

# You are a farmer!

<b>Instrument ID:</b>	<b>Baseline</b>
<b>Drawing bag:</b>	<b>7 green + 3 red</b>

## Official game structure:

5 agricultural season rounds = 4 decision rounds + 1 settlement round

## Mission:

Make decisions to earn tokens that will be converted into a reward (pieces of soap) at the end.

No right or wrong decision – make your own choice!

Conversion:  $\leq 320,000 = 1$  piece of soap;  $320,001-470,000 = 2$  pieces;  $470,001-620,000 = 3$  pieces;  $\geq 620,001 = 4$  pieces.

## Your plot of land:

You own a plot of land worth 300,000 tokens. Its value will be added to your final settlement at the end of the game.

This land generates 30,000 tokens each round (1–5), regardless of your decision.



## Weather mechanism:

Each round of the game has a weather condition. At the beginning of each round, you randomly draw a weather card.

In the bag, there are 7 good-weather cards (70%) and 3 bad-weather cards (30%).



## Your investment opportunity in rounds 1–4:

You can buy high-productivity seeds that could improve your return in the next round.

You must buy at least 150,000 tokens' worth of seeds; you can buy as much as you want beyond that.

The return therefore depends on the weather in the next round.

**If good weather: You get a 50% return, e.g. invest 150,000 → receive 225,000.**

**If bad weather: You lose half, e.g. invest 150,000 → receive 75,000.**

### A financial application is available as a source of credit:

- You can borrow a maximum of 120,000 tokens, or any lesser amount, in each round
- The interest rate is 5%, that is, if you borrow 120,000, you must pay back 126,000 in the next round
- If you fail to repay, the application will automatically collect the tokens you have available (available cash), as well as the future fixed income from your land (30,000 tokens per round), until the debt (principal + interest) is fully repaid.
- When you are in debt to the application, you cannot borrow again from the application. If you are in debt to another lender, the financial application is the priority lender (it is repaid first).

### You can contact your partner to ask if they are willing to lend you money:

- You can borrow a maximum of 120,000 tokens, or any lesser amount, in each round
- Feel free to negotiate the interest rate.
- You can choose not to fully repay your partner, but this will affect your partner's return.
- Feel free to renegotiate terms in case of default. For example, you can request total or partial cancellation of your debt, propose a new interest rate, or spread repayment over future rounds, provided your partner agrees.
- With your partner, you can try to borrow even if you are in debt, provided your partner agrees.
- You can discuss with your partner and still ultimately decide to borrow from the application.

### Procedure – Round 1:

- ① You receive 30,000 from your land and draw a card
- ② You face an investment opportunity to increase your income for the next round
- ③ You must decide whether to invest, whether to borrow, and from whom to borrow

### Rounds 2–4:

- ① You receive 30,000 from your land and draw a card
- ② If you invested in the previous round, the card drawn this round will determine your investment return.
- ③ You repay the lender; or you are in default.

*Note: If you are in debt to your partner, you can negotiate with them on WhatsApp. You can request cancellation of your debt, a new interest rate, or propose to pay part of your debt. Remember that the final decision belongs to your partner.*

- ④ You face the same investment opportunity to increase your income for the next round
- ⑤ You must decide whether to invest, whether to borrow, and from whom to borrow

### Round 5:

- ① You receive 30,000 from your land and draw a card
- ② If you invested in the previous round, we calculate your investment return. You repay the lender; or you are in default.

*Note:*

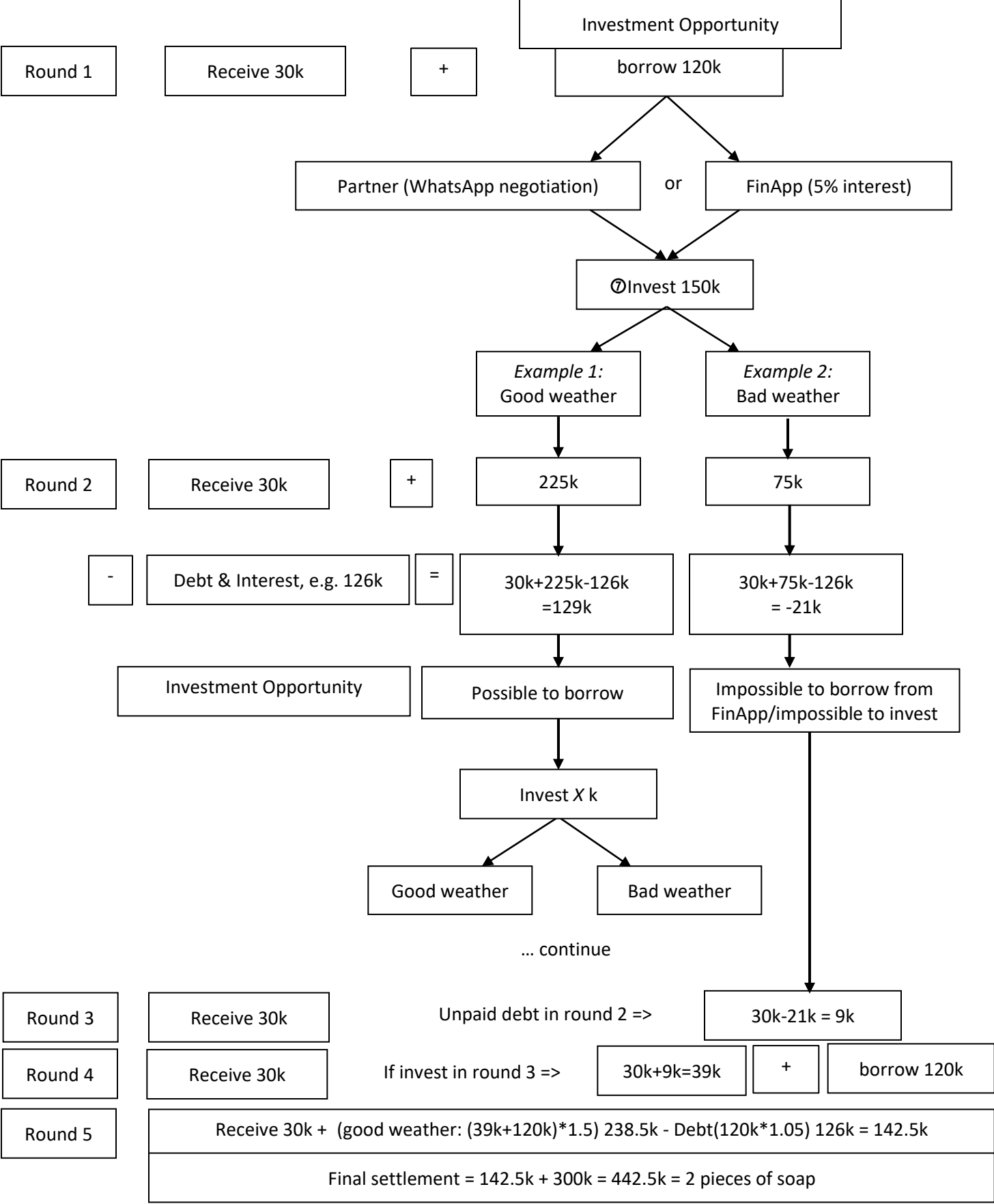
*- If you are in default with the financial application in round 5, the application collects all your available cash.*

*- If you are in default with your partner, you can repay all your available cash or negotiate the cancellation of (part of) your debt.*

- ③ Your final settlement = available tokens on hand + 300,000 (land value)

*Note: Throughout the game, amounts below 100 are rounded up to 100.*

# Practice Game Flowchart - Farmer



# Farmer (Borrower) Protocol

## Instruction ID: Baseline

### 1. Registration on the Day of the Game

#### Physical setup (before participants arrive):

- Set up the registration desk at the entrance
- Prepare the participant list verification form
- Set up the waiting area and game rooms (separate rooms for lenders and borrowers)

#### 1.1. Welcoming participants, enumerator script (read verbatim, neutral tone):

"Hello, I am [First Name Last Name]. I work for a study conducted by the Graduate Institute of International and Development Studies, Geneva, in partnership with the University of Burundi."

"Today, we invite you to participate in a decision-making game."

"By playing, you will earn pieces of soap. The better decisions you make for your farm in the game, the more soap you will receive. At most, you can earn up to 4 pieces, worth 4,000 FBU."

"Your participation is entirely voluntary. There is no physical risk in participating. However, because this exercise involves communication and financial decisions with another participant you know, you may feel some discomfort or tension during the game. You may stop at any time without penalty. Everything you do here will remain confidential: we will de-identify all data collected, so that it is impossible to trace actions back to individual participants. We will never use your name in our academic articles or studies. If you have questions, you may contact our field supervisor at [xxxx xxxx]. Do you wish to participate?"

"Yes or No?"

(If Yes) "Thank you. One last thing: to ensure that the study is conducted fairly for all residents of the hill, please keep the details of the game confidential for one month and do not discuss them with anyone, including your family. Do you agree?"

**1.2. Registration, Enumerator Script (read verbatim, neutral tone):**

*[Action: record responses in Kobo]*

"What is your name?" \_\_\_\_\_

"Which hill do you live on?" \_\_\_\_\_

"What is your phone number?" \_\_\_\_\_

*The enumerator enters the participant ID code (as in the baseline survey)* \_\_\_\_\_

**Partner confirmation:**

"Who did you come with today? (Name of your partner)" \_\_\_\_\_

"What is your relationship or acquaintance with them?" \_\_\_\_\_

"Which hill does your partner live on?" \_\_\_\_\_

*[The enumerator checks: is this the recommended partner? Yes / No]* \_\_\_\_\_

*[If no: is this one of the four persons listed in the baseline survey? Yes / No]* \_\_\_\_\_

*[If "no, no": The session ends for this pair.]*

**After confirming identity:**

"From now on, it is strictly forbidden to speak or exchange signs with other participants, including your partner. We must ensure that your decisions are your own. If you have questions, please consult only the enumerator."

## 2. Explanation of the Borrower Role

### Logistics and setup:

- Guide the participant to the borrowers' area.
- Prepare the materials: instruction sheet, land cards, tokens, draw bag, mobile phone with the WhatsApp group, calculator, whiteboard and marker.

### Enumerator script:

"Now I will present the rules of the game. Please listen carefully."

"To help you, you can follow the steps on the instruction sheet I gave you. My explanations and the practice rounds will follow exactly what is written on this document."

*[Action: Show the instruction sheet to the player and read:]*

### Game structure:

"This game consists of five rounds in total. Each round represents an agricultural season."

"The first four rounds are decision rounds in which you will make investment decisions. The fifth and final round will be used solely for the final settlement; no investment decision will be needed at that point."

### Game objective:

"There are no right or wrong decisions in this game. What matters is that you make choices that truly reflect what you think."

"Your final reward will depend on the total number of tokens you have accumulated at the end of the game."

"The scale for earning pieces of soap is as follows:"

≤320,000 tokens = 1 piece of soap

320,001–470,000 tokens = 2 pieces

470,001–620,000 tokens = 3 pieces

620,001 tokens and above = 4 pieces

"Therefore, your goal is to accumulate as many tokens as possible to obtain the maximum number of pieces of soap."

