

Strictly Confidential



REPUBLIC OF ZAMBIA  
2008 - Central Statistical Office and Food Security Research Project  
*Third* Supplemental Survey to the 1999/2000 Post Harvest Survey  
(Small and Medium Scale Holdings)  
SEA Household Listing Form

**Informed Consent Form for Food Security Cooperative Agreement Surveys in Africa**

This survey is part of a team effort at the Central Statistical Office aimed at studying options to improve crop production and marketing, and food consumption among small farmers. As a start we are listing all the households in this area and your help in answering these questions is very much appreciated. Your responses will be kept COMPLETELY CONFIDENTIAL to the maximum extent allowable by law. If you have questions about this survey, you may contact the Director, CSO headquarters in Lusaka. If you have any questions for Michigan State University about this survey, you may contact Dr. Peter Vasitenko at 517 355 2180.

## LISTING BOOK AND LISTING WORKBOOK INSTRUCTIONS

### INSTRUCTIONS FOR LISTING OF ALL HOUSEHOLDS IN A STANDARD ENUMERATION AREA (SEA)

**PURPOSE:** The SEA-level household listing for the 2008 Third Supplemental Survey provides the basis for systematically relocating panel households to be re-interviewed and for obtaining names of new households to be selected to also be interviewed as part of the sample. The panel households that were interviewed in 2001 and/or 2004 will be re-interviewed if they can be located. Along with the panel, new households will also be selected to make a total of 20 households per SEA before the actual household survey fieldwork begins.

The results from the SEA-level listing will provide current information on the household and will give an indication of the size of the household as well as provide information for categorizing the households into either two of the farm size strata: A (0-5 ha) or B (5-20 ha). Listing team members will write the names of all household heads and selected additional information about their locations into a listing book, including the name of the village headman responsible for each household. A listing workbook will also be used to help record details on the crops and fields cultivated by each household. Upon completing of listing, team members will also attach a "sticker" to each household with visible identification information so that the interviewer will be able to easily relocate the households identified/chosen to be interviewed during the survey that follows.

### OVERVIEW OF LISTING PROCEDURE - SECTIONS OF THE LISTING BOOK

1. **Part 1: Identification.** Write the name of the Province, District, and enumerator/supervisor names in the spaces provided. Also enter the identification codes for the Province, District, and Census Supervisory Area (CSA), Standard Enumeration Area (SEA) in the boxes provided. The summary of the area and dates you start and end listing in each book should also be indicated.
2. **Part 2. Section for Enumerators:** These pages are for enumerators to fill in information about each household identified and for use in applying stickers. See further details below.
3. **Part 3. Section for Supervisors:** These pages are only for the supervisor's use, and are to assist in selecting the sample. See further details below.
4. **Part 4. Sampling Particulars:** sampling particulars are to be entered by the supervisor. Finally, the supervisor should also indicate when he/she started and ended checking the listing book.

## GENERAL RULES FOR LISTING

1. Five enumerators, two supervisors, one vehicle and driver will work in each SEA, forming two listing teams: Team "Northern" and Team "Southern". These two teams will work closely together to carefully complete the listing of all households in a given SEA. Team Northern and Team Southern will each consist of two enumerators and one supervisor. The fifth enumerator will join one of the teams during the listing until a panel household has been identified. After identifying a panel household, the fifth enumerator will begin interviewing the panel household(s).

2. Before each of these teams start canvassing a particular SEA, they will, as a group, study the SEA area map to identify the land marks of the boundaries and plan the canvassing routes that each team will follow to ensure that you do not skip or fail to list any households in the SEA. If possible the entire team will use the vehicle and driver to assist in identifying and becoming familiar with the key landmarks of the entire SEA boundary.

3. Each of the two listing teams will be assigned approximately one half of the area of the SEA in which to list households. The listing teams will be allocated work areas on opposite sides of each SEA (Northern and Southern), and will geographically work towards each other with the objective of meeting up at approximately the center of the SEA. Each listing team in a given SEA will have its own listing book and a corresponding workbook. Thus the two copies of the listing book, with its respective work book will be joined together to become the final listing book used for completing each SEA. Listing team "Northern" will list households in the first half of their listing book where pre-entered listing numbers are preceded by the letter 'N'. Listing team "Southern" will list households in the second half of their listing book where serial numbers are preceded by the letter 'S'. A copy of the listing books used by team Northern and Southern will be stapled together when listing is completed to form one listing book per SEA. Copies of the workbooks used by a "Northern" and a "Southern" team will be retained to become part of the documentation for the listing of each SEA covered in the sample.

