





# National Baseline Household Survey 2009

### **MANUAL**

15. February, 2009 Based on Census 2008 manual

#### **TABLE OF CONTENTS**

| 1          | Back         | groundground  | 1  |
|------------|--------------|---|----|
| 2          | The o        | overall organization of the survey                  | 1  |
| <u>3</u>   | Samp         | oling of Enumeration areas                          | 2  |
| <u>4</u>   |              | uction of Enumeration area maps                     |    |
| <u>5</u>   | Use o        | of Enumeration area (EA) Maps in the Survey         | 3  |
| 6          |              | ehold listing within the EA                         |    |
| <u>7</u>   |              | pleting the Listing form                            |    |
| 8          |              | to Conduct Interviews                               |    |
| _ {        | 3.1          | Gaining the trust and cooperation of respondents    | 9  |
| 8          | 3.2          | Who is an acceptable respondent?                    | 10 |
| 8          | 3.3          | Persons counted in the household                    | 10 |
| 8          | 3.4          | Households without acceptable respondents           | 10 |
| 9          | Fillin       | g in the questionnaire – General Issues             |    |
| <u>10</u>  |              | r page (A1 – A4)                                    |    |
|            |              | iduals characteristics                              |    |
| ]          | 11.1         | Characteristics of the household members (B1-B8)    | 13 |
| ]          | 11.2         | Education (C1-C7)                                   | 15 |
| ]          | 11.3         | Vocational training (C8-C11)                        | 17 |
| ]          | 12           | Labour Force - Work (D1-D14)                        | 17 |
| <u>13</u>  | Anth         | ropometry – children 6-59 months (E1 - E3)          | 20 |
| ]          | 14           | Immunization – Children 12-24 months (F1 – F3)      | 21 |
| <u>15</u>  | Cont         | rol of the interview flow (G1)                      | 21 |
| <u>16</u>  | Hous         | sing characteristics (H1 – H10)                     | 22 |
| <u>17</u>  | Livel        | ihood and assets (I1 – I3)                          | 24 |
|            |              | th (J1 – J10)                                       |    |
| <u> 19</u> | <b>Econ</b>  | omic transfers last 12 months (K1 – K5)             | 25 |
| <u>20</u>  | Cash         | , credit, savings and shocks (L1 – L10)             | 26 |
|            |              | of interview first visit                            |    |
|            |              | nase and consumption                                |    |
| 2          | 22.1         | Last seven days (M2)                                | 28 |
|            |              | Last 30 days (month) (M3)                           |    |
| 2          | 22.3         | Last 30 days (month) (M4)                           | 29 |
| 2          | 22.4         | Last 12 months (year) (M5)                          | 29 |
| <u>23</u>  | <u>Agric</u> | culture (N1 – N6)                                   | 30 |
| <u>24</u>  | End o        | of interview second visit                           | 31 |
| <u>25</u>  | Enun         | nerator Responsibilities                            | 31 |
| 2          | 25.1         | About the Enumerator                                | 31 |
| 2          | 25.2         | Duties of an Enumerator                             | 32 |
| 2          | 25.3         | Confidentiality of Responses                        | 33 |
| 2          | 25.4         | Falsification of Data                               | 33 |
| 2          | 25.5         | Working Hours and Duration of Enumeration           | 33 |
| 2          | 25.6         | Materials Necessary for Enumeration                 |    |
| <u> 26</u> | Supe         | rvisor Responsibilities                             | 34 |
|            | 26.1         | Introduction  |    |
| 2          | 26.2         | Responsibilities prior to and during the field work | 35 |
| 2          | 26.3         | Responsibilities after the field work               | 38 |
|            |              |   |    |

Annex 1-2-3-4

#### 1 Background

(For all participants)

The National Baseline Household Survey 2009 (NBHS) is the second national sample survey designed to provide information for all Sudan after the peace agreement in 2005. The Sudan Central Bureau of Statistics (CBS) and the Southern Sudan Commission for Census, Statistics and Evaluation (SSCCSE) are responsible conducting the survey in all 25 states of Sudan. The survey will take place in March/April 2009. The CBS is responsible for the sampling and operations in the 15 states of Northern Sudan, and the SSCCSE is responsible for the 10 states of Southern Sudan. In December 2008 SSCCSE did a pilot in Torit, Eastern Equatoria.

The NBHS will involve random sampling, interviewing 528 households in every state. The respondents will be asked questions about their education, economic activity, consumption, housing and other topics addressing the issue of poverty.

Accurate, up-to-date, and relevant data from household surveys are essential for governments to make sound economic and social policy decisions. Governments need the data from the NBHS to measure and monitor poverty, employment and unemployment, school enrollment, nutritional status, housing conditions, and other dimensions of living standards. They need the data to determine whether food, drinking water, schools, agriculture, services, roads, electric power, and other basic services are reaching the poor and other disadvantaged.

Additionally analysts need household survey data to model economic behavior and thus provide answers to such important policy issues as mentioned above.

The objectives of this manual:

Harmonize training Look up possibilities during fieldwork Enumerator and supervisor's "ownership" to the survey through knowledge

#### 2 The overall organization of the survey

(For all participants)

The 2009 National Baseline Household Survey is in Southern Sudan conducted in cooperation between Southern Sudan Ministry of Finance and Planning (MoFEP), Southern Sudan Commission for Census Statistics and Evaluation (SSCCSE) and the 10 State Statistical offices. The survey is organized as a separate project with a high level steering group anchored in MoFEP and SSCCSE supported by other ministries and the international community. This committee also ensures the cooperation with the 15 Northern states. Planning and practical administration is delegated to a technical working group TWG where national and international stakeholders can meet. A project secretariat within SSCCSE is doing all practical work during planning, fieldwork and data processing/dissemination. The TWG and the project secretariat are also supported by a team of consultants lead by UNDP but also with support from Statistics Norway and others. The main source of funding is the African Development Bank.

A total of 528 households will be visited in each of the 10 states in Southern Sudan in March and April 2009. These households are selected through a 2 stage sampling process based on the Enumeration Areas (EA) and maps created during the Population Census 2008. In every State 44 EAs are selected with 12 Households in each EA to be interviewed and respond to the survey questionnaire.

With a sample size of 528 households per State, it should be possible to publish reliable information on State level. The information about the possible differences in Poverty between urban and rural located household will all be calculated at the level of Southern Sudan as a whole.

To be able to conduct the survey during 6 weeks in March/April 2009, a total of 4 moving field teams comprising driver, supervisor and 4 enumerators and one anthropometrist will be established per State. These field teams will have locally recruited staff and be administered on daily basis by the SSCCSE State office. Every State offices will be enhanced by a staff member from the headquarter in Juba to assist i the coordination of the fieldwork.

The State Statistician through the supervisors also has the responsibility for sensitization, contact with local chiefs in the sampling areas and for liaison back to the SSCCSE main office in Juba immediately before, during and after the survey takes place.

The 2009 National Baseline Household Survey is conducted according to the Southern Sudan (draft) Statistical Act, 2006. This legally ensures that all information collected should be treated as strictly confidential and only be used for statistical purposes and research. Information about individuals (persons and households) is not the scope of a statistical survey and will not be released.

#### 3 Sampling of Enumeration areas

(For SSCCSE central staff)

< Sampling to be updated and provided as a supplement to this manual >

The sampling of all the EAs that should be visited during the survey (stage 1 sampling) is done by SSCCSE centrally before training and fieldwork.

The source for this sampling procedure is the list of enumeration areas and digital maps created for the Population and Housing Census 2008 and thus available in the SSCCSE GIS laboratory in Rumbek. The sampling procedure is as follows:

- 1. Within each of the 10 States, a list of EAs (from the PHC 2008) are established and sorted by County, Payam, Boma and EA.
- 2. From this list a fixed random sampling is done.

For the pilot survey in December 2008, a few EAs were purposively selected, located in and around Torit town in Eastern Equatoria. One urban EA, one rural EA near main road and one remotely located rural EA in mountainous landscape were selected for piloting.