### Your role and assets:

"In this game, your role is that of a farmer who owns a small plot of land."

"This land has a value of 300,000 tokens."

*[Action: Show the land card to the participant]*

"You farm this land, and it provides you with a fixed income of 30,000 tokens each round."

"This is a secure income: at the start of each round, we will always give you these 30,000 tokens, no matter what."

*[Action: Show 30,000 tokens]*

### **Weather mechanism:**

"Each round, the weather changes. You determine the weather by drawing a card from this bag."

"The bag contains 10 cards in total: 7 green cards and 3 red cards."

"The green card means good weather. The red card means bad weather."

"You therefore have a much higher chance of good weather (7 out of 10) than bad weather (3 out of 10)."

*[Action: Show the cards and the draw bag, invite the participant to try a draw]*

### **Investment opportunity:**

"From round 1 to round 4, you can choose to invest to earn more tokens by purchasing high-quality seeds. This investment opportunity is the same in every round."

"To purchase these seeds, you must invest at least 150,000 tokens. You may invest more if you wish, but not less."

"However, these seeds are risky: your earnings depend on the weather of the next round:"

"If you draw good weather (green card), you earn 50% more. For example, if you invest 150,000 tokens, you receive 225,000 tokens (your investment multiplied by 1.5)."

"If you draw bad weather (red card), you lose half your stake. For example, if you invest 150,000 tokens, you are left with only 75,000 tokens (your investment multiplied by 0.5)."

### **Choice of lenders:**

"As you can see, the minimum investment amount is high. If you have enough tokens, you can use your own resources. However, if you do not have enough money, you may consider borrowing."

"To borrow, you have two options: (1) borrow from a financial application, or (2) borrow from your game partner."

"You can choose either option, but you cannot use both borrowing sources at the same time within a single round. However, you are free to change lenders from one round to another."

"Regardless of which lender you choose, you cannot borrow more than 120,000 tokens per round."

### **Borrowing terms from the financial application:**

"The borrowing terms of the financial application are as follows:"

"The borrowing limit is 120,000 tokens each time and the interest rate is 5%."

"This means that if you borrow 120,000 tokens, you must repay 126,000 tokens in the next round (the principal of 120,000 + the interest of 6,000)."

"In case of non-repayment at maturity, the application will automatically deduct the tokens you have (your liquid assets), as well as your future fixed income (the 30,000 tokens per round), until the 126,000 tokens are fully repaid."

"If you have an outstanding unpaid debt to the application, you cannot take out a new loan from it."

"If you have debts to other lenders (such as your partner), you can still borrow from the application. However, the application is a priority lender. This means you must repay the application before any other lender. As soon as you receive income, the application deducts it automatically; you will only be able to repay your partner once the application has been fully repaid."

### **Borrowing from your game partner:**

"You may also choose to borrow from your game partner. You can contact them via WhatsApp. The enumerator will type your messages exactly as you dictate them. Your partner will also communicate through their enumerator in the same way."

"Your game partner does not know the details of your payoffs. To borrow money from them, you must obtain their consent (their agreement)."

"The borrowing limit from your partner is also 120,000 tokens per round."

"You may discuss anything you wish, but I suggest you negotiate: the amount to borrow and the interest rate."

"You may choose not to repay your partner in full, but this will directly affect their earnings (their return)."

"In case of repayment difficulties, you may request full or partial cancellation of your debt, propose a new interest rate, or spread the repayment over future rounds, provided your partner agrees."

"Unlike the financial application, you can borrow again from your partner even if you already have a debt to them, as long as they agree."

"Each round, you may discuss the options with your partner and still decide to borrow from the application instead."

### **Decision time:**

"In the first round, you have ten minutes to think, contact your partner via WhatsApp, and inform us of your borrowing and investment decisions."

"For subsequent rounds, this discussion and reflection time will be reduced to five minutes."

"You may begin the discussion whenever you wish, but you must respect the total time allocated for each round."

## Game round procedure:

"Here is how each round proceeds:"

### In the first round:

"You will receive 30,000 tokens of fixed income and you will draw a weather card."

"Then you think: should I borrow to buy seeds? If so, from whom?"

"You can discuss with your partner on WhatsApp before making your decision. You have 10 minutes to discuss and make your decision."

"Finally, you inform us of your borrowing and investment decisions."

### From round 2 to round 4:

"You will receive your 30,000 tokens and draw the weather card that determines the result of your previous round's investment (gain or loss)."

"If you have a debt, you must repay it now. If you cannot repay your partner, you may briefly communicate with them on WhatsApp."

"During this exchange, you can ask them to cancel your debt or reduce the interest. The final decision is theirs."

"Each round, the investment opportunity is the same: you can invest if you have at least 150,000 tokens."

### In round 5:

"You will receive your last 30,000 tokens and draw the final weather card for your round 4 investment."

"We will then settle all your final debts."

"If you owe money to the application, it automatically deducts all your liquid cash."

"If you owe money to your partner, you can repay with your liquid cash or negotiate a debt cancellation."

"Your final result = remaining liquid cash + the 300,000 tokens of land value."

## Base income calculation:

"If you never borrow and never invest, receiving only the fixed land income of 30,000 tokens each round:"

"Your income over five rounds:  $30,000 \times 5 = 150,000$  tokens"

"Plus the value of your land at the end:  $150,000 + 300,000 = 450,000$  tokens"

"Your total income will therefore be 450,000 tokens."

"This means you will receive 2 pieces of soap, as your tokens fall in the range between 320,001 and 470,000."

**Comprehension check (ask one at a time, participant answers orally):**

**Question 1: "Is the investment risky? What does your income depend on?"**

→ *Expected answer: Yes, it depends on the weather in the next round.*

**Question 2: "Can you choose not to invest?"**

→ *Expected answer: Yes*

**Question 3: "Can you borrow from different lenders simultaneously in the same round?"**

→ *Expected answer: No*

**Question 4: "Can you change lenders during the game (from one round to another)?"**

→ *Expected answer: Yes*

**Question 5: "Can you discuss with your game partner on WhatsApp and then ultimately decide to borrow from the financial application instead?"**

→ *Expected answer: Yes*

**Question 6: "Can you borrow from the financial application if you have unpaid debts to it?"**

→ *Expected answer: No*

**Question 7: "Will the tokens be converted into a soap reward at the end of the game?"**

→ *Expected answer: Yes*

**Note to enumerator (do not read to participant):**

- If the participant answers incorrectly: calmly reiterate the relevant rules
- Ask again
- Continue only after all questions have been answered correctly

*For each question, the enumerator records in Kobo the number of attempts before the player gives the correct answer. For example, if the player answers correctly on the third try for question 1, record 3.*

Question	Number of attempts
1	
2	
3	
4	
5	
6	
7	

### 3. Practice Game

"Now, we will conduct a practice game."

"The practice is only meant to familiarize you with the process. Tokens earned during the practice do not count toward the final payment (soap)."

"Please follow the instructions strictly. You may ask questions at any time during this practice phase."

"A flowchart (mindmap) of the token calculation for the practice game is on page 3 of your instruction sheet. You can also follow this plan to better understand the process."

#### Practice game procedure

"Your role and the game rules were presented previously. Here is your land card."

*[Action: Give the land card to the participant]*

#### Round 1 (Practice):

"Now, we enter the first round. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"Now, please draw a weather card."

*[Action: Invite the participant to draw a card]*

*[Note: Put the drawn card back in the bag so there are always 10 at the start of each round]*

"Today's weather is [Good/Bad]. But the weather of the first round does not affect the game income."

"Now, you face the investment decision presented previously."

"You can choose whether or not to buy high-quality seeds. These seeds can significantly increase yields or lead to losses, depending on the weather in the next round."

"In this practice, we assume you plan to invest. Since the minimum seed purchase price is 150,000 tokens and you lack sufficient funds, you plan to borrow 120,000 tokens from the financial application."

"Remember that you can contact your partner before deciding whether to borrow via the financial application or from your partner. But in this practice example, we assume you borrow from the financial application."

*[Action: Give 120,000 tokens to the participant]*

"You use all funds for the investment."

*[Action: Take back 150,000 tokens]*

## Round 2 (Practice) – Good Weather Scenario:

"Now, we enter the second round. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"In this practice game, we assume you drew a "Good weather" card."

*[Action: Draw a green card from the bag and show it to the participant]*

"Your investment of 150,000 tokens in seeds earns you an income of 225,000 tokens. Here are your tokens."

*[Action: Give 225,000 tokens to the participant]*

"You now have 255,000 tokens in total (30,000 + 225,000)."

"Since you borrowed in the previous round, you must now repay the principal and interest: 120,000 tokens of principal + 5% interest = 126,000 tokens."

*[Action: Take back 126,000 tokens]*

"You now have 129,000 tokens remaining."

*[Action: Verify with the participant that they have 129,000 tokens in hand]*

"Then you would face the same investment and borrowing decisions for the next round."

"Do you understand this example of the "Good weather" scenario?"

*[Action: Take back all tokens once the explanation is complete]*

## New Practice Game – Bad Weather Scenario:

"We start again to illustrate the "Bad weather" scenario."

### Round 1 (Practice):

"Once again, we enter the first round. This first round is exactly the same as before, so we will proceed a bit faster."

"Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"Now, please draw a weather card."

*[Action: Invite the participant to draw a card]*

"Today's weather is [Good/Bad]. But the weather of the first round does not affect the game income."

"Now, you face the investment decision presented previously."

"In this practice, we assume you plan to invest by borrowing 120,000 tokens from the financial application."

*[Action: Give 120,000 tokens to the participant]*

"You use all funds for the investment."

*[Action: Take back 150,000 tokens]*

### Round 2 (Practice) – Bad Weather Scenario:

"Now, we enter the second round. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"In this practice game, we assume you drew a "Bad weather" card."

*[Action: Draw a red card from the bag and show it to the participant]*

"Your seeds suffered losses; you can now obtain only 75,000 tokens."

*[Action: Give 75,000 tokens to the participant]*

"You now have 105,000 tokens in total, but you owe 126,000 tokens to the financial application."

"You must repay with available funds and future funds. Now, repay 105,000 tokens first; you still owe 21,000 tokens."

*[Action: Take back 105,000 tokens]*

"You now have 0 tokens remaining. Normally, you would now face the investment decision. However, even if you were to borrow from your game partner — the maximum being 120,000 tokens — you would only have 120,000, which is still below the minimum seed price of 150,000. Note that you cannot borrow from the financial application because you still have an unpaid debt to it. We therefore assume you do not borrow and do not invest this round."

### **Round 3 (Practice):**

"Now, we enter the third round. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"Now, we will draw a weather card."

*[Action: Invite the participant to draw a card]*

"Since you did not invest in the previous round, the weather this round does not affect your income."

"However, you must use your funds to repay the previous debt of 21,000 tokens. You therefore have 9,000 tokens remaining after repayment."

