Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

**The Economics of Community Based Seed Production: A Case Study of the *Association Song Koaadba* (ASK), Burkina Faso**

# Farmer Survey

**revised: 6/1/2015**

***INSTRUCTIONS:***

***For ASK member farmers:*** ***Ask to speak to the person who is the member of ASK (see the farmer selection list). If this person is not available, complete X1-X7 and then end the interview and go to the next farmer on the replacement list. If he/she is available, complete all the fields (X1 to X7) before beginning the interview.***

***For non-ASK farmers:*** ***Ask to speak to the person who is the Head of the Household or the person most familiar with cowpea production. If this person is not available or the household does not produce cowpea, complete X1-X7 and then end the interview and go to the next farmer on the replacement list. If he/she is available, complete all the fields (X1 to X7) before beginning the interview.***

| | | | |
|---|---|---|---|
| **X1**. Date of the visit (mm/dd): _____<br>**X2**. Type of HH (select one):<br>☐ 1=Selected ☐ 2=Replacement | **X3.** Province ID: _____<br>**X4.** Department ID: _____ | **X5.** Village ID: _____<br>**X6**. Name of the enumerator:_____ | **X7**. Type of farmer based on the farmer list (select one):<br>☐ 1=ASK member Seed producer ☐ 3=non-ASK member<br>☐ 2=ASK member (non-seed producer) |

VERIFICATION QUESTIONS TO DETERMINE ELIGIBILITY: Ask one of the following filter questions corresponding to the Type of Farmer selected in X7.

1. For ASK member SEED PRODUCER farmer: X8. Are you currently a member of ASK or were you a member of ASK last year? ☐1=Yes ☐2=No
   X9. Did you produce cowpea seed for sale in any years in the past**:** ☐1=Yes ☐2=No

   **If the response is NO to either one of these questions, please stop the interview**
2. For ASK non-seed producer farmer: X10. Are you currently a member of ASK or were you a member of ASK last year? ☐1=Yes ☐2=No
   X11. Did you produce cowpea in the last season (2014)**:** ☐1=Yes ☐2=No

   **If the response is NO to either of these questions, please stop the interview**
3. For non-ASK farmer: X12. Are you currently a member of ASK or were you a member of ASK last year? ☐1=Yes ☐2=No
   X13. Did you produce cowpea in the last season (2014)**:** ☐1=Yes ☐2=No
   **If the response is YES to X12 or NO to X13, please stop the interview. Otherwise continue.**
   X14. Have you heard or know about the ***Association Song Koaadba*** **(ASK)?** ☐1=Yes ☐2=No > Consent Statement
   X15. Have you ever been a member of ASK in the past ☐1=Yes ☐2=No
   X16. Do you know anyone who is a member of ASK? ☐1=Yes ☐2=No > Consent Statement
   X17. How long have you been **aware of ASK**? *Write the number of years (if less than 1 year, write in decimals)* _____ *years*

***CONSENT STATEMENT: IF the farmer meets the eligibility criteria READ*** *the consent statement to the selected respondent and continue with the interview.*

**X18.** Consent statement was read and discussed, and the farmer agreed to be interviewed (*check one)* ☐*1=Yes* ☐*2=No*

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

## Section A. Background Information of the Respondent, His/Her Farm, and Membership with ASK

***INSTRUCTIONS*: Ask the following questions to the person who is on the ASK FARMER LIST or to the head of the HH or a person most familiar with cowpea production (if non-ASK farm HH)**

| A1 | A2 | A3 | A4 | A5 | A6 |
|---|---|---|---|---|---|
| Respondent Name | Gender<br>*[1] Male*<br>*[2] Female* | Relationship to the head of the household (use codes)<br>*1=Self 2= Spouse*<br>*3= Son/daughter 4=Other (specify)* | Age<br>(years completed) | How many years of **cowpea** farming experience do you have? | Education: Highest level completed<br>*[0] No Formal education [1] - [12] School (write years completed)*<br>*[15] – University [20] Adult Education*<br>*[99] Other (specify)* |
| | | | | | |

| A7 | A8 | A9 | A10 | A11 | A12 | A13 | A14 | A15 | A16 |
|---|---|---|---|---|---|---|---|---|---|
| Are you currently a member of ASK as an individual or through a farmer group?<br>*[1] Individual >A12*<br>*[2] farmer group*<br>*[3] Not a member of ASK* ***>A21*** | What is the name of the farmer group/ organization that is a member of ASK? | How many members belong to this farmer group? | Are all the members of this group members of ASK?<br>*[1] Yes*<br>*[2] No*<br>*[88] Don't know* | What type of farmer group is this?<br>*[1] Farmer cooperative*<br>*[2] Cowpea specific producer organization*<br>*[99] Other (specify)* | How many years you have been a member of ASK? | How much did you pay as a one-time fee to become a member of ASK (CFA) | How much do you pay as annual fee to remain a member of ASK? CFA | When was the last time you paid this fee? *Write the month and year*<br>*88-don't remember*<br>*MM YYYY* | |
| | | | | | | | | | |