#### 4 Production of Enumeration area maps

(For SSCCSE central staff)

The SSCCSE division for GIS will produce corresponding A3 size hardcopy survey maps as follows:

- 1. Large scale cluster of EA maps (1:2500-25 000) should be printed out with as much background information as possible (points of interests, roads and riverbeds and if available also satellite image back-drops).
- 2. Large scale maps should have legends with explanation for symbols used, a full set of ID names and codes (State, county, payam, boma and EA). Each EA should also have an urban/rural code.

- 3. The large scale maps (single EA and cluster of EA maps) should have an overlaid grid (decimal degrees) to better help the enumerator to calculate positions with the use of GPS during the field work.
- 4. Medium scale maps (1:50 000 250 000) will be produced for logistics and planning purposes

EA map example (large scale)

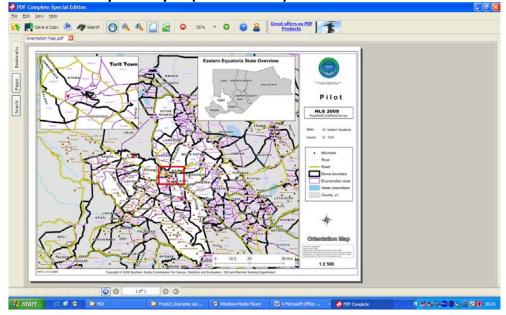
POF Complete Special Edition

Set 1 (en 190)

Set 2 (en 200)

Se





#### 5 Use of Enumeration area (EA) Maps in the Survey

(For enumerators and supervisors)

#### The EA concept

An Enumeration Area (EA) is "statistical area" for use during the fieldwork of the Population and Housing Census 2008. At the time it was created in 2007, it was populated by 150 – 200 households in average. Some of the EAs are very big in number of Households, exceeding

1 000. However this may have changed due to returnees and other reasons. An EA is located within the lowest administrative unit - the Boma. An EA can contain part of a village, several villages or part of an urban area.

#### Getting to know your EA

You will be given a map of your EA at the start of the fieldwork. When you arrive at your EA, you should get to know your EA and understand how to read the map. Use your map to:

- Plan the path you will walk during total listing of all households
- Plan the path you will use to visit the selected household for the first and the second interview
- Plan meetings with your supervisor during enumeration
- Note the locations of problems that require call-backs and/or supervisor assistance

After deployment to your EA, you must first familiarize yourself with your area of responsibility. Check the names of the Boma, village(s) or street(s) that you will be working in with local officials and identify your EA boundary both on your map and on the ground. Link up with the local chief or one person mandated by him as a guide.

#### Rural Areas

In rural areas, Enumerators and Supervisors should check with the Boma chief on the best way to travel from one village to another in the EA, and how much time it takes to get there. Then work out an enumeration plan with your supervisor.

Check the EA boundaries by identifying them on the map. If you are enumerating part of a large village or town, check your common boundaries with enumerators covering adjacent EAs to ensure there are no gaps ('no man's land') and/or overlaps between the EA boundaries.

#### Urban Areas

In urban areas, enumerators should actually <u>walk</u> along their EA boundary before they start listing. Check that you can identify the EA boundary on the map and that you understand the EA boundary description, which is attached to the EA map.

#### Map reading

Map 'reading' means map interpretation. That is, understanding how the symbols shown on your map relate to the actual features they represent on the ground. The symbols are listed in the 'map legend', which is shown on the Boma maps. Map reading also comprise understanding of the scale and north-direction-arrow indicated on the map.

- a) Pay particular attention to the how the different administrative boundaries (International, State, County, Payam, and Boma) are shown in the legend and on the map.
- b) Check how EA boundaries are shown in the legend and on the maps. Note how the EA boundaries never cut across the Boma boundaries. Also note that EA boundaries follow natural and man-made features on the maps where possible, like rivers and streets.
- c) Become familiar with the other symbols in the legend. These can be for: main roads, minor roads, tracks and footpaths; permanent and traditional housing; and water features such as rivers, streams, lakes and swamps. Review these symbols in the legend and make sure you can identify them on the map and on the ground.
- d) Become familiar with scale and north-direction on the map. In brief, the EA map is a simplified and compressed picture of the true ground area/landscape. How much the true area is compressed is documented as the scale of the map. A scale of 1:2000 means that

1cm measured on the map equals 2000 cm in the true terrain. (2000cm = 20 meters). Similar a scale of 1: 50 000 means 1 cm on the map equals 500 meters on the ground. The EA maps will have a scale bar in its legend to help the enumerator to calculate distances by using the map.

- e) A separate geo-reference grid (decimal degrees) is overlaid the map to better show the geographical position of the different items on the map. By comparing the geo-reference grid with the co-ordinates on the GPS display, it should be possible to have a rough idea of where on the map you actually are.
- f) The EA map is always oriented on the A3 sheet so that geographical North is on the top of the page – see also the North arrow in the map legend. By using the GPS compass in the field to find the geographical north-direction, you can turn the map sheet so that its northarrow is oriented in the true North direction. This will make it easier for the enumerator to compare the map with the true ground/terrain in the EA.

#### Making notes on your map

The survey maps have been prepared from the PHC2008. So it's possible that there have been some changes. For example, resettlement of many Internally Displaced Persons (IDPs) or refugees may have taken place in the EA <u>after</u> the map was prepared.

Before you begin enumeration, show your EA map to the Boma chief, or other local official, and ask them if there are any changes compared to what is shown on your map. For example, whether people have returned to any previously abandoned villages that have been cancelled on the map, or whether there are any new villages or streets that have not been shown. Make notes on the map accordingly, using the symbols in the map legend where possible.

During the listing work you should mark roughly where the household numbers are located. To avoid possible overloading on the map, f.exe only every 10 -15 household should be marked on the map only.

When making notes on your map, pay particular attention to the positions and spellings of village names, streets, schools, health centers etc, and to the alignment of boundaries, roads and tracks.

#### You should make notes on names, boundaries and features, as follows:

- If a name (of a Boma, village, street, school, health centre, etc) has been spelled wrongly on the map, cross it out and write it correctly.
- If a boundary (State, County, Payam, or Boma) has been shown in the wrong place on the map, cross it out and draw it correctly using the symbols in the map legend;
- If a feature (road, track, school, health centre, etc) has been left out, draw it and/or name it on the map using the symbols in the map legend.

At the end of the survey you will turn in your EA map (together with the other tools) to your supervisor which in his/her turn will send it back to central SSCCSE.

The GIS sections of SSCCSE will review your EA map notes. Please write as neatly as possible so that your notes can be used to improve the statistical maps of Sudan.

#### 6 Household listing within the EA

(For enumerators and supervisors)

#### **Definitions**

A <u>building</u> is any independent, freestanding structure comprised of one or more rooms covered by a roof with external walls or dividing walls that extend from the foundations to the roof. A building in the context of this survey can be a simple shelter, a tukul, a villa, a building with apartments/block of flats or multi function buildings such as shops or office etc. combined with flats.

A <u>compound</u> consists of one or more buildings/huts with a common entrance enclosed by a wall or fence or without a wall or fence enclosure. While one or two buildings/huts are used as the main residence or office, other buildings/ huts may be used for sleeping, kitchen, or storage. A compound can be a hostel, family dwelling, NGO compound, hospital, or school.

A <u>household</u> consists of one or more related or unrelated persons sharing living arrangements and pooling their resources – 'eating from the same pot'. A household should be located in one building or compound - 'sleeping under the same roof' - which has one or more rooms and cooking facilities of some kind.

A <u>private household</u> is a subgroup of households – excluding special types of households such as nomad households, institutional households (hostels, hospitals etc), homeless population, refugee camps, IDP camps and cattle camps. <u>The current survey should concentrate only on the private households</u>

There may be more than one private household in a building or compound such as a husband and wife renting a tukul/room in another family's compound/building. A single man who works as a security guard and has a small room in a building/compound as part of his salary is a household. A doctor and his family who have a house or apartment on the hospital grounds is a household.

The <u>head of household</u> is the member of the household acknowledged as Head by the other household members either by virtue of his/her age or standing in the household as the chief income earner/takes major decisions. The head has primary authority and responsibility for household affairs.

<u>Respondent</u> is the person from whom information is being obtained, e.g, Head of the household or holding or some adult person appointed by head of household.