"Since the seed price is 150,000 tokens and you can borrow at most 120,000, your 9,000 tokens are insufficient. You therefore cannot invest this round."

"We assume you choose not to borrow and move to the next round."

### **Round 4 (Practice):**

"Now, we enter the fourth round. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"Now, we will draw a weather card."

*[Action: Invite the participant to draw a card]*

"Since you did not invest, the weather does not affect your income. You now have 39,000 tokens in total (9,000 + 30,000)."

"Now suppose you decide to borrow 120,000 from the application and invest all of your 159,000 tokens."

*[Action: Give 120,000 tokens to the participant, then take back all 159,000 tokens]*

### **Round 5 (Practice):**

"Now, we enter the fifth round. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"Suppose you drew a "Good weather" card."

*[Action: Draw a green card from the bag and show it to the participant]*

"You invested 159,000 tokens. Your income is therefore  $159,000 \times 1.5 = 238,500$  tokens (good weather return)."

*[Action: Give 238,500 tokens to the participant]*

"You must repay 126,000 tokens to the financial application (principal + interest)."

*[Action: Take back 126,000 tokens]*

"You have 142,500 tokens remaining."

"Your final income for this practice is  $142,500 + 300,000$  (land value) = 442,500, which is equivalent to 2 pieces of soap."

### Conclusion:

"This concludes the practice session. Do you have any questions?"

"The practice game is now over."

"To emphasize again: the practice that just took place is only an example. We used the financial application in the practice solely to illustrate how the borrowing and repayment rules work — this does not mean the financial application is the preferred or recommended choice. In the official game, you are equally free to contact your game partner to request a loan instead. Deciding whether or not to borrow, from whom, and at what interest rate depends entirely on you. The final decision is yours."

"There are no right or wrong decisions, but each decision will affect your real income after the game ends."

*[Action: Collect the land card and all practice tokens from the participant]*

## 4. Official Game

### 4.0 Communication Rules in the WhatsApp Group

Each WhatsApp group includes: the borrower's enumerator, the lender's enumerator, and the project manager.

All participant messages in the WhatsApp group are typed by the enumerator. The enumerator must type exactly what the participant dictates, word for word, without altering, summarizing, or adding to the message.

- **At the start of the official game:**

Both enumerators must note the first name, last name, identification code, and date of the game in the WhatsApp group, using brackets [ ], to verify that the borrower and lender form the correct pair. For example:

- Step 1. [Borrower: Fiacre Mugisha, Code: XXX, 1 April 2026]
- Step 2. [Lender: Eloi M.SC, 1 April 2026]

- **At the start of each round:**

Step 1. The borrower's enumerator must announce the start of each round, using brackets [ ].

- For example: [Round 1 begins]

Step 2. The lender's enumerator must acknowledge the start, using brackets [ ]

- For example: [Round 1 start acknowledged]

Both enumerators begin the round only after confirming that both messages have appeared (so both participants play their rounds simultaneously).

- **During each round:**

Both participants may communicate freely during the round. The enumerator types exactly what the participant dictates, without brackets [ ].

- **Repayment to partner:**

If the borrower repays their partner, the borrower's enumerator must write:

- For example: [Round 3: the borrower repays 126,000 to the partner]

- **Borrower decision:**

The borrower's enumerator must announce the final decision of the round, using brackets [ ].

- For example: [Round 3: borrower decision made]

*Note: Write only this exact phrase, without giving the details of the decision (amount, choice, etc.).*

*Explanation: Once the borrower has made their decision, both participants may no longer communicate for that round. Both enumerators then continue independently with each participant until the end of the round. The next round begins only when the borrower's enumerator announces the start of the new round.*

- **Strict format:** The enumerator always writes with brackets [ ], whereas participant messages (typed verbatim by the enumerator) appear without brackets.
- **Limited messages (for enumerators only):** Only the official messages specified by the protocol are allowed in the group; any other message is prohibited.

## **Start of the official game, enumerator script (read word for word, neutral tone):**

*[Action: the enumerator writes [Borrower: [First Name Last Name], Code: [XXX], [DD/MM/YYYY]] in the WhatsApp group]*

"We are now starting the official game."

"From now on, the game will be real. The tokens you earn during the game will be converted into rewards."

"Please make sure your decisions are based on your true thinking. Your goal is to earn as many tokens as possible: the more tokens you earn, the higher your reward at the end of the game will be. Remember that your decision also affects the number of tokens your partner receives."

"Please also note that, once the official game begins, I will not provide any further explanation of the rules or any advice."

*[Action: Place the land card in front of the participant]*

"Your role in the game today is that of a farmer."

"You own a small plot of land worth 300,000 tokens. Here is your land card."

### **4.1 Round 1 (official)**

*[Action: the enumerator writes [Round 1 begins] in the WhatsApp group]*

"Now, we enter the first round. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant]*

"Now, please draw a weather card."

*[Action: Invite the participant to draw a card]*

"Today's weather is [Good/Bad]. But the weather of the first round does not affect the game income."

"Now, you face the investment decision presented previously."

"You can choose whether or not to buy high-quality seeds. These seeds can significantly increase yields or cause losses, depending on the weather of the next round, determined by the card you will draw."

"The minimum seed purchase price is 150,000 tokens. If your personal funds are insufficient, you may consider borrowing. You can borrow from your game partner or from the financial application."

"Now, you have ten minutes to freely consider your decisions. You can also contact your game partner to discuss them."

"You can communicate freely with your partner. Tell the enumerator exactly what you want to say, and they will type it word for word in the WhatsApp group."

*[Wait ten minutes; remind the participant of the remaining time if necessary]*

"Now, please inform me of your investment decision."

*[Action: the enumerator writes [Round 1: borrower decision made] in the WhatsApp group]*

*[Action: If the participant borrowed and/or invested, give them the borrowed tokens and collect the invested tokens.]*

## Round 1 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

- (1) "The weather in round 1 was:" \_\_\_\_\_ (Good or Bad)
- (2) "Did you communicate with your partner in round 1?" \_\_\_\_\_ (Yes or No)
- (3) "Did you borrow in round 1?" \_\_\_\_\_ (Yes or No)

→ If "No" to question (3), skip questions (4) to (6) and go directly to question (7).

→ If "Yes" to question (3), continue:

- (4) "Did you borrow from your game partner or from the financial application?" \_\_\_\_\_ (Partner or Financial Application)
- (5) "How much did you borrow?" \_\_\_\_\_ (Amount)
- (6) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")

- (7) "Did you invest in round 1?" \_\_\_\_\_ (Yes or No)

→ If "No" to question (7), skip question (8) and go directly to question (9).

→ If "Yes" to question (7), continue:

- (8) "How much did you invest?" \_\_\_\_\_ (Amount)
- (9) "What is your final balance at the end of round 1?" \_\_\_\_\_  
(Amount = 30,000 + amount borrowed – amount invested)

## Verification phrase (to read aloud):

"In round 1, you borrowed [0 or X] tokens from [LENDER / no one] and invested [0 or Y] tokens. Your balance is [Z] tokens."

## 4.2 Round 2 (official)

*[Action: the enumerator writes [Round 2 begins] in the WhatsApp group]*

"We are now entering round 2. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant.]*

"Now, please draw a weather card."

*[Action: Invite the participant to draw a card; put the drawn card back in the bag after drawing.]*

"Today's weather is [Good/Bad]."

----- A. Calculation of income from the round 1 investment -----

→ **If the participant did not invest in round 1, read:**

"Since you did not invest in round 1, today's weather does not affect your income."

→ **If the participant invested in round 1, calculate then read:**

"You invested [Y] tokens in round 1. With today's weather, your investment income is  $[1.5 \times Y / 0.5 \times Y]$  tokens."

*[Action: Give the participant the corresponding income]*

----- B. Repayment phase (all outstanding debts) -----

→ **If the participant has no outstanding debt at the start of round 2, go directly to C. Investment phase.**

→ **If the participant has outstanding debt at the start of round 2, read: "Now, we enter the repayment phase."**

----- CASE 1 → If the participant has outstanding debt to the financial application -----

"You borrowed [X] tokens from the financial application. Your total debt is  $[X + \text{interest}]$  tokens."

→ If borrowed from the financial application AND full repayment is possible:

"Given the tokens you have in hand, you can repay everything."

*[Action: collect  $[X + \text{interest}]$  tokens.]*

→ **If full repayment is not possible (default):**

"Given the [Z] tokens you have in hand, you cannot repay everything. According to the game rules, you must repay the maximum possible with the tokens you have in hand, i.e. these [Z] tokens."

*[Action: collect [Z] tokens.]*

"Your unpaid debt is  $[X + \text{interest} - Z]$  tokens. The application will deduct your income from future rounds until full repayment."

----- CASE 2 → If the participant has outstanding debt to the partner -----

"You borrowed [X] tokens from your partner. Your total debt is  $[X + \text{interest}]$  tokens."

"You have [Z] tokens in hand. You can repay [all / part] of this debt."

"You can speak with them to try to convince them to cancel your debt, or part of it, and/or to renegotiate the interest rate. The final decision is theirs."

*[Wait up to 5 minutes if the participant is communicating with the partner.]*

"Your partner [has/has not] cancelled your debt (in whole or in part). After negotiation, your debt is  $[X2]$  tokens."

"You decide to repay [K] tokens to your partner."

*[Action: the enumerator writes [Round 2: the borrower repays [K] to the partner] in the WhatsApp group]*

→ If  $K = X2$  (fully repaid), read: "You have repaid everything."

→ If  $K < X2$ , read: "Your remaining debt is  $[X2 - K]$  tokens. This debt will be carried over to the next round."

----- C. Investment phase -----

"Now, you face the same investment decision."

"You have five minutes to consider your decision. You can also contact your game partner to discuss it."

*[Wait up to 5 minutes maximum.]*

"Now, please inform me of your investment decision."

*[Action: the enumerator writes [Round 2: borrower decision made] in the WhatsApp group.]*

*[Action: if the participant borrows and/or invests in round 2, give them the borrowed tokens and collect the invested tokens.]*

## Round 2 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

- (1) "The weather in round 2 was:" \_\_\_\_\_ (Good or Bad)
- (2) "Did you invest in round 1? If yes, how much did you invest in round 1, and what is your investment income received in round 2?" \_\_\_\_\_ (Yes or No) \_\_\_\_\_ (0 or Amount invested in round 1) and \_\_\_\_\_ (0 or Investment income in round 2)
- (3) "At the start of round 2, do you have any outstanding debt (to the partner or the FinApp)?" \_\_\_\_\_ (Yes / No)

→ If No, go to (14).

→ If Yes, continue:

- (4) "Who was the creditor for the loan?" \_\_\_\_\_ (Partner / FinApp /both)

→ If Partner, ask (5)-(10), then go to question (14).

→ If Financial application, ask (11)-(13), then go to question (14).

→ If Both, ask (5)-(13), then go to question (14).

