmer group is requesting a loan. They have saved $10 \%$ of the loan amount request as required. It is a group loan. The group is a new group from the local market.

Answer: The group has saved the required 10\%. As a group loan, there is a social guarantee and other group members will be responsible if a member does not repay.

## REFERENCE MATERIAL

## LIST OF DOCUMENTS USED IN THE LESSONS AND FIELD EXERCISES

## Lesson and Field Exercise 8: Borrowing Concepts

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## Lesson and Field Exercise 9: My Money vs. Someone else's Money

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Derived from the work entitled "Financial Education for Youth and Women," Equity Group Foundation. © Microfinance Opportunities 2010. All rights reserved.

## Lesson and Field Exercise 10: Analyze Your Ability to take on a Loan

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## Lesson and Field Exercise 11: Comparing Financial Services

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## QUIZ ANSWERS <br> QUIZ FOR LESSON 8. BORROWING CONCEPTS

1. Answers: b, c, and d.
2. Answer: False. A loan disbursement is when the lender gives the loan amount (principal) to the borrower. The time the borrower has to use the loan is called the loan period.
3. Answer: 1. c; 2. a; 3. d; 4. b

## QUIZ FOR LESSON 9. MY MONEY VS. SOMEONE ELSE'S MONEY

1. Answer: $b$ and $c$ since $b$ would increase the debt load to an amount that is higher than what can be repaid. When that occurs, it is important to evaluate the necessity of the loan. For c, if the cost of the loan is greater than the increased earnings from the business investment, it may be necessary to rethink the need for the loan.
2. Answer: a, c, e
3. Answer: a.

## QUIZ FOR LESSON 10. ANALYZE YOUR ABILITY TO TAKE ON A LOAN

Answers: 1. b; 2. b; 3. a; 4. a; 5. b; 6. b; 7. c; 8. a; 9. d; 10. a; 11. a; 12. a; 13. a; 14. c; 15. a; 16. c; 17. b; 18. c; 19. b; 20. a

## QUIZ FOR LESSON 11. COMPARING FINANCIAL SERVICES

1. Answers: $b$ and $c$
2. Answers: a and d
3. Answer: a
4. Answer: f
5. Answers: 1. b; 2. d; 3. c; 4. a

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[^0]:    9 Stories is from SILC Field Agent Guide 4.1, September 2011, CRS, page 68.

[^1]:    There is no diference. Both loans pay a total of 1,600 in interes.

[^2]:    10 This section is adapted from 'Microfinance occasional paper, Financing smallholder farmers: where financial and non-financial services meet.' CRS, Tom Shaw, Wendy-Ann Rowe, and Rupert Best. 2010.

