

Improved mungbean harvesting in Myanmar and Bangladesh-Bangladesh Version

SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

HOUSEHOLD IDENTIFICATION

No sub-sections, No rosters, Questions: 15, Static texts: 1.

HOUSEHOLD ROSTER

No sub-sections, Rosters: 1, Questions: 10.

MUNGBEAN PRODUCTION

Sub-sections: 3, Rosters: 11, Questions: 96, Static texts: 1, Variables: 18.

MUNGBEAN VIEWS AND PRACTICES

Sub-sections: 3, No rosters, Questions: 63, Static texts: 3.

GENERAL FARMING INFORMATION

Sub-sections: 1, Rosters: 3, Questions: 52, Static texts: 2, Variables: 3.

LIVESTOCK AND FISH

No sub-sections, Rosters: 1, Questions: 12.

OTHER ECONOMIC ACTIVITIES

No sub-sections, Rosters: 1, Questions: 7.

WOMEN IN MUNGBEAN PRODUCTION

Sub-sections: 2, No rosters, Questions: 42, Static texts: 4.

INTERVIEWER DEBRIEFING

No sub-sections, No rosters, Questions: 5.

APPENDIX A — VALIDATION CONDITIONS AND MESSAGES

APPENDIX B — CATEGORIES

APPENDIX C — VARIABLES

LEGEND

SURVEY IDENTIFICATION INFORMATION

QUESTIONNAIRE DESCRIPTION

Basic information

Title Improved mungbean harvesting in Myanmar and Bangladesh-Bangladesh Version

Version identifier 13 June 2018

Survey data information

Study type Agricultural Survey

Kind of data Sample survey data [ssd]

Mode of Data Collection CAPI

Survey information

Country Myanmar

Year 2018

Languages English, Burmese

Unit of analysis Household

Coverage Major mungbean growing areas

Universe Mungbean farmers (Growing mungbean in the past 12 months)

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Funding Australian Centre for International Agricultural Research (ACIAR)

Additional info

Notes This project is organized by the World Vegetable Center in Cooperation with Yezin Agricultural University and Bangladesh Agricultural Research Institute

HOUSEHOLD IDENTIFICATION

Household ID	NUMERIC: INTEGER SCOPE: IDENTIFYING -----	hhid
For which organization do you work?	SINGLE-SELECT SCOPE: IDENTIFYING 01 <input type="radio"/> Bangladesh Agricultural Research Institute 02 <input type="radio"/> Yezin Agricultural University	inst
In which distric is the household?	SINGLE-SELECT SCOPE: IDENTIFYING 01 <input type="radio"/> Natore 02 <input type="radio"/> Pathuakali 03 <input type="radio"/> Jhenaidah 04 <input type="radio"/> Pabna 05 <input type="radio"/> Other	district
What is the name of the district E district==5	TEXT -----	district_other
Date and time of the interview	DATE: CURRENT TIME -----	A2

STATIC TEXT

Good morning/afternoon. My name is [YOUR NAME] and I am from %inst%.

We are doing a study on mungbean production. We are particularly interested in the effect of improved varieties and agricultural practices on costs and returns in mungbean production as well as the effect of mechanization in mungbean production. Because both men and women are usually involved in mungbean production, and the effect of mechanization may be different for each person, we would like to ask some questions to you as well as to your spouse. Apart from mungbean-related questions, we will ask some general questions about you, your farm, and your household to understand the context of your farm operation.

This interview will use a list of standard questions and will take about 1 hour to complete. Your responses will help us to understand better how mungbean is produced in the country and the problems farmers face.

I would like to emphasize that this interview is for research only and your answers will always be kept strictly confidential and never be revealed to any other people. I would like you to answer the questions truthfully, in your best possible way, and to the best of your knowledge. If you don't know the answer to some of the questions, simply tell me. You can tell me at any time if you 'd like a break or if you would like to discontinue the interview.

What is the name of the primary respondent?	TEXT -----	A9a
What is the name of the secondary respondent? I The secondary respondent is the woman most involved in mungbean p roduction. If the primary respondent is a woman, there is no secondar y respondent.	TEXT -----	A9d

<p>You did not enter a name for the secondary respondent. Is there no secondary respondent? Consider that this should only be the case if the primary respondent is a woman or there is no woman (or girl of sufficient age) in the household.</p> <p>E //Enable if the name of the secondary respondent has less than 2 letters String.IsNullOrEmpty(A9d)</p>	<p>SINGLE-SELECT A9d_1</p> <p>00 <input type="radio"/> No, there is a secondary respondent</p> <p>01 <input type="radio"/> Yes, there is no secondary respondent.</p>
<p>What is the name of the upazilla?</p>	<p>TEXT upazilla</p> <p>SCOPE: IDENTIFYING</p> <p>.....</p>
<p>What is the name of the union?</p>	<p>TEXT union</p> <p>.....</p>
<p>What is the name of the village?</p>	<p>TEXT village</p> <p>SCOPE: IDENTIFYING</p> <p>.....</p>
<p>What is the name of the place?</p>	<p>TEXT place</p> <p>.....</p>
<p>Do you consent to participate in this interview?</p>	<p>SINGLE-SELECT consent1</p> <p>00 <input type="radio"/> No</p> <p>01 <input type="radio"/> Yes</p>
<p>If you consent to participate in this interview, would you kindly say so?</p> <p>E consent1==1</p>	<p>AUDIO signature1</p>
<p>What is the phone number of the respondent?</p> <p>E consent1==1</p>	<p>TEXT A9c</p> <p>.....</p>

HOUSEHOLD ROSTER

I would like to start by asking you a few questions about the members of your household. Can you please list the names of all people who regularly lived in your house and shared meals over the last 6 month ? Please start with your self. Second, your spouse, if you are married and she/he lives with you.	LISTB1names <div></div>
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HOUSEHOLD ROSTER
Roster: HOUSEHOLD ROSTER
generated by list question B1namesB1

What is the sex of %roster%title%?	SINGLE-SELECTB1a 00 <input type="radio"/> Male 01 <input type="radio"/> Female
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Which relationship does %roster%title% have to the household head? V1 /*----- Validation to make sure only one person is reported to be the household head -----*/ B1b==1 ? /// Is this person the hou And 189 other symbols [1] M1 There must be only one person in the household designated as head. V2 /* Check that head has different gender than spouse(s) */ / // if head is current person, and does at least one spouse exist? B1b==1 && B1.Any(x=>x.B1b==2) ? // if so, check that there is no spouse And 136 other symbols [1] M2 The head and his/her spouse typically have different genders. Please confirm. V3 /* Check that spouse has different gender than head */ // if head is current person, and does at least one spouse exist? B1b==2 && B1.Any(x=>x.B1b==1) ? // if so, check whether spouse has difference And 109 other symbols [1] M3 Spouse typically has a different genders than his/her spouse (the head of household). Please confirm. W4 /*Check that there are at most 2 parent*/ // if current person is father/mother? B1b==6? //check that there are no more than 2 (B1.Count(x=>x.B1b==6)<=2) //if not, no problem :true M4 Household head has more than 2 parents, according to your entry. Please double check. V5 /* Checks if no household head was listed. Note: this runs at the end so it does not trigger errors constantly */ / // Check that all information has been filled B1.All(x=>x.B1b!=null) ? // If And 103 other symbols [1] M5 No household member was identified as the household head. Please confirm.	SINGLE-SELECTB1b 01 <input type="radio"/> Household head 02 <input type="radio"/> Spouse 03 <input type="radio"/> Son/daughter 04 <input type="radio"/> Son in law/daughter in law 05 <input type="radio"/> Grandson/ganddaughter 06 <input type="radio"/> Parent 07 <input type="radio"/> Parent in law 08 <input type="radio"/> Brother/sister 09 <input type="radio"/> Brother in law/sister in law 10 <input type="radio"/> Nephew/niece 11 <input type="radio"/> Cousins 12 <input type="radio"/> Other family member 13 <input type="radio"/> Non-family member
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Please specify the relation %roster%title% has to the household head E B1b==12 B1b==13	TEXTB1c <div></div>
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How old is %roster%title% I Only enter completed years. Infants that are less than 12 month old are recorded as "0". V1 self.InRange(0,120) M1 Please enter a valid age.	NUMERIC: INTEGERB1d <div></div>
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<div>For how many years did %roster% attend a school or another form of formal education?</div> <div>E B1d>=6 && (@rowcode==1 @rowcode==2)</div> <div>V1 (B1d - B1e) > 4</div> <div>M1 Compared to the age these are too many years of education.</div>	<div>NUMERIC: INTEGER</div> <div>B1e</div> <div>-----</div>
<div>What is the ethnicity you identify your household with?</div>	<div>SINGLE-SELECT</div> <div>B3</div> <div>10 <input type="radio"/> Bengali</div> <div>09 <input type="radio"/> Other, specify</div>
<div>What is the name of the "other" ethnicity?</div> <div>E B3==9</div>	<div>TEXT</div> <div>B3b</div> <div>-----</div>
<div>What is the religion you identify your household with?</div>	<div>SINGLE-SELECT</div> <div>B4</div> <div>04 <input type="radio"/> Muslim</div> <div>03 <input type="radio"/> Hindu</div> <div>02 <input type="radio"/> Christian</div> <div>01 <input type="radio"/> Buddhist</div> <div>05 <input type="radio"/> Other</div> <div>06 <input type="radio"/> None</div>
<div>What is the name of the "other" religion?</div> <div>E B4==5</div>	<div>TEXT</div> <div>B4b</div> <div>-----</div>

MUNGBEAN PRODUCTION

<div>In total, what is the size of the land you own or hold a cultivation certificate for?</div> <div>I Do not include land that is leased-in.</div>	<div>NUMERIC: DECIMALD0</div> <div>-----</div>
<div>Unit of land size</div>	<div>SINGLE-SELECTD0_1</div> <div>05 <input type="radio"/> decimal/decimel</div> <div>02 <input type="radio"/> square meters</div> <div>03 <input type="radio"/> hectar</div> <div>04 <input type="radio"/> square feet</div> <div>01 <input type="radio"/> acres</div>
<div>In total, how many %D0_1% did you lease in for farming during the last 12 months?</div>	<div>NUMERIC: DECIMALD0_2</div> <div>-----</div>
<div>How much rent did you pay for this (BDT per year)?</div> <div>E D0_2>0</div>	<div>NUMERIC: INTEGERD0_3</div> <div>-----</div>
<div>VARIABLE (D0+D0_2)/(Areaconversion[(int)D0_1].conversion)</div>	<div>DOUBLED0_4</div>
<div>Who is the main person <u>making the decision which inputs to use</u> in mungbean production on your farm?</div> <div>F B1d >= 15</div>	<div>SINGLE-SELECT: LINKEDD1a</div>
<div>Who is the main person <u>making the decision when to plant</u> mungbean on your farm?</div> <div>F B1d >= 15</div>	<div>SINGLE-SELECT: LINKEDD1b</div>
<div>Who is the main person <u>making the decision when and how to harvest</u> mungbean on your farm?</div> <div>F B1d >= 15</div>	<div>SINGLE-SELECT: LINKEDD1c</div>
<div>Who is the main person <u>making the decision to whom to sell your mungbean and at which price?</u></div> <div>F B1d >= 15</div>	<div>SINGLE-SELECT: LINKEDD1d</div>

MUNGBEAN PRODUCTION
Roster: MUNGBEAN ROSTER
generated by fixed list

D2

- 01 Pre-monsoon
- 02 Winter
- 03 Monsoon

<p>In %roster% season, on how many decimal did you grow mungbean?</p> <p>I Enter "0" if not grown in the season.</p> <p>V1 (D2a*40.46) <=D0_4</p> <p>M1 The mungbean area is larger than the area owned and leased-in (%D0_4% square meters).</p>	<p>NUMERIC: DECIMAL</p> <p>D2a</p> <p>-----</p>
<p>Around which date did you plant mungbean in %roster% season?</p> <p>E D2a>0</p>	<p>DATE</p> <p>D2b</p> <p>-----</p>
<p>What crop(s) did you grow on this area before?</p> <p>E D2a>0</p>	<p>TEXT</p> <p>D2c</p> <p>-----</p>
<p>How many days did it take after sowing mungbean until the first harvest?</p> <p>E D2a>0</p> <p>W1 self.InRange(50, 110)</p> <p>M1 Please double check the answer. Mungbean usually takes between 55 and 110 days to mature.</p>	<p>NUMERIC: INTEGER</p> <p>D2d</p> <p>-----</p>
<p>How many times did you harvest in %roster% season?</p> <p>E D2a>0</p> <p>W1 self.InRange(1, 5)</p> <p>M1 Please double check the answer. Usually mungbean is harvested up to three times? (The question is about the times harvested, not the total number of days spend on harvesting.)</p>	<p>NUMERIC: INTEGER</p> <p>D2e</p> <p>-----</p>
<p>How many days did it take from the first harvest until you finished the last?</p> <p>I Include the days in which no harvesting did take place.</p> <p>E D2a>0</p> <p>W1 self<30</p> <p>M1 Please double check the value. The time span is very long.</p>	<p>NUMERIC: INTEGER</p> <p>D2f</p> <p>-----</p>
<p>In which unit do you measure mungbean for harvest and selling?</p> <p>E D2a>0</p>	<p>SINGLE-SELECT</p> <p>D2g_0</p> <p>01 <input type="radio"/> kg</p> <p>02 <input type="radio"/> tons</p> <p>03 <input type="radio"/> pounds</p> <p>04 <input type="radio"/> baskets</p> <p>05 <input type="radio"/> Viss</p> <p>06 <input type="radio"/> Other</p>
<p>Please define the unit</p> <p>E D2g_0==6</p>	<p>TEXT</p> <p>D2g_0a</p> <p>-----</p>
<p>MUNGBEAN PRODUCTION / MUNGBEAN ROSTER</p> <p>Roster: MUNGBEAN HARVESTS</p> <p>generated by numeric question D2e</p> <p>D2e>=1</p>	
<p>What was total quantity of harvest No.%roster%? (In %D2g_0%)</p> <p>I The unit must be the same as in the previous question!</p>	<p>NUMERIC: DECIMAL</p> <p>D2g_1</p> <p>-----</p>