4. Each team will begin canvassing at one boundary of the work area and keep a logical work sequence, roughly agreed upon and **traced on two copies the SEA map** before starting the listing. One of these maps should be marked "Northern" and one "Southern". The starting (and ending) point for listing should be identified as accurately as possible on each map. The copies of the "Northern" and "Southern" SEA map with these tracing should be labeled and retained. These will become part of the listing book. **No listing will be considered completed without these maps included.**

5. List each household in the order that you come across it while canvassing.

6. Supervisor will be on each team to assure procedures are followed and to resolve any questions.

### DETAILED INSTRUCTION FOR THE LISTING PROCEDURES - BY SECTIONS/PARTS OF THE LISTING BOOK

#### PART 1: DETAILED INSTRUCTIONS

**PART 1: IDENTIFICATION.** Write the name of the Province (and code), District name (and code), CSA number, SEA number, listing and enumerator's names on teams Northern and Southern, dates of listing, supervisor's names for Northern and Southern teams, date of final checking and any remarks.

## PART 2: DETAILED INSTRUCTIONS FOR LISTERS/ENUMERATORS

*“Northern” and “Southern” listing team in each SEA will have 2 members, with a team supervisor. Each enumerator members on a team has distinct duties. One enumerator (the **Lister**) is responsible for completing the listing book. The other enumerator (the **Compiler**) will assist with calculations in a workbook and check for panel households using the provided list. It is the duty of supervisor of each team to make sure these instructions are understood and followed. The specific responsibilities of Lister and Compiler are outlined below.*

**Listing Book (LB) Question 1:** The household serial numbers for each SEA are pre-entered and will be sequentially numbered starting with 0800 for listing team “Northern” and starting with 0940 for team “Southern”. The header for Column 1 has a capital N on the pages to be used by Team Northern and a capital S on the pages to be used by team Southern. These letters are use to denote the side of the SEA where each listing team starts.

### **LB Question 2:**

**[Lister & Compiler]** - Enter the full name of the household head in the listing book and workbook. Print neatly, starting with the family name. If the head is popularly known by any other name, record that other name in brackets. For non-contact households, find out the head’s name from the headman or neighbor.  
**[Compiler]** – Review the list of names provided for panel households, and compare the name of the heads of household in the panel with the name obtained from the respondent. To be sure about finding one of the panel households, review the FSRP information provided about each panel household which includes names of household members. Ask the respondent if any of these family members are part of this household. Indicate to the Lister if the household is a panel household.

**[Lister]** – In the small box to the right of the household name in the listing book, enter 1= Yes if the household is a panel household, or 2= No if the household is not a panel household.

### **LB Question 3:**

**[Lister]** - Code if the household is contacted. 1= Contact; or 2 =Non-contact. If non-contacted household, try to find out the head’s name from neighbors or village leader. If the household is a non-contact, proceed to the next household (leave columns 4 through 7 blank).

### **LB Question 4:**

**[Lister]** – Ask respondent the name of the village headman that is responsible for the geographical area and households therein. Enter the name provided in column 4.

### **LB Question 5:**

**[Lister]** - Ask for the sex of the head of household. In column 5 code the response as 1= Male and 2= Female.

### **LB Question 6:**

**[Lister]** - Find out from the respondent whether any member of the household planted any annual crops or had any perennial crops during the **2006/2007** agricultural season. Enter 1= Yes and 2 = No. If household did not plant annual crops and had no perennial crops, go to next household.

**[Compiler]** – For households that responded 1=Yes to question 6 (planted any crops in 06/07 agricultural season), use the workbook and the steps below to elicit information from the household about total area planted in the 06/07 agricultural season.

- Step 1. Ask the respondent for the number of fields planted in the 06/07 agricultural season including fields under cassava and perennial crops. Record the number of fields in column 3 in the workbook.

Step 2. Tell the respondent that we would like to discuss the **area** of the fields in which they planted crops in the 06/07 agricultural season, beginning with the largest field. Ask the respondent which crops were grown in the largest field, and abbreviate the crop names in column 4.A1.

