**Sri Lanka Environmental and Agricultural Decision-making Survey—Household Questionnaire**

**(SEADS-HH)**

**Head Farmer, Day 1 Module**

The SEADS survey project include household (SEADS-HH) and community (SEADS-C) questionnaires. The SEADS is a component of the ADAPT-SL project (<https://my.vanderbilt.edu/srilankaproject/>), a collaboration between Vanderbilt University (USA) and the National Building Research Organization (Sri Lanka) (affiliated to the Ministry of Disaster Management). The ADAPT-SL project is funded by the US National Science Foundation.

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**Formatting**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. District |  | | |
| 1. DS division |  | | |
| 1. GN Name and code | 1. Name b) ID | | |
| 1. Village Name and ID # | a) Name b) ID | | |
| 1. Sampling Frame List ID (1 – 400) |  | | |
| 1. Selected Farmer’s ID (1 – 35, 40, 60, 80) |  | | |
| 1. Person name in the sample list |  | | |
| 1. Name of head farmer of the household interviewed | 1 = Same as person on list 2 = Other family member  If different the name | | |
| 1. 1st session : Date and time: | MM: DD From To | 1 AC | 2 BC |
| 1. 2nd session : Date and time: | MM: DD From To | 1 AC | 2 BC |
| 1. 3rd session : Date and time: | MM: DD From To | 1 AC | 2 BC |
| 1. Interviewer Name & Code |  |  | |
| 1. Supervisor Name & Code |  |  | |

|  |  |  |
| --- | --- | --- |
| Table Concerns 1: Major challenges What do you consider to be biggest challenges to your family’s well-being? Please consider the farming challenge s well as other family challenges.  Instructions: Record up to 5 major challenges as in the same order that the farmer claimed. | | Rate after the first day’s interview in order of their importance 1= most important  5= least important |
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I am going to read out some farming equipment which are used in farming. Can you please tell me if they are used in the farming activities of your family?

|  |  |  |  |
| --- | --- | --- | --- |
| **Table HAC2: Farm Assets and Equipment** | | | |
| Instructions: Record whether the household use each item, for agricultural purposes only. If yes, indicate whether the item is owned, rented, borrowed (used at no cost), or other. | | | |
|  | **Equipment** | **Is … used by famer?**  (a) | **How?**  (b) |
| 1 | Tractor (Hand Tractor/Two wheel) <H> | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 2 | Tractor (Four wheel) <H> | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 3 | Sprayer <H> | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 4 | Water Pump (for farm use) <H> | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 5 | Combine harvester- Ghost | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 6 | Combine harvester- Tsunami | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 7 | Thresher (AgroTec) <H> | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 8 | Combine harvester- Other | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 9 | Buffalo | Yes 1  No 2 -> next row | Owns 1  Rents 2  Borrows 3  Other 4 |
| 10 | Do you use traditional equipment (e.g., scythe, tiller, hoe) | Yes 1  No 2 |  |
| 11 | Do you have a space to store your harvest? | Yes, inside house 1 -> Next table  Yes, outside house 2 ->(b)  No 3 ->Next table | Owns 1  Rents 2  Borrows 3  Other 4 |