| A17 | A18 | A19 | | | A20 |
|---|---|---|---|---|---|
| Would you continue to remain a member of ASK, if the membership fee was 50% more than what you pay?<br>*[1] Yes*<br>*[2] No >A19* | Would you remain a member, if the membership fee was double?<br>*[1] Yes*<br>*[2] No* | What are the benefits you get from being a member of ASK? (select all mentioned) | | | In which of the following activities of ASK have you participated? ***(read each and select if participated)*** |
| | | ☐*1=Access to Information*<br>☐*2=New technologies*<br>☐*3=New crop varieties*<br>☐*4=Linkage to output market* | ☐*5=Access to inputs (fertilizer, pesticides)*<br>☐*6=Access to quality seeds at discounted price* | ☐*7=socio-health development programs*<br>☐*99=Other (specify here)* | ☐*1=Farmer field school*<br>☐*2=Participatory variety selection*<br>☐*3=Training on technology related to soil fertility, natural resource management practices*<br>☐*4=Training on cowpea seed production*<br>☐*5=Training on seed production of other crops* |

| A21 | A22 |
|---|---|
| In your opinion, what are the main achievements of ASK related to cowpea? | In your opinion, what are the most important factors contributing to ASK's long term survival and continued expansion? |
| | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

| A23 | A24 | A25a | A25b | A25c | A26 | A27a | A27b | A28a | A28b | A29a | A29b | A29c | A30a | A30b | A30c | A31a | A31b | A31c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Is anyone else in your family a member of ASK?<br>*[1] Yes*<br>*[2] No* | Are you a member of any other farmer organization or organized group?<br>*[1] Yes*<br>*[2] No* **>A24** | What type of organization do you belong? (*if multiple, write each one in a separate column—up to three; if less than 3, enter [888] in columns that are blank)*<br>*[1] Farmer cooperative*<br>*[2] Crop specific producer organization*<br>*[3] Non-agricultural business group*<br>*[4] Social group*<br>*[99] Other (specify)*<br>*[888] Not applicable* | | | Have you completed all the planting for this season (2015)?<br>*[1] Yes*<br>*[2] No* | **How many** parcels of agricultural land are under the management of your household that you own or have rented/borrowed from others?<br>*(list land owned and land rented or borrowed from others separately)* | | What is the **total area** (in hectares) across all the agricultural fields that are planted by your household or you plan to cultivate or keep fallow this year? (hectares) | | Which are the three most important crops on your household's farm in terms of **total area planted**?<br>*(see codes below)* | | | Which are the three most important crops on your household's farm in terms of **total family labor devoted** for its production?<br>*(see codes below)* | | | Which were the three most important crops on your household's farm in terms of **purchased inputs devoted** for its production?<br>*(see codes below)* | | |
| | | 1st org | 2nd org | 3rd org | | Owned | Rented/borrowed | Cultivated | Kept Fallow | 1st | 2nd | 3rd | 1st | 2nd | 3rd | 1st | 2nd | 3rd |
| | | | | | | | | | | | | | | | | | | |

***Crop codes for A29-A31:*** *(if crop not in this list, write down the name in the corresponding space)*

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *[1] sorghum* | *[2] millet* | *[3] maize* | *[4] rice* | *[5] cowpea* | *[6] soybean* | *[7] peanut* | *[8] cassava* | *[9] yam* | *[10] potato* | *[11] cotton* | *[12] vegetables* | *[99] Other, specify* |

**B01.** Have you ever produced cowpea **quality declared seed** for sale through assistance from ASK? ☐ *1=Yes* ☐ *2=No* *> Section C*

**B02.** When was the last time you produced cowpea quality declared seed for sale through assistance from ASK? *Write year* _____

B02b. If the year mentioned in B02 is before 2014, ask: What is the reason you have not produced cowpea quality declared seed for sale through assistance from ASK since <year>?

_____

**B03.** How many years of experience you have in producing cowpea quality declared seed? _____

## Section B1. Information about cowpea SEED production by VARIETY in the last year seed was produced

**Now, I would like to ask you about the Cowpea QUALITY DECLARED SEED production in the last year you produced seed**

B04. First tell me, how many different varieties of cowpea seeds did you produce that year? _____ ***Enumerator****, please use this answer to determine the number of rows that need to be filled in the following Tables in Section B. Each row should correspond to a distinct variety of cowpea seed produced*

| B05 | B06 | B07 | B08 | B09 | B10 | B11 | B12 | B13 | B14 | B15 |
|---|---|---|---|---|---|---|---|---|---|---|
| Variety code | What variety of cowpea seed did you produce in <year>? | Do you plan to produce quality declared seed of this variety in 2015?<br>*[1] YES*<br>*[2] NO*<br>*[77] Don't know* | When did you first produce seed of this variety on your farm?<br>YYYY<br>*[77] Don't know* | How many hectares of land did you devote for cowpea seed production in <year> for *<variety…>*?<br>*Ha* | Did you plant any other crop in the same field in which this variety was planted for seed production<br>*[1] YES*<br>*[2] NO* | What quantity of Foundation Seed was planted to produce quality declared seed of *<variety…>? KG* | How much did you pay for per kg of Foundation Seed? (CFA/Kg) | Who was the main person **responsible for the parcel** on which the seed was produced for *<variety>*<br>*[1] self [2] spouse*<br>*[3] son/daughter*<br>*[99] other (specify)* | Gender of the person responsible for this parcel<br>*[1] male*<br>*[2] female* | The person responsible belongs to the following age group<br>*[1] < 16 years old*<br>*[2] 16-30*<br>*[3] 31-45*<br>*[4] 46-65*<br>*[5] > 65 years old* |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

