FARMER PERCEPTIONS SURVEY

Dev Patel Fall 2022

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[Notes describing the mechanics of the survey are written in italics inside brackets. Instructions for the enumerators not intended to be read aloud to the respondent are denoted in blue.]

Section A: Interview Preparation

A1: Instructions: Select your name A2: Instructions: Select the union

A3: Instructions: Select the name of the respondent

A4: Instructions: Enter your GPS location. Make sure you are outside. If not possible, swipe forward.

A5: [If the GPS location is missing] Instructions: Do not forget to provide a GPS location! Try your best to take the GPS location. If not possible, swipe forward.

A6: Instructions: Take a picture of your surroundings. Be careful not to include anyone's face in the picture. Try to take the picture in such a way that someone else can find the area in the future. If there is a problem taking a picture with the app, take a picture with the tablet app, then select the picture with "Choose image".

Section B: Introduction

B1: Hello, I just want to confirm I am speaking to the right person. Are you [NAME]?

- Yes | No

[If B1 is "No", interview ends.]

B2: Are you going to be growing boro rice this season?

- Yes | No

[If B2 is "No", interview ends.]

B3: Are you the main decision-maker on your plots?

- Yes | No

[If B3 if "No", interview ends.]

B4: I want to confirm your phone number: [NUMBER]. Is that correct?

- Yes | No

B5: [Asked if B4 is "No":] Can you please give me a phone number that we can reliably reach you on?

B6: Name of person who has first phone number if different from respondent

B7: Can you please also give me a second phone number that we can call if we have trouble getting in touch with you? This could be of a relative or friend.

B8: Name of person who has second phone number

B9: Can you please confirm the name of your village? Is it [NAME]?

- Yes | No

B10: Specify other village name

B11: Consent Form

We are working with researchers from Harvard University to study agriculture in Bangladesh. We are inviting you to be a participant in this study because you are a Boro rice farmer. You have been chosen by a random selection process. We value your opinion.

This study will involve several interviews over the course of the next few months. We will ask you about your farming practices and your household. We will also be using salinity sensors to measure the amount of salt on your plots. Today, we will use approximately 2-2.5 hours of your time to collect information. We will give you 500 Taka today for your time, and we will also give you the chance to buy some items, including seeds, a plate, and a grocery voucher. You may receive some or all of these items for free.

This study will be conducted anonymously, and your identity will never be revealed publicly. There will be no cost to you other than your time. This study poses no more than minimal risk. Your participation in this research is completely voluntary. You are free to withdraw your consent and discontinue participation in this study at any time. You may ask questions at any time.

Your participation will be highly appreciated. The answers you give will help provide better information to policy-makers and researchers so that they can better help farmers like you. The researcher for this project is Dev Patel, and this research has been reviewed and approved by the Harvard University Area Institutional Review Board. If you have any questions about this

The researcher read to me orally the consent form and explained to me its meaning. I agree to take part in this research. I understand that I am free to discontinue participation at any time if I so choose, and that the investigator will gladly answer any question that arises during the course of the research.

- Yes | No [If B11 is "No", interview ends.]

B12: Are you alright with our team measuring salinity on your land using an EC meter?

- Yes | No [If B12 is "No", interview ends.]

Section C: Household Roster

C1: I'm going to ask you some questions about everyone in this household, starting with you. In this survey, a household is a group of people who live together and take food from the "same pot," or someone who used to live here and has migrated away but is expected to return and live here again. If someone stays in the same household but does not bear any costs for food or does not take food from the same pot, they are not considered household members.

For example, if two brothers stay in the same house with their families but they do not share food costs and they cook separately, then they are considered two separate households.

How many people live in this household?

[Questions C2 through C10 are asked in a loop, once for each person in the household.]

C2: We will start with you. [This note is only shown on the first loop.]

What is the name of household member [NUMBER]?

C3: What is [NAME]'s relationship to the household head?

- Household head | Husband of household head | Wife of household head | Daughter of household head | Son of household head | Sister of household head | Brother of household head | Father of household head | Uncle of household head | Aunt of household head | Father in law of household head | Mother in law of household head | Son in law of household head | Daughter in law of household head | Granddaughter of household head | Grandson of household head | Other

C4: [If C3 is "Other":] Specify relationship

C5: What is [NAME]'s gender?

- Female | Male | Other

C6: What is [NAME]'s primary activity?

- Farmer or Fisherman | Agricultural Day Laborer | Other wage laborer (like construction worker) | Salaried worker | Self-employment (like rickshaw puller or tailor) | Trader | Housewife | Student | Retired | Not working | Young child | Other

C7: [If C6 is "Other":]Specify activity

C8: What is *[NAME]*'s highest level of education?

- Class 5 or below | Class 8 or below | SSC/Dakhil or below | HSC/Alim or below | Degree | Graduate | Postgraduate | Technical/ Vocational education | No schooling | Other

C9: [If C8 is "Other":] Specify education

C10: What is [NAME]'s age?

Section D: Crop Diagnosis

D1: I'm now going to show you some pictures of rice plants. I'm going to ask you what you think has made the plant look the way it does.

[Questions D2 through D5 are repeated five times for each respondent with random different images in a random order. See the next page for the set of images.]

Instructions: Show image [IMAGE NUMBER]

D2: What do you think has caused the plant to look this way? Instructions: Do not read the possible answers to the respondent.

Brown spot | Bacterial blight | Bacterial leaf streak | Sheath blight | Blast (leaf and collar) | Blast (neck) | Sheath rot | Tungro | Ufra | Fungus | Rice stem borer | Brown plant hopper | Grasshopper | Yellow stem borer | Hispa | Not enough water | Too much water | Not enough fertilizer | Too much fertilizer | Salinity | Pest/lack of pesticide (farmer does not specify) | Other | Don't know

D3: [If D2 is "Other":] Specify

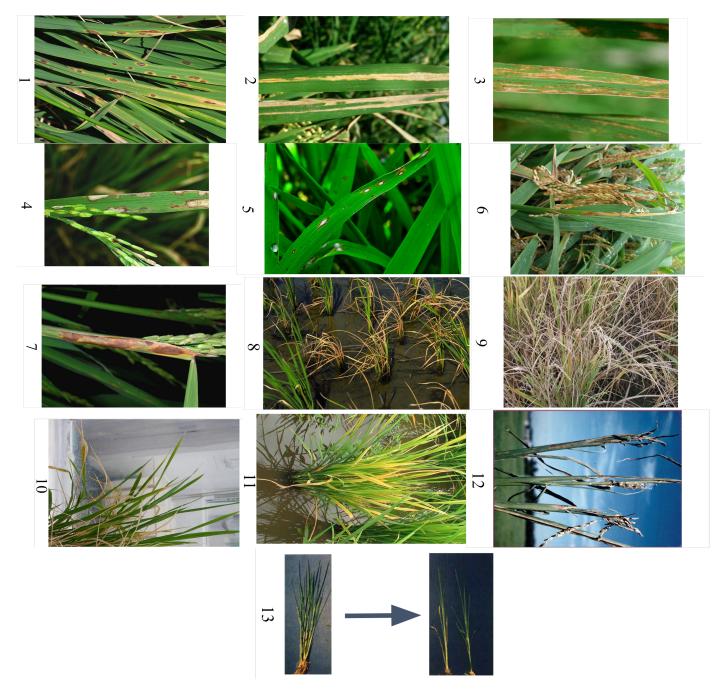
D4: Have you ever grown a crop that looks like this?

- Yes | No

D5: Have you ever seen a crop that looks like this on one of your neighbors' plots?

- Yes | No

[Below are each of the images shown in the loop for questions D2 through D5. Two images were selected from among images 11, 12, and 13 with equal probability, and the remaining 3 were drawn from the rest of the set with equal probability. The order of images was random.]



Section E: Practice Beliefs

E1: Instructions: Prepare weather picture.

Very Sunny	Partly Cloudy	Very Cloudy	A Little Rain	Heavy Rain
The sun is never covered by clouds	The sun is covered by clouds for less than half of the day	The sun is covered by clouds for half or more of the day	Rain for less than 30 minutes	Rain for more than 30 minutes

E2: In this survey, I will ask you some questions asking for your opinion on what might happen in the future. It is true that no one knows the future for sure, but you should try to answer your best guess.

I will now show you a sample question for practice so that you understand the type of the question.

E3: These pictures show some different possibilities about the weather.

For instance, it may be very sunny with no clouds covering the sun (Instructions: Point to picture 1).

It could be a little cloudy so that the sun is visible for at least half of the day (Instructions: Point to picture 2).

It could be very cloudy so that the sun is visible less than half the time (Instructions: Point to picture 3).

It could be a little rainy so that it rains for less than 30 minutes (Instructions: Point to picture 4). It could be very rainy so that it rains for more than 30 minutes (Instructions: Point to picture 5).

E4: It is true that no one knows the future for sure, but you should try to answer your best guess. So for this picture of the weather, even though no one can know for sure what the weather will be, you can use this picture to make your best guess about what will happen.

E5: Here are 10 buttons. You should place buttons on the picture to show that you think that is more likely to happen. It's okay if you put a button in every box or a button in only one box, it is up to you. You can put buttons in whichever box you think. You should always put down ten buttons.

For instance, if you think that each of these different weathers is equally likely to happen, you would put the same number of buttons on each picture (Instructions: Put two buttons on each picture).

If you think that one of these is definitely not going to happen, you would not put any buttons on that picture. So if you definitely thought it would not rain more than 30 minutes tomorrow, you would not put any buttons on that picture. If you think that it is more likely that it is very sunny with no clouds covering the sun, then you might put more buttons on that picture (Instructions: Take away the two buttons from picture 5 and add the same two buttons to picture 1).

You should always put ten buttons down in all. Does this make sense?

Instructions: Answer any questions

- Yes | No

E6: I will now ask you a few questions to check that you clearly understand the process. If you think that it will rain at least a little tomorrow, how would you place the buttons on the picture? [Enumerator enters number of buttons on each of the following categories:]

- Very sunny | Some clouds | Very cloudy | Little rainy | Very rainy Instructions: Enter 99 if the respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

E7: [If the sum entered in E6 doesn't equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

E8: [If they place buttons on any of the cases with no rain:] The answer is not correct. Because in the previous example you said it must rain tomorrow, but you have put buttons on pictures that don't rain. Do you understand?

E9: [If they do not place buttons on any of the cases with no rain:] That's right. Because in this example you thought it must rain tomorrow, so you didn't put a button on the pictures that didn't rain.

E10: Instructions: Place the following number of buttons on each image, in order: 2 on very sunny | 3 on some clouds | 3 on very cloudy | 1 on a little rainy | 1 on very rainy

Now, imagine that I placed the buttons on the image like this. Does that mean I think tomorrow is more likely to be very cloudy or a little rainy?

- Very cloudy is more likely | A little rainy is more likely | Both are equally likely | Don't know

E11: [If E10 is "Very cloudy":] That's right. Because there are more buttons in the very cloudy image than the slightly rainy one, that means I think tomorrow's weather is more likely to be very cloudy.

E12: [If E10 is not "Very cloudy":] It's wrong. Because there are more buttons on very cloudy photos than just a little rain, that means I think tomorrow's weather is more likely to be very cloudy.

E13: [If both previous practice questions were answered incorrectly:] Let's try one more practice question.

Instructions: Place the following number of buttons on each image, in order: 0 on very sunny | 2 on some clouds | 3 on very cloudy | 3 on a little rainy | 2 on very rainy

Now, imagine that I placed the buttons on the image like this. Does that mean I think tomorrow is more likely to rain for more than 30 minutes or not rain at all?

- No rain is more likely | Rain for more than 30 minutes is more likely | Both are equally likely | Don't know

E14: Okay, now let's look at this practice question. What do you think the weather will be like tomorrow? Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty. [Enumerators record number of buttons on each category.]

E15: [If the sum of buttons from E14 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

E16: [If E14 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

E17: You placed [Value from E14] buttons on a very sunny photo, [Value from E14] buttons on a slightly cloudy photo, [Value from E14] buttons on a very cloudy photo, [Value from E14] buttons on a slightly rainy photo, and [Value from E14] buttons on a very rainy photo.

Instructions: Interpret answer for respondent. Is this what you mean?

E18: How confusing do you find this question? Instructions: Read out the options.

- Not at all confusing | A little confusing | Somewhat confusing | A lot confusing | Very confusing

E19: Thank you. We will now move on to the main questions in the survey.

Section F: Agricultural Practices and Beliefs

F1: I'm going to ask you some questions about the amount of salt in the soil. What effect can having a lot of salt in the soil have on crops?

- Can improve crop | Does not impact crop | Can hurt crop | Don't know F2: Are there some seeds that grow better when the soil is salty? Instructions: Do NOT change this answer if later, after you tell them about 67, they say that they did know about it.
 - Yes | No

F3: [If F2 is "Yes":] Please name some such seeds.