### Questions about debt repayment from round 1

→ If in debt to partner:

- (5) "What is the total initial amount of the debt (principal + agreed interest) you owe to your partner, before any possible renegotiation or repayment?" \_\_\_\_\_ (Amount)

- (6) "Did you communicate with your partner to renegotiate the debt?" \_\_\_\_\_ (Yes or No)

→ If No to question (6), skip question (7) and go directly to question (8).

- (7) "What new terms did you agree to?"

a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or Amount)

b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)

c) Other terms: \_\_\_\_\_

- (8) "What is the total amount of the debt (principal + interest) after negotiation? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)

- (9) "How much did you repay to your partner in round 2?" \_\_\_\_\_ (0 or amount)

- (10) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (Amount, 0 if fully repaid)

→ If in debt to the financial application:

- (11) "What is the amount of the debt you owe to the financial application (principal + agreed interest)?" \_\_\_\_\_ (Amount)

- (12) "How much did you repay to the financial application?" \_\_\_\_\_ (0 or amount)

- (13) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)

### Questions about Round 2 decisions (communication / borrowing / investment)

- (14) "Did you communicate with your partner in round 2 to discuss a loan?" \_\_\_\_\_ (Yes or No)

- (15) "Did you borrow in round 2?" \_\_\_\_\_ (Yes or No)

→ If "No" to question (15), skip questions (16) to (18) and go directly to question (19).

→ If "Yes" to question (15), continue:

- (16) "Did you borrow from your game partner or from the financial application?" \_\_\_\_\_ (Partner or Financial Application)

- (17) "How much did you borrow?" \_\_\_\_\_ (Amount)
- (18) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")
- (19) "Did you invest in round 2?" \_\_\_\_\_ (Yes or No)
- If "No" to question (19), skip question (20) and go directly to question (21).
- (20) "How much did you invest in round 2?" \_\_\_\_\_ (Amount)
- (21) "What is your final balance at the end of round 2?" \_\_\_\_\_

(Balance of round 2 = Balance of round 1 + 30,000 + investment income received in round 2 (if applicable) – repayments (partner + application) + amount borrowed in round 2 – amount invested in round 2)

**Verification phrase (to read aloud):**

“In round 2, you borrowed [0 or X] tokens from [LENDER / no one] and invested [0 or Y] tokens. Your balance is [Z] tokens.”

### 4.3 Round 3 (official)

*[Action: the enumerator writes [Round 3 begins] in the WhatsApp group]*

"We are now entering round 3. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant.]*

"Now, please draw a weather card."

*[Action: Invite the participant to draw a card; put the drawn card back in the bag after drawing.]*

"Today's weather is [Good/Bad]."

----- A. Calculation of income from the round 2 investment -----

→ **If the participant did not invest in round 2, read:**

"Since you did not invest in round 2, today's weather does not affect your income."

→ **If the participant invested in round 2, calculate then read:**

"You invested [Y] tokens in round 2. With today's weather, your investment income is  $[1.5 \times Y / 0.5 \times Y]$  tokens."

*[Action: Give the participant the corresponding income]*

-----B. Repayment phase (all outstanding debts) -----

→ **If the participant has no outstanding debt at the start of round 3, go directly to C. Investment phase.**

→ **If the participant has outstanding debt at the start of round 3, read: "Now, we enter the repayment phase."**

-----CASE 1 →If the participant has outstanding debt to the financial application-----

"You borrowed [X] tokens from the financial application. Your total debt is  $[X + \text{interest}]$  tokens."

→ If borrowed from the financial application AND full repayment is possible:

"Given the tokens you have in hand, you can repay everything."

*[Action: collect  $[X + \text{interest}]$  tokens.]*

→ **If full repayment is not possible (default):**

"Given the [Z] tokens you have in hand, you cannot repay everything. According to the game rules, you must repay the maximum possible with the tokens you have in hand, i.e. these [Z] tokens."

*[Action: collect [Z] tokens.]*

"Your unpaid debt is  $[X + \text{interest} - Z]$  tokens. The application will deduct your income from future rounds until full repayment."

-----CASE 2 →If the participant has outstanding debt to the partner-----

"You borrowed [X] tokens from your partner. Your total debt is  $[X + \text{interest}]$  tokens."

"You have [Z] tokens in hand. You can repay [all / part] of this debt."

"You can speak with them to try to convince them to cancel your debt, or part of it, and/or to renegotiate the interest rate. The final decision is theirs."

*[Wait up to 5 minutes if the participant is communicating with the partner.]*

"Your partner [has/has not] cancelled your debt (in whole or in part). After negotiation, your debt is  $[X_2]$  tokens."

"You decide to repay [K] tokens to your partner."

*[Action: the enumerator writes [Round 3: the borrower repays [K] to the partner] in the WhatsApp group]*

→ If  $K = X_2$  (fully repaid), read: "You have repaid everything."

→ If  $K < X_2$ , read: "Your remaining debt is  $[X_2 - K]$  tokens. This debt will be carried over to the next round."

----- C. Investment phase -----

"Now, you face the same investment decision."

"You have five minutes to consider your decision. You can also contact your game partner to discuss it."

*[Wait up to 5 minutes maximum.]*

"Now, please inform me of your investment decision."

*[Action: the enumerator writes [Round 3: borrower decision made] in the WhatsApp group.]*

*[Action: if the participant borrows and/or invests in round 3, give them the borrowed tokens and collect the invested tokens.]*

### Round 3 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

- (1) "The weather in round 3 was:" \_\_\_\_\_ (Good or Bad)
- (2) "Did you invest in round 2? If yes, how much did you invest in round 2, and what is your investment income received in round 3?" \_\_\_\_\_ (Yes or No) \_\_\_\_\_ (0 or Amount invested in round 2) and \_\_\_\_\_ (0 or Investment income in round 3)
- (3) "At the start of round 3, do you have any outstanding debt (to the partner or the FinApp)?" \_\_\_\_\_ (Yes / No)

→ If No, go to (14).

→ If Yes, continue:

- (4) "Who was the creditor for the loan?" \_\_\_\_\_ (Partner / FinApp /both)

→ If Partner, ask (5)-(10), then go to question (14).

→ If Financial application, ask (11)-(13), then go to question (14).

→ If Both, ask (5)-(13), then go to question (14).

#### Questions about debt repayment from round 2

→ If in debt to partner:

- (5) "What is the total initial amount of the debt (principal + agreed interest) you owe to your partner, before any possible renegotiation or repayment?" \_\_\_\_\_ (Amount)

- (6) "Did you communicate with your partner to renegotiate the debt?" \_\_\_\_\_ (Yes or No)

→ If No to question (6), skip question (7) and go directly to question (8).

- (7) "What new terms did you agree to?"

a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or Amount)

b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)

c) Other terms: \_\_\_\_\_

- (8) "What is the total amount of the debt (principal + interest) after negotiation? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)

- (9) "How much did you repay to your partner in round 3?" \_\_\_\_\_ (0 or amount)

- (10) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (Amount, 0 if fully repaid)

→ If in debt to the financial application:

- (11) "What is the amount of the debt you owe to the financial application (principal + agreed interest)?" \_\_\_\_\_ (Amount)

- (12) "How much did you repay to the financial application?" \_\_\_\_\_ (0 or amount)

- (13) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)

#### Questions about Round 3 decisions (communication / borrowing / investment)

- (14) "Did you communicate with your partner in round 3 to discuss a loan?" \_\_\_\_\_ (Yes or No)

- (15) "Did you borrow in round 3?" \_\_\_\_\_ (Yes or No)

→ If "No" to question (15), skip questions (16) to (18) and go directly to question (19).

→ If "Yes" to question (15), continue:

- (16) "Did you borrow from your game partner or from the financial application?" \_\_\_\_\_ (Partner or Financial Application)

- (17) "How much did you borrow?" \_\_\_\_\_ (Amount)  
(18) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")  
(19) "Did you invest in round 3?" \_\_\_\_\_ (Yes or No)

→ If "No" to question (19), skip question (20) and go directly to question (21).

- (20) "How much did you invest in round 3?" \_\_\_\_\_ (Amount)  
(21) "What is your final balance at the end of round 3?" \_\_\_\_\_

(Balance of round 3 = Balance of round 2 + 30,000 + investment income received in round 3 (if applicable) – repayments (partner + application) + amount borrowed in round 3 – amount invested in round 3)

**Verification phrase (to read aloud):**

“In round 3, you borrowed [0 or X] tokens from [LENDER / no one] and invested [0 or Y] tokens. Your balance is [Z] tokens.”

## 4.4 Round 4 (official)

*[Action: the enumerator writes [Round 4 begins] in the WhatsApp group]*

"We are now entering round 4. Here is your stable land income: 30,000 tokens."

*[Action: Give 30,000 tokens to the participant.]*

"Now, please draw a weather card."

*[Action: Invite the participant to draw a card; put the drawn card back in the bag after drawing.]*

"Today's weather is [Good/Bad]."

----- A. Calculation of income from the round 3 investment -----

→ **If the participant did not invest in round 3, read:**

"Since you did not invest in round 3, today's weather does not affect your income."

→ **If the participant invested in round 3, calculate then read:**

"You invested [Y] tokens in round 3. With today's weather, your investment income is  $[1.5 \times Y / 0.5 \times Y]$  tokens."

*[Action: Give the participant the corresponding income]*

-----B. Repayment phase (all outstanding debts) -----

→ **If the participant has no outstanding debt at the start of round 4, go directly to C. Investment phase.**

→ **If the participant has outstanding debt at the start of round 4, read: "Now, we enter the repayment phase."**

-----CASE 1 →If the participant has outstanding debt to the financial application-----

"You borrowed [X] tokens from the financial application. Your total debt is  $[X + \text{interest}]$  tokens."

→ If borrowed from the financial application AND full repayment is possible:

"Given the tokens you have in hand, you can repay everything."

*[Action: collect  $[X + \text{interest}]$  tokens.]*

→ **If full repayment is not possible (default):**

"Given the [Z] tokens you have in hand, you cannot repay everything. According to the game rules, you must repay the maximum possible with the tokens you have in hand, i.e. these [Z] tokens."

*[Action: collect [Z] tokens.]*

"Your unpaid debt is  $[X + \text{interest} - Z]$  tokens. The application will deduct your income from future rounds until full repayment."

-----CASE 2 →If the participant has outstanding debt to the partner-----

"You borrowed [X] tokens from your partner. Your total debt is  $[X + \text{interest}]$  tokens."

"You have [Z] tokens in hand. You can repay [all / part] of this debt."

"You can speak with them to try to convince them to cancel your debt, or part of it, and/or to renegotiate the interest rate. The final decision is theirs."

*[Wait up to 5 minutes if the participant is communicating with the partner.]*

"Your partner [has/has not] cancelled your debt (in whole or in part). After negotiation, your debt is  $[X2]$  tokens."

"You decide to repay [K] tokens to your partner."

*[Action: the enumerator writes [Round 4: the borrower repays [K] to the partner] in the WhatsApp group]*

→ If  $K = X2$  (fully repaid), read: "You have repaid everything."

