Experiment script

Kasese, Uganda, April 2015

1. Introduction and consent

PAR 1: Our names and contacts are The research is about decision making about farming and coffee production.

PAR 2: There may not be any direct benefits that will be derived from this research. The study is more likely to influence policies or future interventions that still need to be planned. Your participation in this research study is voluntary.

PAR 3: I want to assure you of discretion. Although your name and contact details were asked, in the research reports and other research output that will shared with the wider public your name will not be mentioned. The records that include your name and contact details will be stored safely and access to that information is limited to the main researchers.

PAR 4: We will conduct an exercise and will record your decisions. We will not share or disclose any of your personal decisions to others. These decisions will just be analysed as part of the research.

PAR 5: Please feel free to ask questions about the research. We will first explain the exercise and will allow you to ask questions. The exercise will take about 40 minutes.

Consent question

PAR 6: If you have no further questions, I want to ask you to raise your hand if you agree that you have been informed about this research and its implications and that you agree to participate. People who do not agree to participate will be free to leave.

(signatures on forms)

2. VCM stage (provision to common pool)

PAR 7: Today we would like to conduct an exercise per couple as part of this research to better understand decision making about agricultural production. We would like you to take a seat per couple.

[Participants are seated per couple. Maximum 6 couples]

[It needs to be clear to researchers which couples are change agents – but no distinction made between change agents and other couples for participants]

[Avoid collusion within a single game by a threat of exclusion and avoid collusion between games on the same day by keeping waiting groups apart. Collusion across days will be avoided by conducting in different community and by asking secrecy]

2.1. What it mimics

PAR 8: The exercise is meant to mimic (imitate) decisions that you make each season about your household farming enterprise. First, at the start and during every season you and your partner (wife/husband) decide on investments in agricultural production. Investments in your household farming enterprise could be the inputs or techniques you will apply to improve your agricultural production. For instance you can decide to buy improved varieties, apply fertiliser, apply mulch, dig

trenches, produce organic manure, apply herbicides, etc. Even if such investment just needs labour, like for instance digging trenches, you know that labour is also a cost. In fact, you and partner (wife/husband) may have your own plots or crops you make decisions on, but in the end the production contributes to the benefit of the whole household, in the form of food or income.

PAR 9: With some luck, at the end of the season, your investments will result in higher productivity and higher income from your agricultural production at the household farm.

PAR 10: Secondly, at the end of the season, selling some of the harvest of the crops will generate money. After harvesting and selling, you and your partner (wife/husband) will decide on what to do with that money. There are different uses for that money. And what you or your partner (wife/husband) do not use normally become savings, which could be used for investments in agricultural production in the next season.

PAR 11: Then, after that season, a next season starts and you and your partner need to make decisions about investments again. And at the end of that next season, you and your partner will make decisions again on how to use the income generated through that season's agricultural production. And so on...

2.2. Deviations from reality

PAR 12: In this exercise, you and your partner will be asked to make some investments from a sum of money we will make available to each of you. We will explain this later. The amount of money that you and your partner will each be able to invest in this exercise will be not as much as the amount of money you and your partner each invest per season in reality. But what is important is that you and your partner will make a similar decision of how much of that available money to invest in your farm.

PAR 13: In the exercise as in reality, what you and your partner invest will give returns to investment. In other words, the investments will increase the income you gain from your agricultural production at the end of the season. In the exercise, the total amount of money that you and your partner invest will become a larger amount to mimic (simulate) the returns of investment (=higher income from your agricultural production at the end of that season) that you would also have in reality.

PAR 14: Similarly, the amount of money in the exercise that represents the returns to investment or income from agricultural production will also be a lot less than the income you get from farming after one season. Again, what is important is that you and your partner take a similar decision as in reality about that income. That decision is how much money each of you will use from the farming income for various purposes. And as in reality, what you and your partner do not use now, become savings.

PAR 15: To represent decisions in consecutive seasons (=seasons that follow upon each other) like in reality, the exercise can be repeated, starting with decisions about investment for the next season after which decisions about using income at the end of that season.

2.3. No communication

PAR 16: In this exercise it is extremely important that you do not talk or give signs or hints to other people, even not to your partner who is in the same exercise. This is not because we want to keep things secret, but it just for the sake of the exercise. If you would communicate it would influence the results from the exercise. We will monitor very closely that you do not talk or give signs. If we see it happen, you might be excluded from the exercise. Please, also avoid discussing this exercise afterwards with

other people in your community as this could influence the results of our exercise when these other people are invited to participate.

2.4. The exercise – play example

PAR 17: The exercise has 2 parts. In the first part, <u>each partner</u>, <u>wife and husband</u>, in <u>each couple will each receive an envelope with an amount of money between 0 and 4000 UGX</u>. This amount will be your private money. We will ask you to privately decide on what proportion of that money you will invest in your household farming enterprise and what proportion of that money you will keep for yourself.