ACI 5 | BR 1 (Chandina | BR 2 (Mala) | BR 3 (Biplab) | BR 4 (BRRI Shail) | BR 5 (Dulabhog) | BR 6 | BR 7 (BRRI Balam) | BR 8 (Asha) | BR 9 (shufala) | BR 10(Progoti) | BR 11(Mukta) | BR12 (Mayna) | BR14 (Gazi) | BR15 (Mohini) | BR16 (Shahibalam) | BR17 (Hashee) | BR18 (Shajalal) | BR19 (Mangol) | BR20 (Nizami) | BR21(Niamot) | BR22(Kiron) | BR23 (Dishari) | BR24 (Rahmat) | BR25 (Nayapajam) | BR26(Sraboni) | BRRI dhan27 | BRRI dhan28 | BRRI dhan29 | BRRI dhan30 | BRRI dhan31 | BRRI dhan32 | BRRI dhan33 | BRRI dhan34 | BRRI dhan35 | BRRI dhan36 | BRRI dhan37 | BRRI dhan38 | BRRI dhan39 | BRRI dhan40 | BRRI dhan41 | BRRI dhan42 | BRRI dhan43 | BRRI dhan44 | BRRI dhan45 | BRRI dhan46 | BRRI dhan47 | BRRI dhan48 | BRRI dhan49 | BRRI dhan50 (Banglamoti) | BRRI dhan51 | BRRI dhan52 | BRRI dhan53 | BRRI dhan54 | BRRI dhan55 | BRRI dhan56 | BRRI dhan57 | BRRI dhan58 | BRRI dhan59 | BRRI dhan60 | BRRI dhan61 | BRRI dhan62 | BRRI dhan63 | BRRI dhan64 | BRRI dhan65 | BRRI dhan66 | BRRI dhan67 | BRRI dhan68 | BRRI dhan69 | BRRI dhan70 | BRRI dhan71 | BRRI dhan72 | BRRI dhan73 | BRRI dhan74 | BRRI dhan75 | BRRI dhan76 | BRRI dhan77 | BRRI dhan78 | BRRI dhan79 | BRRI dhan80 | BRRI Hybrid dhan1 | BRRI hybrid dhan2 | BRRI hybrid dhan3 | BRRI hybrid dhan4 | BRRI hybrid dhan5 | BRRI hybrid dhan6 | BRRI dhan81 | BRRI dhan 82 | BRRI dhan 83 | BRRI dhan 84 | BRRI dhan 85 | BRRI dhan 86 | BRRI dhan 87 | BRRI dhan 88 | BRRI dhan 89 | BRRI dhan 90 | BRRI dhan 91 | BRRI dhan 92 | BRRI dhan 93 | BRRI dhan 94 BRRI dhan 95 | BRRI dhan 96 | BRRI dhan 97 | BRRI dhan 98 | BRRI dhan 99 | BRRI dhan 100 | Iratom-24 | Binasail | BInadhan-1 | Binadhan-4 | Binadhan-5 | Binadhan-6 | Binadhan-7 | Binadhan-8 | Binadhan-9 | Binadhan-10 | Binadhan-11 | Binadhan-12 | Binadhan-13 | Binadhan-14 | Binadhan-15 | Binadhan-16 | Binadhan-17 | Binadhan-18 | Binadhan-19 | Binadhan-20 | Binadhan- 21 | Binadhan- 22 | Binadhan-23 | Binadhan-24 | Binadhan-28 | BU dhan-1 | BU Aromatic hybrid dhan-1 | BU dhan-2 | BAU dhan-1 (BAU -63) | BAU dhan-2 | Panbira (DA 12) | Dharial (DA 14) | Dular (DA 22) | Marichbati (DA 24) | Hashikalmi (DA 26) | Tilockachari (DA 7) | Latisail (DA 12) | Nizersail (DA 25) | Bashamanik (DA 31) | Patnai23 (Barisal No.2) | Rajasail (Barisal No.4) | Gabura (DW 2) | Maliabhangar | Habigani Boro II (Tupaboro) | Habigani Boro IV (Khoiaboro) | Habigani Boro VI (Pusshusail) | RAJA | RAJKUMAR | SHAKTI 1 | SHAKTI 2 | SHONALI | SONAR BANGLA | TAJ | TEPIDHAN | NERICA (NEW RICE FOR AFRICA) |

GUTI/RAJSHAHI/LALSHORNA | HARIDHAN | HASHI BR 17 (BORO) | HIRA | HS | JAGORON | JAMAIBABU | KAJALLATA | KAJOL | KIRON BR-22* (AMAN) | LAL TEER | MALA BR-2 (BORO/AUS) | MINIKET | BINNI DHAN | ALOK | ALORON 1 | ALORON 2 | ASA BR-8 (BORO/AUS) | BASHMATI | BHOJON(WHITE/COARSE) | BIJOY | Hybrid (not specified) | Hira-2 | Hira-7 | Other

F4: [If F3 is "Other":] Specify name of seeds not found on the list, separating each different name with a comma: ",". For example: "67, 28".

F5: [If F2 is "Yes":] Do you know where or how to get saline resistant seeds?

- Yes | No

F6: [If F2 is "Yes":] How much do you think the price of these seeds are per kg if you were to buy them for this coming season?

Instructions: Please enter 99 if the respondent says they do not know.

F7: [If F2 is "No":] Researchers have developed some seeds that grow well in saline soils. An example is 67 seeds. Have you heard of this type of seed?

- Yes | No | Don't know

F8: Does the amount of salt in the soil change throughout the year?

- Yes | No | Don't know

F9: [If F8 is "Yes":] What month is the amount of salt in the soil the highest?

- April to May | May to June | June to July | July to August | August to September | September to October | October to November | November to December | December to January | January to February | February to March | March to April | Don't Know

F10: [If F8 is "Yes":] What month is the amount of salt in the soil the lowest?

- April to May | May to June | June to July | July to August | August to September | September to October | October to November | November to December | December to January | January to February | February to March | March to April | Don't Know

F11: What signs do you use to figure out the amount of salt in the soil? Instructions: Do not read out possible answers to respondents.

- Look for white powder on the ground | Taste the soil | Taste the water | Red patches on the leaves | White patches on the leaves | Brown patches on the leaves | Brown leaves | Small plants/stunted height | Plant death | Use sensor | Ask SAAO/dealer | Ask friends/family members/neighbors | Other | Don't use any signs

F12: [If F11 "other" is selected:] Specify

F13: If the amount of salt in your soil became very high, would you consider stopping planting rice in the Boro season?

- Yes | No | Don't know

F14: Do you think spraying sugar water on land can help address problems from salinity?

- Yes | No | Don't know

F15: Have you ever sprayed sugar water on your plants?

- Yes | No

[The order of questions F16 and F17 were asked in a random order.]

F16: Think back to the past 10 years. Do you think the amount of salt in the soil in the typical plot in your village has increased, decreased, or stayed the same since then?

- Salinity increased | Salinity decreased | Salinity stayed the same | I don't know F17: Think about the next 10 years. Do you think the amount of salt in the soil in the typical plot in your village will increase, decrease, or stay the same from now until then?
- Salinity will increase | Salinity will decrease | Salinity will stay the same | I don't know F18: How many different plots are you planning to cultivate rice on for the dry season this year? Sometimes, this is called the Boro season or the winter season. A plot is a single area of land. If a land is all connected, then that counts as one plot.

F19: [If F18 is 0:] Instructions: This survey is only for farmers who are planning on cultivating boro rice this year. If this respondent does not have any plots, then they are not eligible for the survey.

F20: [If F18 is greater than 1 and less than 6:] Thank you. I will now ask you a question about each of your dry season rice plots. To make it easier for us to understand, let's start with the plot that is the closest to your house. We will call that plot number 1.

F21: [If F18 is greater than 5:] Thank you. I will now ask you about the size of the five largest of your dry season rice plots. To make it easier for us to understand, let's start with the plot that is the closest to your house. We will call that plot number 1.

[Questions F22 and F23 are asked about up to five plots.]

F22: I will now ask you about plot number [Number].

F23: Plot [Number]:

How big is plot [Number]? Please tell me in decimals.

[The following questions are asked about a single plot that is randomly selected, with the probabilities proportional to plot size.]

F24: [If F18 is greater than 1:] Now I am going to ask you some questions about plot [Number] using the buttons. Plot [Number] is the plot that is [Number] farthest from your home and is [Answer from F24 for this plot] decimales big. Do you know which plot I am talking about?

- Yes | No

F25: Plot [Number]:

How many years have you been growing on plot [Number]?

Instructions: Enter 0 if this is the first year. Enter 9999 if the respondent says they do not know.

F26: Is there anyone else other than you from your household who works on plot [Number]?

- Yes | No

F27: [If F26 is "Yes":] Who?

F28: Do you own the plot [Number] yourself?

- Yes | No

F29: [If F28 is "No":] Do you have to pay the owner of plot [Number]?

- Yes | No

F30: [If F29 is "Yes":] How do you pay?

- Cash | Cash and Cropshare | Cropshare | Other | Don't have to pay | Refuse to answer

F31: [If F30 is "Other":] Other

F32: [If F30 is "Cash" or "Cash and Cropshare":] How much do you pay?

F33: [If F30 is "Cropshare" or "Cash and Cropshare":] How much crop do you think you will need to exchange for land this year for plot [Number]?

F34: What do you grow and produce on plot [Number]?

- Boro | Aus | Aman | Fish | Shrimp | Vegetables | Livestock | Other | Refuse to answer | Don't know

F35: [If F34 is "Other":] Specify (if Other)

F36: [If F34, "Boro" is not selected:] Are you sure that the farmer does not grow boro on plot [Number]? This survey is only about boro plots. If they do not grow boro on this plot, go back and change the number of plots.

F37: Have you already bought the seed for the dry season for plot [Number]?

- Yes | No

F38: What seed are you planning to plant on plot [Number] this year? [Options for seed list are same as F3]

F39: [If F38 "Other" is selected:] Specify name of seeds not found on the list, separating each different name with a comma: ",". For example: "67, 28"

F40: Are any of the seeds that you plan on growing on plot [Number] this year saline tolerant?

- Yes | No | Don't know

F41: Have you ever planted any different seeds in plot [Number] during the Boro season?

- Yes | No

F42: [If F41 is "Yes":] When did you start using the seeds you are going to plant this year in the plot [Number]?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

F43: [If F42 is 8 or more years ago] Year

Instructions: Enter 9999 if the respondent doesn't know.

F44: [If F41 is "Yes":] Why did you change the seed?

- Because I was more worried about salinity | Because I was less worried about salinity |
Because I was more worried about flooding | Because I was less worried about flooding |
Because of taste | To get higher yield | Because neighbor recommended | Because SAAO recommended | Other

F45: [If F44 if "Other":] Specify (If chosen Other)

F46: What is your source of water for plot [Number]?

- Rainfed | River | Canal | Pond | Haor or Beel | Canal irrigation | Groundwater | Tidal water | Other

F47: [If F46 is "Other":] Specify (If chosen Other)

F48: Have you previously used a different water source for plot [Number]?

- Yes | No

F49: [If F48 is "Yes":] What was the source you used before?

- Rainfed | River | Canal | Pond | Haor or Beel | Canal irrigation | Groundwater | Tidal water | Other

F50: [If F49 is "Other":] Specify (If chosen Other)

F51: [If F48 is "Yes": [When did you last change your water source on plot [Number]?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

F52: [If F51 is "8 or more years ago":] Year

Instructions: Enter 9999 if the respondent doesn't know.

F53: What is the irrigation method on plot [Number]?

- Rainfed | Swing basket | Don | Dugwell | Hand tubewell | Treddle pump | Rower pump | Shallow tubewell | Deep tubewell | Low lift pump | Canal irrigation | Axial flow pump | Borewell | Other

F54: [If F53 is "Other":] Specify (If chosen Other)

F55: Have you previously used a different irrigation source for plot [Number]?

- Yes | No

F56: [If F55 is "Yes":] What irrigation methods did you use before on plot [Number]?

Rainfed | Swing basket | Don | Dugwell | Hand tubewell | Treddle pump | Rower pump |
 Shallow tubewell | Deep tubewell | Low lift pump | Canal irrigation | Axial flow pump |
 Borewell | Other

F57: [If F56 is "Other":] Specify (If chosen Other)

F58: [If F55 is "Yes":] When did you last change your irrigation system on plot [Number]?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

F59: [If F58 is "8 or more years ago":] Year

Instructions: Enter 9999 if the respondent doesn't know.

F60: Is there any problem with the water you use on plot [Number]?

- Yes | No | Don't know

F61: [If F60 is "Yes"] What are the issues?

Instructions: Do not read out choices, but mark any that the respondent says.

- Lack of rainfall | Lack of water in river | Lack of water in dam | Fall in groundwater level | Water too saline | More arsenic in groundwater | Electric failure | Lack of diesel | Dispute with irrigation organization | Irrigation machine disfunction | Other

F62: [If F61 is "Other":] Specify (If chosen Other)

F63: When do you expect to plant on plot [Number]? Please tell me the month.

- April to May | May to June | June to July | July to August | August to September | September to October | October to November | November to December | December to January | January to February | February to March | March to April | Don't Know

F64: When do you expect to harvest from plot [Number]? Please tell me the month.

- April to May | May to June | June to July | July to August | August to September | September to October | October to November | November to December | December to January | January to February | February to March | March to April | Don't Know

F65: Has there ever been a pest or disease that has attacked the crops on plot [Number]?

- Yes | No | Don't know

F66: [If F65 is "Yes":] Which pest or disease? Please list all.

- Brown spot | Bacterial blight | Bacterial leaf streak | Sheath blight | Blast (leaf and collar) | Blast (neck) | Sheath rot | Tungro | Ufra | fungus | Rice stem borer | Brown plant hopper | Grasshopper | Yellow stem borer | Hispa | Other | Don't know

F67: [If F66 is "Other":] Specify (If chosen Other)

Please separate each different pest with a comma ",".

[Questions F68 and F69 are asked for each pest selected or mentioned in F66 and F67:]

F68: When was the last time pest [Pest] attacked crops on plot [Number]?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

F69: [If F68 is "8 or years more ago":] Year

Instructions: Enter 9999 if the respondent doesn't know.

F70: Do you think the soil on plot [Number] is salty?

- Yes | No | Don't know

F71: Do you expect to spray sugar water on plot [Number]?

- Yes | No | Don't know

F72: Have there been any events that have affected the salinity of the soil in this plot?

- Yes | No | Don't know

[F73 - F78 are asked on repeat as long as respondents have an additional event to report.]

F73: Collect information about one event at a time.

What was the event on plot [Number]? Please tell me about one event at a time in detail.

Instructions: Do not read out choices, but mark any that the respondent says.

- Fish pond nearby | Fish pond on this plot | Flood with salt water | Flood with freshwater | Flood with unspecified water | Rain at unexpected time | Not enough rain | Too much rain | Pest | Change in water quality | Other crop on this plot | Other

F74: [If F73 "Other" is selected:] Specify (If chosen Other)

F75: Plot [Number]: When did it happen?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

F76: [If F75 is "8 or more years ago":] Year

Instructions: Enter 9999 if the respondent doesn't know.

F77: Plot [Number]: As a result of that incident, the amount of salt in the soil on plot [Number] increased or decreased?

- Salinity increased | Salinity decreased | Salinity stayed the same | I don't know

F78: Has there been another event that affected the salinity of the soil in plot [Number]?

- Yes | No

F79: Plot [Number]: Have you done anything to change the salinity of the soil in plot [Number]?

- Yes | No | Don't know

[Questions F80 - F83 are repeated as long as the respondent has events to add.]

F80: Collect information about one event at a time.

What did you do on plot [Number]?

Instructions: Do not read out choices, but mark any that the respondent says.