**Table LAN 1: Agricultural Land Tenure**

***Ask about any agricultural land held by the household. Land that is ‘held’ includes any land that is owned, rented, borrowed, or informally occupied, including Bethma lands cultivated in the last seasons or more frequent basis, and put the name as “Bethma land”.***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name of land**  **(a)** | **Type of land (b)**  Paddy/low land…...1  High land……….…2  House plot………...3  Chena....................4  Tank ……….5  Others ……….6 | **Area  [acres]  (c)** | **Tenancy  (d)**  **(see codes)** | **How long have you been farming this land regardless of interruptions ?**  **(e)**  **(# of years)**  **( E)** | **Type of crop**  1= Paddy  2= Seasonal crops  3=Perennial crop  4=Others  (MA)  (F) | **Do you cultivate this land in typical Maha and/or Yala ?**  **(G)**  **MA**  Both seasons (total area)…1  In Maha only (total area)….2  In Yala only (total area)…...3  In Maha only (part of land)...4  In Yala only (as Bethma/ part of land)….5 | **How do you generally irrigate this land?**  if only 5/6 go to U  **(H)**  **MA**  **(see codes; all that apply)** | **Main Tank/ Reservoir**  **(Major only)**  1= Padaviya  2= Pimburattewa  3=Galoya  4=Kantale  5=Giant’s Tank  6=Udawalawe  (I) | **Storage Tank/ Drainage Tank/ Minor Tank**  **Name**  (Not applicable where it is not used and for Rain-only farmers)  **(J)** | **Name of the sluice gate/ Main canal?**  **(K)**  **Major**  1= Left Bank  2= Right Bank  3= Centre Bank  4= Other (Enter name or the # from the left sidein column K2)  **Minor**  5= Upper  6= Lower  7= Centre  8= Other (Enter name or the # from the left sidein column K2) | | **Location on field canal?**  **(L)**  Head….1  Middle..2  Tail……3 | **Name of the D-canal?**  **(M)**  Only ask for major systems  99-Don’t Know | **Nameor number of the turnout/field-canal**  **(N)**  Only ask for major systems  99-Don’t Know |
| **K1** | **K2** |
| **1** |  |  |  |  |  | 1 2 3 4 |  |  |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  | 1 2 3 4 |  |  |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  | 1 2 3 4 |  |  |  |  |  |  |  |  |  |
| **4** |  |  |  |  |  | 1 2 3 4 |  |  |  |  |  |  |  |  |  |
| **5** |  |  |  |  |  | 1 2 3 4 |  |  |  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Tenancy (d)** |  | **How do you irrigate this land during… (h)** |  |
| Own (Including Sinnakara,/Mahaveli) 1  Gov’t owned/rent ( Swanboomi/Jaya/ Balapathra/LDO) 2  Rent/Lease- Privately owned/ Anda”/Porondu” 3  Shared: “Thattu/ kattu maaru” 4  Occupied free of rent 5  Reservations(Encroach) 6  Government/ Other owned uses for bethma ………………..7  Other Specify 8 |  | Major Reservoir- Mahaweli Authority 1  Major Reservoir- Irrigation Dep’t 2  Major Scheme (MASL)- Minor Storage/Drainage tank…..3  Major Scheme (ID)- Minor Storage/ Drainage tank……….4  Minor tank 5  Minor tank, Drainage water 6  Agro-well 7  Rainfed only/No irrigation 8  Aniket……………………………………………...9 | Pumping/divert from canals/streams etc 10  Other (specify 11 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name of land**  **(a)** | **Total Number of days do you take irrigation water during *field preparation (Including the time of herbicides/weedicide application*?**  **(Continuously or intermittently)**  **(O)**  **(Number of days water is taken to the farmer’s field. Not the number of days water is released from the major tank )**  ….. of days  (eg 14, 21 or 30 days) | | **How satisfied are you with the amount of irrigation water you receive for *field preparation* & during the application of herbicides?**  **(P)**  1 = Not satisfied  2 = Somewhat satisfied  3 = Very satisfied  4 = NA | | **How frequently do you take irrigation water to your land during the growing stage?**  **(Q)**  R. Rotation . ….Days  H. ….hours per rotation  (eg. Every 7 days, 6 hours) | | **How satisfied are you with the amount of irrigation water you receive during *growing stage*?**  **(R)**  1 = Not satisfied  2 = Somewhat satisfied  3 = Very satisfied | | **How frequently do you take irrigation water during the latter stage?**  **(S)**  R. Rotation . ….Days  H. ….hours per rotation  (eg. Every 9 days, 6 hours) | | **How satisfied are you with the amount of irrigation water you receive during *latter stage*?**  **(T)**  1 = Not satisfied  2 = Somewhat satisfied  3 = Very satisfied | |
|  |  | **O1**  **Maha** | **O2**  **Yala** | **P1**  **Maha** | **P2**  **Yala** | **Q1**  **Maha** | **Q2**  **Yala** | **R1**  **Maha** | **R2**  **Yala** | **S1**  **Maha** | **S2**  **Yala** | **T1**  **Maha** | **T2**  **Yala** |
| **1** |  |  |  |  |  | **R. H.** | **R. H.** |  |  | **R. H.** | **R. H.** |  |  |
| **2** |  |  |  |  |  | **R. H.** | **R. H.** |  |  | **R. H.** | **R. H.** |  |  |
| **3** |  |  |  |  |  | **R. H.** | **R. H.** |  |  | **R. H.** | **R. H.** |  |  |
| **4** |  |  |  |  |  | **R. H.** | **R. H.** |  |  | **R. H.** | **R. H.** |  |  |
| **5** |  |  |  |  |  | **R. H.** | **R. H.** |  |  | **R. H.** | **R. H.** |  |  |