⇒ Example: give envelope to research assistant and myself

[Envelope needs code: couple number + M or F]

PAR 18: The proportion of the money that you want to invest in the household farming enterprise you will <u>leave in the envelope</u> without anyone, even not your partner, seeing how much. The proportion of the money you decide to keep for yourself, you can just put in your pocket or wallet. Remember not to show anyone how much you keep. We will then collect the envelope.

⇒ Example: research assistant and myself take some money out and leave the rest in the envelope

PAR 19: The total of the money you and your partner (wife/husband) decided to invest in your household farming enterprise - that is the sum of the money that you have put in the <u>household farm envelope plus</u> the money that your partner has put — can then result in higher productivity of your household farming enterprise in that season. And if there is higher productivity, your household income for that season will be higher.

⇒ Example: put money from research assistant and my envelope together and display (but clarify that in the exercise we will not display, we display here to show how we will add returns to investment)

PAR 20: Higher productivity – and higher income – will depend on how much you and your partner invest but also on different unpredictable things that can happen in an agricultural season like too much or too little rain, the occurrence of pests. Therefore the total money you and your partner (wife/husband) invested will become either 10% bigger, 30% bigger or 50% bigger. To mimic the unpredictability of your returns to investment, as in reality, it will be decided by luck if it becomes 10%, 30% or 50% bigger.

- ⇒ PAR 21: Example: "Our productivity went up and, at the end of the season, the money we invested together became more. So for example, this is the return to investment:" Add 2x200 UGX
- ⇒ PAR 22: "The sum of the research assistant's investment plus my investment plus the returns to investment are now the household farming income generated at the end of the season."

PAR 23: After this, the second part of the exercise starts. This second part mimics that we are at the end of the season and there is a household farming income that is the result of your and your partner's investment plus the returns to that investment.

⇒ Display the sum of the research assistant's investment plus my investment plus the returns to investment

PAR 24: In this second part of the exercise you and your partner (husband/wife) will each <u>privately</u> decide, without talking to each other, how much you will use of the total household income that you

generated at the end of the season (both investments+ returns to investment). In this exercise you <u>cannot talk</u> to each other to discuss how much each of you will take from the total household income.

PAR 25: The amount that each of you decides to use of that total household income will be given to each of you personally after the exercise.

PAR 26: You and your partner will each receive a decision card on which we wrote down the total household farming income (*Consumption decision card*)

- ⇒ Refer to the sum of the research assistant's investment plus my investment plus the returns to investment on display
- ⇒ Show Consumption decision card for research assistant and for me [do not put real value, put XXXX ugx] [code e.g. 0TS1MT]

PAR 27: On that decision card each we will have written down the amount that you and your partner generated with your investment in your household farming enterprise. There is also a code but that is just for our purpose.

PAR 28: On the same decision card each of you will privately write down in the space provided on the decision card how much you would like to use of that total household farming income. Then you need to fold the sheet so your decision remains secret.

- ⇒ Research assistant and I each privately write on our decision cards what amount we each would like to use from the total household farming income and we fold it. (Research assistant and I write XXX ugx)
- ⇒ PAR 29: "What we decided to use the research assistant and I will each receive personally at the end of the exercise"

PAR 30: Note that if the sum of the amount that you want to use and the amount that your partner (husband/wife) wants to use is <u>smaller</u> than the total household income, the remaining household income becomes household savings that could be used for investment in agriculture in the next season, or other things household savings are normally used for.

[This is important: that the remaining could become hh savings]

PAR 31: If the sum the amount that you want to use and the amount that your partner (husband/wife) wants to use is <u>larger</u> than the total household income, you will only get an amount proportional to what you asked and that sums up to the total of the available household income.

PAR 32: That is the end of the second part of the exercise.

PAR 33: After that, it is possible that we repeat the exercise, with the first part and the second part, a few times to mimic the decisions of consecutive seasons.

2.5. Conduct experiment: VCM stage:

PAR 34: We will now start with the first part of the exercise:

⇒ PAR 35: You now each receive an envelope.

[Distribute envelopes: Each envelope will contain 2000 UGX composed of 2 coins of 500 UGX, 3 coins of 200 UGX and 4 coins of 100 UGX]

- [Envelopes have Couple number (1 to 6) which matches to couple code in the register and data sheet and indication husband (M) or wife (F)]
- ⇒ PAR 36: <u>Leave</u> the amount you want to invest in your household farming enterprise in the <u>envelope</u> and put the remainder in your own pocket or wallet. [I need to know how much each contributed]
- ⇒ PAR 37: As explained before, it is very important that you do not talk with your partner or other participant and you do not show how much you put in the household farm purse or how much you keep for yourself.
- ⇒ PAR 38: The researcher will come and collect each envelope so we can calculate the total of investment by you and your partner (wife/husband).and add the returns to your investment, which can be 10%, 30% or 50%.
 - [Collect envelopes]
- ⇒ PAR 39: Please remain seated while waiting for the second part of the exercise and do not start talking