<p>How much of harvest No.%rostartitle% did you sell? (In %D2g_0%)</p> <p>E D2g_1>0 V1 self<=D2g_1 M1 The sold quantity cannot be larger than the harvested quantity.</p>	<p>NUMERIC: DECIMAL D2g_2</p> <p>-----</p>
<p>What was the price you received per unit (%D2g_0%) after harvest No.%rostartitle% ? (In BDT)</p> <p>E D2g_2>0</p>	<p>NUMERIC: INTEGER D2g_3</p> <p>-----</p>
<p>VARIABLE D2g_2*D2g_3</p>	<p>DOUBLE D2g_3a</p>
<p>In which form did you sell the mungbeans?</p> <p>E D2g.Sum(x=>x.D2g_2)>0</p>	<p>MULTI-SELECT D2g_4</p> <p>01 <input type="checkbox"/> In pods 02 <input type="checkbox"/> Shelled 03 <input type="checkbox"/> Other</p>
<p>Please define the form the mungbeans were sold in.</p> <p>E D2g_4.Contains(3)</p>	<p>TEXT D2g_5</p> <p>-----</p>
<p>VARIABLE D2g.Sum(x=>x.D2g_1) - D2g.Sum(x=>x.D2g_2)</p>	<p>DOUBLE D2h_1</p>
<p>How many %D2g_0% did you reserve for own consumption, sharing with others, or usage as seed?</p> <p>I Use the same unit as for the harvest! E D2h_1>0 V1 self<=D2h_1 M1 The quantity cannot be more than the difference between what was harvested and what was sold (In this case: %D2h_1% %D2g_0%)</p>	<p>NUMERIC: DECIMAL D2h</p> <p>-----</p>
<p>How many %D2g_0% were spoiled before sale or consumption?</p> <p>E D2h_1>0 V1 self<=D2h_1 M1 The quantity cannot be more than the difference between what was harvested and what was sold (In this case: %D2h_1% %D2g_0%).</p>	<p>NUMERIC: DECIMAL D2i</p> <p>-----</p>
<p>VARIABLE D2h_1 - D2h - D2i</p>	<p>DOUBLE D2i_1</p>
<p>Mungbean harvested - Mungbean sold - Mungbean for consumption - Mungbean lost = %D2i_1% %D2g_0%. What happened with this difference? Or needs something to be corrected?</p> <p>I It is sufficient to explain or correct differences above 5% of the yield. E // Only show the question where the difference is larger than 5 percent: D2i_1>=(D2g.Sum(x=>x.D2g_1)*0.05)</p>	<p>TEXT D2i_2</p> <p>-----</p>

<p>What kind of trader did you primarily sell to?</p> <p>E //Only ask this question for one season D2.Count(x=>x.D2a>0)==1 && D2a>0</p>	<p>SINGLE-SELECT D2j</p> <p>01 <input type="radio"/> Trader that is only active in the same village (at farm gate)</p> <p>02 <input type="radio"/> Trader that is only active in the same village (outside farm)</p> <p>03 <input type="radio"/> Local trader (at farm gate)</p> <p>04 <input type="radio"/> Local trader (outside farm)</p> <p>05 <input type="radio"/> Regional trader (at farm gate)</p> <p>06 <input type="radio"/> Regional trader (outside farm)</p> <p>07 <input type="radio"/> Directly to exporter (at farm gate)</p> <p>08 <input type="radio"/> Directly to exporter (outside farm)</p> <p>09 <input type="radio"/> Other</p>
<p>Please define the trader</p> <p>E D2j==9</p>	<p>TEXT D2j_1</p> <p>.....</p>
<p>How many years have you been selling to this trader?</p> <p>I If the farmer sells to the trader for less than one year, enter "0".</p> <p>E //Only ask this question for one season D2j>0</p> <p>W1 self<40</p> <p>M1 This is a very long time, please double check.</p>	<p>NUMERIC: INTEGER D2j_2</p> <p>-----</p>
<p>How much did you need to pay to transport the mungbean to the trader in %rosteritle% season? Please do not include cost for hired labor.</p> <p>E D2j.InList(2,4,6,8,9)</p> <p>W1 self<(D2g.Sum(x=>x.D2g_3a)*0.15)</p> <p>M1 The transport to the trader cost more than 15% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D2j_3</p> <p>-----</p>
<p>Did you also sell to another kind of trader in the last 12 months?</p> <p>E D2j>0</p>	<p>SINGLE-SELECT D2k</p> <p>01 <input type="radio"/> Trader that is only active in the same village (at farm gate)</p> <p>02 <input type="radio"/> Trader that is only active in the same village (outside farm)</p> <p>03 <input type="radio"/> Local trader (at farm gate)</p> <p>04 <input type="radio"/> Local trader (outside farm)</p> <p>05 <input type="radio"/> Regional trader (at farm gate)</p> <p>06 <input type="radio"/> Regional trader (outside farm)</p> <p>07 <input type="radio"/> Directly to exporter (at farm gate)</p> <p>08 <input type="radio"/> Directly to exporter (outside farm)</p> <p>09 <input type="radio"/> Other</p>
<p>Please define the trader</p> <p>E D2k==9</p>	<p>TEXT D2k_1</p> <p>.....</p>

MUNGBEAN PRODUCTION / MUNGBEAN ROSTER
USE OF MACHINES

E D2a>0

<p>What did you use for land preparation?</p> <p>V1 <code>!self.Contains(1) self.ContainsOnly(1)</code></p> <p>M1 The harvest can either be fully manual or not.</p>	<p>MULTI-SELECT D21</p> <p>01 <input type="checkbox"/> Only Manual</p> <p>02 <input type="checkbox"/> Bulls</p> <p>03 <input type="checkbox"/> Power tiller/Hand tractor</p> <p>04 <input type="checkbox"/> Tractor</p> <p>05 <input type="checkbox"/> Other</p>
<p>Please define the other tool or machine used for land preparation</p> <p>E <code>D21.Contains(5)</code></p>	<p>TEXT D21_1</p> <p>.....</p>
<p>How much did you pay to rent the tools/machinery/animals for land preparation?</p> <p>I If owned by the household, ask for the usual rate in the area.</p> <p>E <code>D21.ContainsAny(2, 3, 4, 5)</code></p> <p>W1 <code>self<(D2g.Sum(x=>x.D2g_3a)*0.2)</code></p> <p>M1 The rental cost is more than 20% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D21_2</p> <p>-----</p>
<p>Which <u>engine powered</u> machines did you use for harvest?</p> <p>I Do not include transport to the market, as we already captured this when asking about the trader. Do include transport from the field to the household.</p> <p>E <code>D2g.Sum(x=>x.D2g_1)>0</code></p> <p>V1 <code>self.ContainsOnly(1) !self.Contains(1)</code></p> <p>M1 You cannot collect "None" and another value at the same time.</p>	<p>MULTI-SELECT D2m</p> <p>01 <input type="checkbox"/> None</p> <p>02 <input type="checkbox"/> Thresher</p> <p>03 <input type="checkbox"/> Hand tractor</p> <p>04 <input type="checkbox"/> Truck</p> <p>05 <input type="checkbox"/> Combine</p> <p>06 <input type="checkbox"/> Other</p>
<p>Please define the other engine powered machine used for harvesting</p> <p>I Only include engine powered machinery under "Other", no hand tools, etc.</p> <p>E <code>D2m.Contains(6)</code></p>	<p>TEXT D2m_1</p> <p>.....</p>
<p>How much did you pay to rent the thresher?</p> <p>I If owned by household, ask for usual rental rate in the area.</p> <p>E <code>D2m.Contains(2)</code></p> <p>W1 <code>self<(D2g.Sum(x=>x.D2g_3a)*0.2)</code></p> <p>M1 The rent is more than 20% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D2m_2</p> <p>-----</p>
<p>How much did you pay to rent the hand tractor?</p> <p>I If owned by household, ask for usual rental rate in the area.</p> <p>E <code>D2m.Contains(3)</code></p> <p>W1 <code>self<(D2g.Sum(x=>x.D2g_3a)*0.1)</code></p> <p>M1 The rent is more than 10% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D2m_3</p> <p>-----</p>
<p>How much did you pay to rent the truck?</p> <p>I If owned by household, ask for usual rental rate in the area.</p> <p>E <code>D2m.Contains(4)</code></p> <p>W1 <code>self<(D2g.Sum(x=>x.D2g_3a)*0.1)</code></p> <p>M1 The rent is more than 10% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D2m_4</p> <p>-----</p>
<p>How much did you pay to rent the combine?</p> <p>I If owned by household, ask for usual rental rate in the area.</p> <p>E <code>D2m.Contains(5)</code></p> <p>W1 <code>self<(D2g.Sum(x=>x.D2g_3a)*0.25)</code></p> <p>M1 The rent of the combine is more than 25% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D2m_5</p> <p>-----</p>

<p>At what time did you harvest with the combine harvester</p> <p>E D2m.Contains(5)</p>	<p>SINGLE-SELECT D2m_5b</p> <p>01 <input type="radio"/> At the first harvest</p> <p>02 <input type="radio"/> At the second harvest</p> <p>03 <input type="radio"/> At the third harvest</p> <p>04 <input type="radio"/> At 4th harvest or later</p>
<p>How much did you pay to rent the %D2m_1%?</p> <p>I If owned by household, ask for usual rental rate in the area.</p> <p>E D2m.Contains(6)</p> <p>W1 self<(D2g.Sum(x=>x.D2g_3a)*0.1)</p> <p>M1 The cost to rent the %D2m_1% is more than 10% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D2m_6</p> <p>-----</p>
<p>Did you use any other engine powered machines in the production of your mungbean?</p> <p>I Do not include the transport from the farm to the trader as we have captured the cost of this before.</p>	<p>SINGLE-SELECT D2n</p> <p>00 <input type="radio"/> No</p> <p>01 <input type="radio"/> Yes</p>
<p>What was the machine and what did you use it for?</p> <p>E D2n==1</p>	<p>TEXT D2n_1</p> <p>-----</p>
<p>How much did you pay for this service?</p> <p>I If owned by the household, ask for the usual rate in the area.</p> <p>E D2n==1</p> <p>W1 self<(D2g.Sum(x=>x.D2g_3a)*0.1)</p> <p>M1 The cost to rent this machine is more than 10% of the crop income. Please double check.</p>	<p>NUMERIC: INTEGER D2n_2</p> <p>-----</p>
<p>VARIABLE</p> <p>(@rowcode==1)? D2g.Sum(x=>x.D2g_3a):-99</p>	<p>DOUBLE D2o_1</p>
<p>VARIABLE</p> <p>(@rowcode==2)? D2g.Sum(x=>x.D2g_3a):-99</p>	<p>DOUBLE D2o_2</p>
<p>VARIABLE</p> <p>(@rowcode==3)? D2g.Sum(x=>x.D2g_3a):-99</p>	<p>DOUBLE D2o_3</p>
<p>VARIABLE</p> <p>D2g.Sum(x=>x.D2g_3a) - ((D2j_3>0)? D2j_3:0) - ((D2l_2>0)? D2l_2:0) - ((D2m_2>0)? D2m_2:0) - ((D2m_3>0)? D2m_3:0) - ((D2m_4>0)? D2m_4:0) - ((D2m_5>0)? D2m_5:0) - ((D2m_6>0)? D2m_6:0) - ((D2n_2>0)? D2n_2</p> <p>And 3 other symbols [1]</p>	<p>DOUBLE D2o</p>
<p>STATIC TEXT</p> <p><i>(Total crop income from sales minus transport and machinery is %D2o%)</i></p>	
<p>VARIABLE</p> <p>D2.Max(x=>x.D2o_1)>0? D2.Max(x=>x.D2o_1):(D2.Max(x=>x.D2o_2)>0? D2.Max(x=>x.D2o_2):D2.Max(x=>x.D2o_3))</p>	<p>DOUBLE D2_0</p>
<p>VARIABLE</p> <p>D2.Max(x=>x.D2o_2)</p>	<p>DOUBLE D2_0b</p>
<p>VARIABLE</p> <p>D2.Max(x=>x.D2o_3)</p>	<p>DOUBLE D2_0c</p>
<p>VARIABLE</p> <p>(laborcost[@rowcode].costlimit)*100</p>	<p>DOUBLE D2_0d</p>

Do parts of the area where you grow mungbean have a steep slope?	SINGLE-SELECT 00 <input type="radio"/> No 01 <input type="radio"/> Yes	D3a
How many acres of the planted area are steeply sloped? E D3a==1 V1 self <= D2.Max(x=>x.D2a) M1 The acreage is larger than the largest area grown in any of the three seasons.	NUMERIC: DECIMAL -----	D3b
Is the entire area accessible by a rice/mini combine or a tractor?	SINGLE-SELECT 00 <input type="radio"/> No 01 <input type="radio"/> Yes	D3c
How many acres of the planted area are not accessible? E D3c==0 V1 self <= D2.Max(x=>x.D2a) M1 The acreage is larger than the largest area grown in any of the three seasons.	NUMERIC: DECIMAL -----	D3d

MUNGBEAN PRODUCTION
Roster: MUNGBEAN INPUTS
generated by fixed list

D4

01 Seed
02 Fertilizer
03 Pesticides
04 Herbicides
05 Other chemicals
06 Irrigation water
07 Direct Taxes and other fees (Inc. fees for water management etc.)
08 Fuel (Diesel, etc.)
09 Manure
10 Others

In the last season you produced mungbean, how much %roster% did you use? E @rowcode!=6 && @rowcode!=7	NUMERIC: DECIMAL -----	D4a
Specify the unit E D4a>0	SINGLE-SELECT 02 <input type="radio"/> Bag 25kg 03 <input type="radio"/> Bag 50kg 04 <input type="radio"/> Gram 05 <input type="radio"/> kg 06 <input type="radio"/> Liter 07 <input type="radio"/> cc 08 <input type="radio"/> ml 09 <input type="radio"/> Gallon 10 <input type="radio"/> Pyi 11 <input type="radio"/> Cart 12 <input type="radio"/> Other	D4b