**Table LAN 1: Agricultural Land Tenure (Cont..)**

**Table LAN 1: Agricultural Land Tenure (Cont..)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Name of land**  **(a)** | **In the past 5 years, how many seasons have you cultivated this land?**  **(U)** | **[if U <10]**  **Why did you not cultivate those seasons?**  **(V)**  1=Insufficient water  2=Flooding  3=Elephants/animals  4=Worked outside  5=Sick  6=Other | **Of the seasons you cultivated (# in U), how many seasons did you have a less than expected harvest due to**  **not enough water/rain?**  **(W)** | **Of the seasons you cultivated (# in U), how many seasons did other problems (e.g., flood, elephants, epidemic) cause a lower than expected harvest?**  **(X)** |
|  |  |  |  |  |  |
|  | **1** |  |  |  |  |
|  | **2** |  |  |  |  |
|  | **3** |  |  |  |  |
|  | **4** |  |  |  |  |
|  | **5** |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table LAN 3: Agro-well or pond Irrigation** | | | | | | |
| Collect the following information about each agro-well that is held by the house? If there are no agro-wells, ‘x’ out the table. | | | | | | |
| **Well/pond #** | **Well or pond?**  **(a)**  Agro-well 1  Pond 2 | **When was …….. installed?**  **(b)**  Year: \_\_ \_\_ \_\_ \_\_ | **How deep ……….is? (c)**  Feet: \_\_\_\_\_\_\_\_\_\_ | **Who owns ……it?**  **(d)**  Household 1  Privately owned by someone outside of household 2  Collectively/Community owned 3  Other (Specify) 4 | **Cost to household (material + labour) to establish/"buy-in"……….?**  **(e)**  **99 =Don’t know/can’t say**  SLR: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1 | 1 2 |  |  | 1 2 3 4 |  |
| 2 | 1 2 |  |  | 1 2 3 4 |  |
| 3 | 1 2 |  |  | 1 2 3 4 |  |

**Table FAR1: Last Seasons (Maha 2014-15 & Yala 2014) Paddy Land Usage, Harvest,& Seed varieties used with OFC deatils**

***This table refers only to paddy land. Record the number of acres of paddy land that were used in Last Maha (harvested in 2015) & Last Yala (Harvested in 2014).***