→ If  $K < X2$ , read: "Your remaining debt is  $[X2 - K]$  tokens. This debt will be carried over to the next round."

----- C. Investment phase -----

"Now, you face the same investment decision."

"You have five minutes to consider your decision. You can also contact your game partner to discuss it."

*[Wait up to 5 minutes maximum.]*

"Now, please inform me of your investment decision."

*[Action: the enumerator writes [Round 4: borrower decision made] in the WhatsApp group.]*

*[Action: if the participant borrows and/or invests in round 4, give them the borrowed tokens and collect the invested tokens.]*

## Round 4 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

- (1) "The weather in round 4 was:" \_\_\_\_\_ (Good or Bad)
- (2) "Did you invest in round 3? If yes, how much did you invest in round 3, and what is your investment income received in round 4?" \_\_\_\_\_ (Yes or No) \_\_\_\_\_ (0 or Amount invested in round 3) and \_\_\_\_\_ (0 or Investment income in round 4)
- (3) "At the start of round 4, do you have any outstanding debt (to the partner or the FinApp)?" \_\_\_\_\_ (Yes / No)

→ If No, go to (14).

→ If Yes, continue:

- (4) "Who was the creditor for the loan?" \_\_\_\_\_ (Partner / FinApp /both)

→ If Partner, ask (5)-(10), then go to question (14).

→ If Financial application, ask (11)-(13), then go to question (14).

→ If Both, ask (5)-(13), then go to question (14).

### Questions about debt repayment from round 3

→ If in debt to partner:

- (5) "What is the total initial amount of the debt (principal + agreed interest) you owe to your partner, before any possible renegotiation or repayment?" \_\_\_\_\_ (Amount)

- (6) "Did you communicate with your partner to renegotiate the debt?" \_\_\_\_\_ (Yes or No)

→ If No to question (6), skip question (7) and go directly to question (8).

- (7) "What new terms did you agree to?"

a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or Amount)

b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)

c) Other terms: \_\_\_\_\_

- (8) "What is the total amount of the debt (principal + interest) after negotiation? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)

- (9) "How much did you repay to your partner in round 4?" \_\_\_\_\_ (0 or amount)

- (10) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (Amount, 0 if fully repaid)

→ If in debt to the financial application:

- (11) "What is the amount of the debt you owe to the financial application (principal + agreed interest)?" \_\_\_\_\_ (Amount)

- (12) "How much did you repay to the financial application?" \_\_\_\_\_ (0 or amount)

- (13) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)

### Questions about Round 4 decisions (communication / borrowing / investment)

- (14) "Did you communicate with your partner in round 4 to discuss a loan?" \_\_\_\_\_ (Yes or No)

- (15) "Did you borrow in round 4?" \_\_\_\_\_ (Yes or No)

→ If "No" to question (15), skip questions (16) to (18) and go directly to question (19).

→ If "Yes" to question (15), continue:

- (16) "Did you borrow from your game partner or from the financial application?" \_\_\_\_\_ (Partner or Financial Application)

- (17) "How much did you borrow?" \_\_\_\_\_ (Amount)  
(18) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")  
(19) "Did you invest in round 4?" \_\_\_\_\_ (Yes or No)

→ If "No" to question (19), skip question (20) and go directly to question (21).

- (20) "How much did you invest in round 4?" \_\_\_\_\_ (Amount)  
(21) "What is your final balance at the end of round 4?" \_\_\_\_\_

(Balance of round 4 = Balance of round 3 + 30,000 + investment income received in round 4 (if applicable) – repayments (partner + application) + amount borrowed in round 4 – amount invested in round 4)

**Verification phrase (to read aloud):**

“In round 4, you borrowed [0 or X] tokens from [LENDER / no one] and invested [0 or Y] tokens. Your balance is [Z] tokens.”

## 4.5 Round 5 (official)

[Action: the enumerator writes [Round 5 begins] in the WhatsApp group]

"We are now entering round 5. Here is your stable land income: 30,000 tokens."

[Action: Give 30,000 tokens to the participant.]

"Now, please draw a weather card."

[Action: Invite the participant to draw a card; put the drawn card back in the bag after drawing.]

"Today's weather is [Good/Bad]."

----- A. Calculation of income from the round 4 investment -----

→ **If the participant did not invest in round 4, read:**

"Since you did not invest in round 4, today's weather does not affect your income."

→ **If the participant invested in round 4, calculate then read:**

"You invested [Y] tokens in round 4. With today's weather, your investment income is  $[1.5 \times Y / 0.5 \times Y]$  tokens."

[Action: Give the participant the corresponding income]

-----B. Repayment phase (all outstanding debts) -----

→ **If the participant has no outstanding debt at the start of round 5, go directly to the Round 5 Kobo questions section**

→ **If the participant has outstanding debt at the start of round 5, read: "Now, we enter the repayment phase."**

-----CASE 1 →If the participant has outstanding debt to the financial application-----

"You borrowed [X] tokens from the financial application. Your total debt is  $[X + \text{interest}]$  tokens."

→ If borrowed from the financial application AND full repayment is possible:

"Given the tokens you have in hand, you can repay everything."

[Action: collect  $[X + \text{interest}]$  tokens.]

→ **If full repayment is not possible (default):**

"Given the [Z] tokens you have in hand, you cannot repay everything. According to the game rules, you must repay the maximum possible with the tokens you have in hand, i.e. these [Z] tokens."

[Action: collect [Z] tokens.]

"Your unpaid debt is  $[X + \text{interest} - Z]$  tokens. Since the game is over, you do not need to repay the rest."

-----CASE 2 →If the participant has outstanding debt to the partner-----

"You borrowed [X] tokens from your partner. Your total debt is  $[X + \text{interest}]$  tokens."

"You have [Z] tokens in hand. You can repay [all / part] of this debt."

"You can speak with them to try to convince them to cancel your debt, or part of it, and/or to renegotiate the interest rate. The final decision is theirs."

[Wait up to 5 minutes if the participant is communicating with the partner.]

"Your partner [has/has not] cancelled your debt (in whole or in part). After negotiation, your debt is  $[X_2]$  tokens."

"You decide to repay [K] tokens to your partner."

[Action: the enumerator writes [Round 5: the borrower repays [K] to the partner] in the WhatsApp group]

→ If  $K = X_2$  (fully repaid), read: "You have repaid everything."

→ If  $K < X_2$ , read: "Your remaining debt is  $[X_2 - K]$  tokens. Since the game is over, you do not need to repay the rest."

## Round 5 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

- (1) "The weather in round 5 was:" \_\_\_\_\_ (Good or Bad)
- (2) "Did you invest in round 4? If yes, how much did you invest in round 4, and what is your investment income received in round 5?" \_\_\_\_\_ (Yes or No) \_\_\_\_\_ (0 or Amount invested in round 4) and \_\_\_\_\_ (0 or Investment income in round 5)
- (3) "At the start of round 5, do you have any outstanding debt (to the partner or the FinApp)?" \_\_\_\_\_ (Yes / No)

→ If No, go to (14).

→ If Yes, continue:

- (4) "Who was the creditor for the loan?" \_\_\_\_\_ (Partner / FinApp /both)

→ If Partner, ask (5)-(10), then go to question (14).

→ If Financial application, ask (11)-(13), then go to question (14).

→ If Both, ask (5)-(13), then go to question (14).

### Questions about debt repayment from round 4

→ If in debt to partner:

- (5) "What is the total initial amount of the debt (principal + agreed interest) you owe to your partner, before any possible renegotiation or repayment?" \_\_\_\_\_ (Amount)

- (6) "Did you communicate with your partner to renegotiate the debt?" \_\_\_\_\_ (Yes or No)

→ If No to question (6), skip question (7) and go directly to question (8).

- (7) "What new terms did you agree to?"

a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or Amount)

b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)

c) Other terms: \_\_\_\_\_

- (8) "What is the total amount of the debt (principal + interest) after negotiation? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)

- (9) "How much did you repay to your partner in round 5?" \_\_\_\_\_ (0 or amount)

- (10) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (Amount, 0 if fully repaid)

→ If in debt to the financial application:

- (11) "What is the amount of the debt you owe to the financial application (principal + agreed interest)?" \_\_\_\_\_ (Amount)

- (12) "How much did you repay to the financial application?" \_\_\_\_\_ (0 or amount)

- (13) "Is there any remaining unpaid debt? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)

- (14) "What is your final balance at the end of round 5?" \_\_\_\_\_

(Balance of round5 = Balance of round 4 + 30,000 + investment income received in round 5 (if applicable) – repayments (partner + application))

### Verification phrase (to read aloud):

“In round 5, your balance is [Z] tokens.”

## 4.6 Final Settlement Phase of the Game (official)

"The game is over."

"Your balance is [Z] tokens." (same as the round 5 balance)

"Adding the land value, you have [Z + 300,000] tokens in total."

"Based on the number of tokens you have obtained, your reward will be [M] pieces of soap."

Reward scale:

$\leq 320,000$  tokens = 1 piece of soap

320,001–470,000 tokens = 2 pieces

470,001–620,000 tokens = 3 pieces

620,001 tokens and above = 4 pieces

"This is your payment for participating in this game. Thank you for your participation!"

## You are a landowner!

<b>Instrument ID:</b>	Baseline
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### Official game structure:

4 decision rounds + 1 settlement round

### Mission:

Make decisions to earn tokens that will be converted into a reward (pieces of soap) at the end.

No right or wrong decision – make your own choice!

Conversion:  $\leq 475,000 = 1$  piece of soap;  $475,001 - 495,000 = 2$  pieces;  $495,001 - 515,000 = 3$  pieces;  $\geq 515,001 = 4$  pieces

### Your cash flow:

You own a large plot of land with rental income of 120,000 tokens each round (1–4), regardless of your decision.

### Round 1:

- ① You receive 120,000 from your land
- ② Your game partner may contact you via WhatsApp; they may want to borrow money from you.
- ③ You must decide whether to lend to them, and if so, how much and at what interest rate. You can lend up to 120,000 maximum.
- ④ If you do not lend all or part of your tokens, all remaining tokens are added to your balance account and will be available to you at the end of the game.

### Rounds 2–4:

- ① You receive 120,000 from your land
- ② Your game partner repays their outstanding debt, if any. They may also renegotiate their current debt with you. The final decision is yours!
- ③ Your game partner may contact you via WhatsApp; they may want to borrow money from you.
- ④ You must decide whether to lend to them, and if so, how much and at what interest rate. You can lend up to 120,000 maximum.
- ⑤ If you do not lend all or part of your tokens, all remaining tokens are added to your balance account and will be available to you at the end of the game.

### Round 5:

- ① Your game partner repays their outstanding debt, if any.
- ② We calculate your total token balance and convert your tokens into a reward.

# Landowner (Lender) Protocol

## Instruction ID: Baseline

### 1. Registration on the Day of the Game

#### 1.1. Welcoming participants, enumerator script (read verbatim, neutral tone):

"Hello, I am [First Name Last Name]. I work for a study conducted by the Graduate Institute of International and Development Studies, Geneva, in partnership with the University of Burundi."