[Researchers enter amount left in husband envelope and amount left in wife envelope of each couple in the database. This automatically calculates the total investment and the return to investment (randomly assigned 10%, 30% or 50%) and generated household farming income after investment per couple]

[Researchers prepare Consumption decision card for husband and wife of each couple]

Consumption decision card for husband and for wife

Couple code:[fill couple code]	Couple code: [fill couple code]
Husband (Man)	Wife (Woman)
Out of the total household income =UGX [fill income after investment]	Out of the total household income =UGX [fill income after investment]
I will useUGX	I will useUGX

2.6. Conduct experiment: Appropriation stage:

- ⇒ PAR 40: You now each receive a <u>card</u> on which we wrote down the total household farming income that you and your partner generated with your investment in your household farming enterprise.
 - [Distribute <u>Consumption decision card</u> to husband and wife of each couple (with total household income and couple code filled)]
- ⇒ PAR 41: Please write down in the space provided on the sheet how much you would like to use of the total household farming income. Then fold the sheet so your decision remains secret. Please remain seated and wait for the next step in the exercise.
- ⇒ PAR 42: Please do not talk or show your decision or your card to your partner or to anyone else in the group.
- ⇒ PAR 43: The researchers will now collect the <u>consumption decision cards</u> from each of you. [Collect <u>consumption decision cards</u>]

[Researchers fill in database the amount each participant decided to use from the household income. Rectifying if total per couple is more than total available – proportional]

PAR 44: In this case, we have enough information through this one exercise and we will not repeat the exercise. This means this exercise has come to an end. We will ask you a few questions about your experiences with this exercise.

2.7. Post-experiment questions:

PAR 45: We will now distribute some questions we would like you to answer. We will read each question out loud and give you time to give the answer. If your eyes are not so well and you need help to read the paper, do not hesitate to ask help from the research assistant.

[Post experiment questions per couple number husband and wife]

PAR 46: Question 1: When you compare the decisions you made in the exercise **about investing in the household farming enterprise** (**first part**), even if they are about smaller amounts of money, and the decisions that you make in reality each season about investing in the household farming enterprise: Do the decisions in the exercise resemble the decision in reality a lot; to some extent or do they not resemble at all?

Cards for post experiment question 1

Couple code:[fill couple code]			
		Husband (Man)	
Decisions in the exercise about investing in the household farming enterprise	0 0	Resemble a lot Resemble to some extent Do not resemble	Decisions made in reality about investing in the household farming enterprise each season

Couple code:[fill couple code] Wife (Woman)			
Decisions in the exercise about investing in the household farming enterprise	0 0	Resemble a lot Resemble to some extent Do not resemble	Decisions made in reality about investing in the household farming enterprise each season

PAR 47: Question 2: When you compare the decisions you made in the exercise **about using the household farming income** (**second part**), even if they are about smaller amounts of money, and the decisions that you make in reality after each season about using the household farming income: Do the decisions in the exercise resemble the decision in reality a lot; to some extent or do they not resemble at all?

Cards for post experiment question 2

Couple code:[fill couple code]			
		Husband (Man)	
Decisions in the exercise about using the household farming income	0 0	Resemble a lot Resemble to some extent Do not resemble	Decisions made in reality about using the household farming income after each season

Couple code:[fill couple code]			
		Wife (Woman)	
Decisions in the exercise about using the household farming income	0 0	Resemble a lot Resemble to some extent Do not resemble	Decisions made in reality about using the household farming income after each season

2.8. Refer to interview

PAR 48: Note that our colleague researchers [names] will also interview each one of you individually. Both husband and wife of each couple will be interviewed separately. Most of you can be interviewed today. Our colleague researchers will make an appointment for the interview with those of you who cannot be interviewed today [when]. You will receive a card which has a code and the telephone numbers of our colleague researchers who will interview you. The code is important to link the information we received from you through this exercise and the information we will ask from you during the interview. Please keep the card with the code with you and present it to our colleague researchers who will interview you.

Couple code card

Name:[fill name participant] Couple code:[fill couple code]
Name and telephone number interviewer 1 Name and telephone number interviewer 2

2.9. End

PAR 49: Please remain seated until we call you to give you the amount you decided to use from the household income in the exercise. You will have to sign for reception. Remember that the amount may be less than you decided on the consumption decision sheet if the total you and your partner wanted to use exceeded the available income.

PAR 50: We would like to ask that you do <u>not discuss this exercise</u> with other people in your community as we will invite other people to the same exercise and we would like to avoid that they are influenced by what you told them. That would distort the results of our research.

Thank participants

[Call each of participants and pay out amount they decided to use from the household income. Signature for reception]

[Give each participant the card with the couple code and phone numbers of the interviewers]