- Change seed | Spray sugar | Add gypsum | Add fertilizer | Change water source | Other F81: Specify (If chosen Other)

F82: Did it increase or decrease the amount of salt on your soil in plot [Number]?

- Salinity increased | Salinity decreased | Salinity stayed the same | I don't know F83: Have you done anything else to change the salinity of the soil in plot [Number]?

- Yes | No

[The following two questions are asked in a random order.]

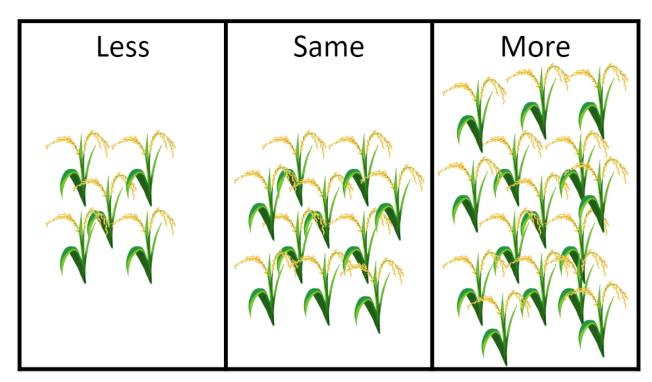
F84: Think back to 10 years ago. Do you think the amount of salt in the soil of this plot has increased, decreased, or stayed the same since then?

- Salinity increased | Salinity decreased | Salinity stayed the same | I don't know F85: Think about 10 years from now. Do you think the amount of salt in the soil of this plot will increase, decrease, or stay the same?
- Salinity will increase | Salinity will decrease | Salinity will stay the same | I don't know F86: Plot [Number]: How much do you expect to harvest from plot [Number]? Instructions: Enter 9999 if the respondent says they do not know.

F87: Unit

- Maunds | Kg

F88: Instructions: Prepare harvest picture



[The values of smaller and bigger value are the value from F86 minus and plus 10 percent of that value rounded to the nearest integer, with a minimum plus or minus value of 1 and a maximum plus or minus value of 10.]

F89: You just said you expect [Value from F86] amount of harvest on this plot for the boro crop this coming season. These pictures represent the amount of crops you might grow.

This picture means a scenario when you cultivate [Smaller value] or less from this plot.

This picture means a scenario when you cultivate [Bigger value] or more from this plot.

The middle picture represents that you cultivate between [Smaller value] and [Bigger value]. Do you clearly understand what is meant by the pictures?

- Yes | No

F90: Now place the buttons on the picture according to the amount of yield you expect from this land. You can put more buttons on the picture that best matches what you think will happen. Do you understand? This question is not about what you want to happen. This question is about what you think will happen.

- Yes | No

F91: Please place the buttons. [Enumerator records number of buttons on each category: low harvest | middle harvest | high harvest]

Instructions: Enter 99 if respondent says they do not know.

F92: [Shown only if sum of F91 does not equal 10.] Warning: The number of buttons did not add up to 10. Please go back and check.

F93: [Asked if F25 is greater than 0:] I'm now going to ask you some questions about last year. How much crop did you get from this plot last year during Boro season? Please tell me the amount in [unit from F87].

Instructions: Enter 9999 if the respondent says they do not know.

F94: [Asked if F25 is greater than 0:] Was the yield you got last year less than, more than, or equal to what you expected you would get last year?

- More | Less | Same | Don't know

F95: [If F94 is not "Same":] Why was the yield you got from the land different than you expected?

- Salinity was worse than I thought | Pest/disease was worse than I thought | Not enough rain | Issue with the water | Too much rain | Flood | Not enough fertilizer | Salinity was better than I thought | Rain was better than I thought | Pest/disease was better than I thought | Seed was worse than I thought | Other

F96: [If F95 is "Other":] Specify

F97: [If F40 is "No":] Do you think you will be able to grow more, the same amount, or less rice if you use seed 67 instead of the seed you are planning to use?

- More | Less | Same | Don't know

F98: [If F40 is "Yes":] Do you think if you use a seed that is not saline tolerant, you will grow more rice, the same amount of rice, or less rice?

- More | Less | Same | Don't know

F99: [If F97 or F98 is "More":] How much more? Please tell me the amount in [Unit from F87].

Instructions: Enter 9999 if the respondent says they do not know.

F100: [If F97 or F98 is "Less":] How much less? Please tell me the amount in [Unit from F87]. Instructions: Enter 9999 if the respondent says they do not know.

F101: Instructions: show harvest amount picture.

[Same picture as F88]

[The "less" and "more" values below are plus and minus 1 if the respondent reported units in maund and plus or minus 10 if the respondent reported units in kilograms, with negative values winsorized at 0.]

F102: [If F97 or F98 is "Less" and F99 is not 9999:] You have said that you expect to grow [Value from F99] less if you use this different seed. It may not be exactly that amount, but could be more or less. These pictures represent the difference in yield between these two seeds. Instructions: Point to middle image.

The middle image represents the [Value from F100] [unit from F87], the difference you just said. Instructions: Point to image with less harvest.

This image means a scenario when you expect to grow no more than [More] [unit from F87] less on this plot if you use this different seed.

Instructions: Point to image with more harvest.

This image means a scenario when you expect to grow [Less] [unit from F87] less on this plot if you use this different seed.

Do you understand what each picture means?

- Yes | No

F103: [If F97 or F98 is "More" and F100 is not 9999:] Thank you. We will now use the buttons again. You have said that you expect to grow [Value from F100] more if you use this different seed. These pictures represent the difference in yield between these two seeds.

Instructions: Point to middle image.

The middle image represents the [Value from F100], the difference you just said.

Instructions: Point to image with less harvest.

This image means a scenario when you expect to grow no more than [Less] more on this plot if you use this different seed.

Instructions: Point to image with more harvest.

This image means a scenario when you expect to grow at least [More] more on this plot if you use this different seed.

Do you understand what each picture means?

- Yes | No

[The questions below have the same calculations for Less and More as F102 and F103, except the default amount that is being added to and subtracted from is simply 1 if the respondent reported their crop in maund and 10 if the respondent reported in kilograms.]

F104: [If F99 is 9999:] You have said that you are not sure how much less you will grow if you use this different seed. These pictures represent the difference in yield between these two seeds. Instructions: Point to middle image.

The middle image represents growing [Default] less if you use this different seed.

Instructions: Point to image with less harvest.

This image means a scenario when you expect to grow no more than [Less] less on this plot if you use this different seed.

Instructions: Point to image with more harvest.

This image means a scenario when you expect to grow [More] less on this plot if you use this different seed.

Do you understand what each picture means?

- Yes | No

F105: [If F100 is 9999:] Thank you. We will now use the buttons again. You have said that you are not sure how much more you will grow if you use this different seed. These pictures represent the difference in yield between these two seeds.

Instructions: Point to middle image.

The middle image represents growing [Default] more on this plot if you use a different seed. Instructions: Point to image with less harvest.

This image means a scenario when you expect to grow no more than [Less] more on this plot if you use this different seed.

Instructions: Point to image with more harvest.

This image means a scenario when you expect to grow at least [More] more on this plot if you use this different seed.

Do you understand what each picture means?

- Yes | No

F106: [If F97 or F98 is "I don't know":] Thank you. We will now use the buttons again. You have said that you do not know whether you will grow the same amount if you use this different seed. These pictures represent the difference in yield between these two seeds.

Instructions: Point to middle image.

The middle image represents no difference.

Instructions: Point to image with less harvest.

This image means a scenario when you expect to grow at least [Less] less on this plot if you use this different seed

Instructions: Point to image with more harvest.

This image means a scenario when you expect to grow at least [More] more on this plot if you use this different seed.

Do you understand what each picture means?

- Yes | No

F107: Thank you. We will now use the buttons again. You have said that you expect to grow the same amount if you use this different seed. These pictures represent the difference in yield between these two seeds.

Instructions: Point to middle image.

The middle image represents no difference, the difference you just said.

Instructions: Point to image with less harvest.

This image means a scenario when you expect to grow at least [Less] less on this plot if you use this different seed.

Instructions: Point to image with more harvest.

This image means a scenario when you expect to grow at least [More] more on this plot if you use this different seed.

Do you understand what each picture means?

- Yes | No

F108: I would now like you to place the buttons on these pictures based on what you think the difference is. You should place more buttons on the picture that you think is more likely. Does that make sense?

- Yes | No

F109: Instructions: Count the number of buttons

Instructions: Enter 99 if respondent says they do not know.

F110: [If the sum of 109 is not 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

F111: [If F40 is "No":] Imagine that you were to plant 67. What is the payment you expect to receive per __of yield?

F112: Instructions: show rice height picture.



F113: This image shows pictures of rice plants at the end of the season, once they are fully grown. They are arranged from the best growing to the worst growing. The smallest ones grew the worst. The biggest plants grew the best. Plant number 1 is the least healthy, and plant number 7 is the most healthy.

F114: First, think about last year. Which of these pictures best matches the plants that grew on plot [Number] last year?

- First plant (far left) | Second plant | Third plant | Fourth plant | Fifth plant | Sixth plant | Seventh plant | Don't know

F115: I would now like to know how you think your own crops will fare this year. Think about the end of the season. What are your guesses about what your grown plant will look like on plot [Number]? Place the highest number of buttons on the image that best matches your guess. Remember, plant 7 is the healthiest and plant 1 is the least healthy.

F116: Count the number of buttons on plant 1 | Count the number of buttons on plant 2 | Count the number of buttons on plant 3 | Count the number of buttons on plant 4 | Count the number of buttons on plant 5 | Count the number of buttons on plant 6 | Count the number of buttons on plant 7

Instructions: Enter 99 if respondent says they do not know.

F117: [If sum of F116 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

F118: This is not a picture of your own plant, it is taken from a previous study. Researchers have grown rice seedlings under different conditions. This rice variety is not specially adapted for saline soils.

Instructions: Point to picture that has the biggest plant.

This picture shows the seed grown in soil with the least amount of salt.

Instructions: Point to picture that has the smallest plant.

This picture shows the seed grown in soil with the most amount of salt.

Instructions: Point to the pictures in the middle.

These pictures show seeds grown in increasing amounts of salt, from largest to smallest.

Do you have any questions about these plants?

F119: Instructions: show rice height picture.

[Same picture as F112]

F120: This photo comes from researchers who planted rice that is not saline tolerant in different soils with different amounts of salt. If they used your soil from the plot [Number], which of these pictures do you think would look most like the plant at the end of the season? We are asking this question because we are trying to understand how much salt you think is in your soil. You should assume that the researchers copy all aspects of your soil, such as the water and fertilizers you use over the season and the weather on your plot. Please place more buttons on the pictures that you think are more likely.

F121: Now place the buttons according to your guess on the picture. Count the number of buttons on plant 1 | Count the number of buttons on plant 2 | Count the number of buttons on plant 3 | Count the number of buttons on plant 4 | Count the number of buttons on plant 5 | Count the number of buttons on plant 6 | Count the number of buttons on plant 7 Instructions: Enter 99 if respondent says they do not know.

F122: [If F121 does not sum to 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

F123: How confident are you that your answer to the previous question is correct?

- Very confident | Somewhat confident | A little confident | Not confident at all

F124: Now instead of thinking about your soil today, answer the same question about the soil on your plot five years ago. Imagine that the researchers who planted rice that is not saline tolerant took the soil from the plot [Number] five years ago, and copied all aspects of the soil, like the water and fertilizers and weather at that time. Which of these pictures do you think would look most like the plant at the end of the season? Please place more buttons on the pictures that you think are more likely. We are asking this question because we are trying to understand how much salt you think was in your soil five years ago.

F125: Now place the buttons according to your guess on the picture. Count the number of buttons on plant 1 | Count the number of buttons on plant 2 | Count the number of buttons on plant 3 | Count the number of buttons on plant 4 | Count the number of buttons on plant 5 | Count the number of buttons on plant 6 | Count the number of buttons on plant 7 Instructions: Enter 99 if respondent says they do not know.

F126: [If sum of F125 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

F127: Now instead of thinking about your soil today or five years ago, answer the same question about the soil on your plot five years in the future. Imagine that the researchers who planted rice that is not saline tolerant took the soil from plot [Number] five years in the future, and copied all aspects of the soil, like the water and fertilizers and weather at that time. Which of these pictures do you think will look most like the plant at the end of the season? Please place more buttons on the pictures that you think are more likely. We are asking this question because we are trying to understand how much salt you think will be in your soil five years from now.

F128: Now place the buttons according to your guess on the picture. Count the number of buttons on plant 1 | Count the number of buttons on plant 2 | Count the number of buttons on plant 3 | Count the number of buttons on plant 4 | Count the number of buttons on plant 5 | Count the number of buttons on plant 6 | Count the number of buttons on plant 7 Instructions: Enter 99 if respondent says they do not know.

F129: [If sum of F128 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

F130: Are there any other seeds that you expect to plant on your other plots this dry season?

- Yes | No | Don't know

F131: [If F130 is "Yes":] Which seeds? [Options for seed list are same as F3]

F132: Specify name of seeds not found on the list, separating each different name with a comma: ",". For example: "67, 28"

[Questions F133 through F141 repeat for every unique seed mentioned in questions F38, F39, F131, and F132.]

F133: How much do you expect [Seed] to cost per kg?

F134: How many kg of [Seed] do you expect to buy this season?

F135: In your view, what are the most important features of [Seed]? Do not read out options to the respondent.

- Grain Yield | Grain Size | Insect/disease resistant | Flood tolerant | Saline tolerant |
Drought tolerant | Zinc enriched | Low labor required | Low input required | Ease of processing | Market demand | Good taste | Nice color | Good as animal feed | Others (specify) | None | Refuse to answer | Don't know

F136: Is this [Seed] saline tolerant?

- Yes | No | Don't know

F137: Is this [Seed] resistant to any insect or disease?

- Yes | No | Don't know

F138: [If F137 is "Yes":] Which pest or disease?

- Brown spot | Bacterial blight | Bacterial leaf streak | Sheath blight | Blast (leaf and collar) | Blast (neck) | Sheath rot | Tungro | Ufra | fungus | Rice stem borer | Brown plant hopper | Grasshopper | Yellow stem borer | Hispa | Other | Don't know

F139: [If F138 "Other" is selected:] Which pest or disease?

F140: What is the payment you expect to receive per [Unit from F87] of the yield for [Seed]? Instructions: Please enter 9999 for Don't Know. If the respondent says it could be a range, please enter the average.