"Today, we invite you to participate in a decision-making game."

"By playing, you will earn pieces of soap. The better decisions you make in the game, the more soap you will receive. At most, you can earn up to 4 pieces, worth 4,000 FBU."

"Your participation is entirely voluntary. There is no physical risk in participating. However, because this exercise involves communication and financial decisions with another participant you know, you may feel some discomfort or tension during the game. You may stop at any time without penalty. Everything you do here will remain confidential: we will de-identify all data collected, so that it is impossible to trace actions back to individual participants. We will never use your name in our academic articles or studies. If you have questions, you may contact our field supervisor at [xxxx xxxx]. Do you wish to participate?"

"Yes or No?"

(If Yes) "Thank you. One last thing: to ensure that the study is conducted fairly for all residents of the hill, please keep the details of the game confidential for one month and do not discuss them with anyone, including your family. Do you agree?"

#### 1.2. Registration, Enumerator Script (verbatim, neutral tone):

*[Action: record responses in Kobo]*

"What is your name?" \_\_\_\_\_

"Which hill do you live on?" \_\_\_\_\_

"What is your phone number?" \_\_\_\_\_

*The enumerator must enter the participant identification code corresponding to the lender (as in the baseline survey)*

\_\_\_\_\_

#### After confirming identity:

"From now on, it is strictly forbidden to speak or exchange signs with other participants, including your partner. We must ensure that your decisions are your own. If you have questions, please consult only the enumerator."

## 2. Explanation of the Lender Role

### Logistics and setup:

- Guide the participant to the lenders' area.
- Prepare the materials: instruction sheet, tokens, mobile phone with the WhatsApp group, calculator, whiteboard and marker.

### Enumerator script:

"Now I will present the basic rules of the game. Please listen carefully."

"To help you, you can follow the steps on the instruction sheet I gave you. My explanations and the practice rounds will follow exactly what is written on this document."

*[Action: Show the instruction sheet to the player and read:]*

### Game structure:

"This game consists of five rounds in total. Each round represents an agricultural season."

"The first four rounds are decision rounds: if your partner contacts you to request money (a loan), you must decide whether to lend to them and on what terms. The fifth round is a settlement round: no decision is required."

### Game objective:

"There are no right or wrong decisions in this game. What matters is that you make choices that truly reflect what you think."

"Your final reward will depend on the total number of tokens you have accumulated at the end of the game."

"The scale for earning pieces of soap is as follows:"

$\leq 475,000$  tokens = 1 piece of soap

475,001 – 495,000 tokens = 2 pieces

495,001 – 515,000 tokens = 3 pieces

515,001 tokens and above = 4 pieces

"Therefore, your goal is to accumulate as many tokens as possible to obtain the maximum number of pieces of soap."

### Your role and income:

"In this game, your role is that of a landowner."

"Each round, this land provides you with a fixed income of 120,000 tokens in rounds one to four."

"This income is stable."

"This is a secure income: at the start of each round, we will always give you these 120,000 tokens, no matter what."

*[Action: Show 120,000 tokens]*

### Lending decision:

"Each round, your game partner may invest in an agricultural investment project, which carries a risk."

"Your game partner does not know the details of your payoffs."

"Therefore, in each round, your partner may contact you via WhatsApp to borrow. All messages are typed by the enumerators exactly as each participant dictates. You can reply through your enumerator in the same way."

"Regardless of the amount of money you hold, you may lend a maximum of 120,000 tokens."

"If you wish, you may choose to lend and decide whether or not to charge interest. You can negotiate the interest rate with your partner on WhatsApp."

"You may also choose not to lend. In that case, all tokens remaining in hand are added to your balance account and will be available to you at the end of the game."

"Your game partner has their own task and may or may not contact you for a loan. If they do not contact you, your funds will be added to your balance account, and the game will move to the next round."

"Note that if your partner has an outstanding debt to you, they may also attempt to renegotiate it by requesting full or partial cancellation, a new interest rate, or by proposing to spread repayment over future rounds. The final decision is yours."

### Base income calculation:

"If you never lend:"

"Each round, you receive 120,000 tokens."

"Over four rounds, you always keep the 120,000 tokens."

"Over four rounds, your total balance is  $120,000 \times 4 = 480,000$  tokens."

"This means you will receive 2 pieces of soap, because your tokens are between 475,001 and 495,000."

"Do you understand the game content described above?"

**Comprehension check (ask one at a time, participant answers orally):**

**Question 1: "Is it possible that your game partner may fail to repay you (their debt to you)?"**

→ *Expected answer: Yes*

**Question 2: "Will the tokens you did not lend earn any return?"**

→ *Expected answer: No*

**Question 3: "Will the tokens be converted into a reward at the end of the game?"**

→ *Expected answer: Yes*

**Note to enumerator (do not read to participant):**

- If the participant answers incorrectly: calmly reiterate the relevant rules
- Ask again
- Continue only after all questions have been answered correctly

*For each question, the enumerator records in Kobo the number of attempts before the player gives the correct answer. For example, if the player answers correctly on the first try, record 1.*

Question	Number of attempts
1	
2	
3	

### 3. Practice Game

"Now, we will conduct a practice game."

"The practice is only meant to familiarize you with the process. Tokens earned during the practice do not count toward the final payment (soap)."

"Please follow the instructions strictly. You may ask questions at any time during this practice phase."

#### Practice game procedure

##### Round 1 (Practice):

"Now, we enter the first round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant]*

"In the official game, your game partner may contact you via the WhatsApp group to borrow. All messages are typed by the enumerator exactly as you dictate them. You have ten minutes to communicate during round 1."

"You may discuss anything with them, but it is recommended to confirm: the loan amount and the interest rate."

"Please note: if they borrow and do not repay, you will lose the corresponding tokens, reducing your reward at the end of the game. And if you do not lend (or only lend a portion), all tokens remaining in hand are added to your balance account and will be available to you at the end of the game. "

"Therefore, please make decisions carefully."

"In this practice round, suppose that your game partner has contacted you and that you are willing to lend."

"Suppose the negotiated terms are: a loan of 120,000 tokens, interest rate of 5%, meaning: lend 120,000 and be repaid 126,000 in the next round."

*[Action: Take back 120,000 tokens]*

##### Round 2 (Practice):

"Now, we enter the second round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant]*

"Suppose your game partner has repaid on time: they repay 126,000 tokens (120,000 principal + 6,000 interest). Your balance is now 246,000 tokens (Round 1 balance of 0 + repayment of 126,000 + Round 2 income of 120,000)."

"We repeat the same decision process. You now wait for your game partner to contact you. You have five minutes to communicate during rounds 2 to 4."

"In this practice round, suppose they contact you again to borrow 100,000 tokens, and you are still willing to lend."

"Suppose the negotiated terms are: a loan of 100,000 tokens, interest rate of 7%, meaning: lend 100,000 and be repaid 107,000 in the next round."

*[Action: Take back 100,000 tokens]*

"The remaining amount (146,000 tokens) is automatically added to your balance account."

*[Action: Take back 146,000 tokens and explain]*

### Round 3 (Practice):

"Now, we enter the third round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant]*

"Suppose your game partner cannot repay in full and is able to repay only 50,000 tokens."

"You may communicate with them on WhatsApp to decide the next steps."

"If they truly cannot repay, you may negotiate: extend to the next round, cancel the remaining debt (in whole or in part), or change the interest rate."

"Suppose here you cancel the interest and agree to receive the remaining principal of 50,000 in the next round. The new debt is therefore 50,000 tokens."

"In this round, you decide not to lend again."

"Your income of 120,000 tokens is automatically added to your balance account."

*[Action: Take back 170,000 (120,000 + 50,000) tokens]*

"Your balance at the end of the previous round was 146,000. Adding the new 170,000 tokens, your balance now stands at 316,000."

### Round 4 (Practice)

"Now, we enter the fourth round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant]*

"Suppose your game partner again cannot repay in full and is able to repay only 30,000 tokens."

"You may communicate with them on WhatsApp to decide the next steps."

"Suppose here you agree to receive the remaining debt of 20,000 in the next round. The new debt is therefore 20,000 tokens."

"In this round, you decide not to lend again."

"Your income of 120,000 tokens plus the repayment of 30,000 tokens are automatically added to your balance account."

*[Action: Take back 150,000 tokens]*

"Your balance at the end of the previous round was 316,000. Adding the new 150,000 tokens, your balance now stands at 466,000."

### Round 5 (Practice)

"Now, we enter the fifth round. There is no fixed land income in this round."

"Suppose your game partner cannot fully repay the 20,000 tokens and is able to repay only 8,000 tokens."

"Since this is the last round, the remaining debt of 12,000 tokens is forfeited."

"The repayment of 8,000 tokens is added to your balance account."

*[Action: Take back 8,000 tokens]*

"Your balance at the end of the previous round was 466,000. Adding the new 8,000 tokens, your balance now stands at 474,000."

## Final Settlement

"Your final token balance is 474,000."

"This means you will receive 1 piece of soap."

## Conclusion:

"This concludes the practice session. Do you have any questions?"

"The practice game is now over."

"To emphasize again: the practice that just took place is only an example. In the official game, deciding whether or not to lend, and what interest to charge, depends entirely on you, based on any discussions you may have with your partner. The final decision to lend money to them is yours."

"There are no right or wrong decisions, but each decision will affect your real income after the game ends."

*[Action: Collect all practice tokens from the participant]*

## 4. Official Game

### 4.0 Communication Rules in the WhatsApp Group

Each WhatsApp group includes: the borrower's enumerator, the lender's enumerator, and the project manager.

All participant messages in the WhatsApp group are typed by the enumerator. The enumerator must type exactly what the participant dictates, word for word, without altering, summarizing, or adding to the message.

- **At the start of the official game:**

Both enumerators must note the first name, last name, identification code, and date of the game in the WhatsApp group, using brackets [ ], to verify that the borrower and lender form the correct pair. For example:

- Step 1. [Borrower: Fiacre Mugisha, Code: XXX, 1 April 2026]
- Step 2. [Lender: Eloi M.SC, 1 April 2026]

- **At the start of each round:**

Step 1. The borrower's enumerator must announce the start of each round, using brackets [ ].

- For example: [Round 1 begins]

Step 2. The lender's enumerator must acknowledge the start, using brackets [ ]

- For example: [Round 1 start acknowledged]

Both enumerators begin the round only after confirming that both messages have appeared (so both participants play their rounds simultaneously).

- **During each round:**

Both participants may communicate freely during the round. The enumerator types exactly what the participant dictates, without brackets [ ].

- **Repayment to partner:**

If the borrower repays their partner, the borrower's enumerator must write:

- For example: [Round 3: the borrower repays 126,000 to the partner]

- **Borrower decision:**

The borrower's enumerator must announce the final decision of the round, using brackets [ ].