#### Listing

You should visit the local authorities (Boma officials and village chiefs) before you begin listing to introduce yourself, explain the work that you will be doing, answer any questions they may have, and ask for their cooperation. The village chief or a person recommended by him will assist the enumerator during the listing. Alternatively he/she should at least give permission for listing and interviewing, inform his villages about the exercise and ensure that the enumerator is able to identify the outlines of the EA.

After you have verified your EA boundaries and discussed your EA map with local authorities and your supervisor, you have to number and list all <u>private households</u> (see definition) in your EA. The listing of an Ea is calculated to be one days work if assisted by a local chief or delegate.

#### Traditional listing

This is done moving around (footing, bicycle, car) in the populated part of the EA, visiting every private household and marking household numbers on house wall etc with a chalk, piece of charcoal (or even with paint). At the same time records should be taken with corresponding household number and name of head of household in a listing book. Markings should be done on the EA map so that it will be possible to have a rough idea of where in the EA the households are located. The listing of an Ea is calculated to be one days work if assisted by a local chief or delegate.

#### Listing with GPS

This will be done by using the "Mark" function in a specially set up hand held GPS tool (Garmin e-trex vista). The enumerator will have to visit all households in the EA and register a way point (North and East co-ordinate) for the geographical location for each household. The waypoint point could be taken just outside the main tukul entrance, at the center of the compound etc. If more than one household resides close together in a compound or a block of flats, you will have to register as many waypoints in the GPS memory as there are households at that location. To be able to register a waypoint, the GPS must be switched on, and in a position with clear view to the sky i.e. out door and not under trees, roofs etc. When listing with GPS, the important issue is to have exactly as many waypoints stored in the GPS memory as there are households in the EA.

More about GPS and a detailed instruction on how to use the GPS tool during listing is found in annex 1.

#### Planning of the listing fieldwork

As far as practically possible, start listing in the north-east corner of your EA and thereafter follow the patterns described in figures 1-2 below.

During listing, you must make sure that all the private households in the EA are listed by location (buildings/compounds). Check particularly in areas that border another EA to avoid double counting or skipping households.

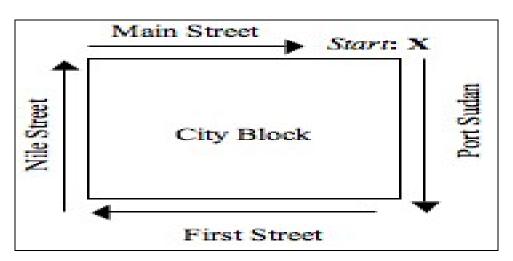
You must visit every building/compound in your EA and register all resident private households.

#### Urban Area:

If there are 'quarters/blocks' within your EA (as in large cities or towns), you should follow RULE OF RIGHTS. In figure 1, you would start at the Northeast corner of Main Street and Port Sudan.

You would walk to the right, numbering the buildings/compounds on the right side of Port Sudan Street. Continue walking around the block, turning right at every corner and numbering buildings/compounds on the right side of the street until you reach your starting point. Continue this process with all the blocks in your EA until the EA is completely covered.

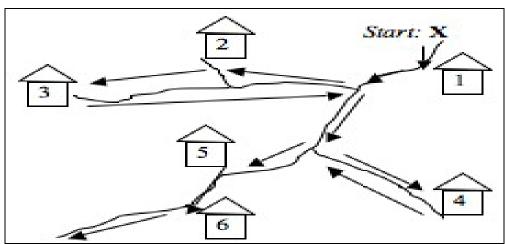
Figure 1. Urban Area



#### Rural Area:

In those areas where buildings/compounds are not in block format, you should start in the Northeast corner of your EA and follow the footpaths to cover your EA in a serpentine path, including all places identified by local authorities as places where people might be living.

Figure 2. Rural Area



When GPS is used for listing as in the NBHS, the total number of waypoints stored in the GPS memory is scrolled and counted. The GPS waypoint list is divided into 12 strata and within the first strata a random waypoint (household) number is selected by using the random sample sheet. The remaining 11 way-points (households) are selected as fixed interval sampling as in the example above. Total waypoint numbers (total number of household in the EA) and the 11 sampled waypoint numbers (households) and their coordinates are recorded in the listing form.

See how to operate the GPS waypoint list in annex 1

#### 7 Completing the Listing form

(For enumerators and supervisors)

#### Purposes of the listing form

The Survey Listing Form serves the following primary functions:

- 1. To plan and control the activity of the enumerators
- 2. As auxiliary when documenting the sampling of households within each EA (second stage sampling)
- 3. As a well organized input/tool to the final and central work to apply weights to the sample

The listing form secures information on a scan-able format on:

- 1. Full documentation of ID
- 2. Documentation of total number of households listed in the EA during the actual survey (needed for applying weights)
- 3. Documentation of location of households sampled for the survey interview
- 4. Logistics information
- 5. Checked and approved declaration from the supervisor

#### Filling in the Listing form

The ID field A4 should be filled by the enumerator with assistance of the supervisor when the listing of households is completed.

Part B is filled in as documentation of the sampling of the 15(12) households within the EA. Information about household number/waypoint number comes from the sampling either based on the Listing book records or from the Way point list from the GPS – depending on which listing method that was used.

If not possible to find a respondent in one or more of the selected 15(12) household, the enumerator should contact the supervisor and together they should decide on a replacement household. However this should not be done before 3 recall attempts are conducted by the enumerator to find the initially selected household respondent present. Section C in the listing form should be used to take records of possible replacement household and also to describe reason for replacement.

#### 8 How to Conduct Interviews

(For Enumerators and Supervisors)

#### 8.1 Gaining the trust and cooperation of respondents

In order to successfully conduct interviews, you must gain the trust and confidence of the people. This involves being courteous and respectful at all times and maintaining a presentable appearance. Always wear your Enumerator Identification Card, Survey Cap and Apron to identify you as an official survey enumerator.

Remember that you may be a stranger to the household so approach each household with respect. Greet household members, introduce yourself, and explain the purpose of your visit. Here is an example:

"Hello. I am [Name] an enumerator with the National Baseline Household Survey (Show your Survey Identification Card). I m here today to interview some of the families in this village\area. All information that you share with me will be kept strictly confidential-. Can I please ask you questions about your family/household for Southern Sudan Commission for Censuses, Statistics and Evaluation?"

When interviewing, do not discuss any potentially sensitive topics such as politics, religion, or sports. Do not become involved in any argument. Be polite and respectful but do not be apologetic when asking questions. You are serving your government as a National Survey enumerator.

When asking questions, never ask a leading question. These types of questions encourage the respondent to give the answer that you provide. Examples include:

"You're about 30 years old, right?"

"You've lived here all your life, haven't you?"

Instead, try to ask the question as worded on the questionnaire, such as:

"What is your age?"

"How long have you lived continuously in this state?"

The questionnaire is designed to help you to ask questions correctly. Text with normal fonts on the form is meant for reading out to the respondent, while *Italic fonts* are meant as information to the enumerator and should NOT be read out to the respondent.

#### 8.2 Who is an acceptable respondent?

You need to interview a responsible member of the household who is able to speak for other members of the household.

Usually you will speak with the head of household when you visit a house and explain the reason for your visit. If the head of household did not spend the last 7 days in the house or is not available, then you should ask to interview the head of household's spouse or other responsible adult members of the household (the person should be at least 15 years of age).

If not one of the acceptable respondents described above is available, ask when you can return to speak with one of these persons.

When interviewing, try to ask questions of adult household members directly when they are present. In cases where head household or any adult member provides the particulars of the children, you should try to see the children if they are present at the time of interview.

#### 8.3 Persons counted in the household

You should enumerate (list and collect information) all persons who belong to the household (*de jure approach*).

#### 8.4 Households without acceptable respondents

If an acceptable respondent cannot be found, ask a neighbor when you might be able to find the responsible members of the family or an acceptable respondent at home.

You are required to make a minimum of three attempts to interview every household. If you are unable to make contact with an acceptable respondent after three attempts then inform your supervisor. Your supervisor will assist you in selecting a replacement household for the interview.