-If the respondent lists only one crop grown, proceed to Step 3

-If the respondent lists more than one crop, ask if they were intercropped. -If they were intercropped, proceed to Step 3 to obtain the area

-If they were NOT intercropped, SUM the area of the crops in Step 3

Step 3. Ask for the area planted in the largest field (field #1). Enter responses in 4.B1 (area planted) and 4.C1 (Unit) with L=lima, A=acre, H=hectare.

Step 4. In column 4.D1 (CON), enter 0.25 if unit is L (lima); 1 if unit is H (hectare); or 0.4 if unit is A (acre).

Step 5. If the household has additional fields, repeat Steps 2 to 4 for each additional field, from the largest to the smallest field.

Step 6. If the household has more than 6 fields, ask the respondent to help you estimate the TOTAL area planted in **all other** remaining fields. Enter this information in columns 10.B7 to 10.E7.

Step 7. Calculate the total area of each field (field #1, field #2, field #3, etc.) in HECTARES. For example, total area for field #1 is computed by multiplying the value in B1 times D1 (area planted X CON). Enter the value in column 4.E1 (the gray shaded column). Repeat for all other fields.

Step 8. Finally, calculate the total area planted **in hectares** for the household by summing across the shaded areas (E1+E2+E3+E4+E5+E6+E7). Enter this value in column 11 [TOTAL (HA)].

\*\*Note: The calculations in Steps 7 and 8 should be completed before proceeding to the next household

### ***LB Question 7:***

[Lister] – Enter the TOTAL (HA) value from the Compiler's workbook in column 7 in the listing book ("How much land in hectares was PLANTED including land under perennial crops in the 2006/2007 agricultural season?").

[Lister] – Fill in the household's Province, District, CSA, SEA and HH serial number (from listing book column 1) on the listing sticker and affix it to the household's door or other visible place. Then proceed to the next household.

## **PART 3: DETAILED INSTRUCTIONS- FOR SUPERVISORS USE ONLY IN SELECTING THE PANEL & NEW HOUSEHOLDS IN THE SEA SAMPLE**

The following set of questions will help to identify panel and non panel households and categorize them by crop size (A, B, or 3). *NOTE: IGNORE CATEGORY 4. CROSS IT OUT IN THE LISTING BOOK. INCLUDE ALL NON-CROPPING HOUSEHOLDS IN CATEGORY A.* Additionally, it will help to identify the serial numbers of the non panel households to be selected as new sample households for Categories A and B.

For Team Northern and Team Southern, the Supervisor verifies the computed total hectares (column 7 in the listing book) using the workbook and corrects any errors.

***LB Question 8:*** Based on the total hectares cultivated by the household, the Supervisor categorizes the household and enters the appropriate code in column 8:

- A= small scale household 0-4.99 ha planted (includes households that did not grow crops);
- B= Medium scale household 5-19.99 ha planted;
- 3= large scale household  $\geq 20$  ha planted; and

- **NOTE: IGNORE CATEGORY 4 (non-agricultural households). CROSS IT OUT IN THE LISTING BOOK. INCLUDE ALL NON-CROPPING HOUSEHOLDS IN CATEGORY A.**

**LB Question 9:** If the household is a Panel Household, tick the box in column 9.

**LB Question 10:** If Column 8=A and Column 9 is ticked (category A and panel household), then enter serial number of Household (from panel household information sheets) in Column 10a. If Column 8=B and Column 9 is ticked (category B and panel household), then enter serial number of Household (from panel household information sheets) in Column 10b. Otherwise leave 10a and 10b blank.

**LB Questions 11 & 12:** Listing of non panel households eligible for being selected as new households for the 2008 supplemental survey:

- Step 1: In column 11a) sequentially number the non panel households in Category A, starting from 1.
- Step 2: In column 12a) sequentially number the non panel households in Category B, starting from 1.
- Step 3: Follow sampling instructions below to select the non panel households to be interviewed (the sequential numbers for these households will be circled in columns 11a and 12a)
- Step 4: For circled households in column 11a, transfer the HH serial number from column 1 to column 11b. Otherwise leave 11b blank.
- Step 5: For circled households in column 12a, transfer the HH serial number from column 1 to column 12b. Otherwise leave 12b blank.