F141: How would you rate the taste of [Seed] on a scale from 0 to 10, where 0 means that it tastes terrible, and 10 means that it tastes delicious?

F142: I now want to know about your other expenses related to your plots. Are you going to hire someone to help you farm this land?

- Yes | No | Don't know

F143: [If 141 is "Yes":] How much do you expect to spend on labor for all of your plots this season?

F144: Do you expect to purchase fertilizer this season?

- Yes | No | Don't know

F145: [If 144 is "Yes":] What kinds of fertilizer do you expect to purchase?

- Urea | TSP | DAP | MOP | Zinc | Ammonia | Gypsum | NPKS | Calcium | Lime | Manure | Compost | Other | Don't know

F146: [If 145, "Other" is selected:] Specify other fertilizer

F147: [If 144 is "Yes":] How much do you think you will spend on fertilizers this season?

F148: Which of these fertilizers, if any, do you think are good for addressing salinity?

- Urea | TSP | DAP | MOP | Zinc | Ammonia | Gypsum | NPKS | Calcium | Lime | Manure | Compost | Other | Don't know

F149: [If 148, "Other" is selected:] Specify other fertilizer

F150: How do you decide which fertilizers to buy and how much of each?

- I decide myself based on my experience/knowledge | I ask friends | I ask the dealer | I ask the SAAO | Other

F151: Do you expect to purchase pesticides this season?

- Yes | No | Don't know

F152: [If F151 is "Yes":] How much do you think pesticides will cost you this season?

F153: [If F14 is not "No":] How much do you expect to spend on sugar water this season?

F154: Do you expect to use any machinery this season that is not related to irrigation?

- Yes | No | Don't know

F155: [If F154 is "Yes":] How much do you think this machine will cost?

F156: Do you plan to purchase any other vitamins or anything else this season?

- Yes | No | Don't know

F157: [If F156 is "Yes":] How much do you think all these things will cost you?

F158: How do you cover the cost of irrigation?

- Cash | Cash and Cropshare | Cropshare | Other | Don't have to pay | Refuse to answer

F159: [If F158 is "Cash" or "Cash and Cropshare":] How much money do you think you will spend on irrigation this year?

F160: [If F158 is "Cropshare" or "Cash and Cropshare":] How much crop do you think you will need to exchange for irrigation this season?

F161: Unit

- Maund | Kg

Section G: Hypothetical Investment

[Respondents were randomized into one of four groups with equal probability.]

[Group 1 is G1-G6: Within this group, respondents were randomized into kilogram groups of 5, 10, 30, and 50 with equal probability, denoted by "Amount" below.]

- G1: Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 50 Tk for the vitamin. Would you buy it?
 - Yes | No
- G2: [If G1 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 100 Tk for the vitamin. Would you buy it?
 - Yes | No
- G3: [If G2 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 200 Tk for the vitamin. Would you buy it?
 - Yes | No
- G4: [If G3 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 300 Tk for the vitamin. Would you buy it?
 - Yes | No
- G5: [If G4 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 400 Tk for the vitamin. Would you buy it?
 - Yes | No

G6: [If G5 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 500 Tk for the vitamin. Would you buy it?

- Yes | No

[Group 2 is G7–G11: Within this group, respondents were randomized into kilogram groups of 5, 10, 30, and 50 with equal probability, denoted by "Amount" below.]

- G7: Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 500 Tk for the vitamin. Would you buy it?
 - Yes | No

G8: [If G7 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 400 Tk for the vitamin. Would you buy it?

- Yes | No

G9: [If G8 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 300 Tk for the vitamin. Would you buy it?

- Yes | No

G10: [If G9 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 200 Tk for the vitamin. Would you buy it?

- Yes | No

G11: [If G19 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 100 Tk for the vitamin. Would you buy it?

- Yes | No

G12: [If G11 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by [Amount] kg. It costs 50 Tk for the vitamin. Would you buy it?

- Yes | No

[Group 3 is G13–G19: Within this group, respondents were randomized into prices of 50, 100, 300, and 500 with equal probability, denoted by "Amount" below.]

G13: Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 1 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G14: [If G13 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 5 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G15: [If G14 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 10 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G16: [If G15 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 20 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G17: [If G16 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 30 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G18: [If G17 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 40 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G19: [If G18 is "No":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 50 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

[Group 4 is G20–G26: Within this group, respondents were randomized into prices of 50, 100, 300, and 500 with equal probability, denoted by "Amount" below.]

G20: Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 50 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G21: [If G19 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 40 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G22: [If G20 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 30 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G23: [If G21 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 20 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G24: [If G22 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 10 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G25: [If G23 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 5 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

G26: [If G24 is "Yes":] Imagine that there was a vitamin that you could spray on your plot. You knew it would definitely increase your harvest by 1 kg. It costs [Amount] Tk for the vitamin. Would you buy it?

- Yes | No

Section H: Village and Household Characteristics

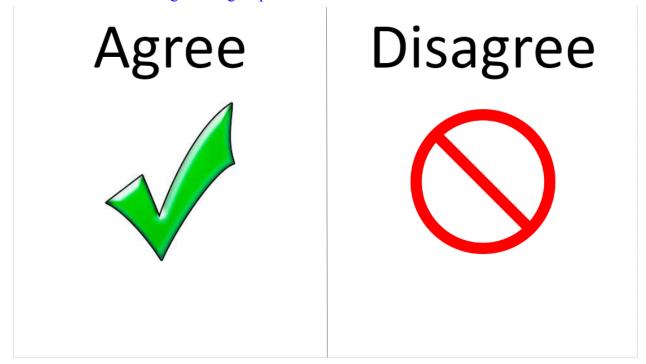
H1: Do you agree with the following statement: Salinity is a big problem on my soil

- Strongly disagree | Slightly disagree | Neither agree or disagree | Slightly agree | Strongly agree | Don't know

H2: Do you agree with the following statement: I know how to properly address salinity on my plots.

- Strongly disagree | Slightly disagree | Neither agree or disagree | Slightly agree | Strongly agree | Don't know

H3: Instructions: Show agree disagree picture.



H4: Think about all the people in your village. I will say a statement now. Tell me how many people in your village will agree to this statement using these 10 buttons. In other words, if you were to talk to ten of your neighbors, how many of them would agree with this statement? H5: "Salinity is a big problem on my soil." How many of your neighbors would agree with that statement? Move more buttons to the agree if you think more of your neighbors would agree.

H6: Count the number of buttons on Agree | Count the number of buttons on Disagree H7: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

H8: [If the sum of H6 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

H9: "I know how to properly address salinity on my plots." How many of your neighbors would agree with that statement? Move more buttons to the agree if you think more of your neighbors would agree.

H10: Count the number of buttons on Agree | Count the number of buttons on Disagree H11: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

H12: [If the sum of H10 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

H13: What other sources of income do you expect this household to receive during the Boro season? Please select all that apply.

- Other employment | Migrant remittances | Other crops (non Boro) | Other | None H14: [If H13 is "Other employment"] Specify other type of employment.
 - Wage Labor | Salaried worker | Self-employment | Trader | Non-earning occupation | Livestock Poultry related work/occupation | Farming | Other

H15: Specify [The following occupations only appear for each corresponding category selected from H14, denoted in brackets below.]

- [Wage labor:] Agricultural day labor | Earth work (govt program) | Earth work (other) |
 Sweeper | Scavenger | Tea garden worker | Construction labor | Factory worker |
 Transport worker (bus/truck helper) | Apprentice | Other wage labor (specify)
- [Salaried worker:] Government/ parastatal | Service (private sector) | NGO worker | House maid | Teacher (GoB-Primary school) | Teacher (Non GoB Primary school) | Teacher (GoB High school) | Teacher (Non-GoB High school) | Teacher (college,university) | Other salaried worker(specify)
- [Self-Employment:] Rickshaw/van pulling | Driver of motor vehicle | Tailor/seamstress |
 Blacksmith | Potter | Cobbler | Hair cutter | Clothes washer | Porter |
 Goldsmith/silversmith | Repairman (appliances) | Mechanic (vehicles) | Plumber |
 Electrician | Carpenter | Mason | Doctor | Rural physician | Midwife | Herbal doctor/Kabiraj | Engineer | Lawyer/deed writer/Moktar | Religious leader (Imam/Muazzem/Khadem/Purohit) | Lodging master | Private tutor/house tutor | Beggar
- [Trader:] Small trader (roadside stand or stall) | Medium trader (shop or small store) | Large trader (large shop or whole sale) | Fish Trader | Contractor | Production | Food Processing | Small industry | Handicrafts
- *[Livestock:]* Milk collector | Livestock Vet medicine seller | Livestock Feed supplier | Commercially feed producer | Animal Breeder | Veterinary/paravet doctor
- [Farming:] Working own farm (crop) | Share cropper/tenant | Homestead farming |
 Fisherman (using non owned/not leased water body) | Raising fish / fish pond | Raising
 poultry | Raising livestock | Dairy production/ dairy farming | Other self employed
 (specify)
- [Non-Earning Occupation:] Student | Housewife | Retired | Child(age <12 no study/work) | Physically/mentally challenged | Jobless | Other

H16: [If H15 is "other":] Please enter name of job if not found in list

H17: [If H14 is "other":] Specify other source of income

- H18: [If H13 is "other crops":] Specify other crops
- H19: What was your total household earnings in the past 12 months?
- H20: How many people live in this village?
- H21: How many boro farmers are in your village?
- H22: Think about your village five years ago. How many boro farmers were in your village then?
- H23: How many shrimp or prawn farmers are in your village?

Section I: Willingness to Pay

- I1: As a thank you for your time in this survey, I'm going to give you 500 Tk.
- I2: Instruction: Hand the respondent 500 Tk.
- I3: I must report to my supervisor with proof that you actually received the money. Could I please take a photo of you holding the money? Your face does not need to be in the picture.
- I4: Photograph
- I5: I would like to give you the opportunity to purchase some products. You can use the money I gave you to purchase these products. It may be a little more complicated than the process you are usually used to. I will explain the whole process to you. If you have any questions about anything you can ask me, and I will try to explain to you as best I can.
- I6: Today you will be given the opportunity to buy three things. I will describe each item in detail to you. To show you how the process works, we will practice with this pen. This is just for practice. If you have any questions about anything you can let me know. I will try my best to answer your questions.
- I7: I am going to say a price and ask whether you would like to buy this pen. I will start at a price of 10 Taka. You should say whether or not you would like the pen for 10 Taka. If you say yes, then I will ask you again at a slightly higher price. I will keep asking until you say you would not want to buy the pen.
- I8: Then, the tablet is going to tell us the price of the pen. I do not know this price yet. This price is going to be random. If you said that you would buy the pen for that price, then you will have to buy it. If you said you would not buy the pen for that price, then you will not buy it. You cannot change your mind after the price is shown.
- I9: Keep in mind, I am not asking you to guess what the price might be if you go out and buy it somewhere. Instead, I would like to know the maximum amount you are willing to pay to purchase this pen. The answers that you give might be different from someone else because you might care about the pen more or less.
- I10: Please remember, you will get the most if you honestly answer each question. For example, imagine you are willing to pay 20 taka for this pen, but when I ask you if you are, you say no. Then, if the tablet shows a price of 20, in that case even if you are willing to pay for it, you won't be able to buy it. Also keep in mind that it is not good to say you would be willing to buy it if you aren't. If you are not willing to buy the pen for 30 taka, but you say you are, then if the tablet shows a price of 30, you will still have to buy the pen. After the tablet shows you the price of the item, you cannot change your mind. That's why you should think very carefully before answering each question.
- II1: Let's practice with this pen. Would you be willing to buy this pen for 10 Taka?
 - Yes | No
- I12: [If I11 is "No":] Would you be willing to take this pen for 0 Taka? It would be free.
 - Yes | No
- I13: [If I11 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 20 Taka?

- Yes | No

I14: [If I13 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 30 Taka?

- Yes | No

I15: [If I14 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 40 Taka?

- Yes | No

I16: [If I15 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 50 Taka?

- Yes | No

I17: [If I16 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 60 Taka?

- Yes | No

I18: [If I17 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 70 Taka?

- Yes | No

I19: [If I18 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 80 Taka?

- Yes | No

I20: [If I19 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 90 Taka?

- Yes | No

I21: [If I20 is "Yes":] Let's practice with this pen. Would you be willing to buy this pen for 100 Taka?

- Yes | No

I22: [If I12 is "No":] Just to make sure, you said you would not want this pen even if it is free. That means that no matter what price the tablet shows, you will not get this pen. Is this what you mean? Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

[Based on the respondents' answers to the above question, their willingness to pay for a pen is calculated and denoted by WTP Pen below.]

I23: Just to make sure, you said you would buy this pen for [WTP Pen] Taka, but no higher. That means that if the tablet shows a price that is higher than [WTP Pen] Taka, then you cannot buy the pen. If it shows any price that is [WTP Pen] Taka or lower, then you will have to buy the pen for the price shown on the tablet. Is this what you mean?

Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

I24: Now the tablet is going to show us the random price. [Random price shown, denoted by Pen Price below.]

125: [If price is higher than willingness to pay:] [Pen Price] Taka

Because this price is bigger than what you said you will be willing to pay, you would not buy the pen.

I26: [If price is lower than or equal to willingness to pay:] [Pen Price] Taka

Before, you said you would be willing to buy the pen for any price up to [WTP Pen]. This tablet shows a price of [Pen Price] Taka, so you have to buy it for [Pen Price] taka. This is a practice question, so you don't have to buy the pen now for [Pen Price] taka. But if the price shown on the tab during the main questions is less than the price you asked, then you have to buy the item. You can no longer say "I won't buy".

I27: Do you have any questions about this process? Instruction: If the respondent says yes, answer their questions. If they say no, then move on.

I28: Now we have done the practice, we will move on to the real items. The way you will buy them is exactly the same as with the pen. Today you will be given the opportunity to buy three things. I will describe each item to you. If you have any questions, I will try my best to answer them. We will start with this plate. Instruction: Hand plate to respondent.

I29: Just like with the pen, I am going to say a price and ask whether you would like to buy this plate. I will start at a price of 10 Taka. You should say whether or not you would like the plate for 10 Taka. If you say yes, then I will ask you again at a slightly higher price. I will keep asking until you say you would not want to buy the item.