#### **Unusual situations**

Most of your interviews will be simple and go smoothly. However, we will discuss some rare situations that may occur so that you will know what to do.

#### Language barrier

If a respondent speaks a language that you do not speak, try to find someone else in the household who speaks English or a language you understand. Kindly ask the person if they would interpret your questions to the respondent and the respondent's answers to you. Notify your supervisor if you are unable to solve the problem *within the household*.

#### Respondent refuses to be interviewed

You may encounter a household that is unwilling to be interviewed. You should make every effort to persuade the household to grant you an interview. If you are unsuccessful, you should:

- Explain the necessity of their participation for a representative selection of households
- Tell them their answers will be used to inform decision-makers about the people and needs of their community and country.
- o Inform them that their responses will be kept confidential.
- o Take help of community leaders and your supervisor.

If you are unable to convince them to be interviewed:

- o Note the location of the building/compound on your EA map.
- Contact your supervisor as soon as possible.

**DO NOT:** Provide false information. Submitting made-up information is worse than receiving no information

#### Incomplete information for persons or households

If the respondent cannot give you complete information about a person:

- Find out when that person or someone more knowledgeable about that person will be home.
- Complete as much information as possible for that person during your current visit.
   Many times the respondent will be able to provide the majority of information.
- Arrange a time with the household for your return visit to complete the questionnaire.
   Make a note in your notepad of the return date and location of the household
- Do not allow this to take a large part of your time. Try to gather information for all persons during the first visit.
- o If you are unable to get complete information on a person tell your supervisor.

#### 9 Filling in the questionnaire – General Issues

(For enumerators and supervisors)

#### Who are included in the survey?

The Questionnaire should be administered to all the 12 selected private households in your EA. All the selected households and all their members are the population that the survey should cover.

#### Marking on the Survey Questionnaire

The questionnaires have a special layout so that they can be easily scanned i.e. your markings and numbers on the form will be interpreted by a machine.

There are several rules that you must follow when working in the field in preparation for scanning. First of all: Any use of locally made copies of this questionnaire is absolutely not allowed. Then:

- 1. Keep forms neat, clean, and dry at all times
- 2. Do not fold or wrinkle the paper
- 3. Put one form on the clipboard at a time so that you can make clear marks
- 4. ONLY use the provided pen(s) to make marks on your questionnaires
- 5. Write in numerals and marks where directed
- 6. <u>For mark boxes</u>; use a diagonal crossing inside the box. If wrong box accidentally is marked, fill the whole box <u>completely</u> with your pen and mark a diagonal cross in the correct box
- 7. For numeric values; write neat numbers (with decimals on the indicated position ONLY if the box is designed for decimals). The written numbers should not touch the box frame. Leading zeros should <u>not</u> be used. If a wrong number is written in a correct field, make a diagonal line across the box and rewrite the correct number with small fonts <u>within</u> the same box. If a correct number is written in a wrong field, make a dialogue line across the erroneous field and fill in the numeric value in the correct field instead.
- 8. No marks should be entered on the form outside the fields provided <u>DO NOT OVERWRITE</u> THE PAGE NUMBERS, THE RECOGNITION MARKS (+) OR THE BAR CODES

#### Reading out the questions

The way a respondent will answer to questions in an interview situation is depending on how the questions are formulated and on the context in which questions are asked. When conducting a survey it is of highest importance that questions are formulated the exact same way by all enumerators in all States. To ensure this, the questionnaire is designed so that <u>text in normal fonts should be read out from the questionnaires (or translated directly to similar meaning in local language)</u> by the enumerator during the interview. Text with 'italic fonts' (tilted) in the questionnaire is for instructions and explanations to the enumerator.

The questionnaire for the survey will be printed in English only in the south and Arabic only in the north. It is very important that correct wording is used during the interview also when local language is used and use of local terms should be thoroughly discussed during the training of the fieldworkers.

#### 10 Cover page (A1 – A4)

(For Enumerators and Supervisors)

- 1. When you arrive at the household you should firstly ask the members to identify and agree on a respondent. This should be the head of household or a person appointed by him/her. A respondent should be at least 18 years old. In most cases this will be clarified making appointments with the household after listing and sampling of the 12 households to be interviewed in the EA. Never start interview without acceptance from head of household.
- 2. Identification (Section A1) Fill in name and/or code (without leading zero) for section A1. The combination of the five codes (State, County, Payam, Boma and EA) uniquely identifies your EA. For this filling in, use the codes printed on your EA map. Be absolutely sure that

these codes are correctly filled in. The Household number should be copied from the Survey Listing Form. Each enumerator will have an ID code to be used during the survey. You will find this code on your special survey ID card and/or you can get it from the Supervisor. ALWAYS complete section A1 for every questionnaire (including also continuation questionnaires in household with more than 12 members).

- 3. Location characteristics (Section A2) Mark for urban or rural location (see EA map information), fill in North and East coordinate with 5 decimals for the selected household (decimal degrees from the GPS) and name of village/part of urban area name. If listing was done based on GPS, the North and Easting coordinates for the household location should be copied from the Listing form. If traditional listing was done, the enumerator should use his/her GPS tool and register the coordinates at the spot.
- 4. Household type and migration characteristics (Section A3) The questions about where the household resided 12 months ago all names and codes for State and Counties can be found annexed to this manual (annex 3). The respondent should be asked about the names of State and County, while the interviewer will add the corresponding codes. If the household not resided in the current country 12 moths ago, the respondent is also requested to specify in which Country it was located. Codes to use are:
  - 1= Sudan
  - 2= Other African country
  - 3= All other countries

NOTE: Specify the name of the Country only if outside Sudan and add one of the codes above.

**Interview characteristics (section A4)** – After ended interview round 1; fill in survey period, day, month and year of interview 1 completed and total number of booklets (questionnaires) used must be filled in.

If more than 1 form total is used (i.e. in the case of more then 12 members in the household), you need to use one or more *continuation forms* to cover all members of the household, also fill in which number the actual form is out of the total number of forms used for a specific household.

The questionnaire should finally be thoroughly checked by the supervisor and signed off before properly stored and packed for return to the data processing center in Rumbek and/or delivered for data entry in the field.

#### 11 Individuals characteristics

#### 11.1 Characteristics of the household members (B1-B8)

Once you have identified and agreed on the respondent in the household, begin by asking the respondent about name (B1), relation to head (B2) and sex (B3) of head of household (head of household is the first person for which information should be filled in on the form) and thereafter repeat question B1-B3 for each of the other persons in the household in systematic order (see box 1 below). All questions B1-B3 should be filled in for each person before the next person is listed. In this way you establish the full list of names and composition of the household and can therefore better plan for the rest of the interview.

#### Box 1. Guidelines for listing names on the questionnaire

- 1. Head of household (de jure).
- 2. Spouse(s) of the head (husband or wife).
- 3. Never married children of the above listed couple from eldest to youngest.
- 4. Eldest married child of the head and spouse (son/daughter).
- 5. Spouse of eldest child (wife of son/husband of daughter).
- 6. Children of eldest child and their spouse from eldest to youngest
- 7. List any other married children of head, their spouse, and their children from eldest to youngest.
- 8. Second wife of head (if any), assuming the head is male. If first wife is head for the census, second wife is marked as "other relative"
- 9. Parents/parent-in-law of the head
- 10. Brother/sister of the head from eldest to youngest
- 11. Grandchildren of head
- 12. Niece or Nephew of head
- 13. Any other relatives like cousins, aunts, etc., mark as "other relative"
- 14. Non-relatives/guests
- 15. Servants, marked as "non-relatives"

**NOTE**: for newborn babies without names, write, "new born"

- When the respondent gives you a name, ask what is the person's relationship to the 'head of household' and sex.
- Enter the name of each person in the columns under B1.
- Write names in full (tripled: name of Person, Father & Grandfather). If the respondent is reluctant to give you the name of a person, write the relationship of the person to another whose name is given. For example: "Wife of (Name)" or "Sister of (Name)."
- Mark the relationship (B2) for each person as they are named.
  - o Children should always be listed after their mothers, starting with the eldest child.
- If the respondent(s) names more than 12 persons as members of the household, you will need to ask them to pause while you get out another questionnaire (see box 2 below).
- When the respondent finishes listing persons, ask if they are sure they have listed all persons
  who belongs to the household. Check especially on babies, elderly persons, guests and
  servants.