***If land was not used in the way specified, enter 0 as the number of acres.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Units etc (a) | Last Maha 2014/15 (b) | Typical Maha (c) | Last Yala 2014 (d) | Typical Yala (e) |
| 1. How much of your paddy land did you cultivate with rice? | Acres:  99. Not cultivated |  | FAR1C\_1 | FAR1D\_1 |  |
| 1. Total area lost due to drought, flood, diseases, elephants, pests etc.) | Acres: |  |  |  |  |
| 1. Total cost for the season (estimated)   Ask the main or biggest cost first. Start a dialog and identify the cost items and help farmer to estimate each cost item and help to get the total cost estimate for a seasons | a. Land and weir preparation | L |  |  |  |
| b. Sowing |  |
| c. Fertilizer, Pesticides, weedicide |  |
| d. Harvesting & Transport |  |
| e. Land rent (if paid in bushels, convert to rupees) |  |
| f. Other costs |  |
| g. Total cost (roughly estimated) |  |  |
| 1. In a typical ……… season, how many people outside of your family would you hire to work on your cultivation (paddy only)? | Total # of hired person days for the season: |  |  |  |  |
| 1. What is your paddy yield in …….(Season)? | Bushels: |  |  |  |  |
| 1. After harvesting total yield that was lost to damage (e.g., pests, mold, mice, etc.) | Bushels:  (999-if no paddy is cultivated) |  |  |  |  |
| 1. Total yield kept/keeping for consumption? | Bushels:  (999-if no paddy is cultivated) |  |  |  |  |
| 1. Used to pay off debt/rent, etc | Bushels:  (999-if no paddy is cultivated) |  |  |  |  |
| 1. Total yield to sold/planning to sell? | Bushels:  (999-if no paddy is cultivated) |  |  |  |  |
| 1. Seed/ variety 1 used | e.g., BG 300, AT308; Samba; Ponni; Heenati). |  |  |  |  |
| 1. Seed/ variety 1 time duration | (e.g., 2.5, 3.0.3.5, 4.0 etc) |  |  |  |  |
| 1. Seed/ variety 1 planted | Acres |  |  |  |  |
| 1. Why did you choose to cultivate this seed/ variety 1?   *(All that apply; spontaneous)* | Cost of seed 1  Higher Yield 2  Availability of seed 3  Receives good price for 4  Drought tolerant 5  Flood tolerant 6  Expert recommendation 7  Due to tradition/habit 8  Preference/taste 9  Promotion scheme……10  Yaya used this…………11  Other (explain) ………..12 |  |  |  |  |
| 1. How much extent of seed/ variety 1 do you usually plant in a typical ….. season? | Acres:  9997 = Depends season to season |  |  |  |  |
| 1. Seed/ variety 2 used | (e.g., BG 300, AT308; Samba; Ponni; Heenati). |  |  |  |  |
| 1. Seed/ variety 2 time duration | (e.g., 2.5, 3.0.3.5, 4.0 etc) |  |  |  |  |
| 1. Seed/ variety 2 planted | Acres |  |  |  |  |
| 1. Why did you choose to cultivate this seed/ variety 2?   *(All that apply; spontaneous)* | Cost of seed 1  Higher Yield 2  Availability of seed 3  Receives good price for 4  Drought tolerant 5  Flood tolerant 6  Expert recommendation 7  Due to tradition/habit 8  Preference/taste 9  Promotion scheme……10  Yaya used this…………11  Other (explain) ………..12 |  |  |  |  |
| 1. How much extent of seed/ variety 2 do you usually plant in a typical ….. season? | Acres:  9997 = Depends season to season |  |  |  |  |
| 1. Do you normally cultivate Other Field Crops (OFC) in your paddy land? | 1=Yes  2=No (Move Q25))  997=Yes, annual crops  9997=Depends on the season |  |  |  |  |
| 1. How many acres you cultivate with other field crops last…. season? | Acres: |  |  |  |  |
| 1. What other field crops did you plant in your paddy land?   ***(use OFC codes, enter all that apply)***  ***(enter '99' if no OFCs cultivated)*** |  |  |  |  |  |
| 1. Total cost of cultivating OFC in paddy land (per season)? | Rs. per season |  |  |  |  |
| 1. Estimated total earning from OFC altogether in paddy land by selling (per season)? | Rs per season |  |  |  |  |
| 1. How much of your paddy land did you leave fallow or not cultivated in? | Acres: |  |  |  |  |
| 1. Did you use your paddy land in some other way that I have not mentioned? If so, please explain. | Use: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Acres: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Use  Acres |  | Use  Acres |  |

Crop Code:

1= Paddy; 2= Kurakkan; 3= Maize; 4= Other Cereals; 5= Yams; 6= Sesame; 7= Finger Millets; 8= Cowpea; 9 = Soya Bean; 10= Moong Beans/Green Gram 11= Other Pulses; 12= Leafy Vegetables; 13= Vegetables; 14= Cinnamon; 15= Chili; 16= Pepper; 17= Other Condiments;; 19= Papaw; ; 20= Melon 21= Pineapple; 22= Mangoes; 23= Oranges; 24= Other Fruit; 25= Coconut; 26= Dhall (Mysoor, Thora, Kadala, etc); 27= Okra; 28= Onion; 29= Banana; 30= Potato; 31= Bitter Gourd; 32= Pumpkin;;33=tomato 34= Other Specify

**Table FAR 2: Non-Paddy Farmland (Chena or High land) Cultivation**

Q: Could you please tell me about the other field crops that you cultivate on all non-paddy land (chena or high land) in a typical season and your plans to cultivate next year.