#### **PART 4. DETAILED INSTRUCTIONS ON SAMPLING PARTICULARS - FOR SUPERVISORS USE ONLY**

The following instructions will help to determine the number of non panel household interviews to be completed to reach the required 20 total household interviews. This section will also help to select the sample of non panel households.

##### **Sampling Particulars (SP) Row (a):**

- Column 1=Small: Count the number of A's in column 8 of the listing book (=the number of small-scale households) and enter this value in the box
- Column 2=Medium: Count the number of B's in column 8 of the listing book (=the number of medium-scale households) and enter this value in the box
- Column 3=Large: Count the number of 4's in column 8 of the listing book (=the number of large-scale households) and enter this value in the box
- Column 4=Non-contacts/Refusals: Count the number of 2's in column 3 of the listing book and enter this value in the box
- Column 5=Total: Sum the values in columns (1) through (4) and enter this value in the box

##### **SP Row (b):**

- Column 1=Small: Divide the number of small households (row a, column 1) by the sum of small+medium+large households (the sum of columns 1+2+3 in row a). Multiply the number of non-contacts/refusals (row a, column 4) by this value. Enter the result in the box.
- Column 2=Medium: Divide the number of medium households (row a, column 2) by the sum of small+medium+large households (the sum of columns 1+2+3 in row a). Multiply the number of non-contacts/refusals (row a, column 4) by this value. Enter the result in the box.
- Column 3=Large: Divide the number of large households (row a, column 3) by the sum of small+medium+large households (the sum of columns 1+2+3 in row a). Multiply the number of non-contacts/refusals (row a, column 4) by this value. Enter the result in the box.
- Column 5=Total: Sum the values in columns (1) through (3) and enter this value in the box

**SP Row (c):** For each household category and the total column, sum rows (a)+(b) = total number of hh's listed + non-contact allocation. Check the value in the Total column by computing the sum of columns 1+2+3 in row (c).

**SP Row (d):**

- Count the number of serial numbers in column 10a in the listing book. Enter this value in column 1.
- Count the number of serial numbers in column 10b in the listing book. Enter this value in column 2.

**SP Row (e):** The total sample size in each SEA is 20 households. The goal is 10 category A households and 10 category B households. (The only case where you would NOT have 10 A's and 10 B's in the sample is when there are insufficient B's in the SEA to complete 10 B interviews.)

1. If all ten panel households in each category are listed AND successfully interviewed, then no more sampling is required.
2. If you have less than 20 panel households, then you need to determine how many replacement households in category A and category B are needed.
  - a. Example 1: if you have 15 panel households, 5 in A (in 06/07) and 10 in B (in 06/07), then add 5 category A households.  
**Feasible Sample Composition: 10 A, 10B**
  - b. Example 2: if you have 12 panels households, 7 in A and 5 in B and you have more than 3 A's and more than 5 B's from which to sample. Then, you want to randomly add 3 households from category A and 5 households from category B.  
**Feasible Sample Composition: 10 A, 10B**
  - c. Example 3: if you have 12 panels households, 7 in A and 5 in B and you have more than 3 A's and but exactly 5 B's from which to sample. Then, you want to randomly add 3 households from category A and add all 5 available households from category B.  
**Feasible Sample Composition: 10 A, 10B**
  - d. Example 4: if you have 12 panels households, 7 in A and 5 in B and you have more than 3 A's and but only 4 B's from which to sample. Then, add ALL 4 of the available category B households to the sample. Select randomly from available category A 4 households. This gives us 20 total households (11 A's and 9 B's).  
**Feasible Sample Composition: 11 A, 9B**

More Examples of Feasible Sample Compositions

Households Listed			Feasible Sample Composition	
51	49	➔	10	10
99	6	➔	14	6
91	10	➔	10	10
115	2	➔	18	2

➔ Based on the examples above, determine the Feasible Sample Composition for the SEA you are currently listing. Enter the number of A and B households in columns (1) and (2) of row (e) in the Sampling Particulars table. Note: These must sum to 20.

**SP Row (f):** For each household category, compute the total number of hhs not in the panel from which to draw the sample of non panel hhs by subtracting the value in row (d) from the value in row (c).

