Baseline test for students in treatment schools
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Note:
This test is for students who are in treatment schools that are not selected for the household-level interventions.

Module 1a: Class-level information to collect before tests (5 min)
Enumerators record names, gender, age and grades of students in the Baseline test form.
Enumerators will record the number of students who say yes to each question, as well as the total number of students responding. Responses are NOT matched to individual students.

Q1. Who is the head of your household?
Choice (select one):

- Father
- Mother
- Grandfather
- Grandmother
- Uncle
- Aunt
- Brother
- Sister
- Brother in law
- Sister in law
- Other relatives: please specify

Enumerators: the answers are not recorded. The question is used to make sure all students understand what is meant with the head of household, and all of the students have that particular person in mind.

Q2. Are you a member of a Kuu labor group?
Choice: Yes/No
Enumerator records the number of students answering yes (among the 10 selected students).
Q3. Are you a member of a susu [i.e. a rotating savings group]?
Choice: Yes/No

Enumerator records the number of students answering yes (among the 10 selected students).
Q4a. Are you a member of the 4 -H Club?
Choice: Yes/No
Enumerator records the number of students answering yes (among the 10 selected students).
Q4b. Do you hold any special positions in the 4 - H Club?
Enumerator note: Special positions include Club president, vice-president, treasurer, secretary and chaplain.

## Choice: Yes/No

Enumerator records the number of students answering yes (among the 10 selected students).
Q5a. Have you ever worked in the school garden?

## Choice: Yes/No

Enumerator records the number of students answering yes (among the 10 selected students).
Q5b. How long have you been working in the school garden? Please answer in terms of months.
Enumerator instructions: If the subject has been working in the school garden for less than 1 month, record " o ".

Numeric answer (number of months): range $=0-18$
Enumerators will put in individual values and average values are recorded.

> Module 1b: Individual-level information to collect before tests (10 min)

Enumerators will ask questions to students individually. Responses are NOT matched to individual students.

Q1a. In this rainy season, who will farm together with the head of your household?
Choice: Yes/No
Q1b. Have you ever tried teaching the head of your household any new farming practices?
Choice: Yes/No
Q1c. Has the head of your household tried using any new farming practices that you taught?
(Applicable if response to Q1b is yes.)
Choice: Yes/No

Q2. How many hours per week do you spend on each of the following activities?
(a) Studying
(This does not include time spent at school during official school hours)
(b) Doing household chores other than farming
(c) Farming

Numeric answer: 0-168
Enumerator instructions: Ask the subject to revise responses to Q2a-Q2c if the responses to Q2a-Q2c add up to more than 168 hours.

Q3. Do you want to look after a farm on your own this rainy season?
Enumerator note: With "on your own", we mean not under the guidance of any older person. Remind the subject that this is about intention to farm on his/her own. It is okay if he/she does not have land at his/her disposal yet.

Choice: Yes/No
Q4. Do you have land ready to start your farm? (Applicable if response to Q3 is yes.)
Enumerator note: with ready, we mean available/at their disposal.
Choice: Yes/No

## Module 2: Farm management knowledge test (10 min)

Task:
Enumerators will ask students a set of 10 questions on farm management knowledge: 4 multiplechoice questions with 4 choices each, and 6 true-or-false questions.

1. Which of the following is a reason why sandy soil should be avoided for crop production? Select all that apply.
[Enumerator instructions: Read out options (a)-(c), ask yes/no. After reading (a)-(c), record the choice.]
a. Because it does not hold water
b. Because it does not have enough nutrients
c. Because it does not provide stable ground for crop growth
d. None of the above
2. It is important to loosen the soil before planting. Which of the following is a reason for that? Choose only one answer.
[Enumerator instructions: Read out options (a)-(c), ask yes/no. After reading (a)-(c), record the choice.]
a. It allows roots to develop more quickly in the soil.
b. It makes it easier for the plant to take in nutrients.
c. It makes planting and water absorption easier.
d. All of the above.
3. When should a farmer start weeding for cassava? Choose only one answer.

Enumerator instructions: Read out every option. After reading all options, ask subjects to choose one option. Record the choice.
a. 1-2 weeks after planting
b. 3-4 weeks after planting
c. 5-6 weeks after planting
d. 7-8 weeks after planting
4. Which of the following is true about cassava stem cuttings [sticks]? Select all that apply.

Enumerator instructions: Read out options (a)-(c), ask yes/no. After reading (a)-(c), record the choice.
a. Older parts of a cassava stem are better than younger parts.
b. Thicker cassava stems are better than thinner cassava stems.
c. Cassava sticks with less nodes are better than sticks with more nodes.
d. All of the above.