#### **Box 2. About continuation questionnaires**

If the respondent lists more than 12 persons in the household, then you need to copy the EXACT SAME geographical information (Section A1) on all questionnaires used for the household. This includes the same household number, since it is the same household.

#### Further more:

- Mark the first questionnaire used (out of total N) for the household as "1" (Section A4)
- Mark the second questionnaire used (out of total N) for the household as "2" (Section A4) etc.
- Continue until all questionnaires for the household are numbered and fill in total number of questionnaires used for the specific household on all the forms (Section A4)

- **B4 1-2 "What is (Name's) age in completed years?"** Starting with the first person listed "Person 01"; ask, "What is (person's name) age in completed years?"
- You must record the person's exact age in completed years on enumeration day.
- For babies less than one year, write "0" because the child has not yet lived one complete year.
- If the person is over 94 years of age, write "95". For example, if a person is 98 years old, write "95"
- If the person is <u>a child less than 5 years old</u>, in addition to age in completed years (B4 1) you should also fill in B4 2 age in completed months. This additional detail about age for smaller children is needed for later analysis on nutrition combined with anthropometric measurements (weight and height).
- If the respondent does not know the age of a person, ask them to estimate the age using the calendar of historical events (Annex 4), ask them if the person was born around some event listed or what events the person remembers
- Do quick checks to make sure the ages given make sense in relation to the age of other household members.
  - For example, if a child's age is 15 years and the parent's age is 25, then this would mean that the parent was 10 years old when the child was born.
  - If an age seems incorrect, ask the respondent if the information seems correct and work with the respondent to get the correct ages of all persons.

#### NAME, RELATIONSHIP, SEX AND AGE SHOULD NEVER BE LEFT BLANK.

#### B5 "What is [Name's] marital status?"

• Continuing with the first person listed "Member number 1" <u>12 years old or over</u>, ask question B5 about marital status. Mark one of the four alternatives for each person.

#### B6 "During past 12 months, how many months did [Name] live in this household?"

- Write the number of months (1-12) of that the actual person was present and lived together with the household.
- If the person has lived with the household for less than one month during the last year (12 months), write "0".

#### B7 "Is biological father of [Name] living in this household?"

• Mark one of the four alternatives for *every* person in the household *also* the head.

#### B8 "Is biological mother of [Name] living in this household?"

• Mark one of the four alternatives for each person in the household

#### **11.2 Education (C1-C7)**

Educational attainment of the members of the household is an important welfare measure of development. It is also very closely correlated with the economic prosperity of individuals. Hence information on education is crucial for a poverty study. We collect information on literacy, grade attainment, grade repetition and vocational training.

**NOTE:** these questions should be asked only to persons aged 6 years and above. Check the age of the person as reported in B4-1. If they are less than 6 years old, then you are finished asking questions about that person under Section C and should skip to Section E if below five. If between 5 and 6 there are no more questions for that person.

Asking questions only for a sub sample of the members in the household such as persons of certain ages or only of females etc. is called a "skip pattern". Skip patterns are used to avoid asking questions that don't make sense for a person. For example, asking if a 1-year-old baby attends school. Look carefully to the skip-instructions for C2 and C3.

#### C1 "Can (Name) read and write, with understanding, a simple sentence in any language?"

- Continuing with the first person listed "Member number 1" if they are 6 years old or over, ask question C1 as written on the questionnaire. Stress the meaning of **both** read and write.
- Mark the box for the answer given: "Yes" or "No".

#### C2 "Has [Name] ever attended school?

- Mark the box for the answer given: "Yes" or "No".
- "School attendance" refers to any regular educational institution, public or private, for systematic instruction at any level of education. Examples include: Primary schools, Secondary or High schools, technical schools, agricultural institutions, teacher training colleges and universities.
- School attendance should be full time participation. Adult or short-term vocational training are not to be classified as school attendance (C8-11).

**NOTE**: There is a complex skip in question C2 for answer No:

- 1 Yes (ever attended), continue with question C3
- 2 No (never attended): If less that 16 years old skip to C4. If 16 or more skip to C7

#### C3 Is [Name] currently attending school?

• 1-"Currently attending" refers to all persons who are now attending formal educational institutions and include those who are temporarily absent from school or those on holiday.

**NOTE**: In C3 there is a complex skip for answer No:

- 1 Yes (currently attending), skip to C5
- 2 No: If less that 16 years old continue to C4. If 16 or more skip to C7

#### C4 IF [NAME] IS LESS THAN 16 YEARS OLD: Why is [Name] not attending school?

- For everyone under 16 who is not currently in school, establish why they are not in school. Read out the 6 alternatives and mark only one alternative according to the response given.
- All skip from C4 to C7 (highest level completed)

## C5 FOR THOSE CURRENTLY ATTENDING SCHOOL: What is the grade and level that [Name] is attending?

- For those currently in school (any formal education also university), ask the grade they are attending this year .
- For the purposes of the survey Koran schools (**khalwa**) are treated as regular educational institutions.
- Mark the box for the appropriate level/grade code that corresponds to the given response.
- Check that the reported level/grade's minimum age is consistent with the age of the respondent as reported in B4. For example, it is unlikely that a person 8 years old is attending secondary (category 9).
- If there is any confusion or doubt, confirm answers with the respondent you must record what the respondent tells you, not what you think is true.

## **C6** FOR THOSE CURRENTLY ATTENDING SCHOOL: What was the grade and level that [Name] was attending previous school year?

- The reason for asking this question is that together with the answers in C5 and C4, it will be
  possible to identify 'school drop outs'.
- Mark the box that corresponds to the appropriate educational level that [Name] attended the previous year.

## **C7** FOR THOSE CURRENTLY ATTENDING AND/OR PREVIOUSLY ATTENDED SCHOOL: What is the highest level that [Name] has completed?

Mark the box that corresponds to the appropriate educational level.

• Note that "1"-No qualification is applicable only for those who have previously attended school and "2"-Incomplete primary is only applicable for those currently attending school

Study and become familiar with the grade and level codes for questions C5, C6 and C7. Ask questions if you have any doubt or confusion.

#### 11.3 Vocational training (C8-C11)

This module looks at any vocational training done by the members of the household. *This is work-oriented training done outside the formal schooling system.* Vocational training is shorter courses outside the formal schooling system with practical training in different skills.

#### C8 Has [Name] ever attended any sort of vocational training?

 Ask the question to the respondent and mark for yes or no for each person 6 years old or more.

#### C9 If yes, what type of skills did [Name] acquire?

• For all persons that have answered yes in C6, you should follow up by asking what kind of skills that were acquired from the vocational training. If the person tells that he/she has more than one type of vocational training, mark for all that applies.

#### C10 How many months did [Name's] vocational training last?

 For all persons that have answered yes in C6, you should follow up by asking about the total duration of the vocational training course(s) that [Name] has participated in. The time should be recorded in completed months. If the total lengths of the vocational training course(s) add up to less than a month's duration, fill in '0' in the questionnaire.

## C11 What was the total expenditure related to [Name's] vocational training last 12 months?

For all persons that have answered yes to participated in vocational training, you should ask
about the total costs for [Name's] last 12 months vocational training. Total costs includes the
monetary value (SDP) of books, travel to training and other stationary, boarding (if part of the
training system) and other vocational training costs etc. paid in cash or kind. Be aware that
many respondents in previous question C10 may have answered for a period earlier that last
12 month. If so, write "0" for total expenditure.

#### 12 Labour Force - Work (D1-D14)

Questions under section D are only asked of <u>persons aged 10 years old and above.</u> This
module looks at the employment status of the household members, the work they do, and the
returns they receive from their employment. Because poverty is closely linked to a deficiency

in income from work, this section is very critical for understanding poverty. We look at the work done by members of the household both over the short term (last 7 days) and longer term (last month and last 12 months) to capture complete picture.

 The questions D1-D11 refers to the period of time 7 days prior to the actual interview (the last 7 days) Questions D12 cover the period of last year, while D13 and D14 cover the period of one month.