| B0 | B16 | B17 | B18 | B19a | B19b | B19c | B19d | B20 | B21 | B22 | B23 | B24 | B25a | B25b | B25c | B26a | B26b | B26c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety ID | Was the seed produced using irrigation? *[1] Yes [2] No [77] Don't know* | Did you apply any insecticide in seed production? *[1] Yes [2] No [77] Don't know* | Did you apply any fungicide? *[1] Yes [2] No [77] Don't know* | What chemical fertilizer and quantity did you apply? ***(highest quantity)*** | | What other chemical fertilizer and quantity did you apply? ***(lower quantity)*** | | Approximately how much did you spend on the following inputs on **seed production for this variety in 2014**? *(CFA)* | | | | Did you purchase any inputs used for seed production on credit? *[1] Yes [2] No [77] Don't know* | How many times during the different seed growing phases did a technical staff from ASK visit your farm to monitor seed production of this variety? | | | On average, how much time did the technical staff spend on each visit during the following seed production stages? *Indicate HOURS spent per visit* | | |
| | | | | Type | Amount | Type | Amount | Chemical Fertilizer | Herbicide | Chemical pesticides | Hired labor | | Before or during planting | After planting to flowering stage | After flowering to harvest | Before or during planting | After planting to flowering stage | After flowering to harvest |
| 1 | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |

| B0 | B27a | B28 | B29 | B30 | B31a | B31b | B31c | B31d | B31e | B31f | B32 | B33a | B33b | B34a | B34b |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Var ID | How much did you have to pay to the technical staff for each visit? *(write zero, if nothing paid) CFA per visit* | Did ASK conduct seed germination test of cowpea seed harvested last year? | What was the total quantity of Cowpea Seed harvested in 2014? *(kg)* | Of the total quantity harvested, how much was approved **by ASK as Quality Declared Seed**? *(should be = to or < B29) (kg)* | How much of the total quantity of **Quality Declared Cowpea Seed** produced last year, did you […]? *(write in kg) (write zero where appropriate) (Total across B31a to B31f should equal quantity in B30)* | | | | | | If any seed harvested last year was rejected for sale as quality declared seed, what was the MAIN reason for rejection? *0=no seed was rejected 1=seed appearance below standard (i.e., size, color 2=seed health issues (insect damage, disease) 3=did not meet purity and germination test 99=other (specify)* | What are the two characteristics you **LIKE** the most about this variety? *[1] Good yield [2] Resistant to diseases and insects [3] Early maturity [4] Good cooking quality/taste [5] Good price/market demand [99] Other (specify)* | | What are the two characteristics you **DISLIKE** the most about this variety? *[0] Nothing [1] Low yield [2] Susceptible to diseases and insects [3] Late maturity [4] Poor cooking quality/taste [5] Lower price/mkt.demand [99] Other (specify)* | |
| | | | | | Keep for your own use? | Sold to farmers in this village | Sold to farmers from other villages | Sold to traders, organizations | Sold to ASK | Remained un-sold or un-used | | 1st | 2nd | 1st | 2nd |
| 1 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

## Section B2. Information about FOUNDATION seed received for Seed Production in <year>

**Now, I would like to ask you about the Foundation seed you received in 2014 for the production of Quality Declared Seed you reported producing above**

| B40 | B41 | B42 | B43 | B44a | B44b | B44c | B44d | B45 | B46 | B47 |
|---|---|---|---|---|---|---|---|---|---|---|
| Where did you get the Foundation Seed?<br>*From:*<br>*1=ASK*<br>*2=INERA*<br>*99=Other* | Was the foundation seed delivered to you in the village or did you have to travel to access this seed?<br>*1=delivered in the village >B16*<br>*2=traveled elsewhere* | Distance traveled to access the foundation seed<br>*Kilometers* | In what type of package did you receive the foundation seed?<br>*[1] **Sealed** package*<br>*[2] **Open bag***<br>*[99] Other (specify)* | Did the package of foundation seed include the following:<br>*[1] Yes [2] No [77] I don't know*<br>Variety name | | Germin-ation rate | Weight | Date of production | When did you receive the foundation seed in relation to your planned planting date?<br>*[1] One month before*<br>*[2] One week before*<br>*[3] Less than one week*<br>*[4] After the date I was planning to plant*<br>*[99] Other (specify)* | Did you pay cash for the foundation seed at the time of its purchase or was it given to you on credit?<br>*1=cash purchase*<br>*2=on credit* | How would you rate the quality of foundation seed you received last year?<br>*1=high*<br>*2=Medium*<br>*3=low* |
| | | | | | | | | | | |

## Section B3. Information about Quality Declared Seed Production and Post-Harvest Practices

**Now, I would like to ask you about the seed production and post-harvest practices, including the sale of quality declared seed you produced in 2014**

**Enumerator Read:** The production of quality declared cowpea seed requires following some specific production and post-harvest practices and guidelines that are different from producing cowpea grain. Can you tell me what specific practices did you follow in 2014 for seed production and how they compare with producing cowpea grain?