I30: As a reminder, if the tablet price is lower than a price that you say you would buy the item, then you will have to buy it.

I31: Would you be willing to buy the plate for 10 taka?

- Yes | No

I32: [If I31 is "No":] Would you be willing to take the plate for 0 taka? That means you would get it for free.

- Yes | No

133: [If 132 is "Yes":] Would you be willing to buy the plate for 20 taka?

- Yes | No

I34: [If I33 is "Yes": Would you be willing to buy the plate for 30 taka?

- Yes | No

I35: [If I34 is "Yes":] Would you be willing to buy the plate for 40 taka?

- Yes | No

I36: [If I35 is "Yes":] Would you be willing to buy the plate for 50 taka?

- Yes | No

137: [If 136 is "Yes":] Would you be willing to buy the plate for 60 taka?

- Yes | No

I38: [If I37 is "Yes":] Would you be willing to buy the plate for 70 taka?

- Yes | No

I39: [If I38 is "Yes":] Would you be willing to buy the plate for 80 taka?

- Yes | No

I40: [If I39 is "Yes":] Would you be willing to buy the plate for 90 taka?

- Yes | No
- I41: [If I40 is "Yes":] Would you be willing to buy the plate for 100 taka?
 - Yes | No
- I42: [If I41 is "Yes":] Would you be willing to buy the plate for 110 taka?
 - Yes | No
- I43: [If I42 is "Yes":] Would you be willing to buy the plate for 120 taka?
 - Yes | No
- I44: [If I43 is "Yes":] Would you be willing to buy the plate for 130 taka?
 - Yes | No
- I45: [If I44 is "Yes":] Would you be willing to buy the plate for 140 taka?
 - Yes | No
- I46: [If I45 is "Yes":] Would you be willing to buy the plate for 150 taka?
 - Yes | No
- I47: [If I46 is "Yes":] Would you be willing to buy the plate for 160 taka?
 - Yes | No
- I48: [If I47 is "Yes":] Would you be willing to buy the plate for 170 taka?
 - Yes | No
- I49: [If I48 is "Yes":] Would you be willing to buy the plate for 180 taka?
 - Yes | No
- I50: [If I49 is "Yes":] Would you be willing to buy the plate for 190 taka?
 - Yes | No
- I51: [If I50 is "Yes":] Would you be willing to buy the plate for 200 taka?
 - Yes | No
- I52: [If I32 is "No":] Just to make sure, you said you would not want this plate even if it is free. That means that no matter what price the tablet shows, you will not get this plate. Is this what you mean? Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

[Based on the respondents' answers to the above question, their willingness to pay for a plate is calculated and denoted by WTP Plate below.]

I53: Just to make sure, you said you would buy this plate for [WTP Plate] Taka, but no higher. That means that if the tablet shows a price that is higher than [WTP Plate] Taka, then you cannot buy the plate. If it shows any price [WTP Plate] Taka or lower, then you will have to buy the plate for the price shown on the tablet. Is this what you mean? Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

I54: Now the tablet is going to show us the random price. [Random price shown, denoted by Plate Price below.]

155: [If Plate Price is greater than WTP Plate:] [Plate Price] Taka

Because this price is bigger than what you said you will be willing to pay, you will not buy the plate.

156: [If Plate Price is less than or equal to WTP Plate:] [Plate Price] Taka

Before, you said you would be willing to buy the plate for any price up to [WTP Plate]. This tablet shows a price of [Plate Price] Taka, so you have to buy it for [Plate Price].

I57: Instruction: Please collect [Plate Price] Taka from the respondent and give them the plate.

I58: The next item is a voucher for the Day-7 store in Khulna city, a supermarket located in New Market. It sells groceries and other home goods. Instruction: Give voucher to respondent.

I59: This voucher is worth 500 Taka that you can use only at that store. You can use this to buy 500 Taka worth of things like groceries, such as rice or oil, soap, plastic containers, cutlery, pots or pans, or clothes. There is no farming equipment. You cannot exchange this voucher for cash. You can only use it to buy things at the store. The address of the store is written on the voucher. The voucher never expires. Because you do not live in Khulna, this voucher will be more useful to you if you think that you or someone else in your household will probably be migrating to Khulna city. If you are living in the city, then the voucher can be useful to buy things you will need.

If I am going to say a price and ask whether you would like to buy this voucher. I will start at a price of 0 Taka, so the voucher will be free. You should say whether or not you would like the voucher for free. If you say yes, then I will ask you again at a slightly higher price. I will keep asking until you say you would not want to buy the voucher.

I61: As a reminder, if the tablet price is lower than a price that you say you would buy the item, then you will have to buy it.

I62: Would you be willing to buy the voucher for 20 taka?

- Yes | No

I63: [If I62 is "No":] Would you be willing to take the voucher for 0 taka? That means you would get it for free.

- Yes | No

I64: [If I63 is "Yes":] Would you be willing to buy the voucher for 40 taka?

- Yes | No

I65: [If I64 is "Yes":] Would you be willing to buy the voucher for 60 taka?

- Yes | No

I66: [If I65 is "Yes":] Would you be willing to buy the voucher for 80 taka?

- Yes | No

I67: [If I66 is "Yes":] Would you be willing to buy the voucher for 100 taka?

- Yes | No

I68: [If I67 is "Yes":] Would you be willing to buy the voucher for 120 taka?

- Yes | No

I69: [If I68 is "Yes":] Would you be willing to buy the voucher for 140 taka?

- Yes | No

I70: [If 169 is "Yes":] Would you be willing to buy the voucher for 160 taka?

- Yes | No

I71: [If I70 is "Yes":] Would you be willing to buy the voucher for 180 taka?

- Yes | No

- I72: [If I71 is "Yes":] Would you be willing to buy the voucher for 200 taka?
 - Yes | No
- I73: [If I72 is "Yes":] Would you be willing to buy the voucher for 220 taka?
 - Yes | No
- I74: [If I73 is "Yes":] Would you be willing to buy the voucher for 240 taka?
 - Yes | No
- I75: [If I74 is "Yes":] Would you be willing to buy the voucher for 260 taka?
 - Yes | No
- I76: [If I75 is "Yes":] Would you be willing to buy the voucher for 280 taka?
 - Yes | No
- I77: [If I76 is "Yes":] Would you be willing to buy the voucher for 300 taka?
 - Yes | No
- I78: [If I77 is "Yes":] Would you be willing to buy the voucher for 320 taka?
 - Yes | No
- 179: [If 178 is "Yes":] Would you be willing to buy the voucher for 340 taka?
 - Yes | No
- I80: [If I79 is "Yes":] Would you be willing to buy the voucher for 360 taka?
 - Yes | No
- I81: [If I80 is "Yes":] Would you be willing to buy the voucher for 380 taka?
 - Yes | No
- I82: [If I81 is "Yes":] Would you be willing to buy the voucher for 400 taka?
 - Yes | No
- I83: [If I82 is "Yes":] Would you be willing to buy the voucher for 420 taka?
 - Yes | No
- I84: [If I83 is "Yes":] Would you be willing to buy the voucher for 440 taka?
 - Yes | No
- I85: [If I84 is "Yes":] Would you be willing to buy the voucher for 460 taka?
 - Yes | No
- I86: [If I85 is "Yes":] Would you be willing to buy the voucher for 480 taka?
 - Yes | No
- I87: [If I86 is "Yes":] Would you be willing to buy the voucher for 500 taka?
 - Yes | No
- I88: [If 163 is "No":] Just to make sure, you said you would not want this voucher even if it is free. That means that no matter what price the tablet shows, you will not get this voucher.
- Is this what you mean? Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

[Based on the respondents' answers to the above questions, their willingness to pay for a pen is calculated and denoted by WTP Voucher below.]

I89: Just to make sure, you said you would buy this voucher for [WTP Voucher] Taka, but no higher. That means that if the tablet shows a price that is higher than [WTP Voucher] Taka, then

you cannot buy the voucher. If it shows any price [WTP Voucher] Taka or lower, then you will have to buy the voucher for the price shown on the tablet. Is this what you mean? Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

I90: Now the tablet is going to show us the random price. [Random price shown, denoted by Voucher Price below.]

191: [If Voucher Price is greater than WTP Voucher:] [Voucher Price]

Because this price is bigger than what you said you will be willing to pay, you will not buy the voucher.

192: [If Voucher Price is less than or equal to WTP Voucher:] [Voucher Price]

Before, you said you would be willing to buy the voucher for any price up to [WTP Voucher].

This tablet shows a price of [Voucher Price] Taka, so you have to buy it for [Voucher Price].

I93: Instruction: Please collect [Voucher Price] Taka from the respondent and give them the voucher.

I94: The last item is a 1 kg packet of BRRI 67, a saline resistant seed for the Boro season. This seed has been designed to grow well even if the soil has a lot of salt in it.

I95: Show respondent seed packet.

In I am going to say a price and ask whether you would like to buy this seed packet. I will start at a price of 10 Taka. You should say whether or not you would like the seed packet for 10 Taka. If you say yes, then I will ask you again at a slightly higher price. I will keep asking until you say you would not want to buy the seed packet.

197: As a reminder, if the tablet price is lower than a price that you say you would buy the item, then you will have to buy it.

198: Would you be willing to buy the seed packet for 10 taka?

- Yes | No

I99: [If 197 is "No":] Would you be willing to take the seed packet for 0 taka? That means you would get it for free.

- Yes | No

100: [If 197 is "Yes":] Would you be willing to buy the seed packet for 20 taka?

- Yes | No

I101: [If I99 is "Yes":] Would you be willing to buy the seed packet for 30 taka?

- Yes | No

1102: [If 1100 is "Yes":] Would you be willing to buy the seed packet for 40 taka?

- Yes | No

I103: [If I101 is "Yes":] Would you be willing to buy the seed packet for 50 taka?

- Yes | No

I104: [If I102 is "Yes":] Would you be willing to buy the seed packet for 60 taka?

- Yes | No

I105: [If I103 is "Yes": Would you be willing to buy the seed packet for 70 taka?

- Yes | No

- 1106: [If 1104 is "Yes":] Would you be willing to buy the seed packet for 80 taka?
 - Yes | No
- I107: [If I105 is "Yes":] Would you be willing to buy the seed packet for 90 taka?
 - Yes | No
- I108: [If I106 is "Yes":] Would you be willing to buy the seed packet for 100 taka?
 - Yes | No
- I109: [If I107 is "Yes":] Would you be willing to buy the seed packet for 110 taka?
 - Yes | No
- I110: [If I108 is "Yes":] Would you be willing to buy the seed packet for 120 taka?
 - Yes | No
- I111: [If I109 is "Yes":] Would you be willing to buy the seed packet for 130 taka?
 - Yes | No
- I112: [If I110 is "Yes":] Would you be willing to buy the seed packet for 140 taka?
 - Yes | No
- I113: [If I111 is "Yes":] Would you be willing to buy the seed packet for 150 taka?
 - Yes | No
- I114: [If I112 is "Yes":] Would you be willing to buy the seed packet for 160 taka?
 - Yes | No
- I115: [If I113 is "Yes":] Would you be willing to buy the seed packet for 170 taka?
 - Yes | No
- I116: [If I114 is "Yes":] Would you be willing to buy the seed packet for 180 taka?
 - Yes | No
- I117: [If I115 is "Yes":] Would you be willing to buy the seed packet for 190 taka?
 - Yes | No
- I118: [If I116 is "Yes":] Would you be willing to buy the seed packet for 200 taka?
 - Yes | No
- I119: [If 198 is "No":] Just to make sure, you said you would not want this seed packet even if it is free. That means that no matter what price the tablet shows, you will not get this seed packet. Is this what you mean? Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

[Based on the respondents' answers to the above questions, their willingness to pay for a pen is calculated and denoted by WTP Seed below.]

I120: Just to make sure, you said you would buy this seed packet for [WTP Seed] Taka, but no higher. That means that if the tablet shows a price that is higher than [WTP Seed] Taka, then you cannot buy the seed packet. If it shows any price [WTP Seed] Taka or lower, then you will have to buy the seed packet for the price shown on the tablet. Is this what you mean? Instruction: If the respondent says yes, then continue. If they say no, then go back and ask the previous question again.

I121: Now the tablet is going to show us the random price. [Random price shown, denoted by Seed Price below.]

I122: [If Seed Price is bigger than WTP:] [Seed Price] Taka

Because this price is bigger than what you said you will be willing to pay, you will not buy the seed packet.

I123: [If Seed Price is less than or equal to WTP:] [Seed Price] Taka

Before, you said you would be willing to buy the seed packet for any price up to [WTP Seed]. This tablet shows a price of [Seed Price] Taka, so you have to buy it for [Seed Price].

I124: Instruction: Please collect [Seed Price] Taka from the respondent and give them the seed packet.

Section J: Rainfall Beliefs

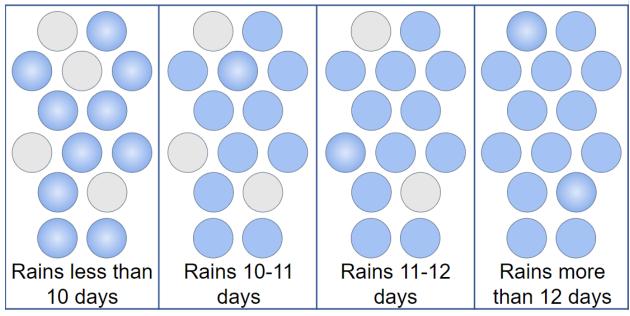
[Respondents are randomly assigned to one of two arms. Those assigned to Arm #1 are asked the questions in Section J.]

J1: Did you plant rice during the last rainy season?

- Yes | No

J2: Instructions: Get rainfall picture.

For every two weeks of the monsoon season...



J3: I'm now going to ask you about how much it rained during the monsoon season from the beginning of জৈঠ [May/June in Bengali Calendar] to the end of আখিল [September/October in Bengali Calendar]. It's okay if you don't know for certain, you should just make your best guess. You can put buttons on multiple squares if you think that there are multiple possibilities. There are six months in this period. I'm going to ask you about how much it rained in this village. For this question, you should say that it rained on a day if it rained for at least an hour with normal size drops. I'm going to use this picture to help explain. The pictures show different scenarios about how much it rained in this period. In the first, it shows that for every two weeks during this period, it rained between 10 and 11 days. In the third, it shows that for every two weeks during this period, it rained between 11 and 12 days. In the fourth, it shows that for every two weeks during this period, it rained on more than 12 of those days. Do you have any questions about each of these scenarios?