- For example: [Round 3: borrower decision made]

*Note: Write only this exact phrase, without giving the details of the decision (amount, choice, etc.).*

*Explanation: Once the borrower has made their decision, both participants may no longer communicate for that round. Both enumerators then continue independently with each participant until the end of the round. The next round begins only when the borrower's enumerator announces the start of the new round.*

- **Strict format:** The enumerator always writes with brackets [ ], whereas participant messages (typed verbatim by the enumerator) appear without brackets.
- **Limited messages (for enumerators only):** Only the official messages specified by the protocol are allowed in the group; any other message is prohibited.

## Start of the official game, enumerator script (read word for word, neutral tone):

"We are now starting the official game."

"From now on, the game will be real. The tokens you earn during the game will be converted into rewards."

"Please make sure your decisions are based on your true thinking. Your goal is to earn as many tokens as possible: the more tokens you earn, the higher your reward at the end of the game will be. Remember that your decision also affects the number of tokens your partner receives."

"Please also note that, once the official game begins, I will not provide any further explanation of the rules or any advice."

"Your role is that of a landowner."

"The game has five rounds: the first four rounds are decision rounds, and the fifth round is the settlement round."

"In rounds 1 to 4, your land provides a fixed income of 120,000 tokens, which is not affected by your decisions."

### 4.1 Round 1 (official)

*[Action: After receiving the message "[Round 1 begins]" from the borrower's enumerator, write in the WhatsApp group: [Round 1 start acknowledged].]*

"Now, we enter the first round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant.]*

"Your game partner may contact you via WhatsApp to borrow."

"If you wish, you may choose to lend to them and decide whether or not to charge interest. If you lend, you must agree on an interest rate."

"You may also choose not to lend. In that case, the amount you do not lend will be added to your balance account and will be available to you at the end of the game."

"Note: your partner may or may not contact you. If they do not contact you, your funds will be automatically added to your balance account, and the game will move to the next round."

"Each round, regardless of the amount you hold, you may lend a maximum of 120,000 tokens."

"Now, let us wait for your partner to make contact."

*[Note: the participant (borrower) may initiate conversation in the WhatsApp group only after the lender enumerator has posted the round-start acknowledgment.]*

*[Action: After receiving the message "[Round 1: borrower decision made]" from the borrower's enumerator, apply the corresponding rule below.]*

#### → If the participant is not contacted by the borrower:

"No loan is made in this round. Your funds are therefore added to your balance account."

*[Action: Take back 120,000 tokens and place them in the designated balance account area.]*

#### → If lending:

"You have decided to lend. The loan amount is 120,000 tokens; the interest rate is [r]; other agreed terms: [Z]."

*[Action: Take back 120,000 tokens (amount lent)]*

#### → If contacted but decided not to lend:

"You have decided not to lend. Your funds are therefore added to your balance account."

*[Action: Take back 120,000 tokens and place them in the designated balance account area.]*

## Round 1 – Kobo:

*[Action: ask the participant the questions and record their answers in Kobo.]*

(1) "Did your partner contact you in the WhatsApp group during round 1?" \_\_\_\_\_ (Yes or No)

(2) "Did you lend to your partner in round 1?" \_\_\_\_\_ (Yes or No)

→ If the participant was not contacted by the borrower OR did not lend, skip questions (3)–(4) and go directly to question (5).

→ If the participant lent:

(3) "How much did you lend?" \_\_\_\_\_ (Amount)

(4) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")

(5) "What is your final balance for round 1?" \_\_\_\_\_ (Amount = 120,000 – amount lent)

## Verification sentence (read aloud):

"In round 1, you lent [0 or X] tokens. Your balance is [Z] tokens, which are automatically added to the balance account."

## 4.2 Round 2 (official)

*[Action: After receiving the message "[Round 2 begins]" from the borrower's enumerator, write in the WhatsApp group: [Round 2 start acknowledged].]*

"Now, we enter the second round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant]*

→ **If no outstanding debt at the start of round 2: skip directly to Part B. Lending decision in round 2.**

----- A. Repayment of outstanding debts -----

→ **If there is an outstanding debt owed to you at the start of round 2:**

*[Action: Check the repayment message sent by the borrower's enumerator in the WhatsApp group, e.g.: "[Round 2: the borrower repays [Y\_repaid] to the partner]."]*

→ Case 1 — If the message indicates full repayment:

"Your partner repays [Y\_repaid] tokens. They have repaid everything."

*[Action: Give [Y\_repaid] tokens to the participant]*

→ Case 2 — Partial repayment OR renegotiation message:

"Your partner cannot repay everything. Would you like to speak with them on WhatsApp to negotiate a solution?"

"They may ask you to cancel all or part of the debt, to repay only a portion, or to modify the interest rate. The final decision is yours."

*[Wait up to 5 minutes if participants are communicating.]*

*[Action: Give the accepted repayment tokens [Y\_repaid] to the participant. Record the remaining deferred debt (if applicable): [D\_remaining].]*

"You now have 120,000 + [Y\_repaid] tokens."

----- B. Lending decision in round 2 -----

"Your partner may contact you via WhatsApp to borrow again. The rules are the same."

"You may choose to lend to them and decide whether or not to charge interest. You may also choose not to lend. In that case, the unlent amount will be added to your balance account and will be available to you at the end of the game. Regardless of the amount you hold, you may lend a maximum of 120,000 tokens. Now, let us wait for your partner to make contact."

*[Wait up to 5 minutes if the participant wishes to negotiate.]*

*[Action: After receiving the message "[Round 2: borrower decision made]" from the borrower's enumerator, apply the corresponding rule below.]*

→ **If the participant is not contacted by the borrower:**

"No loan is made in this round. Your funds are therefore added to your balance account."

*[Action: Take back all participant tokens and place them in the designated balance account area.]*

→ **If lending:**

"You have decided to lend. The loan amount is [Y] tokens; the interest rate is [r]; other agreed terms: [Z]."

*[Action: Take back [Y] tokens (amount lent)]*

→ **If contacted but decided not to lend:**

"You have decided not to lend. Your funds are therefore added to your balance account."

*[Action: Take back all participant tokens and place them in the designated balance account area.]*

## Round 2 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

### Questions about debt repayment from round 1

(1) "At the start of round 2, did your partner have an outstanding debt to you?" \_\_\_\_\_ (Yes or No)

→ If No to (1), skip (2)–(9) and go directly to (10)

→ If Yes to (1), continue:

(2) "At the start of round 2, how much did your partner still owe you from the loan granted in round 1?" \_\_\_\_\_  
(Amount; write 0 if nothing was left to pay from the round 1 loan)

(3) "At the start of round 2, how much did your partner still owe you from older unpaid debts?" \_\_\_\_\_ (Amount; write 0 if there were no older debts)

[Note: For round 2, this question is 0 by default.]

(4) "What was the total outstanding debt at the start of round 2 (principal + agreed interest) before any renegotiation?" \_\_\_\_\_ (Amount = amount from question 2 + amount from question 3)

(5) "Did you communicate with your partner on WhatsApp to renegotiate the debt?" \_\_\_\_ (Yes or No)

→ If No to (5), skip (6) and go directly to (7).

→ If Yes to (5), continue:

(6) "What new terms did you agree to?"

a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or amount)

b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)

c) Other terms: \_\_\_\_\_

(7) "What is the amount of the debt after negotiation, before any repayment in round 2? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)

(8) "How much did your partner ultimately repay in round 2?" \_\_\_\_\_ (Amount)

(9) "Is there any unpaid debt remaining to carry over to the next round? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)

### Questions about a new loan (round 2)

(10) "Did your partner request a new loan on WhatsApp?" \_\_\_\_\_ (Yes or No)

→ If No to (10), skip (11)–(13) and go directly to (14).

→ If Yes to (10), continue:

(11) "Did you lend to your partner in round 2?" \_\_\_\_\_ (Yes or No)

→ If No to (11), skip (12)–(13) and go directly to (14).

→ If Yes to (11), continue:

(12) "How much did you lend to your partner in round 2?" \_\_\_\_\_ (Amount)

(13) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")

(14) "What is your final (total) balance for round 2?" \_\_\_\_\_ (Balance = round 1 balance + 120,000 + amount repaid in round 2 – amount lent in round 2)

### Verification sentence (read aloud):

"In round 2, your partner repaid [0 or Y] tokens of the round 1 debt (full / partial repayment). You lent [0 or X] tokens again. Your balance is [Z] tokens, which are automatically added to the balance account."

### 4.3 Round 3 (official)

*[Action: After receiving the message "[Round 3 begins]" from the borrower's enumerator, write in the WhatsApp group: [Round 3 start acknowledged].]*

"Now, we enter the third round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant]*

→ **If no outstanding debt at the start of round 3: skip directly to Part B. Lending decision in round 3.**

----- *A. Repayment of outstanding debts* -----

→ **If there is an outstanding debt owed to you at the start of round 3:**

*[Action: Check the repayment message sent by the borrower's enumerator in the WhatsApp group, e.g.: "[Round 3: the borrower repays [Y\_repaid] to the partner]."]*

→ Case 1 — If the message indicates full repayment:

"Your partner repays [Y\_repaid] tokens. They have repaid everything."

*[Action: Give [Y\_repaid] tokens to the participant]*

→ Case 2 — Partial repayment OR renegotiation message:

"Your partner cannot repay everything. Would you like to speak with them on WhatsApp to negotiate a solution?"

"They may ask you to cancel all or part of the debt, to repay only a portion, or to modify the interest rate. The final decision is yours."

*[Wait up to 5 minutes if participants are communicating.]*

*[Action: Give the accepted repayment tokens [Y\_repaid] to the participant. Record the remaining deferred debt (if applicable): [D\_remaining].]*

"You now have 120,000 + [Y\_repaid] tokens."

----- *B. Lending decision in round 3* -----

"Your partner may contact you via WhatsApp to borrow again. The rules are the same."

"You may choose to lend to them and decide whether or not to charge interest. You may also choose not to lend. In that case, the unlent amount will be added to your balance account and will be available to you at the end of the game. Regardless of the amount you hold, you may lend a maximum of 120,000 tokens. Now, let us wait for your partner to make contact."

*[Wait up to 5 minutes if the participant wishes to negotiate.]*

*[Action: After receiving the message "[Round 3: borrower decision made]" from the borrower's enumerator, apply the corresponding rule below.]*

→ **If the participant is not contacted by the borrower:**

"No loan is made in this round. Your funds are therefore added to your balance account."

*[Action: Take back all participant tokens and place them in the designated balance account area.]*

→ **If lending:**

"You have decided to lend. The loan amount is [Y] tokens; the interest rate is [r]; other agreed terms: [Z]."

*[Action: Take back [Y] tokens (amount lent)]*

→ **If contacted but decided not to lend:**

"You have decided not to lend. Your funds are therefore added to your balance account."