| | B51. Production of quality declared seed | B52. Production of cowpea grain |
|---|---|---|
| Planting practices:<br><br>Did you…..?<br><br>*(read each option and select the practices followed first for the production of QDS and then for cowpea grain)* | ☐ *1=Mono-cropped* ☐ *2=Inter-cropped*<br>☐ *3=Had to devote minimum hectares of land for cowpea seed production*<br>☐ *4=Followed guidelines on planting date based on technical advise*<br>☐ *5=Followed guidelines on planting date based on traditional practice*<br>☐ *6=Followed guidelines on seeding rate, seeding method based on technical advise*<br>☐ *7=Followed guidelines on seeding rate, seeding method based on traditional practice*<br>☐ *8=Applied fertilizer at the time of planting*<br>☐ *9=Treated the seed with chemicals to control for pest and disease damage*<br>☐ *10=do any other planting practices different? If yes, specify here:* | ☐ *1=Mono-cropped* ☐ *2=Inter-cropped*<br>☐ *3=Had to devote a minimum hectares of land for cowpea production*<br>☐ *4=Followed guidelines on planting date based on technical advice*<br>☐ *5=Followed guidelines on planting date based on traditional practice*<br>☐ *6=Followed guidelines on seeding rate, seeding method based on technical advise*<br>☐ *7=Followed guidelines on seeding rate, seeding method based on traditional practice*<br>☐ *8=Put fertilizer at the time of planting*<br>☐ *9=Treated the seed with chemicals to control for pest and disease damage* |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

| | B51. Production of quality declared seed | B52. Production of cowpea grain |
|---|---|---|
| In Production phase:<br><br>Did you….? | ☐ *11= Hire labor for weeding* ☐ *12=Weeding done by own labor*<br>☐ *13=Applied herbicides* ☐ *14= Did no weeding*<br>☐ *15=Applied fertilizers* ☐ *16= Applied organic fertilizer (e.g., manure)*<br>☐ *17=Applied Pesticides* ☐ *18=Irrigated the field*<br>☐ *19=Visited the field more than once a week to monitor the crop*<br>☐ *20=Visited the field daily (at certain critical phase) to monitor the crop*<br>☐ *21=Consult technical experts if the plants showed signs of stress and followed their advise*<br>☐ *22=Consult other farmers if the plants showed signs of stress and followed their advise*<br>☐ *23=do any other production practices different? If yes, specify here:* | ☐ *11= Hire labor for weeding* ☐ *12=Weeding done by own labor*<br>☐ *13=Applied herbicides* ☐ *14= Did no weeding*<br>☐ *15=Applied fertilizers* ☐ *16= Applied organic fertilizer (e.g., manure)*<br>☐ *17=Applied Pesticides* ☐ *18=Irrigated the field*<br>☐ *19=Visited the field more than once a week to monitor the crop*<br>☐ *20=Visited the field daily (at certain critical phase) to monitor the crop*<br>☐ *21=Consult technical experts if the plants showed signs of stress and followed their advise*<br>☐ *22=Consult other farmers if the plants showed signs of stress and followed their advise* |
| Post-harvest phase<br><br>Did you…..? | ☐ *24=use machinery or special equipment to harvest the cowpea*<br>☐ *25=use seed dryer to dry the seed*<br>☐ *26=conditioned the seed*<br>☐ *27=sorted and graded the seed*<br>☐ *28=treated the seed with chemicals*<br>☐ *29=used solar treatment method to kill insects*<br>☐ *30=stored the seed using traditional method (e.g., plastic container)*<br>☐ *31=stored the seed using triple bag storage method*<br>☐ *32=do any other post-harvest practices different? If yes, specify here:* | ☐ *24=use machinery or special equipment to harvest the cowpea*<br>☐ *25=use seed dryer to dry the seed*<br>☐ *26=conditioned the seed*<br>☐ *27=sorted and graded the seed*<br>☐ *28=treated the seed with chemicals*<br>☐ *29=used solar treatment method to kill insects*<br>☐ *30=stored the seed using traditional method (e.g., plastic container)*<br>☐ *31=stored the seed using triple bag storage method* |
| Sale of harvest<br><br>Did you….? | ☐ *33=sold the seed in a sealed bag with information on the name of the variety, weight, and other information*<br>☐ *34=sold the seed in a sealed bag but with no information on the package*<br>☐ *35=sold the seed in an open bag with information on the name of the variety, weight, and other information*<br>☐ *36=sold the seed in an open bag but with no information*<br>☐ *37=sold the seed in bulk in bags/containers brought by buyers*<br>☐ *38=Not sell any harvest*<br>☐ *39=do any other sale practices different? If yes, specify here:* | ☐ *33=sold the seed in a sealed bag with information on the name of the variety, weight, and other information*<br>☐ *34=sold the seed in a sealed bag but with no information on the package*<br>☐ *35=sold the seed in an open bag with information on the name of the variety, weight, and other information*<br>☐ *36=sold the seed in an open bag but with no information*<br>☐ *37=sold the seed in bulk in bags/containers brought by buyers*<br>☐ *38=Not sell any harvest* |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

**Enumerator Read:** In your experience, if you had **two same size of fields**, and you produced cowpea seed on one field and cowpea grain on the other. How much of the following resources would you typically devote for seed production compared with grain production?