<p>Please specify the unit</p> <p>E D4b==12</p>	<p>TEXT D4b_1</p> <p>.....</p>
<p>Please define the other input</p> <p>E @rowcode==10 && D4a>0</p>	<p>TEXT D4_1</p> <p>.....</p>
<p>What was the <u>price per unit</u>?</p> <p>E D4a>0 && !@rowcode.InRange(2, 8) //Do not ask for unit p rice for fertilizer, chemical inputs, water, and taxes</p> <p>W1 (D4a*self)<(D2_0*0.2)</p> <p>M1 This cost is more than 20% of income from the mungbean sales in the season.</p>	<p>NUMERIC: INTEGER D4c</p> <p>-----</p>
<p>How much did you <u>pay</u> for %rostertitle% <u>in total</u> during the last season to grow mungbean?</p> <p>E (@rowcode.InRange(2, 8) @rowcode==10) && !(@rowcode== 2 && D4a==0)</p> <p>W1 self<(D2_0*0.2)</p> <p>M1 This cost is more than 20% of income from the mungbean sales in the season.</p>	<p>NUMERIC: INTEGER D4d</p> <p>-----</p>
<p>Now I would like to ask about the labor you needed to grow mungbean the last season you produced it. Which of the following groups worked in any step of production?</p>	<p>MULTI-SELECT: YES/NO D5_0</p> <p>01 <input type="checkbox"/> / <input type="checkbox"/> hired women</p> <p>02 <input type="checkbox"/> / <input type="checkbox"/> hired men</p> <p>03 <input type="checkbox"/> / <input type="checkbox"/> women of the family</p> <p>04 <input type="checkbox"/> / <input type="checkbox"/> men of the family</p> <p>05 <input type="checkbox"/> / <input type="checkbox"/> women of the community who were not payed money</p> <p>06 <input type="checkbox"/> / <input type="checkbox"/> men of the community who were not payed money</p> <p>07 <input type="checkbox"/> / <input type="checkbox"/> Girls (<15 years old)</p> <p>08 <input type="checkbox"/> / <input type="checkbox"/> Boys (<15 years old)</p>

MUNGBEAN PRODUCTION

Roster: WORKING HOURS AND WAGES

generated by fixed list

D5

- 01 Ploughing
- 02 Harrowing
- 03 Levelling
- 04 Sowing
- 05 Fertilizer application
- 06 Weeding
- 07 Pesticide application
- 08 Harvesting
- 09 Threshing
- 10 Drying
- 11 Transportation
- 12 Others

MUNGBEAN PRODUCTION / WORKING HOURS AND WAGES

Roster: LABOR BY PRODUCTION STEP

generated by multi-select question [D5_0](#)

D5_1

How many days worked %rostartitle% on %D5%?	NUMERIC: INTEGER D5a -----
On average how many %rostartitle% worked on this each day? E D5a>=1	NUMERIC: INTEGER D5b -----
How many hours did each %rostartitle% work per day (on average)? E D5a>=1 W1 self<12 M1 You entered a daily working time above 12 hours. Please double check your answer. V2 self<18 M2 The number of working hours per person is unreasonably high.	NUMERIC: DECIMAL D5c -----
How much were %rostartitle% paid per day for this activity? E (@rowcode==1 @rowcode==2 @rowcode==7 @rowcode==8) && D5a>=1 W1 self<20000 M1 Are you sure every person got that much for each day they worked?	NUMERIC: INTEGER D5d -----
VARIABLE (@rowcode==1 @rowcode==2)? (D5a * D5b * D5d):0	DOUBLE D5d_1
VARIABLE D5_1.Sum(x=>x.D5d_1)	DOUBLE D5_2
DO NOT READ OUT: The labor cost is more than %D2_0d%% of the crop income. Did you probe the answers? (Laborcost is %D5_2% while mungbean income in the season was %D2_0%) E (D5_2 / D2_0) > (laborcost[@rowcode].costlimit)	SINGLE-SELECT D5_2b 00 <input type="radio"/> No 01 <input type="radio"/> Yes
Why did the community members who were not paid money decide to help you? E D5_0.Yes.ContainsAny(5,6)	MULTI-SELECT D5_3 01 <input type="checkbox"/> I/We will help them as well, or did so in the past. 02 <input type="checkbox"/> They owe money to the respondent or his/her family. 03 <input type="checkbox"/> They receive food while working. 04 <input type="checkbox"/> They receive mungbean. 05 <input type="checkbox"/> They receive other agricultural products. 06 <input type="checkbox"/> They are friends 07 <input type="checkbox"/> They are family 08 <input type="checkbox"/> Other
Please define the other reason to help without being paid any money E D5_3.Contains(8)	TEXT D5_3a -----
Which share of the harvested mungbean were the workers given? E D5_3.Contains(4) V1 D5_3b <= 100 && D5_3b>0 M1 The value needs to be between 0 and 100 percent.	NUMERIC: DECIMAL D5_3b -----

<p>What was the approximate value of what you gave to each person (in BDT per person)?</p> <p>I Do not include the value of mungbean, if they are allowed to take it home. Enter zero if nothing was given.</p> <p>E D5_3.ContainsAny(5, 8)</p>	<p>NUMERIC: INTEGER D5_3c</p> <p>-----</p>
<p>DO NOT READ OUT: If hired women worked in the harvest: Did this farmer pay hired women laborers according to how much they harvested?</p> <p>E D5_0.Yes.Contains(1)</p>	<p>SINGLE-SELECT D5_4_1</p> <p>00 <input type="radio"/> No/Does not employ hired women for harvest</p> <p>01 <input type="radio"/> Yes</p>
<p>How much were the hired women payed per kg of mungbean they harvested?</p> <p>E D5_0.Yes.Contains(1) && D5_4_1==1</p> <p>V1 D5_4_2<80</p> <p>M1 This payment is very high. Please make sure it is per kg.</p>	<p>NUMERIC: INTEGER D5_4_2</p> <p>-----</p>
<p>DO NOT READ OUT: If hired men work in the harvest: Did this farmer pay hired men laborers according to how much they harvested?</p> <p>E D5_0.Yes.Contains(2)</p>	<p>SINGLE-SELECT D5_4_3</p> <p>00 <input type="radio"/> No/Does not employ hired men for harvest</p> <p>01 <input type="radio"/> Yes</p>
<p>How much were the hired men payed per kg of mungbean they harvested?</p> <p>E D5_0.Yes.Contains(2) & D5_4_3==1</p> <p>V1 D5_4_4<80</p> <p>M1 This payment is very high. Please make sure it is per kg.</p>	<p>NUMERIC: INTEGER D5_4_4</p> <p>-----</p>

MUNGBEAN PRODUCTION

MUNGBEAN PRODUCTION IN WINTER SEASON

E D2.Count(x=>x.@rowcode==2 && x.D2a>0)>0 && D2.Count(x=>x.@rowcode==1 && x.D2a>0)>0

In the last Winter season, did you buy different amounts of any input to grow mungbean?

MULTI-SELECT: YES/NO

D7_1_0

- 01 ☐ / ☐ Seed
- 02 ☐ / ☐ Fertilizer
- 03 ☐ / ☐ Pesticides
- 04 ☐ / ☐ Herbicides
- 05 ☐ / ☐ Other chemicals
- 06 ☐ / ☐ Irrigation
- 07 ☐ / ☐ Direct Taxes and other fees
- 08 ☐ / ☐ Fuel (Diesel etc)
- 09 ☐ / ☐ Manure
- 10 ☐ / ☐ Others

MUNGBEAN PRODUCTION / MUNGBEAN PRODUCTION IN WINTER SEASON

Roster: MUNGBEAN INPUTS

generated by multi-select question [D7_1_0](#)

D7_1

E D7_1_0.Yes.Length>=1

In the last Winter season, how much %rosteritle% did you use?

NUMERIC: DECIMAL

D7_1a

E @rowcode!=6 && @rowcode!=7

Specify the unit E D7_1a>0	<div>SINGLE-SELECT</div> <div>d7_1b</div> <div> 01 <input type="radio"/> Basket 02 <input type="radio"/> Bag 25kg 03 <input type="radio"/> Bag 50kg 04 <input type="radio"/> Gram 05 <input type="radio"/> kg 06 <input type="radio"/> Liter 07 <input type="radio"/> cc 08 <input type="radio"/> ml 09 <input type="radio"/> Gallon 10 <input type="radio"/> Pyi 11 <input type="radio"/> Cart 12 <input type="radio"/> Other </div>
Please specify the unit E D7_1b==12	<div>TEXT</div> <div>d7_1b_1</div> <div> </div>
Please define the other input E @rowcode==10 && D7_1a>0	<div>TEXT</div> <div>d7_1_1</div> <div> </div>
What was the price per unit? E D7_1a>0 && !@rowcode.InRange(2, 8) //Do not ask for unit price for chemical inputs, water, and taxes W1 (D7_1a*self)<(D2_0b*0.2) M1 This cost is more than 20% of income from the mungbean sales in the season.	<div>NUMERIC: INTEGER</div> <div>d7_1c</div> <div> ----- </div>
How much did you pay for %rostertitle% in total during the last season to grow mungbean? E (@rowcode.InRange(2, 8) @rowcode==10) && !(@rowcode==2 && D7_1a==0) W1 self<(D2_0b*0.2) M1 This cost is more than 20% of income from the mungbean sales in the season.	<div>NUMERIC: INTEGER</div> <div>d7_1d</div> <div> ----- </div>
In the last Winter season, was any activity in mungbean production done with more or less workers from one of the groups?	<div>MULTI-SELECT: YES/NO</div> <div>d7_2_0</div> <div> 01 <input type="checkbox"/> / <input type="checkbox"/> Ploughing 02 <input type="checkbox"/> / <input type="checkbox"/> Harrowing 03 <input type="checkbox"/> / <input type="checkbox"/> Levelling 04 <input type="checkbox"/> / <input type="checkbox"/> Sowing 05 <input type="checkbox"/> / <input type="checkbox"/> Fertilizer application 06 <input type="checkbox"/> / <input type="checkbox"/> Weeding 07 <input type="checkbox"/> / <input type="checkbox"/> Pesticide application 08 <input type="checkbox"/> / <input type="checkbox"/> Harvesting 09 <input type="checkbox"/> / <input type="checkbox"/> Threshing 10 <input type="checkbox"/> / <input type="checkbox"/> Drying 11 <input type="checkbox"/> / <input type="checkbox"/> Transportation 12 <input type="checkbox"/> / <input type="checkbox"/> Others </div>

Which of the following groups worked in these activities?	MULTI-SELECT	D7_2_0b
E D7_2_0.Yes.Length>=1	01 <input type="checkbox"/> hired women 02 <input type="checkbox"/> hired men 03 <input type="checkbox"/> women of the family 04 <input type="checkbox"/> men of the family 05 <input type="checkbox"/> women of the community who were not payed money 06 <input type="checkbox"/> men of the community who were not payed money 07 <input type="checkbox"/> Girls (<15 years old) 08 <input type="checkbox"/> Boys (<15 years old)	

MUNGBEAN PRODUCTION / MUNGBEAN PRODUCTION IN WINTER SEASON		
Roster: WORKING HOURS AND WAGES		
generated by multi-select question D7_2_0		
E D7_2_0.Yes.Length>=1		D7_2

MUNGBEAN PRODUCTION / MUNGBEAN PRODUCTION IN WINTER SEASON / WORKING HOURS AND WAGES		
Roster: LABOR BY PRODUCTION STEP		
generated by multi-select question D7_2_0b		
		D7_2_1
How many days worked %rostartitle% on %D7_2%?	NUMERIC: INTEGER	D7_2a

On average how many %rostartitle% worked on this each day?	NUMERIC: INTEGER	D7_2b
E D7_2a>=1	-----	
How many hours did each %rostartitle% work per day (on average)?	NUMERIC: DECIMAL	D7_2c
E D7_2a>=1 W1 self<12 M1 You entered a daily working time above 12 hours. Please double check your answer. V2 self<18 M2 The number of working hours per person is unreasonably high.	-----	
How much were %rostartitle% payed per day for this activity?	NUMERIC: INTEGER	D7_2d
E (@rowcode==1 @rowcode==2 @rowcode==7 @rowcode==8) && D7_2a>=1 W1 self<20000 M1 Are you sure every person got that much for each day they worked?	-----	
VARIABLE (@rowcode==1 @rowcode==2)? (D7_2a * D7_2b * D7_2d):0	DOUBLE	D7_2d_1
VARIABLE D7_2_1.Sum(x=>x.D7_2d_1)	DOUBLE	D7_2_2
DO NOT READ OUT: The labor cost is more than %D2_0d%% of the crop income. Did you probe the answers? (Laborcost is %D7_2_2% while mungbean income in the season was %D2_0b%)	SINGLE-SELECT	D7_2_2b
E (D7_2_2 / D2_0b) > (laborcost[@rowcode].costlimit)	00 <input type="radio"/> No 01 <input type="radio"/> Yes	

MUNGBEAN PRODUCTION IN MONSOON SEASON

E D2.Count(x=>x.@rowcode==3 && x.D2a>0)>0 && (D2.Count(x=>x.@rowcode==1 && x.D2a>0)>0 || D2.Count(x=>x.@rowcode==2 && x.D2a>0)>0)

In the last monsoon season, did you buy different amounts of any input?

MULTI-SELECT: YES/NO

D8_1_0

- 01 ☐ / ☐ Seed
 02 ☐ / ☐ Fertilizer
 03 ☐ / ☐ Pesticides
 04 ☐ / ☐ Herbicides
 05 ☐ / ☐ Other chemicals
 06 ☐ / ☐ Irrigation
 07 ☐ / ☐ Direct Taxes and other fees
 08 ☐ / ☐ Fuel (Diesel etc)
 09 ☐ / ☐ Manure
 10 ☐ / ☐ Others

MUNGBEAN PRODUCTION / MUNGBEAN PRODUCTION IN MONSOON SEASON

Roster: MUNGBEAN INPUTS

generated by multi-select question [D8_1_0](#)

D8_1

E D8_1_0.Yes.Length>=1

In the last monsoon season you produced mungbean, how much %rosteritle% did you use?