- Yes | No

J4: Now, think about how much rain is necessary for your crops to grow without any problems. Please place the buttons below on the pictures that you think represent how much rain is necessary. Do not put buttons on the amount of rain that you think will hurt your crops.

J5: Count the number of buttons on fewer than 10 days | Count the number of buttons on 10-11 days | Count the number of buttons on 11-12 days | Count the number of buttons on more than 12 days

Instructions: Enter 99 if respondent says they do not know. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

J6: [If sum of J5 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

J7: [If J5 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

[Respondents were randomly assigned a value for how many years in the past they were asked about: 1, 5, and 10 with equal probability, denoted by "Past Gap" below. Additionally, respondents were randomized into different question orders. Some respondents were asked about rain 10 years in the future first; then rain in 2022; then rain in the past. Others were asked first about rain in the past; then rain in 2022; then rain in the future. Some were asked about 2022 first; then rain in the past; then rain in the future. Finally, some were asked about 2022 first, then rain in the future; then rain in the past.]

[Rain in the future group includes questions J8 through J11:]

J8: I'm now going to ask you to place buttons on the scenario that you think will happen 10 years from now, 2032. You may not know exactly, so you should put more buttons on the scenario that you think is most likely to happen. How much rain do you think will occur in this village during the monsoon season 10 years from now in 2032?

J9: Count the number of buttons on fewer than 10 days | Count the number of buttons on 10-11 days | Count the number of buttons on 11-12 days | Count the number of buttons on more than 12 days

Instructions: Enter 99 if respondent says they do not know. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

J10: [If J9 does not sum to 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

J11: [If J10 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

[Rain in 2022 group includes questions J12 through J15:]

J12: I'm now going to ask you to place buttons on the scenario that happened this past year, 2022. You may not remember exactly, so you should put more buttons on the scenario that you think is most likely to have happened. How much rain occurred in this village during this season in 2022?

J13: Count the number of buttons on fewer than 10 days | Count the number of buttons on 10-11 days | Count the number of buttons on 11-12 days | Count the number of buttons on more than 12 days

Instructions: Enter 99 if respondent says they do not know. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

J14: [If J13 does not sum to 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

J15: [If J13 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

[Rain in past group includes questions J16 through J19:]

J16: I'm now going to ask you to place buttons on the scenario that happened [Past Gap] years ago, [2022 - Past Gap]. You may not remember exactly, so you should put more buttons on the scenario that you think is most likely to have happened. How much rain occurred in this village during this season [Past Gap] years ago in [2022 - Past Gap]?

J17: Count the number of buttons on fewer than 10 days | Count the number of buttons on 10-11 days | Count the number of buttons on 11-12 days | Count the number of buttons on more than 12 days

Instructions: Enter 99 if respondent says they do not know. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

J18: [If J17 does not sum to 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

J19: [If J17 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

J20: Do you think that rainfall patterns of 10 years ago are different than they are today?

- Yes | No

J21: [If J20 is "Yes":] How do you think the rainfall patterns have changed?

- Years with low amounts of rain are more common today than 10 years ago | Years with high amounts of rain are more common today than 10 years ago | Rain is less predictable today | Raindrops are smaller today than 10 years ago | Raindrops are bigger today than 10 years ago | Rain intensity has increased (water per hour) | Rain intensity has decreased (water per hour)

J22: Do you think that rainfall patterns of today are different than they will be in 10 years?

- Yes | No

J23: [If J22 is "Yes":] How do you think the rainfall patterns will change?

- Years with low amounts of rain will become more common | Years with high amounts of rain will become more common | Rain will become less predictable | Rain drops will become smaller | Rain drops will become bigger | Rain intensity will increase (water per hour) | Rain intensity will decrease (water per hour)

Section K: Flooding Beliefs

K1: I would now like to ask you some questions about the flood. By flood I mean unexpected and unwanted water enters your land or house and covers the ground. I only want you to think of a flood happening to you if it covers at least half of one of your plots, or the water is touching your house. Do you understand this definition of flood?

- Yes | No

K2: Have you experienced flooding on your plots or at your house before?

- Yes | No

[Respondents were randomly asked either K3 or K4:]

K3: I will now ask you about each flood. We'll start with the most recent flood you remember.

K4: I will now ask you about each flood. Let's start with the oldest flood you remember.

[Respondents were asked about floods in a loop, with the number of each loop denoted by Number:]

Instruction: Please click "add group" when it appears on the next screen.

K5: I'm now going to ask you about flood [Number].

K6: When did this flood occur?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

K7: [If K6 is "8 or more years ago":] Year

Instructions: Enter 99 if respondent doesn't know.

K8: [If K6 is "0 years ago":] Was this flooding part of Cyclone Sitrang?

- Yes | No | Don't know

K9: [If K6 is "0 years ago":] You said that a flood occurred on your plots or at your house this year. Which month?

- April to May | May to June | June to July | July to August | August to September | September to October | October to November | November to December | December to January | January to February | February to March | March to April | Don't Know

K10: How long did this flood last?

one day of flood | 1-3 days of flood | 3 days - 1 week of flood | 1 week to 1 month of flood | more than 1 month of flood | Don't know

K11: Did that flood harm your crops?

- Yes | No | Don't know

K12: How much of your harvest was damaged because of the flood?

- None | A quarter | A half | Three quarters | All | Don't Know

K13: Was your house damaged because of that flood?

- Yes | No | Don't know

K14: How much damage was done to your house? Try to estimate the amount in terms of how much Taka it would cost to fix.

Instructions: Enter 9999 if the respondent doesn't know.

K15: Can you remember another flood?

- Yes | No | Don't know

[If K15 is "Yes", loop repeats.]

[Respondents are randomly assigned to one of two arms. Those assigned to Arm #1 are asked the following questions in Section K.]

K16: Instructions: Get flood photo.

No Flood	1 Day of Flooding	1-3 Days of Flooding
3 Days - 1 Week of Flooding	1 Week - 1 Month of Flooding	More than 1 Month of Flooding

K17: I'm now going to ask you about flooding in the next 12 months. These pictures represent different amounts of flooding that might have occurred. The first picture shows no flooding that occurred on your land or plots. The second shows flooding that lasts for no more than one day. The third shows flooding that lasts more than one day but not more than three days. The fourth shows flooding that lasts more than three days but less than a week. The fifth shows flooding that lasts for more than a week but less than a month. The sixth shows flooding that lasts more than a month. If you think multiple floods happen, then you should add up the total number of days of flooding. For instance, if you think there will be one flood for three days and one flood for a week, then you should say that there was flooding for more than a week. Do you have any questions about these pictures?

- Yes | No | Don't know

K18: I will now ask you some questions about next year's floods. I would like to know your best estimate of how much flooding is likely to occur in the next 12 months. Place the buttons on this image according to your guess. If the flood conditions shown in an image closely match your guess, you can place more buttons on that image. Do you understand the process?

- Yes | No | Don't know

K19: Place the buttons on the picture according to your guess. Count the number of buttons on No flood | Count the number of buttons on 1-3 days of flood | Count the number of buttons on 3

days - 1 week of flood | Count the number of buttons on 1 week to 1 month of flood | Count the number of buttons on more than 1 month of flood

Instructions: Enter 99 if respondent says they do not know. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

K20: [If K19 does not sum to 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

K21: [If K19 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

K22: Now, instead of just thinking about the next 12 months, you think about all of the flooding that might occur in the next five years. Think about the type of flooding your land might experience during that entire time. Please place buttons on these images, placing more buttons on the image that most closely matches how many total days of flooding you think your land will experience in the next five years. Count the number of buttons on No flood | Count the number of buttons on 1-3 days of flood | Count the number of buttons on 3 days - 1 week of flood | Count the number of buttons on 1 week to 1 month of flood | Count the number of buttons on more than 1 month of flood

Instructions: Enter 99 if respondent says they do not know. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

K23: [If K22 does not sum to 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

K24: [If K22 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

K25: How many years do you think it would take for a one-day long flood to happen in this village?

K26: How many years do you think it would take for a three-day long flood to happen in this village?

K27: How many years do you think it would take for a week long flood to happen in this village? K28: How many years do you think it would take for a month-long flood to happen in this village?

K29: I would like to know your estimate of the amount of damage in case of flood. Think about the flood situation in each of these pictures. I will ask you about each situation. For each scenario, I would like to know what you think the average amount of damage to your crops and property would be if this amount of flooding occurred. Do you have any questions about this?

- Yes | No | Don't know

K30: How much of your harvest do you think would be damaged from a flood that lasts less than one day?

- None | A quarter | A half | Three quarters | All | Don't know

K31: What is the average amount of damage to your home that you think might happen from a flood that lasts less than one day? Instructions: Enter "99" if the respondent says they do not know.

K32: How much of your harvest do you think would be damaged from a flood that lasts one to three days?

- None | A quarter | A half | Three quarters | All | Don't know

K33: What is the average amount of damage to your home that you think might happen from a flood that lasts one to three days?

Instructions: Enter "99" if the respondent says they do not know.

K34: How much of your harvest do you think would be damaged from a flood that lasts three days to one week?

- None | A quarter | A half | Three quarters | All | Don't know

K35: What is the average amount of damage to your home that you think might happen from a flood that lasts three days to one week?

Instructions: Enter "99" if the respondent says they do not know.

K36: How much of your harvest do you think would be damaged from a flood that lasts more than one week but less than one month?

- None | A quarter | A half | Three quarters | All | Don't know

K37: What is the average amount of damage to your home that you think might happen from a flood that lasts more than one week but less than one month?

Instructions: Enter "99" if the respondent says they do not know.

K38: How much of your harvest do you think would be damaged from a flood that lasts more than one month?

- None | A quarter | A half | Three quarters | All | Don't know

K39: What is the average amount of damage to your home that you think might happen from a flood that lasts more than one month?

Instructions: Enter "99" if the respondent says they do not know.

- None | A quarter | A half | Three quarters | All | Don't know

K40: Have you ever changed what you grow or what livelihood you do because you are worried about floods?

- Yes | No

K41: [If K40 is "Yes":] What did you change?

- Changed crops | Changed plots | Got new job | Became a fisherman | Other

K42: [If K41 is "Other":] Specify

K43: [If K41 is "Changed crops" or "Changed plots":] When did you change what you grow or what livelihood you do?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

K44: [If K43 is "8 or more years ago":] Year

Instructions: Enter 99 if respondent doesn't know.

K45: Have you heard of flood resistant seeds?

- Yes | No

K46: [If K45 is "Yes":] Do you use flood resistant seeds?

- Yes | No

K47: [If K46 is "Yes":] What seed do you use? [Options for seed list are same as F3]

K48: [If K47 is "Other":] Specify

K49: [If K46 is "Yes":] When did you switch to flood resistant seeds?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

K50: [If K49 is "8 or more years ago":] Year

Instructions: Enter 99 if respondent doesn't know.

[Questions K51 and K52 were asked in a random order:]

K51: Think about the risk of flooding today compared to the risk of flooding 10 years ago. Do you think the risk of flooding is higher, lower, or the same today than it was 10 years ago?

- Flood risk was higher in the past than today | Flood risk was lower in the past than today | Flood risk was the same in the past as it is today | Don't know

K52: Think about the risk of flooding today compared to the risk of flooding 10 years from now. Do you think the risk of flooding in 10 years will be higher, lower, or the same as it is today?

- Flood risk will be higher in the future than it is today | Flood risk will be lower in the future than it is today | Flood risk will be the same in the future as it is today | Don't know

Section L: Insurance

[Respondents are randomly assigned to one of two arms. Those assigned to Arm #1 are asked the questions in Section L.]

L1: In some places, there are insurance contracts for bad weather or natural disasters. For example, there may be an insurance contract for the amount of rain. In that case, farmers like you will pay some money to the insurance company at the beginning of the season. If there is not enough rain in that season, the insurance company will refund the money paid to the farmers at the beginning of the season with interest. And if there is enough rain in the season, then the insurance company will not pay any money at the end of the season. Have you ever heard of any such insurance company or contract before?

- Yes | No | Don't know

L2: Do you have an insurance contract that pays or will pay you based on bad weather or natural disasters?

- Yes | No

L3: [If L2 is "No":] Why don't you have insurance like that? you can have more than one answer.

Instruction: Do not read out the options to the respondent.

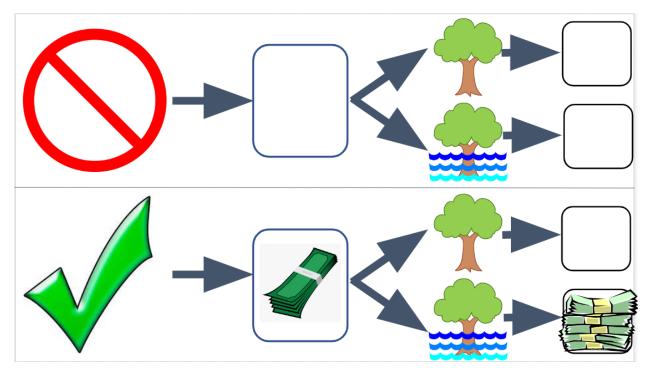
Insurance is not available | It is too expensive | I do not need it or want it | I do not trust the company to pay | Other | I have never heard of this kind of insurance | Refuse to answer | Don't know

L4: [If L3 is "Other":] Specify other reason

L5: I'm now going to ask you about a hypothetical insurance contract. Suppose there is an insurance company offering insurance for flooding. You should imagine that the insurance company is extremely trustworthy. If you accept the contract, that means that every month, you would have to pay a fixed amount to that company. If there is a flood that occurs on your land, then they will pay you a large amount of money. If there is no flood, then you do not receive any money. Does this make sense?

- Yes | No

L6: Instructions: Turn to the flood insurance picture.



[Respondents are randomly assigned with equal probability to an insurance payout and an insurance fee. The potential payouts are: 10,000; 15,000; 20,000; 25,000; and 30,000. This value is denoted by "Payout" below. The potential fees are: 20; 30; 40; 50; and 60. This value is denoted by "Fee" below.]

L7: Instructions: Point to the relevant part of the picture as you explain each part.