## True or false questions

5. When finding a site for planting cassava, it is good to find a place where water pools (sits down) when it rains.
Enumerator instructions: Ask if the statement is true or false, and record the choice.
Select one: True / False
6. How deep a cassava plant reaches into the soil depends on the angle the farmer puts the cassava sticks into the ground.
Enumerator instructions: Ask if the statement is true or false, and record the choice.
Select one: True / False
7. If you plant your cassava cuttings [sticks] closer to each other, you can get more produce because you have more crops for a given piece of land.
Enumerator instructions: Ask if the statement is true or false, and record the choice.
Select one: True / False
8. When choosing a farm site, one sign of fertile soil is that there are a large number of different plants in the field.

Enumerator instructions: Ask if the statement is true or false, and record the choice.
Select one: True / False
9. Weeding should always be done AFTER using fertilizer.

Enumerator instructions: Ask if the statement is true or false, and record the choice.
Select one: True / False
10. If brown spots show on the tips of cassava leaves, it is a sign that the soil lacks nitrogen [i.e. a kind of nutrients].
Enumerator instructions: Ask if the statement is true or false, and record the choice.
Select one: True / False

Module 3: Beliefs about scores in the farm management test (5 min)
Introduction to module:
Just now I gave you a test about how to look after a farm. Now I would like to ask you a few questions about your views on the test.

Questions:
Q1. There were ten questions in the test. How many questions do you think you have answered correctly?

Numeric answer: range $=0-10$
Q2. You think you have answered [answer to Q1] questions correctly in the test. How many questions would [the head of your household] think you can answer correctly?

Numeric answer: range $=0-10$
Q3. Questions in the test were about how to look after a farm on your own. Would [the household head] believe that you can correctly use the knowledge and practices in real life? (7-point Likert scale)
(Hint: Try to break down the Likert scale for the respondent by first getting from them whether they think \{head of household\} would believe, not believe or don't know. If the respondent's first response is don't know, simply select "don't know" and move on to the next question. If the respondent's first response is Believe, further ask how strongly they think this belief would be. (eg. Maybe believe, Believe or Surely believe). The same goes for Not believe.

Enumerator instructions: Please remind the subject that this is about whether the child can correctly use the knowledge and practices in the current rainy season.

## Choices:

Never believe/Not believe/Maybe not believe/Don't know what he/she will think/Maybe believe/Believe/Surely believe

Module 4: Agricultural innovations test ( 10 min )
Task:
Enumerators will ask subjects a set of 10 short questions on the promoted agricultural innovations. These 10 questions are about the following promoted innovations:

1. Composting
2. Making mounds or ridges for roots and tubers
3. Making vegetable gardens using the dig-dig method
4. Direct seeding and transplanting
5. Seed germination test

Questions:
For Q1, show the following pictures of compost piles and pits.


(Read to subjects) Explanation:
Composting is a practice of making natural fertilizer. This means the fertilizer does not use any chemical material, it is only natural. Farmers can use things like animal waste or poo, cassava dirt, and leaves. It can either be made above the ground, in piles (enumerator, show the picture).

You can also make a hole in the ground, and put the materials in there. These are called pits (enumerator, show the picture).

Q1a. Have you ever made compost fertilizer piles or pits?
Select one: Yes / No
Q1b. A compost [fertilizer] pile, which is above the ground, should be turned after how many weeks?
Numeric answer: range $=0-10$
Q1c. True-or-false: During the rainy season, it is better to use pits than piles to make a compost [fertilizer].
[Enumerator instructions: Ask if the statement is true or false, and record the choice.] Select one: True / False

For Q2, show the following pictures of mounds and ridges.

(Read to subjects) Explanation:
These are raised beds. This means the farmer does not farm on flat land. There are two types. One is like a hill, and is called mounds. They look like this (enumerator, show the picture).
One is called ridges, and looks like this (enumerator, show the picture).

Q2a. Have you ever made mounds or ridges for growing roots and tuber crops [e.g. cassava and sweet potatoes]?
Select one: Yes / No
Q2b. Which of the following is a benefit of using mounds and ridges to grow cassava?
Enumerator instructions: Read out options (a)-(c), ask yes/no. After reading (a)-(c), record the choice.
(a) It prevents the crop from taking in too much water when it rains.
(b) It allows plants to reach deeper into the soil and grow bigger.
(c) It makes harvesting easier.
(d) All of the above.

Q2c. True-or-false: On steep slopes, it is always better to grow cassava using ridges than mounds.

Enumerator instructions: Ask if the statement is true or false, and record the choice.
For Q3, show the following picture of a vegetable garden made using the double-dig method.

(Read to subjects) Explanation:
This is a garden using the dig-dig method. The topsoil is first removed.
You take other soil that is rich in nutrients and you replace the topsoil with it.

Q3a. Have you ever made a vegetable garden using the dig-dig method?