NUMERIC: DECIMAL

D8_1a

E @rowcode!=6 && @rowcode!=7

Specify the unit

SINGLE-SELECT

D8_1b

E D8_1a>0

- 01 ☐ Basket
 02 ☐ Bag 25kg
 03 ☐ Bag 50kg
 04 ☐ Gram
 05 ☐ kg
 06 ☐ Liter
 07 ☐ cc
 08 ☐ ml
 09 ☐ Gallon
 10 ☐ Pyi
 11 ☐ Cart
 12 ☐ Other

Please specify the unit

TEXT

D8_1b_1

E D8_1b==12

.....

Please define the other input

TEXT

D8_1_1

E @rowcode==10 && D8_1a>0

.....

What was the price per unit?

NUMERIC: INTEGER

D8_1c

E D8_1a>0 && !@rowcode.InRange(2, 8) //Do not ask for unit price for chemical inputs, water, and taxes

W1 (D8_1a*self)<(D2_0c*0.2)

M1 This cost is more than 20% of income from the mungbean sales in the season.

<p>How much did you pay for %rostartitle% in total during the last season to grow mungbean?</p> <p>E (@rowcode.InRange(2, 8) @rowcode==10) && !(@rowcode==2 && D8_1a==0)</p> <p>W1 self<(D2_0c*0.2)</p> <p>M1 This cost is more than 20% of income from the mungbean sales in the season.</p>	<p>NUMERIC: INTEGER</p> <p>D8_1d</p> <p>-----</p>
<p>In the last monsoon season, was any activity in mungbean production done with more or less workers from one of the groups?</p>	<p>MULTI-SELECT: YES/NO</p> <p>D8_2_0</p> <p>01 <input type="checkbox"/> / <input type="checkbox"/> Ploughing</p> <p>02 <input type="checkbox"/> / <input type="checkbox"/> Harrowing</p> <p>03 <input type="checkbox"/> / <input type="checkbox"/> Levelling</p> <p>04 <input type="checkbox"/> / <input type="checkbox"/> Sowing</p> <p>05 <input type="checkbox"/> / <input type="checkbox"/> Fertilizer application</p> <p>06 <input type="checkbox"/> / <input type="checkbox"/> Weeding</p> <p>07 <input type="checkbox"/> / <input type="checkbox"/> Pesticide application</p> <p>08 <input type="checkbox"/> / <input type="checkbox"/> Harvesting</p> <p>09 <input type="checkbox"/> / <input type="checkbox"/> Threshing</p> <p>10 <input type="checkbox"/> / <input type="checkbox"/> Drying</p> <p>11 <input type="checkbox"/> / <input type="checkbox"/> Transportation</p> <p>12 <input type="checkbox"/> / <input type="checkbox"/> Others</p>
<p>Which of the following groups worked in these activities?</p> <p>E D8_2_0.Yes.Length>=1</p>	<p>MULTI-SELECT</p> <p>D8_2_0b</p> <p>01 <input type="checkbox"/> hired women</p> <p>02 <input type="checkbox"/> hired men</p> <p>03 <input type="checkbox"/> women of the family</p> <p>04 <input type="checkbox"/> men of the family</p> <p>05 <input type="checkbox"/> women of the community who were not payed money</p> <p>06 <input type="checkbox"/> men of the community who were not payed money</p> <p>07 <input type="checkbox"/> Girls (<15 years old)</p> <p>08 <input type="checkbox"/> Boys (<15 years old)</p>

MUNGBEAN PRODUCTION / MUNGBEAN PRODUCTION IN MONSOON SEASON

Roster: WORKING HOURS AND WAGES

generated by multi-select question [D8_2_0](#)

D8_2

E D8_2_0.Yes.Length>=1

MUNGBEAN PRODUCTION / MUNGBEAN PRODUCTION IN MONSOON SEASON / WORKING HOURS AND WAGES

Roster: LABOR BY PRODUCTION STEP

generated by multi-select question [D8_2_0b](#)

D8_2_1

<p>How many days worked %rostartitle% on %D8_2%?</p>	<p>NUMERIC: INTEGER</p> <p>D8_2a</p> <p>-----</p>
<p>On average how many %rostartitle% worked on this each day?</p> <p>E D8_2a>=1</p>	<p>NUMERIC: INTEGER</p> <p>D8_2b</p> <p>-----</p>

<p>How many hours did each %rostartitle% work per day (on average)?</p> <p>E D8_2a>=1</p> <p>W1 self<12</p> <p>M1 You entered a daily working time above 12 hours. Please double check your answer.</p> <p>V2 self<18</p> <p>M2 The number of working hours per person is unreasonably high.</p>	<p>NUMERIC: DECIMAL D8_2c</p> <p>-----</p>
<p>How much were %rostartitle% payed per day for this activity?</p> <p>E (@rowcode==1 @rowcode==2 @rowcode==7 @rowcode==8) && D8_2a>=1</p> <p>W1 self<20000</p> <p>M1 Are you sure every person got that much for each day they worked?</p>	<p>NUMERIC: INTEGER D8_2d</p> <p>-----</p>
<p>VARIABLE</p> <p>(@rowcode==1 @rowcode==2)? (D8_2a * D8_2b * D8_2d):0</p>	<p>DOUBLE D8_2d_1</p>
<p>VARIABLE</p> <p>D8_2_1.Sum(x=>x.D8_2d_1)</p>	<p>DOUBLE D8_2_2</p>
<p>DO NOT READ OUT: The labor cost is more than %D2_0d%% of the crop income. Did you probe the answers? (Laborcost is %D8_2_2% while mungbean income in the season was %D2_0c%)</p> <p>E (D8_2_2 / D2_0c) > (laborcost[@rowcode].costlimit)</p>	<p>SINGLE-SELECT D8_2_2b</p> <p>00 <input type="radio"/> No</p> <p>01 <input type="radio"/> Yes</p>

MUNGBEAN VIEWS AND PRACTICES

MUNGBEAN VIEWS AND PRACTICES VIEWS ON MUNGBEAN HARVESTING

STATIC TEXT

Please tell me on a scale from 1, meaning you strongly disagree, to 5, meaning you fully agree, how strongly you agree with the following statements.

Manual harvesting of mungbean requires little effort.	<div>SINGLE-SELECTD9_1_5a</div> <div>01 <input type="radio"/> Strongly disagree</div> <div>02 <input type="radio"/> Disagree</div> <div>03 <input type="radio"/> Neutral</div> <div>04 <input type="radio"/> Agree</div> <div>05 <input type="radio"/> Strongly agree</div>
Manual harvesting of mungbean takes a lot of time from women.	<div>SINGLE-SELECTD9_1_5b</div> <div>01 <input type="radio"/> Strongly disagree</div> <div>02 <input type="radio"/> Disagree</div> <div>03 <input type="radio"/> Neutral</div> <div>04 <input type="radio"/> Agree</div> <div>05 <input type="radio"/> Strongly agree</div>
Manual harvesting of mungbean takes a lot of time from men.	<div>SINGLE-SELECTD9_1_5c</div> <div>01 <input type="radio"/> Strongly disagree</div> <div>02 <input type="radio"/> Disagree</div> <div>03 <input type="radio"/> Neutral</div> <div>04 <input type="radio"/> Agree</div> <div>05 <input type="radio"/> Strongly agree</div>
If mungbean could be harvested by machine it would benefit our entire village community.	<div>SINGLE-SELECTD9_1_5d</div> <div>01 <input type="radio"/> Strongly disagree</div> <div>02 <input type="radio"/> Disagree</div> <div>03 <input type="radio"/> Neutral</div> <div>04 <input type="radio"/> Agree</div> <div>05 <input type="radio"/> Strongly agree</div>
Our family enjoys working together in the field harvesting mungbean.	<div>SINGLE-SELECTD9_1_5e</div> <div>01 <input type="radio"/> Strongly disagree</div> <div>02 <input type="radio"/> Disagree</div> <div>03 <input type="radio"/> Neutral</div> <div>04 <input type="radio"/> Agree</div> <div>05 <input type="radio"/> Strongly agree</div>
Machine mungbean harvesting would exclude women from the harvesting process.	<div>SINGLE-SELECTD9_1_5f</div> <div>01 <input type="radio"/> Strongly disagree</div> <div>02 <input type="radio"/> Disagree</div> <div>03 <input type="radio"/> Neutral</div> <div>04 <input type="radio"/> Agree</div> <div>05 <input type="radio"/> Strongly agree</div>

Women can operate farm machinery equally well as men.	SINGLE-SELECT D9_1_5g 01 <input type="radio"/> Strongly disagree 02 <input type="radio"/> Disagree 03 <input type="radio"/> Neutral 04 <input type="radio"/> Agree 05 <input type="radio"/> Strongly agree
Manual harvesting of mungbean is among the most arduous types of work on the farm	SINGLE-SELECT D9_1_5h 01 <input type="radio"/> Strongly disagree 02 <input type="radio"/> Disagree 03 <input type="radio"/> Neutral 04 <input type="radio"/> Agree 05 <input type="radio"/> Strongly agree
The problem with mechanization is that it reduces work and income for landless people.	SINGLE-SELECT D9_1_5i 01 <input type="radio"/> Strongly disagree 02 <input type="radio"/> Disagree 03 <input type="radio"/> Neutral 04 <input type="radio"/> Agree 05 <input type="radio"/> Strongly agree

MUNGBEAN VIEWS AND PRACTICES

MUNGBEAN CULTIVATION PRACTICE

STATIC TEXT

Now I would like to ask you about the techniques you use when growing mungbean

From where did you obtain mungbean seed for your most recent cultivation?	SINGLE-SELECT D9_2 01 <input type="radio"/> Saved from my previous harvest 02 <input type="radio"/> Bought it from the grain/open market 03 <input type="radio"/> Bought it from a seed dealer/company 04 <input type="radio"/> Received it from a research station 05 <input type="radio"/> Received from extension 06 <input type="radio"/> Received from fellow female farmer 07 <input type="radio"/> Received from fellow male farmer 08 <input type="radio"/> Other (Specify)
Please define the source of mungbean seed E D9_2==8	TEXT D_9_2a
Did you grow an improved mungbean variety?	SINGLE-SELECT D9_2_1 00 <input type="radio"/> No, grew a local variety 01 <input type="radio"/> Yes, grew an improved variety

<p>Which mungbean variety did you grow primarily?</p> <p>E d9_2_1==1</p>	<p>SINGLE-SELECT d9_2_2</p> <p>-98 <input type="radio"/> Don't know</p> <p>01 <input type="radio"/> BARI Mung-6</p> <p>02 <input type="radio"/> BARI Mung-5</p> <p>03 <input type="radio"/> BARI Mung-2</p> <p>04 <input type="radio"/> Binamoog-5</p> <p>05 <input type="radio"/> Binamoog-8</p> <p>06 <input type="radio"/> BARI-Mung-3</p> <p>07 <input type="radio"/> Other</p>
<p>Please name the other mungbean variety</p> <p>E d9_2_2==7</p>	<p>TEXT d9_2_2b</p> <p>.....</p>
<p>For how many years are you growing this variety already?</p> <p>E d9_2_1==1</p> <p>W1 self<=20</p> <p>M1 Make sure the person really grows the variety for more than 20 years</p>	<p>NUMERIC: INTEGER d3_2_3</p> <p>-----</p>
<p>Which mungbean variety did you use before?</p> <p>E d9_2_1==1</p>	<p>SINGLE-SELECT d9_2_4</p> <p>-98 <input type="radio"/> Don't know</p> <p>00 <input type="radio"/> Unimproved variety</p> <p>01 <input type="radio"/> BARI Mung-6</p> <p>02 <input type="radio"/> BARI Mung-5</p> <p>03 <input type="radio"/> BARI Mung-2</p> <p>04 <input type="radio"/> Binamoog-5</p> <p>05 <input type="radio"/> Binamoog-8</p> <p>06 <input type="radio"/> BARI-Mung-3</p> <p>07 <input type="radio"/> Other</p>
<p>Please name the other mungbean variety</p> <p>E d9_2_4==7</p>	<p>TEXT d9_2_4b</p> <p>.....</p>
<p>For how many cropping cycles have you reused seed from your own production?</p> <p>E d9_2==1</p> <p>W1 self<=20</p> <p>M1 This is a very long time. Please double-check.</p>	<p>NUMERIC: INTEGER d9_2_5</p> <p>-----</p>
<p>Did you grow another variety at the same time as the primary variety you just named?</p> <p>E d9_2_1==1</p>	<p>SINGLE-SELECT d9_2_6</p> <p>00 <input type="radio"/> No</p> <p>01 <input type="radio"/> Yes</p>
<p>Which mungbean variety did you grow the second most?</p> <p>E d9_2_6==1</p>	<p>SINGLE-SELECT d9_2_7</p> <p>-98 <input type="radio"/> Don't know</p> <p>01 <input type="radio"/> BARI Mung-6</p> <p>02 <input type="radio"/> BARI Mung-5</p> <p>03 <input type="radio"/> BARI Mung-2</p> <p>04 <input type="radio"/> Binamoog-5</p> <p>05 <input type="radio"/> Binamoog-8</p> <p>06 <input type="radio"/> BARI-Mung-3</p> <p>07 <input type="radio"/> Other</p>