**SP Row (g):** For each household category, compute the number of non panel households required to obtain the Feasible Sample Composition by subtracting the value in row (d) from the value in row (e).

**SP Row (h):** For each household category, determine the sampling interval (SI) for use in selecting non panel households by dividing the value in row (f) by the value in row (g). Calculate this value to two decimal places.

**SP Row (i):** Point at the table of random numbers below with your eyes closed to obtain a random start (RS) number between '1' and the value in row (f) (the total number of hhs not in panel from which to draw sample of non panel hhs). If the number is not between '1' and the value in row (f), randomly point again and repeat until number chosen is in the given interval. This is the RS. Enter the value in row (i). Repeat the procedure for the other category of households to determine its RS.

### **Selection of sample households using the Random Start and Sampling Interval**

1. The RS for each category gives the first non panel household that will be in the sample for that category.
2. Add the SI to the RS; the whole number part of the sum will give the second non panel household to be in the sample.
3. Continue with the procedure adding the SI to each successive sum until you have select the required number of non panel households for the category. (If you reach the end of the listing book, continue counting at the beginning of the listing book until you obtain the required number of non panel households for the category.)
4. Put a circle around each selected sequential number in the listing book (for example, column 11a when selecting category A households; column 12a when selecting category B households). The sampling serial numbers circled will indicate the households selected for the sample. Put a star (\*) next to the LAST household selected in the sample for each category. (This will help you find where you finished sampling if you need to select additional households as replacements after the initial round of attempted interviews.)

Attempts should then be made to interview ALL listed panel households and the SELECTED non panel households.

---

**SP Row (j):** After initial interview attempts, enter the number of interviews completed for each category. Enter these values in the respective columns. Compute the total by summing the values in columns 1+2. Enter the sum in column 5.

**SP Row (k):** Determine the number of additional replacements needed for each household category. Enter these values in the respective columns. Compute the total by summing the values in columns 1+2. Enter the sum in column 5. See "Selection of additional replacement households using the Random Start and Sampling Interval" instructions below for how to select additional replacements.

### **Selection of additional replacement households using the Random Start and Sampling Interval.**

To select replacement households for each category, start from the starred (\*) sequential number in the listing book for a given category. Add the original SI (from column h) to this starred sequential number to obtain the sequential number for the first replacement. Continue adding the SI to the sequential number until the required number of replacements for that category is obtained. If, upon adding the SI to the sampling serial number, you land on a household that is already circled, use the next sequential number household.

**SP Row (l):** Enter the total number of hh's successfully interviewed for both categories in columns 1 and 2 for the SEA. The sum of columns 1+2 should equal 20.

**SP Row (m):** Enter the total number of hhs from the original panel that were successfully interviewed. Enter the sum of these in column 5.

**SP Sample selected by:** Enter the name of the supervisor who selected the sample for the SEA.

**SP Remarks:** Make any notes or remarks related to the sample selection and replacements.

Table of Random Numbers

37	41	90	56	60	83	46	16	15	63
63	94	61	23	42	35	4	10	7	81
18	15	54	77	46	33	85	26	86	6
47	25	82	58	62	8	60	8	21	9
52	45	32	43	37	19	97	5	86	86
75	8	84	18	63	44	91	32	26	55
39	38	58	50	42	77	13	94	9	61
17	41	5	47	55	8	100	68	18	77
49	84	49	42	15	25	42	39	69	55
31	31	2	33	75	8	12	57	81	86
83	8	34	39	36	44	55	54	2	68
56	1	34	31	33	5	89	56	68	51
84	76	20	91	57	26	33	9	54	32
13	65	19	27	26	52	55	95	79	91
28	86	52	69	40	40	55	21	31	9
47	93	96	69	79	32	35	99	60	49
27	57	65	20	91	26	45	74	36	75
3	73	2	88	98	21	94	63	55	93
80	11	92	56	86	37	93	13	1	34
58	52	37	50	87	49	28	74	91	22
10	56	85	77	55	77	61	68	69	81
4	31	73	0	71	32	17	46	12	7
67	5	7	79	28	88	82	15	78	67
82	73	72	33	90	75	48	81	49	1
43	6	12	64	15	74	17	98	16	9
36	99	8	94	24	11	94	52	1	58
59	62	79	14	78	25	28	44	27	63
97	41	93	10	59	40	87	14	79	70