| *Resource* ***Category*** | Resources devoted ***Unit*** | What is the total quantity of *<unit…>* you would invest on *<category…>* during the entire season in producing **cowpea QDS seed** | What is the total quantity of *<unit…>* you would invest on *<category…>* during the entire season in producing **cowpea grain** |
|---|---|---|---|
| Household labor | Days | B53a: | B53b: |
| Hired labor | CFA | B54a: | B54b: |
| Seed for planting | CFA | B55a: | B55b: |
| Purchased inputs for production (e.g., fertilizer, pesticides) | CFA | B56a: | B56b: |
| Supplies / inputs for post-harvest processing and sale | CFA | B57a: | B57b: |

| **B58** | **B59** | **B60** | **B61** | **B62** | **B63** | **B64** | **B65** | **B66** | **B67** |
|---|---|---|---|---|---|---|---|---|---|
| At what price did you sell the Quality Declared Seed produced in <year>?<br><br>CFA / kg | Who set this price?<br><br>*1=ASK*<br>*2=Government*<br>*3=Farmer group*<br>*99=Other (specify)*<br>*88=Don't know* | Did you know this price before you decided to grow Quality Declared seed of cowpea?<br>*1=Yes*<br>*2=No* | If the price was 10% LOWER THAN the price you received last year, would you have produced the same, less or no quantity of cowpea QDS seed?<br>*0=Not produced any seed*<br>*1=Produced same quantity*<br>*2=Produced less quantity* | What if the price was 20% LOWER THAN the price you received last year, would you have produced same, less or no quantity of cowpea QDS seed?<br>*0=Not produced any seed*<br>*1=Produced same quantity*<br>*2=Produced less quantity* | What if the price was 30% LOWER THAN the price you received last year, would you have produced same, less or no quantity of cowpea QDS seed?<br>*0=Not produced any seed*<br>*1=Produced same quantity*<br>*2=Produced less quantity* | If the price was 10% MORE THAN the price you received last year, would you have produced MORE cowpea QDS seed?<br><br>*1=Yes*<br>*2=No >B66* | What would you have produced LESS to make land available for cowpea seed production?<br>*(write the crop name)*<br>*77-would have not reduced production of any crop, but would have rented or borrowed more land* | What are the two main constraints YOU face in **expanding cowpea seed production**?<br>*1=labor*<br>*2=land*<br>*3=Cash*<br>*4=technical guidance*<br>*5=Lack of demand resulting in unsold inventory*<br>*6=Price uncertainty*<br>*99=Other (specify)*<br>1st | 2nd |
| | | | | | | | | | |

| **B68** | **B69** | **B70** | **B71** | **B72** | **B73** | **B74a** | **B74b** |
|---|---|---|---|---|---|---|---|
| Were you able to sell all the QDS seed produced last year to farmers, traders or organizations?<br><br>*1=Yes <B71*<br>*2=No* | What was the MAIN reason you were not able to sell all the seed produced last year?<br><br>*1=no demand for seed*<br>*2=seed price was too high*<br>*3=no transport facility*<br>*99=Other, specify* | What did you do with the un-sold seed from last year?<br><br>*1=sold as grain at lower price*<br>*2=sold to ASK at full seed price*<br>*3=stored to sell this year*<br>*99=Other, specify* | In your estimate, how many farmers purchased cowpea seed from you last year?<br><br>*0=did not sell seed directly to farmers > Section C* | On average, what quantity of cowpea seed was purchased from you by individual farmers last year?<br>*999=did not sell seed to farmers*<br>*Kg* | What percentage of your farmer clients purchase cowpea seed every year?<br><br>*Response should be between 0 to 100* | In your opinion what are the two main **advantages** to farmers in having access to a local source of seed produced by small scale seed producers like you<br>***[1]** It's closeness/proximity /presence in the community*<br>***[2]** Flexibility in payment method*<br>***[3]** Timely availability of seed* ***[4]** Good quality of seed*<br>***[5]** Community seed security*<br>***[6]** Affordability of seed* ***[99]** Other (specify) )*<br>***Most important*** | ***2nd important*** |
| | | | | | | | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

**Section C: Awareness, knowledge and perception on the benefits of quality seed as planting material and of community based seed production**

| C1 | C2 | C3 | C4 | C5a | C5b | C5c | C6a | C6b | C7 |
|---|---|---|---|---|---|---|---|---|---|
| Do you have easy access to **certified seeds of cowpea**?<br>*[1] Yes*<br>*[2] No*<br>*[3] don't know what is a certified seed* | Have you ever used or purchased **certified cowpea seed** ?<br>*[1] Yes-it was given free of cost*<br>*[2] Yes-I purchased it*<br>*[3] No, I have not used it* | Do you have easy access to **certified seeds of other crops**?<br>*[1] Yes*<br>*[2] No*<br>*[3] don't know what is a certified seed* | Have you ever used or purchased **certified seed** of other crops?<br>*[1] Yes*<br>*[2] No >C6* | For which crops you have used certified seeds?<br>*List up to 3 crops*<br>*888=no more* | | | In your opinion what are the two main **advantages** of using certified seeds *(see code list)* | | Have you ever **produced** certified seed of cowpea or any other crop?<br>*[1] Yes, cowpea*<br>*[2] Yes, other crop*<br>*[3] Yes, both 1 and 2*<br>*[4] No* |
| | | | | Crop 1 | Crop 2 | Crop 3 | Most important | 2nd important | |
| | | | | | | | | | |