Now let's see an example. The insurance company offers you a contract for [Fee] Taka per month. If there is a flood, then the company pays you [Payout] Taka. Let's walk through two scenarios. First, imagine that you do not buy the contract. That is shown by the top row. Then each month, you do not have to pay anything to any company. If no flood occurs, then you never receive any payment from the company and you never have to pay anything. However, if there is a flood, then that might damage your house or your crops. In that case, you would also not receive anything from the company, but you might have damages that might cost you some money. Now, imagine that you do buy the contract. That is shown by the bottom row. Then each month, you have to pay [Fee] taka. If there is no flood, then you do not get paid anything by the company. If there is a flood, it might damage your house or your crops. But the company also pays you [Payout] Taka. Of course, it is hard to know in advance if or when a flood will occur. L8: Just to make sure this is clear, I'm going to ask you some questions about these scenarios. If you do not buy the insurance, how much do you get paid if there is a flood?

L9: [If L8 is greater than 0:] Actually, you would not be paid anything if you did not buy the insurance. Instructions: Explain again.

L10: If you do buy the insurance, how much do you get paid if there is a flood? L11: [If L10 does not equal Payout:] Actually, you would be paid [Payout]. Instructions: Explain again.

- L12: It is important to remember that it is hard to predict if and when a flood might occur. That means that if you buy insurance, the number of months you have to pay the fee before a flood occurs could be small, could be large, or a flood might never occur. Does that make sense?
 - Yes | No
- L13: Instructions: Please answer any of the respondent's questions about how the insurance works.
- L14: Now, imagine that the insurance company pays [Payout] taka in case there is a flood. I am going to ask you if you would buy insurance for different prices. First, I will ask if you would buy this insurance for 10 taka per month. This means that you have to pay 10 taka every month, but if there is a flood at some point, you will get [Payout] taka. Do you accept this contract?
 - Yes | No
- L15: [If L14 is "No":] Now, imagine that the insurance costs 0 taka per month, so it is free. Do you accept this contract? Remember, if your plot gets flooded, you will be paid [Payout] taka if you have signed up for this free insurance.
 - Yes | No
- L16: [If L14 is "Yes":] Now, imagine that the insurance costs 20 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No
- L17: [If L16 is "Yes":] Now, imagine that the insurance costs 30 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No
- L18: [If L17 is "Yes":] Now, imagine that the insurance costs 40 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No
- L19: [If L18 is "Yes":] Now, imagine that the insurance costs 50 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No
- L20: [If L19 is "Yes":] Now, imagine that the insurance costs 60 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No
- L21: [If L20 is "Yes":] Now, imagine that the insurance costs 70 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No
- L22: [If L21 is "Yes":] Now, imagine that the insurance costs 80 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No
- L23: [If L22 is "Yes":] Now, imagine that the insurance costs 90 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?
 - Yes | No

L24: [If L23 is "Yes":] Now, imagine that the insurance costs 100 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L25: [If L24 is "Yes":] Now, imagine that the insurance costs 110 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L26: [If L25 is "Yes":] Now, imagine that the insurance costs 120 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L27: [If L26 is "Yes":] Now, imagine that the insurance costs 130 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L28: [If L27 is "Yes":] Now, imagine that the insurance costs 140 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L29: [If L28 is "Yes":] Now, imagine that the insurance costs 150 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L30: [If L29 is "Yes":] Now, imagine that the insurance costs 160 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L31: [If L30 is "Yes":] Now, imagine that the insurance costs 170 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L32: [If L31 is "Yes":] Now, imagine that the insurance costs 180 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L33: [If L32 is "Yes":] Now, imagine that the insurance costs 190 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L34: [If L33 is "Yes":] Now, imagine that the insurance costs 200 taka per month, and you will be paid [Payout] if and when a flood occurs. Do you accept this contract?

- Yes | No

L35: [If 34 is "Yes":] What is the highest amount you would be willing to pay per month to accept this contract?

Section M: Migration Experience—Arm #1

[Respondents are randomly assigned to one of two arms. Those assigned to Arm #1 are asked the questions in Section M.]

M1: How many years have you been farming?

M2: Did you live anywhere else before coming to this village?

- Yes | No

M3: [If M2 is "Yes":] When did you move here?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

M4: [If M3 is "8 or more years ago":] Year

Instructions: Enter 99 if respondent doesn't know.

M5: [If M2 is "Yes":] Which district did you live in before?

- Bagerhat | Chuadanga | Jessore | Jhenaidah | Khulna | Kushtia | Magura | Meherpur | Narail | Satkhira | Other

M6: [If M5 is "Other":] Specify district name

M7: [If M2 is "Yes":] Which upazila did you live in before? [Options are upazilas within selected district from M5.]

M8: [If M7 is "Other":] Please enter name of upazila if not found in list

M9: [If M2 is "Yes":] Which union did you live in before? [Options are unions within selected upazila.]

M10: [If M9 is "Other":] Other union name

M11: [If M2 is "Yes":] Why did you move here?

- Flood | Cyclone | River erosion | Debt | Crop failure | Marriage | Better opportunities | Other

M12: [If M11 is "Other":] Specify

M13: Instructions: show pictures of displacement scenarios.



Stay in the village



M14: I'm now going to ask you some questions using buttons. This picture shows two scenarios. In one scenario, your family stays in this village. In the second scenario, your family leaves this village. If a flood occurred on your land, how likely are you to leave the village? Please place more buttons on the picture that you think is more likely.

M15: Number of buttons on stay

M16: Number of buttons on leave

M17: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

M18: [If sum of M15 and M16 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

M19: [If M17 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

M20: Now think about everyone who lived in this village five years ago. Instructions: place all buttons on the picture with the family staying in the village. For every 10 households who lived here five years ago, how many households do not live here any more? Please move the buttons over to the other image to show how many out of 10 you think have left.

M21: Number of buttons on stay

M22: Number of buttons on leave

M23: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

M24: [If sum of M21 and M22 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

M25: [If M23 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

M26: Is there anyone in this household who lived outside of this village for work in the past year?

- Yes | No

M27: Who? [Options are people from household roster]

Section N: Job Expectations

[Respondents are randomly assigned to one of two arms. Those assigned to Arm #2 are asked the questions in Section N.]

N1: Instructions: Please prepare job picture.



N2: I'm now going to ask you about some different occupations. These pictures show some different occupations that you might have. This picture shows a wage laborer, like an agricultural day laborer or a construction worker. This picture shows a salaried worker, like a teacher or an NGO worker. This picture shows self-employment, like a rickshaw puller or a tailor. This picture shows a trader, like in a shop. This picture shows a farmer. This picture shows someone not working for pay, like a housewife. This picture shows another occupation.

N3: What was your occupation five years ago? Select all that apply.

- Farmer or Fisherman | Agricultural Day Laborer | Other wage laborer (like construction worker) | Salaried worker | Self-employment (like rickshaw puller or tailor) | Trader | Housewife | Student | Retired | Not working | Young child | Other

N4: Now think about what occupation you will have five years from now. Please place the buttons, and put more buttons on the picture that you think is more likely. This question is not asking about what you want, but instead asking what you think will happen.

N5: Count number of buttons on Wage Laborer | Count number of buttons on Salaried Worker | Count number of buttons on Self-Employment | Count number of buttons on Trader | Count number of buttons on Farmer | Count number of buttons on Not Working for Pay | Count number of buttons on Other

N6: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

N7: [If sum of N5 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

[The survey now loops through every member of the household under the age of 23, denoted by Name below. Questions n(through]

N8: What is the highest level of education that you expect [Name] to get? This question is not asking about what you want, but instead asking what you expect will happen.

- Class 5 or below | Class 8 or below | SSC/Dakhil or below | HSC/Alim or below | Degree | Graduate | Postgraduate | Technical/ Vocational education | No schooling | Other

N9: [If N9 is "Other":] Specify

N10: When [Name] is 25 years old, do you expect them to live in a city or in a rural area? This question is not asking about what you want, but instead asking what you think will happen.

- Rural | Urban | Don't know

N11: Instructions: Please prepare job picture. [Same picture as N1.]

N12: What kind of job do you expect [Name] to have when they are 25 years old? Please use these buttons, and place more buttons on the job that you think is more likely. This question is not asking about what you want, but instead asking what you think will happen.

N13: Count number of buttons on Wage Laborer | Count number of buttons on Salaried Worker | Count number of buttons on Self-Employment | Count number of buttons on Trader | Count number of buttons on Farmer | Count number of buttons on Not Working for Pay | Count number of buttons on Other

N14: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

N15: [If sum of N13 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

N16: [If N14 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

Section O: Migration Experience—Arm #2

[Respondents are randomly assigned to one of two arms. Those assigned to Arm #2 are asked the questions in Section 0.]

O1: Is there anyone in this household who lived outside of this village for work in the past year?

- Yes | No

O2: [If O1 is "Yes":] Who? [Options come from all members of the household roster.] [Questions O3 through are asked for every member selected in O2, denoted by Name below.]

O3: Does [Name] still live away from the village?

- Yes | No

O4: Did [Name] leave the country?

- Yes | No

O5: Did [Name] move to a city or a rural area?

- Rural | Urban | Don't know

O6: [If O3 is "Yes" and O4 is "Yes":] What country does [Name] live in?

- Oman | Qatar | Singapore | United Arab Emirates/Dubai | Bahrain | Jordan | Lebanon | Iraq | Saudi Arabia | India | Mauritius | Other

O7: [If O3 is "No" and O4 is "Yes":] What country did [Name] live in?

- Oman | Qatar | Singapore | United Arab Emirates/Dubai | Bahrain | Jordan | Lebanon | Iraq | Saudi Arabia | India | Mauritius | Other

O8: [If O6 is "Other" or O7 is "Other":] Specify country

O9: [If O5 is "Urban" and O3 is "Yes":] What city does [Name] live in?

Dhaka | Chattrogram | Gazipur | Narayanganj | Khulna | Sylhet | Rajshahi | Bogra | Barisal
 | Comilla | Bogra | Brahmanbaria | Chapainawabganj | Dinajpur | Jamalpur | Jessor |
 Mymensingh | Naogaon | Pabna | Rangpur | Tangail | Other

O10: [If O3 is "No" and O5 is "Urban":] What city did [Name] live in?

- Dhaka | Chattrogram | Gazipur | Narayanganj | Khulna | Sylhet | Rajshahi | Bogra | Barisal | Comilla | Bogra | Brahmanbaria | Chapainawabganj | Dinajpur | Jamalpur | Jessor | Mymensingh | Naogaon | Pabna | Rangpur | Tangail | Other

O11: [If O5 is "Rural":] Select the name of the district

- Bagerhat | Chuadanga | Jessore | Jhenaidah | Khulna | Kushtia | Magura | Meherpur | Narail | Satkhira | Other

O12: [If O9 is "Other":] Specify district name

O13: [If O5 is "Rural":] Select the name of the upazila [Options are upazilas from relevant districts of O11]

O14: [If O13 is "Other":] Please enter name of upazila if not found in list

O15: [If O5 is "Rural":] Select the name of the union [Options are unions from relevant upazilas of O13]

O16: [If O15 is "Other":] Other union name

O17: What was [Name]'s job?

- Wage Labor | Salaried worker | Self-employment | Trader | Non-earning occupation | Livestock Poultry related work/occupation | Farming | Other

O18: Specify [Options follow the same rule as H15]

O19: [If O17 or O18 is "Other":] Please enter name of job if not found in list

O20: [If O3 is "No":] How long did [Name] live there?

O21: [If O3 is "Yes":] How long has [Name] lived there?

O22: Years

O23: Months

O24: [If O3 is "No":] How much did [Name] earn on average per month while away?

O25: [If O3 is "Yes":] How much is [Name] earning on average per month while away?

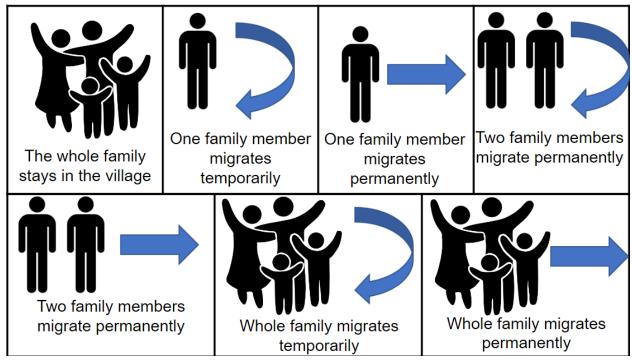
O26: [If O3 is "No":] How much money does [Name] send back home to this village on average per month?

O27: [If O3 is "Yes":] How much money did [Name] send back home to this village on average per month?

O28: How much did it cost [Name] for transportation to migrate?

O29: How much does [Name] spend on food and lodging at the destination?

O30: Instructions: Please prepare migration scenario picture.



O31: I will now ask you about the migration to this village in the coming year. These pictures show different scenarios. I will be talking about two different types of migration. Temporary migration is migration that lasts for less than one year. Permanent migration is migration that lasts for longer than one year. The first scenario shows your whole household staying here next year. The second scenario shows only one member of the household temporarily migrating for work (migrating for less than one year). The third scenario shows that one member of the

household permanently migrating for work (migrating for more than one year). The fourth scenario shows that two or more members (but not all) temporarily migrating for work outside of the village (migrating for less than one year). The fifth scenario shows that two or more members (but not all) permanently migrating for work outside of the village (migrating for more than one year). The sixth scenario shows that the whole household will temporarily migrate out of the village (migrating for less than one year). The seventh scenario shows that the whole family permanently migrating out of the village (migrating for more than one year). Are these scenarios clear?

- Yes | No

O32: Now I am going to ask about your household. Thinking about the next year, how likely do you think are each of these scenarios? Place more buttons on the picture that you think is more likely.

O33: Count number of buttons on no migration | Count number of buttons on one person temporarily migrating | Count number of buttons on one person permanently migrating | Count number of buttons on two family members migrating permanently | Count number of buttons on whole family migrating temporarily | Count number of buttons on whole family migration permanently | Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

O34: [If sum of O33 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

O35: [If sum of O33 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

O36: Thank you. Now I want you to think about five years from now. Again thinking about each of these scenarios, how likely do you think each one is? Place more buttons on the picture that you think is more likely.

O37: Count number of buttons on no migration | Count number of buttons on one person temporarily migrating | Count number of buttons on one person permanently migrating | Count number of buttons on two family members migrating permanently | Count number of buttons on whole family migrating temporarily | Count number of buttons on whole family migration permanently | Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

O38: [If sum of O37 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

O39: [If O37 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

O40: Now think about if you had to leave this village permanently with your whole household. Do you think you would go to a city or a rural area?