## D1 "During the last 7 days, did [Name] work at least one hour for pay (or without pay), profit in kind or for family business?"

- Continuing with the person listed "Member number 1" 10 years old or over, ask question D1.
  The reason for asking questions about work last week for persons down to 10 years old is that it is important for the use of this type of data to reveal possible child labor and the characteristics of such.
- NEVER assume that female members of the household are homemakers and do not work.
   You must probe to get the correct response
- Never assume that children or other members of the family do not work so ask the question for all of the household members 10 years or older.
- Questions D1 through D5 are screening questions or statements. The purpose with these group of questions/statements is to define every member of the household 10 years or older whether he or she is in the labour force or not.
- If "Yes" in D1 you are defined as within the labour force and you skip the other screening questions and goes to D6. If "No" you continue to question D2.

#### D2 [Name] did not work during the last 7 days, but have a job to go back to?

• If "Yes" in D2 you are defined as within the labour force and you skip to D6. If "No" you continue to filtering question D3.

## D3 Name] did <u>not</u> work during the last 7 days, but have worked before and is available for work?

• If "Yes" in D3 you are defined as within the labour force and you skip to D6. If "No" you continue to filtering question D4.

#### D4 Name] did <u>not</u> work before, and is not seeking work?

• If "Yes" in D4 you are defined as outside the labour force and you skip to D11. If "No" you continue to filtering question D5.

#### D5 [Name] have never worked before, but is seeking work?

- If "Yes" in D5 you are defined as within the labour force (seeking job). As you have never worked there is no information for the rest of the module and you skip to E1.
- If "No" in D5 something is wrong and you go back and do the screening questions again.

## D6 FOR THOSE WHO WORKED OR HAVE WORKED BEFORE (Yes in D1-D3): What was [Name's] main activity of work the last 7 days or last days work? (ISIC-4)

• "This question applies ONLY to those persons who were coded "1-3" in D1. Continuing with the person listed "member number 1" 10 years over who responded "yes in D1-D3.

This question refers to the type of goods produced, services provided, or work carried out at the respondent's main workplace or previous workplace. You must record the main type of activity, which takes place at the respondent's workplace as given by the respondent limited to the alternatives given in D6 (compatible with international standard classification)

#### For example:

- If a security guard is working in a shop/supermarket, then the nature of work in his/her main place of work is shop/supermarket i.e. alternative 10 "Wholesale, retail trade, hotel, and restaurant" under D6.
- If a security guard is working at a government office, then nature of work is alternative 18 "Public administration and pulsory social security".
- If a security guard working at a bank, the nature of work in his/her main place of work is alternative 14 "Financial and insurance activities".

The same can apply to a military man, clerk, cook, or cleaner. You should make sure that you properly describe the main nature of work at the respondent's place of work.

## D7 "Did [Name] receive wages, salaries or other values in cash or kind or in other values for the work done during the last 7 days?"

• In D7 there is no skip. Both "Yes" and "No" goes to D8

## D8 What was the value of [Name's] last payment (cash or kind)? (or if not yet received payment) What is the value of the payment that [Name] expect to receive (cash or kind)?

• Fill in value in SDG without decimals for the value (cash or kind) of the most recent payment received for the work last 7 days. If not yet received payment, ask respondent to about the value he expects to receive and fill in the value. If the respondent expects no payment, then write "0".

## D9 "How many days did [Name] work for the payment just reported? (or if not yet received payment) How many days does [Name] expect to work for the payment just reported?"

• Fill in the actual days worked or expected days of work as reported by the respondent in completed days without decimals. If only one hour, then you still write "1". If less than one hour then write "0".

## **D10** FOR THOSE WHO WORKED LAST 7 DAYS OR HAVE WORKED BEFORE (Yes in D1-D3): What was [Name's] main employment status? This question applies ONLY to those persons who were answering "Yes" in either D1, D2 or D3.

- Read the categories aloud so the respondent can choose the correct description of their employment status. You must be able to answer any questions that a respondent may ask about each of the choices. You should also be able to explain the different types of employment statuses in the local language.
- 1 Paid Employee includes those who were in paid employment for at least one hour the seven days prior to census night, whether they are paid weekly, monthly, or hourly.
- **2 Employer** includes those who for at least one hour during the reference period operated their own business, profession or trade and employed one or more employees.
- 3 Own account worker includes those who operated their own enterprise, profession, or trade without paid employed and worked for their own consumption or profit. Examples include: basket weavers, coffee and tea sellers, bicycle taxis, fruit sellers, cattle milking, firewood collection, farmers, fishermen, and herders.
- 4 Unpaid family workers includes those who worked in the enterprise, profession or trade
  of the household without pay or profit. Examples include: daughters helping mothers sell
  food, sons helping watch herds, family members who work in the family store, or family
  members working on the family farm.

• **5 Unpaid working for others** – includes apprentices or trainees who are not paid, participants in food for work programs and anyone else who works for others but does not receive money.

**NOTE**: There is a missing skip in D10. <u>All categories skips to D12</u>.

## **D11** FOR THOSE WHO DID NOT WORK BEFORE AND WERE NOT SEEKING WORK (from D4): Why did [Name] not seek work? (Mark only one)

- In this question we want to classify by main activity those outside the labour force (not working and not seeking work). D11 together with D5 (never worked but seeking work) and D10 (worked before and ready for work) everyone is captured and we have the full picture.
- For all categories: member guestions finished.
- D12 FOR THOSE WHO WORKED LAST 7 DAYS OR HAVE WORKED BEFORE (from D1, D2 or D3): What was [Name's] main activity of work during the last 12 months? (ISIC-4) This question applies ONLY to those persons who were answering "Yes" in either D1, D2 or D3.
- This question refers to the <u>main</u> place of work the last 12 months to the type of goods produced, services provided, or work carried out at the respondent's main workplace or previous workplace. You must record the main type of activity, which takes place at the respondent's workplace as given by the respondent limited to the alternatives given in D8 (compatible with international standard classification)
- More than one type of work means having more than one employer, or working both on own private business and part time employed or otherwise combination of different places of work the last 12 months.

## D13 For the last month (30 days) - What was the value of [Name's] payments (cash or kind)? (or if not yet received payment) What is the value of the payment that [Name] expect to receive (cash or kind)?

• This question is the same as D8, but time-frame is *last 30 days*.

#### D14 How many weeks did [Name] work for the payment just reported (D13)?

- This question is the same as D9, but the period of time is *last 30 days*.
- If the answer is only one day you still write "1" in number of weeks. If the number of days are between one and two weeks you round up to "2" or down to "1" depending of the number of days if the respondent is not answering in number of weeks.

#### 13 Anthropometry – children 6-59 months (E1 - E3)

There are three modules concerning Health in the questionnaire and anthropometry is one of them. Anthropometry is used to measure nutritional status in patients. Indices include: body weight, body height, skin-fold thickness, mid-arm circumference and hand-grip dynanometry. The measurements undertaken in this survey is body weight and height.

5 million children die of malnutrition every year. Malnourishment is not only a matter of enough food, but correct food especially for the under five. Nutrition or more specific: underweight prevalence is one of the most important Millennium Development Goals (MDG) indicators (no 4).

• Section E 1-3 should be filled based on measuring and weighing all children under 5 years old in the household. Age in years and months is already established in section B4 1-2.

- Taking anthropometric measures correctly and also handling of small children requires special skills and thorough training. Each field team will undergo such training and also be assisted by an anthropometrics specialist/skilled health worker to ensure that these data are correctly captured.
- There should be at least two enumerators or one enumerator and an anthropometrics specialist working together when conducting the child measuring part of the survey. Assistance as well as clear permission from child's mother or other adult person responsible for the child is obligatory before any handling of children starts.
- Record weight and length/height in E1 and E2, taking care to record the measurements correctly for each child. Check the child's name and member number under section B on the household listing before recording measurements.
- For children under 2 years old, the length measure should be taken with the child lying down. For children aged 2 -4 years the height measure should be taken as the child is standing up.
- The result of the weighing should be marked for each child under E3. If the option "other" is used, please specify reason in the field below for each child.