INTERVIEWER: Use the Other Field Crops Codes. Only consider the crops which are grown for commercial purposes.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Typical Season/ year  (a)  (***Write down answer and put the codes later)*** | | | Plans for Next Season/ year  (b)  (Write down answer and put the codes later) | | |
|  | Yala  (a1) | Maha  (a2) | Annual (e.g. Bananas, pineapple etc.,)  (a3) | Yala  (b1)  99=don’t know/cant tell | Maha  (b2)  99=don’t know/cant tell | Annual (e.g. Bananas, pineapple, etc.)  (b3)  99=don’t know/cant tell |
| 1. Crop codes |  |  |  |  |  |  |
| 1. Approx. total cost |  |  |  |  |  |  |
| 1. Approx. total income |  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table FIN 2: Head farmers - Non-farm Income & Remittances/ Social Safety Nets etc. | | | | | |
| Determine if the household earns any other income in addition to their farm. If the answer is no, skip to the next table.  If the answer is yes, indicate the wage earned by the household using one of the four units (e.g., daily, monthly, seasonally). Leave any cells blank that do not apply. All values that are entered should be recorded only once. All the figures that are entered should be relevant. Do not enter irrelevant information or total figures.  Encourage the respondent to give an approximate value if he/she is unsure | | | | | |
| 1. Does this household have any other sources of income other than farming? | Yes 1  No 2 skip to next table | | | | |
|  | Respondent claimed amounts | | | | Converted annual amounts, after verification from respondent  (e) |
| Daily  (a) | Monthly  (b) | Seasonally  (c) | Annual  (d) |
| 2. Daily wages/ labour |  |  |  |  |  |
| 3. Animal husbandry |  |  |  |  |  |
| 4. Government service/private salaried employee |  |  |  |  |  |
| 5. Self-employment/own economic activity |  |  |  |  |  |
| 6. All other non-farm income |  |  |  |  |  |
| 7. Internal or external transfers/ remittances |  |  |  |  |  |
| 8. Social Protection benefit (Samurdhi/ /disability /Other) |  |  |  |  |  |

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| --- | --- |
| Table SAT 1. FO Satisfaction, Water Management Satisfaction | |
| **Instructions: Ask participants to answer each of the following statements. Circle the appropriate response for each question.** | |
| 1.  Are you a member of the farmer organization (FO)? | Yes 1  No 2 skip to item 5  There is no FO here 4 |
| 2. How often do you participate in meetings? | Never 1  Sometimes 2  Always 3 |
| 3. Can you cooperate with other FO members to tackle mutual problems?  SHOW CARD 3/Readout all answers options | Not at all 1  A little 2  Somewhat 3  Very much 4 |
| 4.  Are you generally satisfied with your FO?  SHOW CARD 3/Readout all answers options | Not at all 1  A little 2  Somewhat 3  Very much 4 |
| 5. What do you think about the condition of the irrigation infrastructure (i.e. canals, tanks, anicuts, bunds, poles, gates etc)in this village? | Poor quality 1  Moderately good quality 2  Good quality 3 |
| 6. Would you say that water in your tanks and canals is generally well managed in your community?  SHOW CARD 3/Readout all answers options | Not at all 1  A little 2  Somewhat 3  Very much 4 |
| 7. Would you say that farmers in this community get an equal amount of irrigation water per acre of land  SHOW CARD 3/Readout all answers options | Not at all 1  A little 2  Somewhat 3  Very much 4 |

**Table CAES: Agricultural Advisory Services Usage**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.    Have you used 1920 agriculture advisory service last 5 years? | 1  yes | | 2  No  (Skip to question 3) | |
| 2.Was their advice useful in rectifying your problem? | 1  Very useful | 2  Somewhat useful | | 3  Not useful |
| 3. Will you use the service again? | 1  Yes | | 2  No | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table CAP 9. Occupational Attachment | | | | |
| Now I am going to ask about how you feel it is to be a farmer. | | | | |
| 1. Are you happy being a farmer? | Yes 1  No 2 | | | |
| 2. Do you consider farming a good profession? | Bad  1 | A little good  2 | Moderately good  3 | Good  4 |
| 3. Would you like to see your children become farmers? | No 1  Yes, but only if they have another job 2  Yes 3 | | | |

## Table Concerns 1: Major challenges

Rate the concerns in the order of their importance