**Code for C6 and C11 (advantages)**

1=high germination rate
2=less disease and pest problem
3=Uniformity in plant growth
4=high quality grain at harvest
5=high yield
99=other (specify)
88=have not used this type of seed; no more, don't know

| C8 | C9 | C10 | C11a | C11b | C12a | C12b | C12c | C12d | C12e |
|---|---|---|---|---|---|---|---|---|---|
| Have you ever used or purchased Quality Declared Seed of cowpea?<br>*[1] Yes*<br>*[2] No*<br>*[3] don't know what is quality declared seed* | When was the last time you used QDS seed of cowpea for grain production?<br>YYYY<br>*88=have not used this type of seed* | From whom did you purchase or access the QDS seed of cowpea?<br>*1=Own production*<br>*2=From another farmer in this village*<br>*3=From a farmer in another village*<br>*4=from ASK*<br>*5=from other organization*<br>*99=Other (specify)*<br>*88=have not used this type of seed* | In your opinion what are the two main **advantages** of using Quality Declared seeds<br>*(see code list)* | | If you had easy access to both certified cowpea seed and quality declared cowpea seed, what type of seed would you purchase for your cowpea production in the following scenario?<br>*1=I would purchase certified seed*<br>*2=I would purchase QDS seed*<br>*3=I am indifferent*<br>*4=I would not purchase either; I would use own saved seed*<br>*99=Can't tell as I have not used these types of seeds (have no prior experience)* | | | | |
| | | | Most important | 2nd important | Price of certified seed = QDS seed | Price of certified seed 20% more than QDS seed | Price of certified seed 33% more than QDS seed | Price of certified seed 50% more than QDS seed | Price of certified seed is double the price of QDS seed |
| | | | | | | | | | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

## Section D1. Cowpea Production in 2014

***Now, I would like to ask you about your cowpea grain production in2014 agricultural season.***

| | |
|---|---|
| **D1.** Did you have the following problems more in 2014 compared to the previous 2 years? *[1] Yes [2] No [88] Don't know*<br>**D3a** Insects ☐ **D3b** Diseases ☐ **D3c** Drought ☐ **D3d** Too much rain ☐ | |
| **D2.** In **2014** planting season, how many **PARCELS** of agricultural land were planted to cowpea grain production? (***If ZERO PARCELS in 2014, GO TO SECTION E)***<br>***ENUMERATOR: Define a cowpea PARCEL as a contiguous piece of land in which one cowpea variety was planted*** | |
| **D3.** In the 2014 planting season, what was the total hectare of land cultivated across **all parcels and all crops**? | |

***Enumerator**, please use the answer in D2 to determine the number of rows that need to be filled in the following Tables in Section D. Each row should correspond to a distinct agricultural parcel in which cowpeas were planted in 2014. Start by listing the biggest cowpea parcel.*

**Parcel characteristics, use of inputs and varieties for cowpea production during the 2014 season**

| D0 | D4 | D5 | D6 | D7 | D8 | D9 | D10 | D11 | D12 | D13 | D14 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Parcel ID | Unique description of the parcel (e.g., its location, some landmark, etc.) | What is the size (area) of this parcel in hectares? | Was cowpea inter-cropped?<br>*1=Yes*<br>*2=No >D8* | What proportion of this area was planted to **cowpea**?<br>*[1] 25%*<br>*[2] 33%*<br>*[3] 50%*<br>*[4] 67%*<br>*[5] 75%*<br>*[6] >75%* | What variety of cowpea seed was planted on this parcel?<br>*[1] Kvx396-4-5-2D*<br>*[2] Kvx414-22-2*<br>*[3] Kvx414-22-72*<br>*[4] CR0607*<br>*[5] Kvx61-1*<br>*[6] Komcallé*<br>*[7] Nafi*<br>*[8] Tiligré*<br>*[99] Other, specify*<br>*[88] Don't know* | Was this an improved variety or a traditional variety?<br>*1=Improved*<br>*2=Traditional*<br>*88=Don't know* | Was the seed of this variety planted on this parcel a certified seed, quality declared seed or harvested grain used as seed?<br>*[1] Certified seed*<br>*[2] Quality Declared seed*<br>*[3] Grain used as seed*<br>*[88] don't know* | What was the primary source of the seed planted on this parcel<br>*[1] grain saved from own harvest*<br>*[2] Purchased from other farmer*<br>*[3] Purchased in the market from a grain vendor*<br>*[4] Purchased in the market from a seed vendor as packaged seed*<br>*[5] Received from an NGO or government program*<br>*[6]Received/Purchased from ASK*<br>*[99] Other, specify* | When did you first plant this variety on your farm?<br>*[88] Don't know*<br>YYYY | How much seed was planted of this variety in 2014?<br>*(in kg)* | What was the total quantity of cowpeas harvested from this parcel in 2014?<br>*(in kg)* |
| P1 | | | | | | | | | | | |
| P2 | | | | | | | | | | | |
| P3 | | | | | | | | | | | |
| P4 | | | | | | | | | | | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