#### 14 Immunization – Children 12-24 months (F1 – F3)

The questions under section F are asked for all children 12-24 months old. The respondent for these questions should be the mother or the care taker. The questions are about their children's vaccination.

Immunization is the second Health module in the questionnaire. Measles immunization coverage in also an MDG indicator (no 15).

## F1 Has your 1 year old child [Name] ever been given measles vaccination injections or MMR (that is a "shot" in the arm given at the age of 9-12 months)?

• This question shall be asked to mother or care taker of all children in household 12-24 months old. Continue to next question.

#### F2 Is there a vaccination card to confirm this?

• Ask question F2 to all 12-24 months old and tick off for "Yes" or "No" one by one.

#### F3 If there is a vaccination card, can I see it?

• Continue and ask question F3 and tick off if you see the card. Accept without difficulty if card is not at hand. Do not let the respondent use much time finding the card.

#### 15 Control of the interview flow (G1)

- This question is only for the enumerator to keep control of the number of questionnaires to be used for the actual household. If there are more than 12 members of the household, it will be necessary to use one ore more extra questionnaires to cover information about each member. Remember to tick off for "Yes" or "No" in question G1 before you proceed to next module.
- Note that section H housing characteristics and also section M on purchase and consumption should be filled in ONLY on the questionnaire that contains information about the last member of the household.

#### 16 Housing characteristics (H1 – H10)

The major objective of sections H, I and J, is to get an idea of a household's living standards as inferred by observing their housing conditions, their access to various services, and their possession of assets. These questions are similar to the questions asked in Census 2008. They are also expected to help in comparison of this survey data with the Census data.

Questions H1 – H10 refer to the main building/compound/structure occupied by the household. *These questions are asked for all households.* 

#### H1 What type of dwelling does this household live in? (mark only one)

- Ask question H1
- If the respondent is unsure of the type of response you are looking for, read the categories aloud.
- Work with the respondent to try and classify their dwelling into one of the options provided in the questionnaire.
- Tick off the appropriate household code as reported by the respondent.
- Remember that only one code should be ticked off.
- Study the different categories for type of dwelling. If you are unsure of any category, ask questions.

#### H2 "How many rooms does this household have in total?"

- Ask question H2. Write the number of rooms in the box (without leading zeros).
- A room should be constructed with roofing walls. If the household lives in several tukuls or other types of roofed and walled constructions it is sum of all rooms that should be reported I H1.

#### H3 "How many rooms are used for sleeping indoors?"

• The number of rooms used for sleeping H3 should include the number of rooms in the main building plus any other rooms used for sleeping in the building/compound.

#### H4 "What is the main tenure status of this dwelling?"

- Tick off the number corresponding to the type of tenure reported by the respondent.
- Read the categories aloud if the respondent seems confused.
- 1. Owned a member of the household owns the dwelling.
- 2. Rented a member of the household pays rent for the dwelling.
- <u>3. Housing provided as part of work</u> dwelling is provided by the employer of a household member even though some rent may be paid. If the employment stops, the household members lose the lower rent and/or dwelling.
- <u>4. Free</u> A household member does not own the dwelling, it is occupied free of charge without rent or linkage to job.

#### H5 "What is the main source of drinking water for this household?"

• A household may obtain water from numerous sources. You must ask them from which source they get <u>most</u> of their water.

- If the respondent is uncertain, read the categories aloud.
- Tick off the number corresponding to the answer provided by the respondent.
- Remember that only one of the sources listed should be marked.

## H6 "How long time does it usually take to walk (one way) to this main water source from dwelling?" (if source in dwelling, enter 0)

 It is the time usually needed to reach from the household to the main source of drinking water by walking that should be captured in minutes. This is the time measured in minutes used for one way, not the return.

#### H7 "What is the main source of lighting for this household?"

- Ask question H7.
- A household may use different types of lighting. You must ask them which source they use for lighting for most of the time.
- If the respondent is uncertain, read the categories aloud.
- Mark the number corresponding to the answer provided by the respondent.
- Remember that only one of the sources listed should be shaded

#### H8 "What is the main source of energy for cooking in this household?"

- Ask question H8.
- A household may use different kinds of fuel to cook. You must ask them which source of energy they mainly use for cooking.
- If the respondent is uncertain, read the categories aloud.
- Tick off the number corresponding to the answer provided by the respondent.
- Remember that only one of the sources listed should be shaded

#### H9 "What is the main type of toilet facility used by this household?"

- Ask question H9.
- A household may have or use more than one toilet facility. You must ask them which toilet facility they use **most often**.
- If the respondent is uncertain, read the categories aloud.
- Tick off the number corresponding to the answer provided by the respondent.
- Remember that only one of the facilities listed should be shaded

#### H10 "What is the main method of solid waste disposal for this household?"

- Ask question H10.
- A household may have or use more than one method for solid waste disposal. You must ask them which method they use **most often**.
- If the respondent is uncertain, read the categories aloud.
- Mark off the number corresponding to the answer provided by the respondent.
- Remember that only one of the methods listed should be shaded

#### 17 Livelihood and assets (I1 – I3)

#### I1 "What is the household's main source of livelihood?"

- Ask question I1.
- Only ONE type of livelihood can be shaded
- Tick off the number for the source that the respondent says is the most important for the survival of the household. If this source is cut or is not available then the household will find it very difficult to survive.
- If the respondent is uncertain, read the categories aloud.

## 12 "Does any member of this household own any of the following transport items? (Mark all that apply) If marked: How many items do you have and much would you have to pay if you should buy this item at the market?"

Ask question I2.

- Read off each item in the list to the respondent
- If the answer is "Yes", mark the box and follow up by asking about number owned of this item
  and ask the respondent about how much he/she thinks it would cost to by <u>one</u> such item at
  the market.
- If the answer is "No", mark the box, leave the rest of the line blank and move to the next item on the list
- This is a MULTIPLE RESPONSE QUESTION: more than one type of item can be marked.

## 13 "Does any member of this household own any of the following? (Mark all that apply) If marked: How many items do you have and much would you have to pay if you should buy this item at the market?"

Ask question I3.

- Read off each item in the list to the respondent
- If the answer is "Yes", mark the box and follow up by asking about number owned of this item
  and ask the respondent about how much he/she thinks it would cost to by <u>one</u> such item at
  the market.
- If the answer is "No", mark the box, leave the rest of the line blank and move to the next item on the list
- This is a MULTIPLE RESPONSE question meaning more than one type of item can be marked.

#### 18 Health (J1 – J10)

Poverty and health is strongly related. Thus this is the third module concerning health in the questionnaire. The module is focusing on accessibility to health facilities and protection against malaria. From the 8 main Millennium Development Goals no 6 is: Combat HIV/AIDS, malaria and other diseases.

#### J1 "Do members of this household have access to any health care facility when sick?"

- Ask question J1 and tick off for "Yes" or "No". If "No" go to question J5.
- For health facility see the list following the question.

### J2 "What type of health care facility do members of this household visit most often when sick?"

- Ask question J2 and tick off only one alternative. If the respondent is uncertain, read the categories aloud.
- For health facility see the list following the question.

#### J3 "Does the facility provide free health care?"

Ask question J3 and tick off for "Yes" or "No".

## J4 "How long does it take members of this household to reach the above mentioned (J2) health facility?

• Ask question J4 and tick off for one of five alternatives: "less than 15 minutes", "1-29 minutes", "30-59 minutes", "1-2 hours" or "more than 2 hours".

**NOTE 1**: In J4 there is a missing box for category 5 "More than 2 hours". If that should be the alternative tick off as if the box was in place (tick at that spot).

**NOTE 2**: There is a missing skip in J4. All categories skips to J6.

## J5 "If members of this household do not usually visit any of the facilities above mentioned (J2), what is the <u>main</u> type of medical help you seek when sick?"

• Ask question J5 after question J2. Tick off only for the <u>main</u> medical help. If the respondent is uncertain, read the categories aloud.

#### J6 "Does this household have any bed-/mosquito-nets?"

• Ask question J6 and tick off for "Yes" or "No". If "No" skip to next module.

#### J7 "How many bed-/mosquito-nets does this household have?"

Ask question J7 and write the total number of nets in the box.