<p>Please name the other mungbean variety</p> <p>E D9_2_7==7</p>	<p>TEXT D9_2_7b</p> <p>.....</p>
<p>On which share of your mung area did you grow the secondary variety?</p> <p>E D9_2_6==1</p> <p>V1 self.InRange(0,100)</p> <p>M1 The share must be between 0 and 100 percent.</p>	<p>NUMERIC: INTEGER D9_2_8</p> <p>-----</p>
<p>Did you face difficulties finding payed and unpaid workers to harvest mungbean?</p> <p>I Do not read out the options!</p> <p>V1 !self.Contains(0) self.ContainsOnly(0)</p> <p>M1 You cannot select "No" and another option at the same time.</p>	<p>MULTI-SELECT D9_3</p> <p>00 <input type="checkbox"/> No</p> <p>01 <input type="checkbox"/> Yes, less unpaid family members were available than last year</p> <p>02 <input type="checkbox"/> Yes, less unpaid community members were available than last year</p> <p>03 <input type="checkbox"/> Yes, I had to postpone the harvest until unpaid helper were available</p> <p>04 <input type="checkbox"/> Yes, I had to pay hired workers higher wages than last year (increase more than 5 percent)</p> <p>05 <input type="checkbox"/> Yes, I had to postpone the harvest until hired workers were available</p> <p>06 <input type="checkbox"/> Yes, I had to work with fewer hired laborers than planned</p> <p>07 <input type="checkbox"/> Other</p>
<p>Please define the problem with finding payed and unpaid workers.</p> <p>E D9_3.Contains(7)</p>	<p>TEXT D_9_3_1</p> <p>.....</p>
<p>Did you provide the hired workers with anything else, besides their wage?</p> <p>I Do not read out the answers!</p> <p>V1 !self.Contains(0) self.ContainsOnly(0)</p> <p>M1 You cannot select "No" and another option at the same time.</p>	<p>MULTI-SELECT D9_4</p> <p>00 <input type="checkbox"/> No</p> <p>01 <input type="checkbox"/> Food</p> <p>02 <input type="checkbox"/> Water</p> <p>03 <input type="checkbox"/> A place to sleep</p> <p>04 <input type="checkbox"/> Transport</p> <p>05 <input type="checkbox"/> Mungbean</p> <p>06 <input type="checkbox"/> Straw/crop residues</p> <p>07 <input type="checkbox"/> Other</p>
<p>Please define the in-kind payment you made to workers.</p> <p>E D9_4.Contains(7)</p>	<p>TEXT D_9_4_1</p> <p>.....</p>
<p>The last time you grew mungbean, how much did all the in-kind payments cost you?</p> <p>E !D9_4.Contains(0)</p>	<p>NUMERIC: INTEGER D9_4_2</p> <p>-----</p>

Which pests and diseases brought economic damage to your mungbean crop over the last 12 month? Please start with the pest or disease that dealt the largest damage to you.	<p>MULTI-SELECT: ORDERED D9_5</p> <p>01 <input type="checkbox"/> Anthracnose</p> <p>02 <input type="checkbox"/> Black legume aphid</p> <p>03 <input type="checkbox"/> Bacterial blight</p> <p>04 <input type="checkbox"/> Bean common mosaic virus</p> <p>05 <input type="checkbox"/> Bean fly</p> <p>06 <input type="checkbox"/> Urd bean leaf crinkle virus</p> <p>07 <input type="checkbox"/> Bihar hairy caterpillar</p> <p>08 <input type="checkbox"/> Bollworm, fruit borer, pod borer</p> <p>09 <input type="checkbox"/> Bruchids, pea and bean weevils</p> <p>10 <input type="checkbox"/> Mirid</p> <p>11 <input type="checkbox"/> Leafhopper, jassids</p> <p>12 <input type="checkbox"/> Cercospora leaf spot</p> <p>13 <input type="checkbox"/> Lycaenid borer</p> <p>14 <input type="checkbox"/> Macrophomina blight</p> <p>15 <input type="checkbox"/> Bean pod borer</p> <p>16 <input type="checkbox"/> Powdery mildew</p> <p>And 8 other symbols [1]</p>
What is the name of the unspecified pest or disease? E D9_5.Contains(24)	<p>TEXT D9_5a</p> <p>.....</p>
How did you sow the mungbean last season?	<p>SINGLE-SELECT D9_6</p> <p>01 <input type="radio"/> Broadcast seed in clean field (mungbean alone)</p> <p>02 <input type="radio"/> Broadcast seed in standing other crops (e.g. broadcast in rice field before rice is harvested)</p> <p>03 <input type="radio"/> Manual Line sowing (mung bean alone)</p> <p>04 <input type="radio"/> Manual Line sowing (intercropping with others)</p> <p>05 <input type="radio"/> Manual Line sowing (mixed cropping with others)</p> <p>06 <input type="radio"/> Mechanized seeder</p> <p>07 <input type="radio"/> Other</p>
Please specify the sowing method E D9_6==7	<p>TEXT D9_6a</p> <p>.....</p>
Do you know about the use of rhizobial inoculants as a way to help with mungbean growth?	<p>SINGLE-SELECT D9_6_1</p> <p>00 <input type="radio"/> I do not know it</p> <p>01 <input type="radio"/> I know rhizobia</p>
Did you use it in the last 12 months' mungbean production? E D9_6_1==1	<p>SINGLE-SELECT D9_6_2</p> <p>00 <input type="radio"/> No</p> <p>01 <input type="radio"/> Yes</p>
Why did you not use Rhizobia? E D9_6_2==0	<p>TEXT D9_6_2a</p> <p>.....</p>

<p>In which form did you apply the rhizobia (e.g. coating mungbeans, spraying, etc.)?</p> <p>E D9_6_2==1</p>	<p>TEXT D9_6_2b</p> <p>.....</p>
<p>Do you know about the use of desiccants or herbicides to speed up the drying-up of the plant?</p>	<p>SINGLE-SELECT D9_6_3</p> <p>00 <input type="radio"/> I do not know about it</p> <p>01 <input type="radio"/> I know desiccants</p>
<p>Did you use desiccants in the last 12 months?</p> <p>E D9_6_3==1</p>	<p>SINGLE-SELECT D9_6_4</p> <p>00 <input type="radio"/> No</p> <p>01 <input type="radio"/> I used desiccants</p>
<p>Why did you not use any desiccants?</p> <p>E D9_6_4==0</p>	<p>TEXT D9_6_4a</p> <p>.....</p>
<p>Which desiccants did you use and for which plants?</p> <p>E D9_6_4==1</p>	<p>LIST D9_6_4b</p> <p>.....</p>
<p>Did you irrigate your mungbean fields in the last 12 months?</p> <p>V1 self.ContainsOnly(0) !self.Contains(0)</p> <p>M1 You cannot select "No" and another answer.</p>	<p>MULTI-SELECT D9_7</p> <p>00 <input type="checkbox"/> No</p> <p>01 <input type="checkbox"/> Yes, during premonsoon season</p> <p>02 <input type="checkbox"/> Yes, during winter season</p> <p>03 <input type="checkbox"/> Yes, during monsoon season</p>
<p>Have you tried to control storage pests like bruchids?</p> <p>V1 !self.ContainsAny(-9, 0) self.ContainsOnly(0) self.ContainsOnly(-9)</p> <p>M1 You cannot select "No" or "N/A" and any other thing.</p>	<p>MULTI-SELECT D9_8</p> <p>-09 <input type="checkbox"/> Sold directly after harvest/Not applicable</p> <p>00 <input type="checkbox"/> No</p> <p>01 <input type="checkbox"/> Use resistant variety</p> <p>02 <input type="checkbox"/> Use clean storage containers and do not mix old and new beans</p> <p>03 <input type="checkbox"/> Inspect regularly</p> <p>04 <input type="checkbox"/> Fumigate using phosphine tablets</p> <p>05 <input type="checkbox"/> Use natural pest repellents (e.g. neem oil)</p> <p>06 <input type="checkbox"/> Cooling aeration</p> <p>07 <input type="checkbox"/> Hermetic storage bags</p> <p>08 <input type="checkbox"/> Used ash</p> <p>09 <input type="checkbox"/> Other</p>
<p>Please specify the other storage pest control method.</p> <p>E D9_8.Contains(9)</p>	<p>TEXT D9_8a</p> <p>.....</p>
<p>For how many months do you usually store your mungbean?</p> <p>I Enter 0 if stored for less than one month.</p> <p>E D9_8.ContainsAny(0,1,2,3,4,5,6,7,8,9)</p>	<p>NUMERIC: INTEGER D9_8b</p> <p>-----</p>
<p>Did you collect the mungbean straw?</p>	<p>SINGLE-SELECT D9_9</p> <p>00 <input type="radio"/> No</p> <p>01 <input type="radio"/> Yes</p>

<p>What did you use the munbgean straw for?</p> <p>E D9_9==1</p>	<p>MULTI-SELECT D9_9_1</p> <p>01 <input type="checkbox"/> Fodder</p> <p>02 <input type="checkbox"/> Cooking fuel</p> <p>03 <input type="checkbox"/> Sold it</p> <p>04 <input type="checkbox"/> Other</p>
<p>Please specify the other usage of the mungbean straw.</p> <p>E D9_9_1.Contains(4)</p>	<p>TEXT D9_9_1a</p> <p>.....</p>
<p>What are your two most important sources of production information on mungbean? Please start with the most important one.</p>	<p>MULTI-SELECT: ORDERED D9_10</p> <p>00 <input type="checkbox"/> None</p> <p>01 <input type="checkbox"/> Female farmers</p> <p>02 <input type="checkbox"/> Male farmers</p> <p>03 <input type="checkbox"/> Input dealer</p> <p>04 <input type="checkbox"/> Buyer/middleman</p> <p>05 <input type="checkbox"/> Extension officer</p> <p>06 <input type="checkbox"/> Group meetings (e.g. farmer group, cooperative)</p> <p>07 <input type="checkbox"/> Farmer Field days/School/training</p> <p>08 <input type="checkbox"/> Other</p>
<p>Please define the other information source.</p> <p>E D9_10.Contains(8)</p>	<p>TEXT D9_10a</p> <p>.....</p>
<p>How many month ago did you meet the primary information source for the last time?</p> <p>I If they met in the same month, enter 0.</p> <p>E D9_10.Length>0</p> <p>W1 self<=12</p> <p>M1 Are you sure it is more than a year ago?</p>	<p>NUMERIC: INTEGER D9_10_1b</p> <p>-----</p>
<p>How many month ago did you meet the secondary information source for the last time?</p> <p>I If they met in the same month, enter 0.</p> <p>E D9_10.Length==2</p> <p>W1 self<=12</p> <p>M1 Are you sure it is more than a year ago?</p>	<p>NUMERIC: INTEGER D9_10_1c</p> <p>-----</p>
<p>Was the extension officer/group meeting/field day/field school organized by a private company, the government, or a NGO?</p> <p>E D9_10.ContainsAny(5,6,7)</p>	<p>SINGLE-SELECT D9_10d</p> <p>01 <input type="radio"/> Private company</p> <p>02 <input type="radio"/> Government</p> <p>03 <input type="radio"/> NGO</p>

For you, what are the three most important constraints to mungbean production? Please start with the main problem.	<div>MULTI-SELECT: ORDERED</div> <div>d9_11</div> <div>01 <input type="checkbox"/> Land is too saline</div> <div>02 <input type="checkbox"/> Not enough water</div> <div>03 <input type="checkbox"/> Soil fertility is too low</div> <div>04 <input type="checkbox"/> It is too hot (flowers drop)</div> <div>05 <input type="checkbox"/> Rain damage during ripening</div> <div>06 <input type="checkbox"/> Seed is unavailable</div> <div>07 <input type="checkbox"/> Seed quality is low</div> <div>08 <input type="checkbox"/> Growing period too short (cannot plant rice on time)</div> <div>09 <input type="checkbox"/> Insect pests</div> <div>10 <input type="checkbox"/> Plant diseases</div> <div>11 <input type="checkbox"/> Input costs are too high</div> <div>12 <input type="checkbox"/> Too low selling prices</div> <div>13 <input type="checkbox"/> Yields are too low</div> <div>14 <input type="checkbox"/> Lack of market demand</div> <div>15 <input type="checkbox"/> High storage losses</div> <div>16 <input type="checkbox"/> Other crops are better</div> <div>And 5 other symbols [2]</div>
Please define the other constraint. E D9_11.Contains(21)	<div>TEXT</div> <div>d9_11a</div> <div>.....</div>

MUNGBEAN VIEWS AND PRACTICES

HYPOTHETICAL AREA EXPANSION

STATIC TEXT

What will you do if the production cost especially labor cost is lower than at the current wage? If you would expand the mungbean area due to less labor cost, by how many acres would you expand the area at each wage? The hours worked and the effort of the workers would be the same at every wage.

Labor cost is decreased by 10% E D9_14a==1	<div>SINGLE-SELECT</div> <div>d9_14a</div> <div>01 <input type="radio"/> expand area</div> <div>02 <input type="radio"/> stay the same</div> <div>03 <input type="radio"/> no idea</div>
By how many decimal would you expand the mungbean area? E D9_14a==1	<div>NUMERIC: DECIMAL</div> <div>d9_14b</div> <div>-----</div>
Labor cost is decreased by 20% W1 self<=D9_14a M1 Please double check. Based on the reaction to the lower wage decrease this is unexpected.	<div>SINGLE-SELECT</div> <div>d9_14c</div> <div>01 <input type="radio"/> expand area</div> <div>02 <input type="radio"/> stay the same</div> <div>03 <input type="radio"/> no idea</div>
By how many decimal would you expand the mungbean area? E D9_14c==1 W1 (D9_14b>0)? self>=D9_14b:true M1 The area expansion is less than at higher labor cost. Please double check!	<div>NUMERIC: DECIMAL</div> <div>d9_14d</div> <div>-----</div>

<p>Labor cost is decreased by 30%</p> <p>W1 self<=D9_14c</p> <p>M1 Please double check. Based on the reaction to the lower wage decrease this is unexpected.</p>	<p>SINGLE-SELECT D9_14e</p> <p>01 <input type="radio"/> expand area</p> <p>02 <input type="radio"/> stay the same</p> <p>03 <input type="radio"/> no idea</p>
<p>By how many decimal would you expand the mungbean area?</p> <p>E D9_14e==1</p> <p>W1 (D9_14d>0)? self>=D9_14d:true</p> <p>M1 The area expansion is less than at higher labor cost. Please double check!</p>	<p>NUMERIC: DECIMAL D9_14f</p> <p>-----</p>
<p>Labor cost is decreased by 40%</p> <p>W1 self<=D9_14e</p> <p>M1 Please double check. Based on the reaction to the lower wage decrease this is unexpected.</p>	<p>SINGLE-SELECT D9_14g</p> <p>01 <input type="radio"/> expand area</p> <p>02 <input type="radio"/> stay the same</p> <p>03 <input type="radio"/> no idea</p>
<p>By how many decimal would you expand the mungbean area?</p> <p>E D9_14g==1</p> <p>W1 (D9_14f>0)? self>=D9_14f:true</p> <p>M1 The area expansion is less than at higher labor cost. Please double check!</p>	<p>NUMERIC: DECIMAL D9_14h</p> <p>-----</p>
<p>Labor cost is decreased by 50%</p> <p>W1 self<=D9_14h</p> <p>M1 Please double check. Based on the reaction to the lower wage decrease this is unexpected.</p>	<p>SINGLE-SELECT D9_14i</p> <p>01 <input type="radio"/> expand area</p> <p>02 <input type="radio"/> stay the same</p> <p>03 <input type="radio"/> no idea</p>
<p>By how many decimal would you expand the mungbean area?</p> <p>E D9_14i==1</p> <p>W1 (D9_14h>0)? self>=D9_14h:true</p> <p>M1 The area expansion is less than at higher labor cost. Please double check!</p>	<p>NUMERIC: DECIMAL D9_14j</p> <p>-----</p>