## Select one: Yes / No

Q3b. True-or-false: After using the dig-dig method, you should step in the garden bed to water the plants.
[Enumerator instructions: Ask if the statement is true or false, and record the choice.]
Select one: True / False
Q3c. Select one: After using the dig-dig method, what should you use to water the plants?
[Enumerator instructions: Read out options (a) and (b). After reading (a) and (b), ask the subject to choose one. Record the choice.]
(a) Watering can
(b) Water bucket

Select one: (a) / (b)
For Q4, show the following picture of a nursery.

(Read to subjects) Explanation:
This is a nursery. The practice of transplanting means to plant seeds first in the nursery, and then taking seeds to the field.

Q4a. Have you ever moved seeds from the nursery to the field?
Select one: Yes / No
Q4b. After how many weeks can you move pepper seeds from the nursery to the field?
Enumerator instructions: Ask the subject to give a number, and record the number.
Numeric answer: range $=0-10$
Q4c. Multiple choice: For which of the following crops, it is better to sow seeds directly into the soil than to start in the nursery?

Enumerator instructions: Read out every option. After reading all options, ask the subject to choose one. Record the choice.
(a) Collard greens
(b) Eggplant
(c) Okra
(d) Bitterballs

Select one: (a) / (b) / (c) / (d)
For Q5, show the following picture of a seed germination test.

(Read to subjects) Explanation:
The purpose of a seed test is to see if seeds are usable for planting. Some people also call it a seed germination test. It can either be done on a nursery or in a rolled cloth (enumerator, show this picture and the picture on the next page). Show the picture and explain to the respondent this is also the rolled cloth method. You can also put the seeds in a bucket of water to do a seed germination test (enumerator, show the picture).

Q5a. Have you ever done a seed germination test before planting?
Select one: Yes / No
Q5b. After placing seeds in a rolled cloth, how many days do you have to wait to see the results of a seed germination test?
Enumerator instructions: Ask the subject to give a number, and record the number.
Numeric answer: range $=0-10$
Q5c. Select one: Imagine you put 10 seeds to a seed germination test. In which situation do you need to get more seeds for planting?

Enumerator instructions: Read out options (a) and (b). After reading (a) and (b), ask the subject to choose one. Record the choice.
(a) If 4 seeds germinate
(b) If 6 seeds germinate

## Correct answer: (a)

Select one: (a) / (b)

Module 5: Beliefs about yields (5 min)
Questions:
Q1. Have you ever seen older people in your community harvest cassava?
Enumerator instructions: Emphasize to the subject that this is about the harvesting process, not the planting process.
Choice: yes/no
Q2a. Imagine an older person in your community grows cassava for 9-10 months. What do you think is the highest number of cassava tubers that can be harvested from 1 plant?

Enumerator instruction: Remind the subject that this adult farmer is not from the subject's family.
Numeric answer: range $=0-15$ (Do not show subjects the range. If the subject gives a response outside this range, ask him/her to revise and show visual aid again.)

## Include visual aids



Q2b. Now imagine that person has 4 cassava plants. Some of these plants might do well, some of these plants might not do well. How many cassava tubers do you think the person could harvest from 4 plants?

Enumerator note: If the subject reports a number that is different from 4 times the amount reported in Q2a, this does not mean the answer is wrong.

Numeric answer: range $=0-60$ (Do not show subjects the range. If the subject gives a response outside this range, ask him/her to revise and show visual aid again.)

## Include visual aids



Q3a. Now imagine that you plant cassava on your own for 9-10 months. What do you think is the highest number of cassava tubers that can be harvested from 1 plant?

Numeric answer: range $=0-15$ (Do not show subjects the range. If the subject gives a response outside this range, ask him/her to revise and show visual aid again.)

## Include visual aids



Q3b. Now imagine you have 4 cassava plants. Some of these plants might do well, some of these plants might not do well. How many cassava tubers do you think you could harvest from 4 plants?

Enumerator note: If the subject reports a number that is different from 4 times the amount reported in Q3a, this does not mean the answer is wrong.

Numeric answer: range $=0-60$ (Do not show subjects the range. If the subject gives a response outside this range, ask him/her to revise and show visual aid again.)

## Include visual aids



Q4a. Based on your answers to previous questions, you think that you can harvest [more/the same number of/less] cassava tubers [than/as/than] an adult farmer in your community. Is that correct?

Select one: Yes/No
Enumerator instruction: If the subject answers no in Q4a, show Q2b and Q3b again on the same screen. Allow the subject to revise his/her answers to Q2b and Q3b. Then ask Q4a again.

Q4b. You think that you can harvest [more/the same number of/less] cassava tubers [than/as/than] an adult farmer in your community. Would the head of your household agree with you?

Choices:
Disagree badwy/ Disagree / Disagree small/ Neutral(No opinion) / Agree small/ Agree / Agree badwy