**Section D2. Experience with using cowpea seed produced by ASK seed producer member**

**Now I would like to ask you about your experience with purchasing or using cowpea seed obtained from ASK or a seed producer who is a member of ASK**

| D21 | D22 | D23 | D24 | D25 | D26 | D27a D27b | D28 | D29a | D29b | D30a | D30b |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Have you ever purchased cowpea seed from ASK or a farmer seed producer who is a member of ASK?<br>*[1] Yes*<br>*[2] No > D43*<br>*[99] Don't know > D43* | When was the last time you purchased cowpea seed from a seed producer who was a member of ASK?<br>YYYY | What is the name of the farmer from whom you purchased the cowpea seed last time?<br>*88=Don't know / can't remember* | Does this farmer reside in this village or another village?<br>*1=this village >D28*<br>*2=another village in the same Department*<br>*3=village from another Department* | If another village, what is the name of that village<br>*88=Don't know / can't remember* | How far is this village from your house in terms of distance (km) and travel time by most common mode of transportation (hh:mm)?<br>*88=Don't know / can't remember* | | What variety was the cowpea seed you purchased?<br>*[1] Kvx396-4-5-2D*<br>*[2] Kvx414-22-2*<br>*[3] Kvx414-22-72*<br>*[4] CR0607*<br>*[5] Kvx61-1*<br>*[6] Komcallé*<br>*[7] Nafi*<br>*[8] Tiligré*<br>*[99] Other, specify*<br>*[88] Don't know* | What are the two characteristics you **LIKE** the most about this variety?<br>*[1] Good yield*<br>*[2] Resistant to diseases and insects*<br>*[3] Early maturity*<br>*[4] Good cooking quality/taste*<br>*[5] Good price/market demand*<br>*[99] Other (specify)* | | What are the two characteristics you **DISLIKE** the most about this variety?<br>*[0] Nothing*<br>*[1] Low yield*<br>*[2] Susceptible to diseases and insects*<br>*[3] Late maturity*<br>*[4] Poor cooking quality/taste*<br>*[5] Lower price/mkt.demand*<br>*[99] Other (specify)* | |
| | | | | | **Distance (km)** | **Travel time hh \| mm** | | 1st | 2nd | 1st | 2nd |
| | | | | | | \| | | | | | |

| D31 | D32 | D33a | D33b | D33c | D33d | D34 | D35 | D36 | D37 | D38 |
|---|---|---|---|---|---|---|---|---|---|---|
| How much quantity of seed did you purchase?<br>*Kg* | In what type of package did you receive the seed?<br>*[1] **Sealed** package*<br>*[2] **Open bag***<br>*[99] Other (specify)* | Did the package of seed include the following:<br>*[1] Yes [2] No [77] I don't know*<br>Variety name | Germin-ation rate | Weight | Date of production | Was this seed sold as certified seed or a Quality Declared Seed?<br>*1=certified seed*<br>*2=quality declared seed*<br>*88=don't know* | When did you receive the seed in relation to your planned planting date?<br>*[1] More than one month before*<br>*[2] One week before*<br>*[3] Less than one week*<br>*[4] After the date I was planning to plant*<br>*[99] Other (specify)* | Did you pay cash for the seed at the time of its purchase or was it given to you on credit?<br>*1=cash purchase*<br>*2=on credit* | How much did you pay for the seed per kg?<br>CFA / kg | In your opinion was the price of the seed [..]?<br>*[1] Lower than what you were willing to pay*<br>*[2] Right around the rate you were willing to pay*<br>*[3] Higher than what you were willing to pay* |
| | | | | | | | | | | |

| D39 | D40 | D41 | D42 |
|---|---|---|---|
| How would you rate the quality of the seed you received from that seed producer?<br>*1=high 2=Medium 3=low*<br>*[88] I don't know / don't remember* | If rated low: What is the main reason for rating the seed as lower quality?<br>*[1] low/zero germination rate*<br>*[2] poor plant growth*<br>*[3] It was prone to diseases and insects*<br>*[4] It had mixed varieties with different plant height and maturity*<br>*[99] Other (specify)* | Was the seed delivered to you in the village or did you have to travel to access this seed?<br>*1=delivered in the village >D32*<br>*2=traveled elsewhere* | Distance traveled to access the seed<br>*Kilometers*<br>*<Skip to D44a>* |
| | | | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

| D43 | D44a | D44b | D45a | D45b |
|---|---|---|---|---|
| What is the main reason why you have never purchased seed from a seed producer who is a member of ASK?<br><br>*1=I don't know any such seed producer*<br>*2=I prefer to use my own saved seed*<br>*3=I am not sure about the quality of seed*<br>*4=It is expensive (cannot afford)*<br>*5=they don't sell the variety I like*<br>*99=Other (specify)* | In your opinion what are the two main **advantages** to farmers in having access to a local source of seed produced by small scale seed producers living close to the community?<br>***[1]** It's closeness/proximity/presence in the community*<br>***[2]** Flexibility in payment method*<br>***[3]** Timely availability of seed*<br>***[4]** Good quality of seed*<br>***[5]** Community seed security*<br>***[6]** Affordability of seed*<br>***[99]** Other (specify)*<br>*[88] Don't know* | | In your opinion what are the two main **disadvantages** of purchasing seeds from a small-scale farmer seed producer?<br>*[1] Poor quality of seed*<br>*[2] Seed not available on time*<br>*[3] Inadequate capacity to meet the seed needs of the community in terms of quantity*<br>*[4] Inadequate capacity to meet the seed needs of the community in terms of diversity of varieties demanded*<br>*[99] Other (specify)*<br>*[88] Don't know* | |
| | ***Most important*** | ***2nd important*** | ***Most important*** | ***2nd important*** |
| | | | | |