GENERAL FARMING INFORMATION

Besides mungbean, which crops did you grow over the last 12 months to sell them?	LIST	c1_1
	

GENERAL FARMING INFORMATION

Roster: OTHER CROPS INCOME

generated by list question [c1_1](#)

c2

What was your gross income from %rostertitle%? (In BDT)	NUMERIC: INTEGER	c2a

What was your total production cost for %rostertitle%, including all inputs, hired labor, and rental cost for machines?	NUMERIC: INTEGER	c2b

VARIABLE c2a-c2b	DOUBLE	c2c
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Who is the main person <u>making the decision which inputs to use</u> in production of these crops?	SINGLE-SELECT: LINKED	c3_1
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F B1d >= 15

Who is the main person <u>making the decision when to plant</u> these crops?	SINGLE-SELECT: LINKED	c3_2
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F B1d >= 15

Who is the main person <u>making the decision when and how to harvest</u> these crops?	SINGLE-SELECT: LINKED	c3_3
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F B1d >= 15

Who is the main person <u>making the decision to whom to sell the yield from these crops and at which price?</u>	SINGLE-SELECT: LINKED	c3_4
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F B1d >= 15

GENERAL FARMING INFORMATION

MECHANISATION OF AGRICULTURAL ACTIVITIES

When growing these crops, other than mungbean, do you use any engine powered machinery?	SINGLE-SELECT	c4_1
	00 <input type="radio"/> No	
	01 <input type="radio"/> Yes	

In which step of production did you use engine powered machinery?	MULTI-SELECT	c4_2
	01 <input type="checkbox"/> Land preparation	
	02 <input type="checkbox"/> Sowing	
	03 <input type="checkbox"/> Weeding	
	04 <input type="checkbox"/> Harvesting	
	05 <input type="checkbox"/> Threshing	
	06 <input type="checkbox"/> Transport to the market	

E c4_1==1

<p>Which engine powered agricultural machines does your household own?</p> <p>V1 self.ContainsOnly(0) !self.Contains(0)</p> <p>M1 You cannot select "none" and another option.</p>	<p>MULTI-SELECT C4_3</p> <p>00 <input type="checkbox"/> None</p> <p>01 <input type="checkbox"/> Water pump</p> <p>02 <input type="checkbox"/> Power tiller</p> <p>03 <input type="checkbox"/> Tractor</p> <p>04 <input type="checkbox"/> Motor sprayer</p> <p>05 <input type="checkbox"/> Mini harvester</p> <p>06 <input type="checkbox"/> Combine harvester</p> <p>12 <input type="checkbox"/> Reaper harvester</p> <p>07 <input type="checkbox"/> Thresher</p> <p>08 <input type="checkbox"/> Seed cleaner</p> <p>09 <input type="checkbox"/> Pick-up truck</p> <p>10 <input type="checkbox"/> Truck</p> <p>11 <input type="checkbox"/> Other (to be listed)</p>
<p>In the last 12 months, how many BDT did you spend on repairs for the agricultural machinery you own? Please consider machinery used for all the crops and also the livestock you own.</p> <p>E !C4_3.Contains(0)</p> <p>W1 self<(C2.Sum(x=>x.C2c)*0.5)</p> <p>M1 The cost for the machinery is more than half of the sum of crop incomes, excluding mungbean.</p>	<p>NUMERIC: INTEGER C4_4</p> <p>-----</p>
<p>Please list the other machinery the household owns.</p> <p>E C4_3.Contains(11)</p>	<p>LIST C4_5</p> <p>.....</p>
<p>DO NOT READ OUT: In which seasons was the farmer growing rice?</p>	<p>MULTI-SELECT C5_1_0</p> <p>00 <input type="checkbox"/> None</p> <p>01 <input type="checkbox"/> Summer rice</p> <p>02 <input type="checkbox"/> Monsoon rice</p> <p>03 <input type="checkbox"/> Winter rice</p>
<p>Which machine did you use for the rice harvest in monsoon season?</p> <p>I This is just for harvesting, not for transport to the market.</p> <p>E C4_2.Contains(4) && C5_1_0.Contains(2)</p> <p>V1 self.ContainsOnly(-99) !self.Contains(-99)</p> <p>M1 If the question is not applicable you cannot select another item.</p>	<p>MULTI-SELECT C5_1</p> <p>-99 <input type="checkbox"/> None/Not applicable</p> <p>01 <input type="checkbox"/> Combine harvester</p> <p>02 <input type="checkbox"/> Hand tractor</p> <p>04 <input type="checkbox"/> Reaper harvester</p> <p>05 <input type="checkbox"/> Mini combine</p> <p>03 <input type="checkbox"/> Other</p>
<p>Please define the other machine used for rice harvest</p> <p>E C5_1.Contains(3)</p>	<p>TEXT C5_1a</p> <p>.....</p>
<p>How much did you pay for this service in the monsoon season?</p> <p>I If machine is owned by the farmer, ask for the usual rate to rent the machine.</p> <p>E !C5_1.Contains(-99) && C5_1_0.Contains(2)</p>	<p>NUMERIC: INTEGER C5_1_1</p> <p>-----</p>
<p>How many decimal did you harvest with the machine?</p> <p>E !C5_1.Contains(-99) && C5_1_0.Contains(2)</p>	<p>NUMERIC: DECIMAL C5_1_2</p> <p>-----</p>

<p>And how many decimal did you not harvest with the machine?</p> <p>E !C5_1.Contains(-99) && C5_1_0.Contains(2)</p>	<p>NUMERIC: DECIMAL c5_1_3</p> <p>-----</p>
<p>Why did you not harvest all the rice with the machine?</p> <p>E C5_1_2>=0 && C5_1_3>0</p>	<p>TEXT c5_1_4</p> <p>-----</p>
<p>Which machine did you use for the rice harvest in summer season?</p> <p>I This is just for harvesting, not for transport to the market.</p> <p>E C4_2.Contains(4) && C5_1_0.Contains(1)</p> <p>V1 self.ContainsOnly(-99) !self.Contains(-99)</p> <p>M1 If the question is not applicable you cannot select another item.</p>	<p>MULTI-SELECT c5_1_5</p> <p>-99 <input type="checkbox"/> None/Not applicable</p> <p>01 <input type="checkbox"/> Combine harvester</p> <p>02 <input type="checkbox"/> Hand tractor</p> <p>04 <input type="checkbox"/> Reaper harvester</p> <p>05 <input type="checkbox"/> Mini combine</p> <p>03 <input type="checkbox"/> Other</p>
<p>How much did you pay for this service in the summer season?</p> <p>I If machine is owned by the farmer, ask for the usual rate to rent the machine.</p> <p>E !C5_1_5.Contains(-99) && C5_1_0.Contains(1)</p>	<p>NUMERIC: INTEGER c5_1_6</p> <p>-----</p>
<p>How many decimal did you harvest with the machine?</p> <p>E !C5_1_5.Contains(-99) && C5_1_0.Contains(1)</p>	<p>NUMERIC: DECIMAL c5_1_7</p> <p>-----</p>
<p>And how many decimal did you not harvest with the machine?</p> <p>E !C5_1_5.Contains(-99) && C5_1_0.Contains(1)</p>	<p>NUMERIC: DECIMAL c5_1_8</p> <p>-----</p>
<p>Why did you not harvest all the rice with the machine?</p> <p>E C5_1_7>=0 && C5_1_8>0</p>	<p>TEXT c5_1_8a</p> <p>-----</p>
<p>Which machine did you use for the rice harvest in winter season?</p> <p>I This is just for harvesting, not for transport to the market.</p> <p>E C4_2.Contains(4) && C5_1_0.Contains(3)</p> <p>V1 self.ContainsOnly(-99) !self.Contains(-99)</p> <p>M1 If the question is not applicable you cannot select another item.</p>	<p>MULTI-SELECT c5_1_9</p> <p>-99 <input type="checkbox"/> None/Not applicable</p> <p>01 <input type="checkbox"/> Combine harvester</p> <p>02 <input type="checkbox"/> Hand tractor</p> <p>04 <input type="checkbox"/> Reaper harvester</p> <p>05 <input type="checkbox"/> Mini combine</p> <p>03 <input type="checkbox"/> Other</p>
<p>How much did you pay for this service in the winter season?</p> <p>I If machine is owned by the farmer, ask for the usual rate to rent the machine.</p> <p>E !C5_1_9.Contains(-99) && C5_1_0.Contains(3)</p>	<p>NUMERIC: INTEGER c5_1_10</p> <p>-----</p>
<p>How many decimal did you harvest with the machine?</p> <p>E !C5_1_9.Contains(-99) && C5_1_0.Contains(3)</p>	<p>NUMERIC: DECIMAL c5_1_11</p> <p>-----</p>
<p>And how many decimal did you not harvest with the machine?</p> <p>E !C5_1_9.Contains(-99) && C5_1_0.Contains(3)</p>	<p>NUMERIC: DECIMAL c5_1_12</p> <p>-----</p>

<p>Why did you not harvest all the rice with the machine?</p> <p>E C5_1_11>=0 && C5_1_12>0</p>	<p>TEXT C5_1_12a</p> <p>.....</p>
<p>In which year did you start using engine powered machinery to harvest rice?</p> <p>E C5_1.ContainsAny(1,2,3,4,5) C5_1_5.ContainsAny(1,2,3,4,5) C5_1_9.ContainsAny(1,2,3,4,5)</p> <p>V1 self.Contains("19") self.Contains("20")</p> <p>M1 Answer must be in format YYYY and adoption can only be in 19th or 20th century (e.g. 1998 or 2015).</p>	<p>TEXT C5_2</p> <p>.....</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"The mechanization of the rice harvest saved men a lot of time."</p>	<p>SINGLE-SELECT C5_2_1a</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"The mechanization of the rice harvest saved women a lot of time."</p>	<p>SINGLE-SELECT C5_2_1b</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"I preferred the rice harvest before mechanical harvesters became available."</p>	<p>SINGLE-SELECT C5_2_1c</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"Women have a smaller role in rice harvest, since mechanical harvesters became common."</p>	<p>SINGLE-SELECT C5_2_1d</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"Women have the same opportunity to find a job in mechanical rice harvesting as men do."</p>	<p>SINGLE-SELECT C5_2_1e</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"It is good for my entire family that mechanical harvest is possible today."</p>	<p>SINGLE-SELECT C5_2_1f</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>

<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"The mechanization of harvesting is bad for the poor and landless."</p>	<p>SINGLE-SELECT C5_2_1g</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>What are the biggest advantages of using machines in rice harvesting? Please start with the most important one first.</p> <p>I Do not read out. Collect up to three. The order is automatically recorded.</p> <p>V1 self.ContainsOnly(-98) self.ContainsOnly(0) !self.ContainsAny(-98, 0)</p> <p>M1 You cannot select "Don't know" or "None" and other items.</p>	<p>MULTI-SELECT: ORDERED C5_3</p> <p>-98 <input type="checkbox"/> I don't know</p> <p>00 <input type="checkbox"/> None, (It does not have advantages)</p> <p>01 <input type="checkbox"/> Higher yield</p> <p>02 <input type="checkbox"/> Better quality of the produce</p> <p>03 <input type="checkbox"/> Lower cost</p> <p>04 <input type="checkbox"/> More time to do other things</p> <p>05 <input type="checkbox"/> Faster harvest</p> <p>06 <input type="checkbox"/> Not dependent on finding workers</p> <p>07 <input type="checkbox"/> Other</p>
<p>Please define the other advantage(s) of the mechanized rice harvest</p> <p>E C5_3.Contains(7)</p>	<p>LIST C5_3a</p> <p>.....</p>
<p>What are the most important disadvantages of using machines in rice harvesting instead of doing it manually? Please start with the most important one.</p> <p>I Do not read out. Collect up to three. The order is automatically recorded.</p> <p>V1 self.ContainsOnly(-98) self.ContainsOnly(0) !self.ContainsAny(-98, 0)</p> <p>M1 You cannot select "Don't know" or "None" and other items.</p>	<p>MULTI-SELECT: ORDERED C5_4</p> <p>-98 <input type="checkbox"/> I don't know</p> <p>00 <input type="checkbox"/> None, (It does not have advantages)</p> <p>01 <input type="checkbox"/> Lower yield</p> <p>02 <input type="checkbox"/> Worse quality of the produce</p> <p>03 <input type="checkbox"/> Higher cost</p> <p>04 <input type="checkbox"/> Dangerous to work with the machines</p> <p>05 <input type="checkbox"/> Hired workers loose income source</p> <p>06 <input type="checkbox"/> Dependency on owners of machines</p> <p>07 <input type="checkbox"/> Bad for the environment</p> <p>08 <input type="checkbox"/> Cannot use rice straw (for fodder etc.)</p> <p>09 <input type="checkbox"/> Other</p>
<p>Please define the other disadvantage(s) of the mechanized rice harvest</p> <p>E C5_4.Contains(9)</p>	<p>LIST C5_4a</p> <p>.....</p>
<p>Now I would like to ask about the labor you needed to harvest the rice the last time you grew it. Which of the following groups worked in the harvest?</p> <p>I Please include all work from the beginning of the harvest until it is ready to be sold.</p> <p>E C5_1_0.ContainsAny(1, 2, 3)</p>	<p>MULTI-SELECT: YES/NO C5_5_0</p> <p>01 <input type="checkbox"/> / <input type="checkbox"/> hired women</p> <p>02 <input type="checkbox"/> / <input type="checkbox"/> hired men</p> <p>03 <input type="checkbox"/> / <input type="checkbox"/> women of the family</p> <p>04 <input type="checkbox"/> / <input type="checkbox"/> men of the family</p> <p>05 <input type="checkbox"/> / <input type="checkbox"/> women of the community who helped</p> <p>06 <input type="checkbox"/> / <input type="checkbox"/> men of the community who helped</p> <p>07 <input type="checkbox"/> / <input type="checkbox"/> Girls (under 15 years old)</p> <p>08 <input type="checkbox"/> / <input type="checkbox"/> Boys (under 15 years old)</p>