*[Action: Take back all participant tokens and place them in the designated balance account area.]*

### Round 3 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

#### Questions about debt repayment from round 2

- (1) "At the start of round 3, did your partner have an outstanding debt to you?" \_\_\_\_\_ (Yes or No)  
→ If No to (1), skip (2)–(9) and go directly to (10)  
→ If Yes to (1), continue:
- (2) "At the start of round 3, how much did your partner still owe you from the loan granted in round 2?" \_\_\_\_\_  
(Amount; write 0 if nothing was left to pay from the round 2 loan)
- (3) "At the start of round 3, how much did your partner still owe you from older unpaid debts?" \_\_\_\_\_ (Amount; write 0 if there were no older debts)
- (4) "What was the total outstanding debt at the start of round 3 (principal + agreed interest) before any renegotiation?" \_\_\_\_\_ (Amount = amount from question 2 + amount from question 3)
- (5) "Did you communicate with your partner on WhatsApp to renegotiate the debt?" \_\_\_\_ (Yes or No)  
→ If No to (5), skip (6) and go directly to (7).  
→ If Yes to (5), continue:
- (6) "What new terms did you agree to?"  
a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or amount)  
b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)  
c) Other terms: \_\_\_\_\_
- (7) "What is the amount of the debt after negotiation, before any repayment in round 3? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)
- (8) "How much did your partner ultimately repay in round 3?" \_\_\_\_\_ (Amount)
- (9) "Is there any unpaid debt remaining to carry over to the next round? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)

#### Questions about a new loan (round 3)

- (10) "Did your partner request a new loan on WhatsApp?" \_\_\_\_\_ (Yes or No)  
→ If No to (10), skip (11)–(13) and go directly to (14).  
→ If Yes to (10), continue:
- (11) "Did you lend to your partner in round 3?" \_\_\_\_\_ (Yes or No)  
→ If No to (11), skip (12)–(13) and go directly to (14).  
→ If Yes to (11), continue:
- (12) "How much did you lend to your partner in round 3?" \_\_\_\_\_ (Amount)
- (13) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")
- (14) "What is your final (total) balance for round 3?" \_\_\_\_\_ (Balance = round 2 balance + 120,000 + amount repaid in round 3 – amount lent in round 3)

#### Verification sentence (read aloud):

"In round 3, your partner repaid [0 or Y] tokens of the round 2 debt (full / partial repayment). You lent [0 or X] tokens again. Your balance is [Z] tokens, which are automatically added to the balance account."

## 4.4 Round 4 (official)

*[Action: After receiving the message "[Round 4 begins]" from the borrower's enumerator, write in the WhatsApp group: [Round 4 start acknowledged].]*

"Now, we enter the fourth round. Here is your fixed land income: 120,000 tokens."

*[Action: Give 120,000 tokens to the participant]*

→ **If no outstanding debt at the start of round 4: skip directly to Part B. Lending decision in round 4.**

----- *A. Repayment of outstanding debts* -----

→ **If there is an outstanding debt owed to you at the start of round 4:**

*[Action: Check the repayment message sent by the borrower's enumerator in the WhatsApp group, e.g.: "[Round 4: the borrower repays [Y\_repaid] to the partner]."]*

→ Case 1 — If the message indicates full repayment:

"Your partner repays [Y\_repaid] tokens. They have repaid everything."

*[Action: Give [Y\_repaid] tokens to the participant]*

→ Case 2 — Partial repayment OR renegotiation message:

"Your partner cannot repay everything. Would you like to speak with them on WhatsApp to negotiate a solution?"

"They may ask you to cancel all or part of the debt, to repay only a portion, or to modify the interest rate. The final decision is yours."

*[Wait up to 5 minutes if participants are communicating.]*

*[Action: Give the accepted repayment tokens [Y\_repaid] to the participant. Record the remaining deferred debt (if applicable): [D\_remaining].]*

"You now have 120,000 + [Y\_repaid] tokens."

----- *B. Lending decision in round 4* -----

"Your partner may contact you via WhatsApp to borrow again. The rules are the same."

"You may choose to lend to them and decide whether or not to charge interest. You may also choose not to lend. In that case, the unlent amount will be added to your balance account and will be available to you at the end of the game. Regardless of the amount you hold, you may lend a maximum of 120,000 tokens. Now, let us wait for your partner to make contact."

*[Wait up to 5 minutes if the participant wishes to negotiate.]*

*[Action: After receiving the message "[Round 4: borrower decision made]" from the borrower's enumerator, apply the corresponding rule below.]*

→ **If the participant is not contacted by the borrower:**

"No loan is made in this round. Your funds are therefore added to your balance account."

*[Action: Take back all participant tokens and place them in the designated balance account area.]*

→ **If lending:**

"You have decided to lend. The loan amount is [Y] tokens; the interest rate is [r]; other agreed terms: [Z]."

*[Action: Take back [Y] tokens (amount lent)]*

→ **If contacted but decided not to lend:**

"You have decided not to lend. Your funds are therefore added to your balance account."

*[Action: Take back all participant tokens and place them in the designated balance account area.]*

## Round 4 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

### Questions about debt repayment from round 3

- (1) "At the start of round 4, did your partner have an outstanding debt to you?" \_\_\_\_\_ (Yes or No)  
→ If No to (1), skip (2)–(9) and go directly to (10)  
→ If Yes to (1), continue:
- (2) "At the start of round 4, how much did your partner still owe you from the loan granted in round 3?" \_\_\_\_\_  
(Amount; write 0 if nothing was left to pay from the round 3 loan)
- (3) "At the start of round 4, how much did your partner still owe you from older unpaid debts?" \_\_\_\_\_ (Amount; write 0 if there were no older debts)
- (4) "What was the total outstanding debt at the start of round 4 (principal + agreed interest) before any renegotiation?" \_\_\_\_\_ (Amount = amount from question 2 + amount from question 3)
- (5) "Did you communicate with your partner on WhatsApp to renegotiate the debt?" \_\_\_\_ (Yes or No)  
→ If No to (5), skip (6) and go directly to (7).  
→ If Yes to (5), continue:
- (6) "What new terms did you agree to?"  
a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or amount)  
b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)  
c) Other terms: \_\_\_\_\_
- (7) "What is the amount of the debt after negotiation, before any repayment in round 4? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)
- (8) "How much did your partner ultimately repay in round 4?" \_\_\_\_\_ (Amount)
- (9) "Is there any unpaid debt remaining to carry over to the next round? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)

### Questions about a new loan (round 4)

- (10) "Did your partner request a new loan on WhatsApp?" \_\_\_\_\_ (Yes or No)  
→ If No to (10), skip (11)–(13) and go directly to (14).  
→ If Yes to (10), continue:
- (11) "Did you lend to your partner in round 4?" \_\_\_\_\_ (Yes or No)  
→ If No to (11), skip (12)–(13) and go directly to (14).  
→ If Yes to (11), continue:
- (12) "How much did you lend to your partner in round 4?" \_\_\_\_\_ (Amount)
- (13) "At what interest rate?" \_\_\_\_\_ (interest rate with "%", e.g. "5%")
- (14) "What is your final (total) balance for round 4?" \_\_\_\_\_ (Balance = round 3 balance + 120,000 + amount repaid in round 4 – amount lent in round 4)

### Verification sentence (read aloud):

"In round 4, your partner repaid [0 or Y] tokens of the round 3 debt (full / partial repayment). You lent [0 or X] tokens again. Your balance is [Z] tokens, which are automatically added to the balance account."

## 4.5 Round 5 (official)

*[Action: After receiving the message "[Round 5 begins]" from the borrower's enumerator, write in the WhatsApp group: [Round 5 start acknowledged].]*

"Now, we enter the fifth round. This round is the settlement round and you have no fixed land income."

→ **If no outstanding debt at the start of round 5: skip directly to the Round 5 Kobo questions section**

----- *A. Repayment of outstanding debts* -----

→ **If there is an outstanding debt owed to you at the start of round 5:**

*[Action: Check the repayment message sent by the borrower's enumerator in the WhatsApp group, e.g.: "[Round 5: the borrower repays [Y\_repaid] to the partner]."]*

→ Case 1 — If the message indicates full repayment:

"Your partner repays [Y\_repaid] tokens. They have repaid everything."

*[Action: Give [Y\_repaid] tokens to the participant]*

→ Case 2 — Partial repayment OR renegotiation message:

"Your partner cannot repay everything. Would you like to speak with them on WhatsApp to negotiate a solution?"

"They may ask you to cancel all or part of the debt, to repay only a portion, or to modify the interest rate. The final decision is yours."

*[Wait up to 5 minutes if participants are communicating.]*

*[Action: Give the accepted repayment tokens [Y\_repaid] to the participant. Record the remaining deferred debt (if applicable): [D\_remaining].]*

"Your round 5 balance is [Y\_repaid] tokens."

## Round 5 – Kobo:

[Action: ask the participant the questions and record their answers in Kobo.]

### Questions about debt repayment from round 4

- (1) "At the start of round 5, did your partner have an outstanding debt to you?" \_\_\_\_\_ (Yes or No)  
→ If No to (1), skip (2)–(9) and go directly to (10)  
→ If Yes to (1), continue:
- (2) "At the start of round 5, how much did your partner still owe you from the loan granted in round 4?" \_\_\_\_\_  
(Amount; write 0 if nothing was left to pay from the round 4 loan)
- (3) "At the start of round 5, how much did your partner still owe you from older unpaid debts?" \_\_\_\_\_ (Amount; write 0 if there were no older debts)
- (4) "What was the total outstanding debt at the start of round 5 (principal + agreed interest) before any renegotiation?" \_\_\_\_\_ (Amount = amount from question 2 + amount from question 3)
- (5) "Did you communicate with your partner on WhatsApp to renegotiate the debt?" \_\_\_\_ (Yes or No)  
→ If No to (5), skip (6) and go directly to (7).  
→ If Yes to (5), continue:
- (6) "What new terms did you agree to?"
  - a) Amount of debt forgiven (cancelled): \_\_\_\_\_ (0 or amount)
  - b) New interest rate: \_\_\_\_\_ (leave blank or rate in %, e.g. 5%)
  - c) Other terms: \_\_\_\_\_
- (7) "What is the amount of the debt after negotiation, before any repayment in round 5? (If no negotiation, state the initial amount.)" \_\_\_\_\_ (Amount)
- (8) "How much did your partner ultimately repay in round 5?" \_\_\_\_\_ (Amount)
- (9) "Is there any unpaid debt remaining at the end of round 5? If so, how much?" \_\_\_\_\_ (amount, 0 if fully repaid)
- (10) "What is your final (total) balance for round 5?" \_\_\_\_\_ (Balance = round 4 balance + amount repaid in round 5)

### Verification sentence (read aloud):

"In round 5, your partner repaid [0 or Y] tokens of the round 4 debt (full / partial repayment). Your balance is [Z] tokens, which are automatically added to the balance account."

## 4.6 Final Settlement Phase of the Game (official)

"The game is over."

*[Action: count the balance in the balance account.]*

"Your balance in the balance account is [Z]."

"Based on the number of tokens you have obtained, your reward will be [M] pieces of soap."

Reward scale:

$\leq 475,000$  tokens = 1 piece of soap

475,001 – 495,000 tokens = 2 pieces

495,001 – 515,000 tokens = 3 pieces

515,001 tokens and above = 4 pieces

"This is your payment for participating in this game. Thank you for your participation!"