## Section D3. Preference for Cowpea Varietal Traits and Demand for Seed

| | D50 | D51 | D52 | D53 | D54 | D55 |
|---|---|---|---|---|---|---|
| If I gave you numbers 1 to 10, where 1 means 'highly preferred by you and your family' and 10 means 'least preferred by you and your family', how would you assign those numbers to the following traits in a cowpea variety? Describe your preference for a specific trait. | | | What is the maximum amount of money you would be **willing to pay per kg for the seed** of a variety that has the preferred qualities indicated in D51?<br><br>CFA / *kg* | How often would you purchase **clean and high-quality seed** of a variety that has all the desired traits<br><br>*[1] Once every year*<br>*[2] every 2 years*<br>*[3] every 3-5 years*<br>*[4] more than every 5 years*<br>*[0] I would not purchase seed (only use saved seed)**==>Go to Section E*** | What quantity of seed would you purchase at that frequency *(indicated in D53)*? | |
| **Traits** *(first read them all, then ask to rank them)* | **Trait ID** | **Rank**<br>***(assign numbers 1-10 without repeating)***<br>[99] Not preferred at all | | | **Quantity** | **Units**<br>*[1] Kg*<br>*[2] Lbs*<br>*[99] Other (specify units)* |
| Seed color and size | **1** | | | | | |
| Resistance to field pests and diseases | **2** | | | | | |
| Resistance to storage pests | **3** | | | | | |
| Cooking time | **4** | | | | | |
| Yield | **5** | | | | | |
| Taste | **6** | | | | | |
| Earliness of maturity | **7** | | | | | |
| Marketability (Easy to sell) | **8** | | | | | |
| Taste of green pods | **9** | | | | | |
| Other (Specify:_____) | **10** | | | | | |

Village name:_____ Village ID:_____ Farmer name:_____ Farmer ID:_____

## E. Family Socioeconomic characteristics, poverty scorecard indicators, and role of cowpea in HH economy

| E1 | E2 | E3 | E4 | E5 | E6 | E7 | E8 | E9 | E10 | E11 | E12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **How many people belong to this household?** | | | How many household members are 14-years-old or younger? | In what languages can the male head/spouse read and write?<br><br>*0 =None or no male head / spouse*<br>*4 =French only*<br>*5 =A non-French language (regardless of French literacy)* | Has the female head/spouse completed first grade?<br><br>*0 =No*<br>*0 =No female head / spouse*<br>*9 =Yes* | What is the main source of energy for lighting: Is it…<br><br>*8 =electricity or solar energy?*<br>*5 =flashlight or batteries?*<br>*4 =candles, kerosene or LPG?*<br>*0 =firewood, or other?* | What toilet arrangement does the household have?<br><br>*15 =Ventilated pit latrine, or flush to a septic tank*<br>*4 =Non-ventilated pit latrine*<br>*0 =No toilet arrangement, or other* | Does the household own a television?<br><br>*10 =Yes*<br>*0 =No* | Does the household own a bed or a mattress?<br><br>*3 =Yes*<br>*0 =No* | Does the household own a scooter or a motorcycle ?<br><br>*6 =Yes*<br>*0 =No* | How many head of cattle or other large animals does the household now own? |
| **Males** | **Females** | **Total** | | | | | | | | | |
| | | | | | | | | | | | |

| E13 | E14 | E15 | E16 | E17 | E18 | E19 | E20 | E21 |
|---|---|---|---|---|---|---|---|---|
| Did your HH purchase cowpea grain for consumption in the past 12 months?<br><br>*[1] YES*<br>*[2] NO* | Did your HH use agricultural credit in the past 12 months?<br><br>*[1] YES*<br>*[2] NO* | Did your HH receive remittances from a relative in the past 12 months?<br><br>*[1] YES*<br>*[2] NO* | In a typical year, what share of your HH **income** comes from **<u>cowpea grain sales</u>**?<br>*[0] zero*<br>*[1] Less than 25%*<br>*[2] Between 25% and 50%*<br>*[3] Between 50% and75%*<br>*[4] More than 75%* | In a typical year, what share of your HH **income** comes from cowpea **<u>seed sales</u>**?<br>*[0] zero*<br>*[1] Less than 25%*<br>*[2] Between 25% and 50%*<br>*[3] Between 50% and75%*<br>*[4] More than 75%* | In a typical year, what share of your HH annual cowpea **grain consumption** is satisfied by your own production?<br><br>*[1] Less than 10%*<br>*[1] Between 10- 25%*<br>*[2] Between 25% and 50%*<br>*[3] Between 50% and75%*<br>*[4] Between 75-90%*<br>*[6] More than 90%* | In a typical year, how long does your **food grain reserves** of cowpea last after harvest?<br><br>*[1] Less than one month*<br>*[2] One to three months*<br>*[3] Three to six months*<br>*[4] Six to nine months*<br>*[5] Until the harvest in the following season*<br>*[77] Don't know / can't answer* | In a typical year, when bean reserves are over, how often is **grain purchased** for consumption?<br>*[1] Never*<br>*[2] Every day*<br>*[3] Few times per week*<br>*[4] Once a week*<br>*[5] 2-3 times per month*<br>*[6] Once a month*<br>*[77] Don't know / can't answer* | In the past 7 days, how many days cowpeas were cooked for home consumption? |
| | | | | | | | | |

**E22**. Do you have any suggestions regarding what is needed to increase farmers' cowpea yields?

_____

_____

**THANK YOU VERY MUCH FOR YOUR TIME TO PARTICIPATE IN THIS STUDY**