<p>On how many decimal did you grow rice the last time?</p> <p>E C5_1_0.ContainsAny(1,2,3)</p> <p>V1 (C5_5_0a*40.46)<=D0_4</p> <p>M1 The area is larger than the area owned and rented by the household.</p>	<p>NUMERIC: INTEGER</p> <p>C5_5_0a</p> <p>-----</p>
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GENERAL FARMING INFORMATION / MECHANISATION OF AGRICULTURAL ACTIVITIES

Roster: RICE HARVEST LABOR DEMAND

generated by multi-select question C5_5_0

C5_5

<p>E C5_1_0.ContainsAny(1,2,3)</p>	
<p>On how many days did %rostertitle% work in the rice harvest?</p> <p>I Enter "0" if no person from this group worked in the harvest.</p> <p>W1 self<14</p> <p>M1 You entered a large number of days. Please make sure: 1) The number is only for the one harvest; 2) It is the days on which people from the group worked (not labour-days/men-days).</p>	<p>NUMERIC: INTEGER</p> <p>C5_5a</p> <p>-----</p>
<p>On average, how many %rostertitle% worked each day?</p> <p>E C5_5a>=1</p>	<p>NUMERIC: INTEGER</p> <p>C5_5b</p> <p>-----</p>
<p>On average, how many hours per day did %rostertitle% work?</p> <p>E C5_5a>=1</p> <p>W1 self<12</p> <p>M1 You entered an extremely large number of working hours. Please make sure that this is the average number of hours worked by each person.</p> <p>V2 self<20</p> <p>M2 The value is too high. You entered that each person worked 20 hours or more every day.</p>	<p>NUMERIC: INTEGER</p> <p>C5_5c</p> <p>-----</p>
<p>On average, how much did you pay %rostertitle% per day?</p> <p>E C5_5a>=1 && (@rowcode==1 @rowcode==2)</p> <p>W1 self<20000</p> <p>M1 You entered a very high wage. Please make sure it is per person, per day.</p>	<p>NUMERIC: INTEGER</p> <p>C5_5d</p> <p>-----</p>
<p>VARIABLE</p> <p>C5_5.Sum(x=>x.C5_5a)*C5_5.Sum(x=>x.C5_5b)*C5_5.Sum(x=>x.C5_5c)</p>	<p>DOUBLE</p> <p>C5_5_1</p>
<p>DO NOT READ OUT: Did the farmer use mechanical harvest when growing rice in the last season?</p> <p>E C5_1_0.ContainsAny(1,2,3) && (C5_1.ContainsAny(1,2,3,4,5) C5_1_5.ContainsAny(1,2,3,4,5) C5_1_9.ContainsAny(1,2,3,4,5))</p>	<p>SINGLE-SELECT</p> <p>C5_6_0b</p> <p>01 <input type="radio"/> Yes</p> <p>00 <input type="radio"/> No</p>

STATIC TEXT

<p>E C5_6_0b==1</p> <p><i>You said before that you used machinery to help with the rice harvest. How much time and labor would you have needed for the harvest without machines?</i></p>	
--	--

Which of the following groups would have worked in the harvest?

- I Please include all work from the beginning of the harvest until it is ready to be sold.
E C5_6_0b==1

MULTI-SELECT: YES/NO

C5_6_0

- 01 ☐ / ☐ hired women
02 ☐ / ☐ hired men
03 ☐ / ☐ women of the family
04 ☐ / ☐ men of the family
05 ☐ / ☐ women of the community who were not paid money
06 ☐ / ☐ men of the community who were not paid money
07 ☐ / ☐ Girls (under 15 years old)
08 ☐ / ☐ Boys (under 15 years old)

GENERAL FARMING INFORMATION / MECHANISATION OF AGRICULTURAL ACTIVITIES

Roster: RICE HARVEST LABOR DEMAND WITHOUT MACHINERY

generated by multi-select question C5_6_0

C5_6

- E C5_6_0b==1

On how many days did %roster% work in the winter rice harvest?

NUMERIC: INTEGER

C5_6a

- I Enter "0" if no person from this group worked in the harvest.
W1 self<14
M1 You entered a large number of days. Please make sure: 1) The number is only for the one harvest; 2) It is the days on which people from the group worked (not labour-days/men-days).

On average, how many %roster% worked each day?

NUMERIC: INTEGER

C5_6b

- E C5_6a>=1

On average, how many hours per day did %roster% work?

NUMERIC: INTEGER

C5_6c

- E C5_6a>=1
W1 self<12
M1 You entered an extremely large number of working hours. Please make sure that this is the average number of hours worked by each person.
V2 self<20
M2 The value is too high. You entered that each person worked 20 hours or more every day.

VARIABLE

C5_6.Sum(x=>x.C5_6a)*C5_6.Sum(x=>x.C5_6b)*C5_6.Sum(x=>x.C5_6c)

DOUBLE

C5_6_1

STATIC TEXT

- E C5_6_1<C5_5_1 & C5_6_0b==1

The labor hours without the help of machinery (first roster) is larger than without machinery (second roster). Please look for the mistake!

LIVESTOCK AND FISH

Which livestock did you own over the last 12 months?	<p>MULTI-SELECT E1a</p> <p>01 <input type="checkbox"/> Dairy cow</p> <p>02 <input type="checkbox"/> Draft cattle</p> <p>03 <input type="checkbox"/> Beef cattle</p> <p>04 <input type="checkbox"/> Goat</p> <p>05 <input type="checkbox"/> Sheep</p> <p>06 <input type="checkbox"/> Poultry</p> <p>08 <input type="checkbox"/> Prawn</p> <p>09 <input type="checkbox"/> Fish</p> <p>10 <input type="checkbox"/> Other livestock (1)</p> <p>11 <input type="checkbox"/> Other livestock (2)</p> <p>12 <input type="checkbox"/> Other livestock (3)</p>
Please define Other livestock (1). E E1a.Contains(10)	<p>TEXT E1a_1</p> <p>.....</p>
Please define Other livestock (2). E E1a.Contains(11)	<p>TEXT E1a_2</p> <p>.....</p>
Please define Other livestock (3). E E1a.Contains(12)	<p>TEXT E1a_3</p> <p>.....</p>

LIVESTOCK AND FISH

Roster: LIVESTOCK ROSTER

generated by multi-select question [E1a](#)

E1

In which unit do you sell %rosteritle%? E @rowcode>=8	<p>TEXT E1b</p> <p>.....</p>
How many %rosteritle% are owned by your household now? I Enter in specified unit for prawn and fish.	<p>NUMERIC: INTEGER E1c</p> <p>-----</p>
How many %rosteritle% did you sell, consume, or gift to others over the last 12 months? I Enter in specified unit for prawn and fish.	<p>NUMERIC: INTEGER E1d</p> <p>-----</p>
What is the price of one (unit) %rosteritle%? I Enter unit price in case of prawn and fish. E E1d>0	<p>NUMERIC: INTEGER E1e</p> <p>-----</p>
Over the last 12 month, how much money did you make from selling %rosteritle%'s products (e.g. milk, eggs) or services (e.g. as draft animal)? E @rowcode!= 8 && @rowcode!= 9	<p>NUMERIC: INTEGER E1f</p> <p>-----</p>
In total, how much did you spend on buying new %rosteritle% over the last 12 months?	<p>NUMERIC: INTEGER E1g</p> <p>-----</p>

In total, how much did you spend to keep your %rostartitle% over the last 12 months (fodder, veterinary costs, etc.)?	NUMERIC: INTEGERE1h -----
Who in your household is responsible of feeding/taking care of the %rostartitle%?	SINGLE-SELECT: LINKED E1i

OTHER ECONOMIC ACTIVITIES

OTHER ECONOMIC ACTIVITIES
Roster: OFF-FARM INCOME
generated by list question B1names

F1

E //As we might not expect children under 9 to work for income, we exclude them: B1d>=9

Did %roster% follow any economic activity other than working on your farm in the last 12 months?	SINGLE-SELECT 00 <input type="radio"/> No 01 <input type="radio"/> Yes	F1a
What were the off-farm activities of %roster% in the last 12 months? If more than one, please start with the one that brought most income.	MULTI-SELECT: ORDERED 01 <input type="checkbox"/> Work on other farm 02 <input type="checkbox"/> Other employment with private company/person 03 <input type="checkbox"/> Employment with public institution 04 <input type="checkbox"/> Own business 05 <input type="checkbox"/> Other	F1b
Please specify the other off-farm activity.	TEXT	F1b1
How many of the last 12 months did %roster% work in the primary off-farm job?	NUMERIC: INTEGER	F1c
What was the average monthly income of %roster% from all the off-farm activities during the last 12 months?	NUMERIC: INTEGER	F1d
Did you or any other member of your household receive any remittances during the last 12 months?	SINGLE-SELECT 00 <input type="radio"/> No 01 <input type="radio"/> Yes	F2
On average, which share of your monthly income came from these remittances during the last 12 months? (Expressed in percent)	NUMERIC: INTEGER	F2_1

WOMEN IN MUNGBEAN PRODUCTION

STATIC TEXT

E A9d_1!=1

READ ONLY IF SECONDARY RESPONDENT WAS NOT PRESENT IN BEGINNING

If possible, try that no man can overhear the interview.

Good morning/afternoon. My name is [YOUR NAME] and I am from %inst%.

We are doing a study on mungbean production. We are particularly interested in the effect of improved varieties and agricultural practices on costs and returns in mungbean production as well as the effect of mechanization in mungbean production. Because both men and women are usually involved in mungbean production, and the effect of mechanization may be different for each person, we would like to ask some questions to you as well as to your spouse. Apart from mungbean-related questions, we will ask some general questions about you, your farm, and your household to understand the context of your farm operation.

This interview will use a list of standard questions and will take about 1 hour to complete. Your responses will help us to understand better how mungbean is produced in the country and the problems farmers face.

I would like to emphasize that this interview is for research only and your answers will always be kept strictly confidential and never be revealed to any other people. I would like you to answer the questions truthfully, in your best possible way, and to the best of your knowledge. If you don't know the answer to some of the questions, simply tell me. You can tell me at any time if you 'd like a break or if you would like to discontinue the interview.

Do you consent to participate in this interview? E A9d_1!=1	SINGLE-SELECT consent2 00 <input type="radio"/> No 01 <input type="radio"/> Yes
If you consent to participate in this interview, would you kindly say so? E consent2==1	AUDIO signature2
Did your household consume mungbean or a mungbean product like fried mungbean snacks in the last 30 days?	SINGLE-SELECT G1 00 <input type="radio"/> No 01 <input type="radio"/> Yes
In which forms did you consume the mungbean? E G1==1	MULTI-SELECT G1_1 01 <input type="checkbox"/> Grain (e.g. in soup, dal) 02 <input type="checkbox"/> Sprouts 03 <input type="checkbox"/> Processed (e.g. mungbean vermicelli, fried mungbean snack, etc.)
How often did you eat mungbean? E G1==1	SINGLE-SELECT G1_2 01 <input type="radio"/> Less than once a week 02 <input type="radio"/> Once a week 03 <input type="radio"/> Twice a week 04 <input type="radio"/> More than twice a week

WOMEN IN MUNGBEAN PRODUCTION VIEWS ON MUNGBEAN HARVESTING

E A9d_1!=1

How many female family members worked in the last mungbean harvest?	NUMERIC: INTEGER G2a -----
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On average, on how many days did each female family member work? E G2a>=1	NUMERIC: INTEGER G2b -----
On average, for how many hours did each female family member work? E G2a>=1	NUMERIC: INTEGER G2c -----
How many male family members worked in the last mungbean harvest?	NUMERIC: INTEGER G2d -----
On average, on how many days did each male family member work? E G2d>=1	NUMERIC: INTEGER G2e -----
On average, for how many hours did each male family member work? E G2d>=1	NUMERIC: INTEGER G2f -----

STATIC TEXT

Please tell me on a scale from 1, meaning you strongly disagree, to 5, meaning you fully agree, how strongly you agree with the following statements.

Manual harvesting of mungbean requires little effort.	SINGLE-SELECT G2_1a 01 <input type="radio"/> Strongly disagree 02 <input type="radio"/> Disagree 03 <input type="radio"/> Neutral 04 <input type="radio"/> Agree 05 <input type="radio"/> Strongly agree
Manual harvesting of mungbean takes a lot of time from women.	SINGLE-SELECT G2_1b 01 <input type="radio"/> Strongly disagree 02 <input type="radio"/> Disagree 03 <input type="radio"/> Neutral 04 <input type="radio"/> Agree 05 <input type="radio"/> Strongly agree
Manual harvesting of mungbean takes a lot of time from men.	SINGLE-SELECT G2_1c 01 <input type="radio"/> Strongly disagree 02 <input type="radio"/> Disagree 03 <input type="radio"/> Neutral 04 <input type="radio"/> Agree 05 <input type="radio"/> Strongly agree
If mungbean could be harvested by machine it would benefit our entire village community.	SINGLE-SELECT G2_1d 01 <input type="radio"/> Strongly disagree 02 <input type="radio"/> Disagree 03 <input type="radio"/> Neutral 04 <input type="radio"/> Agree 05 <input type="radio"/> Strongly agree

Our family enjoys working together in the field harvesting mungbean.	<p>SINGLE-SELECT G2_1e</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
Machine mungbean harvesting would exclude women from the harvesting process.	<p>SINGLE-SELECT G2_1f</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
Women can operate farm machinery equally well as men.	<p>SINGLE-SELECT G2_1g</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
Manual harvesting of mungbean is among the most arduous types of work on the farm	<p>SINGLE-SELECT G2_1h</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
The problem with mechanization is that it reduces work and income for landless people.	<p>SINGLE-SELECT G2_1i</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>

STATIC TEXT

In the production of rice, mechanical harvesting already became popular over the last years. Therefore I would like to ask you a few questions about the rice harvest as well.