- Rural | Urban | Don't know

[Questions 41 through 47 mirror questions at the beginning of this section.]

O41: Select the name of the district

O42: Specify district name

O43: Select the name of the upazila

O44: Please enter name of upazila if not found in list

O45: Select the name of the union

O46: Other union name

O47: Which city would you go to?

O48: How much do you think it will cost to migrate with the whole family?

O49: How many years have you been farming?

O50: Did you live anywhere else before coming to this village?

- Yes | No

[Questions O51 through O58 mirror those of section M.]

O51: When did you move here?

- 0 years ago | 1 year ago | 2 years ago | 3 years ago | 4 years ago | 5 years ago | 6 years ago | 7 years ago | 8 or more years ago

O52: [If O51 is "8 or more years ago":] Year

Instructions: Enter 99 if respondent doesn't know.

O53: Which district did you live in before?

O54: Specify district name

O55: Which upazilla did you live in before?

O56: Please enter name of upazila if not found in list

O57: Which union did you live in before?

O58: Other union name

O59: Why did you move here?

- Flood | Cyclone | River erosion | Debt | Crop failure | Marriage | Better opportunities | Other

O60: [If O59 is "Other":] Specify

O61: Instructions: show picture of displacement scenarios. [Same picture as M13.]

O62: I'm now going to ask you some questions using buttons. This picture shows two scenarios. In one scenario, your family stays in this village. In the second scenario, your family leaves this village. If a flood occurred on your land, how likely are you to leave the village? Please place more buttons on the picture that you think is more likely.

O63: Number of buttons on stay

O64: Number of buttons on leave

O65: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

O66: [If O63 and O64 do not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

O67: [If O65 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

O68: Now think about everyone who lived in this village five years ago. Instructions: place all buttons on the picture with the family staying in the village. For every 10 households who lived here five years ago, how many households do not live here any more? Please move the buttons over to the other image to show how many out of 10 you think have left.

O69: Number of buttons on stay

O70: Number of buttons on leave

O71: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

O72: [If sum of O69 and O70 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

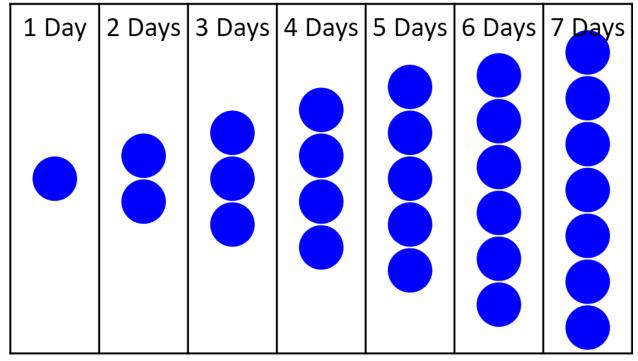
O73: [If O71 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

Section P: Labor Force Expectations and Attitudes

[Respondents are randomly assigned to one of two arms. Those assigned to Arm #2 are asked the questions in Section P.]

P1: In 2016 and 2017, the government did a survey of people living in Khulna who migrated from somewhere else. I'm going to ask you about what people in that survey said about their work.

[Questions P2 through P20 are asked twice: once for women and once for men. The order of men and women is randomized across respondents. Below, the questions are shown for women.] P2: Instructions: prepare days picture.



P3: Think about all of the women who are working in Khulna who migrated from somewhere else. How many days per week do you think they work? Place more buttons on the answers that you think more people gave.

P4: Count number of buttons on one day | Count number of buttons on two days | Count number of buttons on three days | Count number of buttons on four days | Count number of buttons on five days | Count number of buttons on six days | Count number of buttons on seven days P5: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

P6: [If sum of P4 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

P7: [If P5 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

P8: Instructions: prepare hours picture.

Fewer than three hours per day	3-6 hours per day	6-8 hours per day
8-12 hours per day	12-15 hours per day	More than 15 hours per day

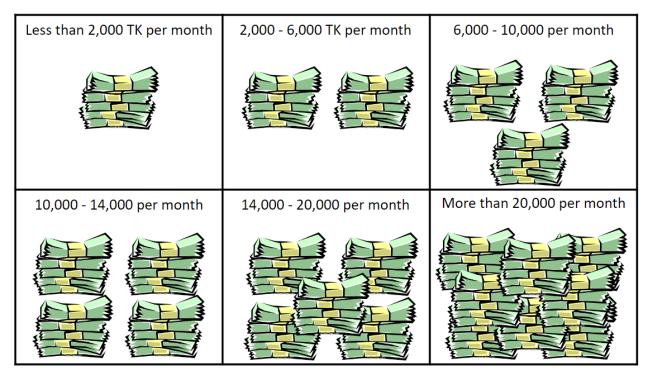
P9: Think about all of the women who are working in Khulna who migrated from somewhere else. How many hours per day do you think they work? Place more buttons on the answers that you think more people gave.

P10: Count number of buttons on fewer than 3 hours | Count number of buttons on 3 to 6 hours | Count number of buttons on 6 to 8 hours | Count number of buttons on 8 to 12 hours | Count number of buttons on 12 to 15 hours | Count number of buttons on more than 15 hours | P11: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

P12: [If sum of P10 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

P13: [If P11 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

P15: Instructions: prepare income picture.



P16: Think about all of the women who are working in Khulna who are working in Khulna who migrated from somewhere else. How much do you think they said they earn per month? Place more buttons on the answers that you think more people gave.

P17: Count number of buttons on less than 2,000 Tk | Count number of buttons on 2,000 to 6,000 Tk | Count number of buttons on 6,000 to 10,000 Tk | Count number of buttons on 10,000 to 14,000 Tk | Count number of buttons on 14,000 to 20,000 Tk | Count number of buttons on more than 20,000 Tk

P18: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

P19: [If sum of P17 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

P20: [If P18 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

P21: People have different opinions about women going out to work. Some people feel that women should not work outside the home to earn money and they should only look after their families, while others say that there is nothing wrong if women go out for work to earn money. What is your opinion?

- Women should not work outside the home | There is nothing wrong if women work outside the home | Refuse to answer | Don't know

P22: Do you agree with the following statement: It reflects badly on a couple if the wife works for pay outside of the household.

- Agree | Disagree | Refuse to answer | Don't know

P23: Instructions: Prepare Agree/Disagree picture [Same picture as H3.]

P24: Tell me how many people in your village will agree with that same statement using these 10 buttons. Put more buttons on the "Agree" if you think more people agree with the statement, and more buttons on the "Disagree" side if you think more people disagree with the statement. In other words, if you were to talk to ten of your neighbors, how many of them would agree with this statement?

P25: It reflects badly on a couple if the wife works for pay outside of the household.

P26: Count number of buttons on agree | Count number of buttons on disagree

P27: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

P28: [If sum of P26 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

P29: [If P27 equals 99:] Warning: Are you sure the respondent doesn't understand the question? If they simply do not know the answer, then they should put buttons on everything that they think might be a possibility, even if they do not know for sure.

Section Q: Risk Sharing

[Questions Q1 - Q3 were asked in a random order.]

Q1: Would you ask for financial assistance from other villagers if in need?

- Yes | No

Q2: Would other villagers ask you for financial assistance if in need?

- Yes | No

Q3: Would you help other villagers with either a gift or a loan?

- Yes | No

Q4: In the last 12 months, if you have received any gift from other villagers, how much was it in Taka?

Instructions: Please enter 0 if not received any gift.

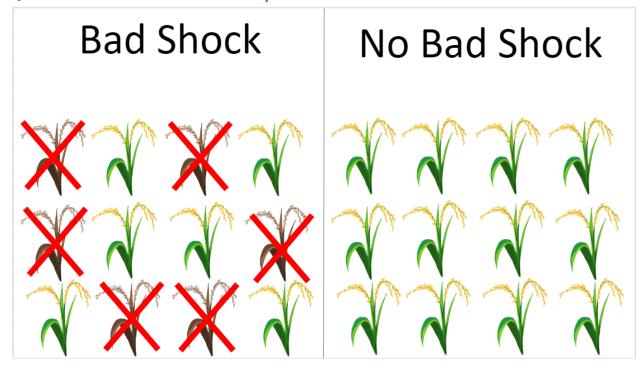
Q5: In the last 12 months, if you have received any loan from other villagers, how much was it in Taka?

Instructions: Please enter 0 if not received any loan.

Q6: In the last 12 months, if you gave any gift to another villager, how much was it? Instructions: Please enter 0 if no gift is given.

Q7: In the last 12 months, if you have given any loan to another villager, how much was it? Instructions: Please enter 0 if no loan is given.

Q8: Instructions: Turn to the bad shock picture. Get out ten buttons.



Q9: Imagine that you have a bad shock to your crops, and your crops are damaged. This can be due to many reasons. Some of them could be due to weather, like not enough rain or a flood. It could also be due to things like using the wrong fertilizer, choosing the wrong seed, or a pest. You should think about anything that might damage your crops. Tell me using these buttons, how

likely do you think it is that your neighbors will experience such a bad shock as well? Put more buttons on the bad shock image if you think more of your neighbors may experience a bad shock. In other words, how many of the 10 neighbors do you think experience a bad shock?

Q10: Count number of buttons on bad shock | Count number of buttons on no shock

Q11: Instructions: Enter 99 if respondent says they are confused by the question. If they are uncertain about the answer, tell them to put buttons on multiple options to express this uncertainty.

Q12: [If sum of Q10 does not equal 10:] Warning: The number of buttons did not add up to 10. Please go back and check.

Q13: In general, how willing or unwilling you are to take risks on a scale of 0 to 10, where 0 means you are not willing to take risks at all and 10 means you have no problem taking risks? You can choose any number from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10. Instructions: Type 99 if the respondent says they do not know.

Q14: How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future? Please rate your answer on a scale of 0 to 10. 0 means "completely unwilling" and 10 means completely willing. You can choose any number from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10. Instructions: Type 99 if the respondent says they do not know.

Section R: Networks

R1: Think about all of the Boro farmers in your village. Some of them may use different seeds than you. If a farmer is successful with a seed, then others in the village may start using that same seed too. Is there anyone in the village whom you might learn from in this way? We want to know about the farmers who influence your seed choice. This might be someone you discuss farming with and whose experience you find helpful.

- Yes | No | Don't know

R2: Please list all farmers whom you might discuss farming with and whose experience you find helpful when you are deciding what seed to plant. [Options come from initial listing of Boro farmers in village.]

R3: Instructions: If you can't find the name on this list, please enter it here.

R4: I am now going to ask you questions about some boro farmers in your village. Your answers will not be shared with anyone else, so you can be honest.

[Questions R5 through R18 are asked five times for a random selection of farmers, each of whose name is denoted by Name below.]

R5: I will now ask about [Name]. Instructions: If there is more than one person with this name in the village, tell the respondent to answer about the person who lives closest to them.

R6: Which of the following best describes your relationship with [Name]?

- I do not know them | We know each other but are not friends | We are friends | We are close friends | We are family members | Other | Refuse to answer | Don't know

[If R6 does not equal "I do not know them", then questions R7 through R18 are skipped for this person.]

R7: Which of the following best describes how often you speak with [Name]?

- We have never spoken to each other | We talk to each other less than every six months | We talk to each other more than twice a year but less than every month | We talk to each other more than every month but less than every week | We talk to each other more than every week but less than every day | We talk to each other every day | Refuse to answer | Don't know

R8: How much do you trust [Name]?

- Do not trust at all | Trust a little bit | Trust a fair amount | Trust a lot | Refuse to answer | Don't know

R9: Would you feel comfortable borrowing money from or lending money to [Name]?

- Yes | No

R10: If you have a bad shock, do you think you can count on \${networkname} to help you?

- Yes | No

R11: How many minutes does it take you to walk from [Name]'s house to your house?

R12: How many minutes does it take you to walk from one of your plots to one of [Name]'s plots? In this case, imagine the two closest plots.

R13: Do you use the same water source on your lands as [Name]?

- Yes | No | Don't know

R14: How knowledgeable do you think [Name] is about farming?

- Not knowledgeable | Somewhat knowledgeable | Very knowledgeable | Extremely knowledgeable | Refuse to answer | Don't know

R15: Do you think that [Name]'s plot is on average more/same amount/less saline than your plot?

- More salt | Same amount of salt | Less salt | Refuse to answer | Don't know

R16: Does [Name] use any salinity tolerant seeds?

- Yes | No | Don't know

R17: If [Name] advised you to use a different seed, would you follow their advice?

Yes I would follow their advice | I would consider their advice but decide what I wanted to do based on my own understanding as well | No their advice would not influence me | Don't know

R18: How likely are you to recommend seed 67 to a friend?

- Not at all likely | A little likely | Somewhat likely | Very Likely | Refuse to answer | Don't know

Section S: Soil Measurement

S1: Enter your GPS location again

[The plot number piped in below is the same that was selected for the series of questions beginning in F24.]

S2: Now, I have to measure the salinity on plot [*Plot*]. This will only take one minute. Can we walk there together?

- Yes | No

S3: [If S2 is "No":] When can we reschedule a time to measure the salinity in your soil?

S4: Instructions: Please go to the soil where the Boro crop will be planted. First, describe the location where you are so that the next enumerator can find the same spot on the plot. For example, if you are in the corner closest to the road, write that.

S5: Take a photo of the place where you are standing so that the next enumerator can stand in the same place

S6: Photograph

S7: Stick the sensor in the soil. You should stick it at least six inches from the edge of the soil. Take a photo of the number on the sensor while it is in the soil. Make sure the setting on the top is switched to ms.

S8: Photograph

S9: Enter the number.

S10: Now, move the sensor three feet away, and repeat.

S11: Take a photo of the number on the sensor while it is in the soil.

S12: Photograph

S13: Enter the number.

S14: Now, move the sensor three feet away in a different direction, and repeat.

S15: Take a photo of the number on the sensor while it is in the soil.

S16: Photograph

S17: Enter the number.

S18: Enter your GPS location. Make sure you are outside. If not possible, swipe forward.

S19: [If S18 is missing:] Do not forget to provide GPS location! Try your best to take the GPS location. If not possible, swipe forward.

Section T: Survey End

T1: Thank you for participating in the survey!

T2: Was it raining at any time during the day in this area?

- Yes | No