<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"The mechanization of the rice harvest saved men a lot of time."</p>	<p>SINGLE-SELECT G2_2a</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"The mechanization of the rice harvest saved women a lot of time."</p>	<p>SINGLE-SELECT G2_2b</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>

<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"I preferred the rice harvest before mechanical harvesters became available."</p>	<p>SINGLE-SELECT G2_2c</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"Women have a smaller role in rice harvest, since mechanical harvesters became common."</p>	<p>SINGLE-SELECT G2_2d</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"Women have the same opportunity to find a job in mechanical rice harvesting as men do."</p>	<p>SINGLE-SELECT G2_2e</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"It is good for my entire family that mechanical harvest is possible today."</p>	<p>SINGLE-SELECT G2_2f</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>Please tell me on scale from 1 (strongly disagree) to 5 (fully agree) how strongly you agree with the following statements?</p> <p>"The mechanization of harvesting is bad for the poor and landless."</p>	<p>SINGLE-SELECT G2_2g</p> <p>01 <input type="radio"/> Strongly disagree</p> <p>02 <input type="radio"/> Disagree</p> <p>03 <input type="radio"/> Neutral</p> <p>04 <input type="radio"/> Agree</p> <p>05 <input type="radio"/> Strongly agree</p>
<p>What are the biggest advantages of using machines in rice harvesting? Please start with the most important one first.</p> <p>I Do not read out. Collect up to three. The order is automatically recorded.</p> <p>V1 self.ContainsOnly(-98) self.ContainsOnly(0) !self.ContainsAny(-98, 0)</p> <p>M1 You cannot select "Don't know" or "None" and other items.</p>	<p>MULTI-SELECT: ORDERED G3</p> <p>-98 <input type="checkbox"/> I don't know</p> <p>00 <input type="checkbox"/> None, (It does not have advantages)</p> <p>01 <input type="checkbox"/> Higher yield</p> <p>02 <input type="checkbox"/> Better quality of the produce</p> <p>03 <input type="checkbox"/> Lower cost</p> <p>04 <input type="checkbox"/> More time to do other things</p> <p>05 <input type="checkbox"/> Faster harvest</p> <p>06 <input type="checkbox"/> Not dependent on finding workers</p> <p>07 <input type="checkbox"/> Other</p>
<p>Please define the other advantage(s) of the mechanized rice harvest</p> <p>E C5_3.Contains(7)</p>	<p>LIST G3_1</p> <p>.....</p>

<p>What are the most important disadvantages of using machines in rice harvesting instead of doing it manually? Please start with the most important one.</p> <p>I Do not read out. Collect up to three. The order is automatically recorded.</p> <p>V1 self.ContainsOnly(-98) self.ContainsOnly(0) !self.ContainsAny(-98, 0)</p> <p>M1 You cannot select "Don't know" or "None" and other items.</p>	<p>MULTI-SELECT: ORDERED</p> <p>G4</p> <p>-98 <input type="checkbox"/> I don't know</p> <p>00 <input type="checkbox"/> None, (It does not have advantages)</p> <p>01 <input type="checkbox"/> Lower yield</p> <p>02 <input type="checkbox"/> Worse quality of the produce</p> <p>03 <input type="checkbox"/> Higher cost</p> <p>04 <input type="checkbox"/> Dangerous to work with the machines</p> <p>05 <input type="checkbox"/> Hired workers loose income source</p> <p>06 <input type="checkbox"/> Dependency on owners of machines</p> <p>07 <input type="checkbox"/> Bad for the environment</p> <p>08 <input type="checkbox"/> Other</p>
<p>Please define the other disadvantage(s) of the mechanized rice harvest</p> <p>E C5_3.Contains(8)</p>	<p>LIST</p> <p>G4_1</p> <p>.....</p>

WOMEN IN MUNGBEAN PRODUCTION
FEMALE DECISION MAKING

E A9d_1!=1 || (B1.Count(x=>x.@rowcode==1 && x.B1a==1)>0)

STATIC TEXT

I am going to read out 10 statements about your ability to make decisions independently. Please indicate how strongly you can identify yourself with these statements on a scale from strongly agree, agree, neutral, disagree or strongly disagree.

I can decide on my own whether to take a loan, if I want to.	<p>SINGLE-SELECT</p> <p>G5a</p> <p>01 <input type="radio"/> Agree</p> <p>02 <input type="radio"/> Neutral</p> <p>03 <input type="radio"/> Disagree</p>
I can decide on my own how to spend the household income.	<p>SINGLE-SELECT</p> <p>G5b</p> <p>01 <input type="radio"/> Agree</p> <p>02 <input type="radio"/> Neutral</p> <p>03 <input type="radio"/> Disagree</p>
I can decide on my own to visit a health facility for myself or my child, if I want to.	<p>SINGLE-SELECT</p> <p>G5c</p> <p>01 <input type="radio"/> Agree</p> <p>02 <input type="radio"/> Neutral</p> <p>03 <input type="radio"/> Disagree</p>
I can decide on my own what food to eat or to prepare.	<p>SINGLE-SELECT</p> <p>G5d</p> <p>01 <input type="radio"/> Agree</p> <p>02 <input type="radio"/> Neutral</p> <p>03 <input type="radio"/> Disagree</p>
If I disagree with the running of my community, I can publicly say so	<p>SINGLE-SELECT</p> <p>G5e</p> <p>01 <input type="radio"/> Agree</p> <p>02 <input type="radio"/> Neutral</p> <p>03 <input type="radio"/> Disagree</p>

I regularly participate in any public events in my community.	<div>SINGLE-SELECT</div> <div>G5f</div> <div>01 <input type="radio"/> Agree</div> <div>02 <input type="radio"/> Neutral</div> <div>03 <input type="radio"/> Disagree</div>
If there are meetings about agriculture, then I can participate in them.	<div>SINGLE-SELECT</div> <div>G5g</div> <div>01 <input type="radio"/> Agree</div> <div>02 <input type="radio"/> Neutral</div> <div>03 <input type="radio"/> Disagree</div>
I do not have enough time to take care of myself.	<div>SINGLE-SELECT</div> <div>G5h</div> <div>01 <input type="radio"/> Agree</div> <div>02 <input type="radio"/> Neutral</div> <div>03 <input type="radio"/> Disagree</div>
If I don't feel well, I can take a day off from my regular chores.	<div>SINGLE-SELECT</div> <div>G5i</div> <div>01 <input type="radio"/> Agree</div> <div>02 <input type="radio"/> Neutral</div> <div>03 <input type="radio"/> Disagree</div>
I do not have enough time for leisure activities.	<div>SINGLE-SELECT</div> <div>G5j</div> <div>01 <input type="radio"/> Agree</div> <div>02 <input type="radio"/> Neutral</div> <div>03 <input type="radio"/> Disagree</div>
Please go back to the beginning of the questionnaire and enter the name of the secondary respondent! <div data-bbox="105 1126 403 1149">E A9d.Length<2 && A9d_1==0</div>	<div>TEXT</div> <div>G_0</div> <div>.....</div>

INTERVIEWER DEBRIEFING

Please record the location of the homestead.	<div>GPSI0</div> <div>N</div> <div>W</div> <div>A</div>
How do you judge the quality of the response based on the ability of the respondent to recall information and stay focused during the interview?	<div>SINGLE-SELECTI1</div> <div>01 <input type="radio"/> Very good</div> <div>02 <input type="radio"/> Good</div> <div>03 <input type="radio"/> Moderate</div> <div>04 <input type="radio"/> Poor quality</div> <div>05 <input type="radio"/> Very poor quality</div>
While interviewing the secondary respondent, was any man present that could hear the answers?	<div>SINGLE-SELECTI1_1</div> <div>00 <input type="radio"/> No</div> <div>01 <input type="radio"/> Yes</div>
Can you make any observations about the household or the interview that might be relevant for interpreting the data?	<div>TEXTI2</div> <div></div>
When did you end the interview?	<div>DATE: CURRENT TIMEI4</div> <div></div>

APPENDIX A — VALIDATION CONDITIONS AND MESSAGES

[1] B1b: Which relationship does %rosteritle% have to the household head?

Validation Condition:

```
/*-----  
Validation to make sure only one person is  
reported to be the household head  
-----*/  
B1b==1? /// Is this person the household head?  
/// If household head, check that there has  
/// not been another household head reported  
(B1.Count(x=>x.B1b==1)==1)  
/// If not a household head, then no error  
:true
```

Validation Message: There must be only one person in the household designated as head.

Validation Condition:

```
/* Check that head has different gender than spouse(s) */  
  
// if head is current person, and does at least one spouse exist?  
B1b==1 && B1.Any(x=>x.B1b==2) ?  
  
// if so, check that there is no spouse with a gender different than that of the head  
!( B1.Any(a=>a.B1b==2 && a.B1a!=null && a.B1a==B1a) ) :  
  
// if not, no problem  
true
```

Validation Message: The head and his/her spouse typically have different genders. Please confirm.

Validation Condition:

```
/* Check that spouse has different gender than head */  
  
// if head is current person, and does at least one spouse exist?  
B1b==2 && B1.Any(x=>x.B1b==1) ?  
  
// if so, check whether spouse has different gender than head  
!( B1.Any(b=>b.B1b==1 && b.B1a!=null && b.B1a==B1a) ) :  
  
// if not, no problem  
true
```

Validation Message: Spouse typically has a different genders than his/her spouse (the head of household). Please confirm.

Validation Condition:

```
/*Check that there are at most 2 parent*/  
  
// if current person is father/mother?  
B1b==6?  
  
//Check that there are no more than 2  
(B1.Count(x=>x.B1b==6)<=2)  
  
//if not, no problem  
:true
```

Validation Message: Household head has more than 2 parents, according to your entry. Please double check.

Validation Condition:

```
/* Checks if no household head was listed.  
Note: this runs at the end so it does not trigger errors constantly */  
  
// Check that all information has been filled  
B1.All(x=>x.B1b!=null) ?  
// If all information has been filled out, check for a head was listed  
!(B1.Count(x=>x.B1b==1)==0) :  
true
```

Validation Message: No household member was identified as the household head. Please confirm.

APPENDIX B — CATEGORIES

- [1] [D9_5: Which pests and diseases brought economic damage to your mungbean crop over the last 12 month? Please start with the pest or disease that dealt the largest damage to you.](#)

Categories: 1: Anthracnose, 2: Black legume aphid, 3: Bacterial blight, 4: Bean common mosaic virus, 5: Bean fly, 6: Urd bean leaf crinkle virus, 7: Bihar hairy caterpillar, 8: Bollworm, fruit borer, pod borer, 9: Bruchids, pea and bean weevils, 10: Mirid, 11: Leafhopper, jassids, 12: Cercospora leaf spot, 13: Lycaenid borer, 14: Macrophomina blight, 15: Bean pod borer, 16: Powdery mildew, 17: Red hairy caterpillar, 18: Tobacco caterpillar, 19: Shield bugs, 20: Thrips, 21: White fly, 22: Mungbean yellow mosaic virus, 23: Galerucid beetle, 24: Other

- [2] [D9_11: For you, what are the three most important constraints to mungbean production? Please start with the main problem.](#)

Categories: 1: Land is too saline, 2: Not enough water, 3: Soil fertility is too low, 4: It is too hot (flowers drop), 5: Rain damage during ripening, 6: Seed is unavailable, 7: Seed quality is low, 8: Growing period too short (cannot plant rice on time), 9: Insect pests, 10: Plant diseases, 11: Input costs are too high, 12: Too low selling prices, 13: Yields are too low, 14: Lack of market demand, 15: High storage losses, 16: Other crops are better, 17: Not enough land, 18: Not enough labor, 19: Not enough cash (credit), 20: Don't like to eat it, 21: Other

APPENDIX C — VARIABLES

[1] [D2o](#):
D2g.Sum(x=>x.D2g_3a) - ((D2j_3>0)? D2j_3:0) - ((D2l_2>0)? D2l_2:0) - ((D2m_2>0)? D2m_2:0) - ((D2m_3>0)? D2m_3:0) - ((D2m_4>0)? D2m_4:0) - ((D2m_5>0)? D2m_5:0) - ((D2m_6>0)? D2m_6:0) -((D2n_2>0)? D2n_2:0)

Legend and structure of information in this file

Name of section		Type of question, scope		Variable name
Enabling condition for this section		Answer options		
Question title				
SECTION 5: OTHER INCOME SOURCES				
E s4_other_sources_which.Contains(98)				
Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur?		MULTI-SELECT SCOPE: PREFILLED		s4_re1_leaders_other
I This refers to family relations		01 <input type="checkbox"/> Community animal health workers		
E s3_time_other > 0		02 <input type="checkbox"/> Private		
V1 s4_re1_leaders_which.Contains(98)		03 <input type="checkbox"/> Government		
M1 Can not be itself		04 <input type="checkbox"/> Livestock keepers association		
V2 (s3_time_other_breeding_advice <= (50 - s3_time_art_insem_advice)) s3_time_other_breeding_advice == 0		05 <input type="checkbox"/> NGO		
M2 This person is not in the list		And 5 other [13]		
F optioncode != s5_ignored_option_code				
Additional information:		Link to full set in appendix		
"I" – Question instruction				
"E" – Enabling condition				
"V1" – Validation condition №1				
"M1" – Message for validation №1				
"F" – Filter in Categorical questions				

Breadcrumbs

Type or roster
Roster Title
CHAPTER 3 IDENTIFICATION / Roster: LEADER RELATION DETAILS generated by fixed list:
01 Ward Livestock Officer
02 Village Livestock Officer
99 Other (specify)
List items