#### J8 "Who du usually sleep under these bed-/mosquito-net(s)?"

Ask question J8 and tick off for all categories that apply.

## J9 "Have these bed-/mosquito-net(s) been treated with chemicals less than 12 months ago?"

• Ask question J9 and tick off for "Yes" or "No".

#### J10 "Where did the household aquire these bed-/mosquito-net(s)?"

• Ask question J10 and tick off for one of the three categories.

#### 19 Economic transfers last 12 months (K1 – K5)

## K1 "Has the household received cash or goods from food aid programs in the last 12 months?"

- Ask question K1 and mark for "yes" or "no" answer from the respondent
- If the answer is "yes" follow up and ask the respondent about the monetary value (SDP without decimals) of the cash or goods received. If received goods/kind, ask the respondent about how much he/she thinks it would cost to by similar goods at the market.
- Value of cash received should be filled in on a separate line. So should the estimate value for the goods received.
- If the answer is "no" continue to next question K2

#### K2-5 Other cash or goods received last 12 months

 Read out the questions to the respondent and follow the same answering pattern as described for K1

#### 20 Cash, credit, savings and shocks (L1 - L10)

The purpose of this section is to capture any transfers that the household may have received from any sources – Government, NGO, friends and family, food aid or other sources.

Informal evidence suggests that such transfers are often an important means for households to cope with poverty and especially to shocks. These are thus very important for our study.

For each of the sources of transfers, we ask whether the household (HH) received any transfers whether in cash or in kind from that source (e.g. Govt., NGO etc.)

If the HH received any transfers, we ask the value of the transfer in cash and in kind.

If the HH did not receive any transfers from a source we move to the next source.

This module aims to look at whether households are using money or barter in most areas, their access to credit, their vulnerability to shocks and their ability to cope with these shocks.

Denial of access to credit, and being affected by severe shocks, are often thought of as contributors and even lead causes of poverty and its persistence. Thus their inclusion in a poverty study.

L1-L3: These questions are designed to see the extent of monetization (use of money) in the economy.

#### L1 "Has any member of this household used cash in the past 7 days?"

• Read out guestion L1 and tick off "Yes" or "No".

## L2 "Does any member of this household use cash for obtaining goods for the household that that the household does not produce it self?"

• Read out guestion L2 and tick off "Yes" or "No". If "Yes" skip to L4.

#### L3 "If not using cash, how does the household obtain such goods?"

Read out question L3 and tick off for one of three categories.

## L4 "In the last 12 months has any member of the household borrowed or obtained money that he/she had to repay?"

- This question applies for all households. Establish whether the HH borrowed any money in the past 12 months.
- Read out question L4 and tick off "Yes" or "No". If "No" skip to L8.

#### L5 "Who did the household borrow from in the last 12 months?"

• Establish who the households borrowed from. If the respondent is unsure or the answer is unclear, read out the categories.

#### L6 "How much money did the household borrow the last 12 months?"

 Read out question L6 and fill in the amount of money in the box. Note: The respondent may need some time or even some assistance to give you the answer.

#### L7 "What is the main reason for borrowing or obtain this loan?"

 Find out main reason for borrowing. If the respondent is unsure or the answer is unclear, read out first the headings and if necessary, then all categories. You only tick off for the main (one) category.

**NOTE**: There is a missing skip in L7. All categories skips to L9.

**L8** "FOR THOSE WHO DID NOT BORROW OR OBTAIN MONEY THE LAST 12 MONTHS (From L4) Why has no members of the household borrowed money in the last 12 months?" (Mark all that apply)

Read out question L8 and tick off for all categories that apply.

## L9 "Does any member of the household have a bank account or a postal savings account?"

Read out question L9 and tick off "Yes" or "No".

## L10 "Over the past five years, was the household severely affected by any of the following events?"

- Read out question L10. Then start with reading out all events on the list and tick off "Yes" or "No" for all that apply in column "c01".
- <u>If "No" on all events, then first visit interview is finished</u>. If one ore more "Yes", then proceed to next column.
- Second: fill in column c02: "Rank the three most significant shocks(Code 1, 2 or 3)" by ranking <u>up to</u> three most significant events ticked off with "Yes" in second column. Ranking is done by marking the events with code 1, 2 or 3.
- Third: fill in column c03: "Estimated Value of the most significant shocks (SDG)" only for the shocks listed in column c02.
- Fourth: fill in column c04: "What did you do in response to this [shock] to try to cope /regain your former welfare level?" (Code list below).

**NOTE:** Be fully aware of all content of code list for coping strategies ahead of the interview. You will need this to be able to probe on coping strategies.

#### 21 End of interview first visit

Look over the questionnaire A-L to be sure it is complete. Thank the respondent and the household members for their contribution and make appointment (person, day and time) for the second interview concerning purchase and consumption and agriculture. Prepare the respondent for the second interview objectives and how he/she should be prepared for this interview. <u>Take note on date</u> and time for the second interview and fill in this on the EA Listing form (section B).

#### Start of second visit interview

For households with more than 12 members, be sure that the form you use for the second visit interview is the one containing information about <u>the last member</u> of the household (section B-G first interview) and the housing information (section H-L first interview). To ensure this: fill in "Yes" or "No" in both questions M1.1 and M1.2. <u>Check that section A4 "Number of forms used for this household"</u> is correctly filled in.

#### 22 Purchase and consumption

This is THE most important module in the survey. Unfortunately, it is also one of the more difficult modules to administer. This module is critical for computing the acquiring, purchasing and consumption of the household and establishing a poverty line. Without this module, poverty figures cannot be estimated.

The purpose of this module is to capture everything that the households within a limited period of time has acquired, purchased and consumed'. Consumption here means any goods and services that the households enjoy for their own satisfaction. A person is in 'absolute poverty' if he cannot

afford to consume the bare necessities (minimum requirements) in life. The bare necessities are calculated as a 'poverty line' with people with consumption below classified as poor. Poverty lines are calculated based on the minimum income that is required to consume a minimum level of calories and some minimum non-food expenditure.

The households "purchasing capacity" for goods and services is an important indicator for poverty and the reason why we want to capture <u>how</u> the households acquire their goods and services. People can source consumption in different ways: Purchasing, own production, gifts and others. People consume a wide variety of commodities. We need to capture consumption on all of them (or as many as possible) thus the long list of items.

#### Instructions for section M Purchase and Consumption module

Any changes in number of Household members since first visit must be recorded in section M1.3

#### M1.3 "How many people ate together at a daily basis during last 7 days?"

- Before you start to ask about consumptions and purchase details, find out about how
  many of the listed household members that actually was present during the last week
  before the interview takes place. Count the number of household members listed under B1
  and asks the respondent if all those were actually present. If not, ask how many that was
  present and fill in M1.3.
- It may also be that *more* than usual number of household members where present in the household last week before the interview takes place. In any case, fill in the number actually present last week in M1.3.

#### 22.1 Last seven days (M2)

#### M2 Purchase and consumption <u>last 7 days</u> (Food, beverages and tobacco)

- The interviewer should start by discussing with the respondent to clarify the understanding of the period "last 7 days". Discuss possible going to church on Sundays or relate the issue to children going to school or may be weekly local market. It is important that the period 7 days is clear to the respondent so that all items listed during the interview section M2 are actually consumed/purchased in that period.
- Ask question M2 and read out each commodity. For each commodity mark "Yes" or "No" due
  to the respondents answer. Then leave the rest of the line open/blank and continue to next
  line/item and repeat the questioning. You will save much time by not reading out the question
  for every item but only when there is a new heading.
- When you have finished all items in M2 with "Yes" or "No" go to the start of the list (page 14).
- If "yes" in column **C02**, fill in column C03 C15 due to respondents answer. Then you continue to next "Yes"- item. .
- For **C03** quantity purchased fill in for number of units of the given quantity unit that was purchased last 7 days. C02 and C03 must be seen together when filled in. Some examples:
  - The respondent has answered "yes" for acquire/purchase/consume of maize cobs last week. They actually purchased a 50 kg sack of maize. The enumerator should fill in number of quantity units "1" under C03 and quantity unit code "18" (50 kg sack) under C04.
  - The respondent has answered "yes" for acquire/purchase/consume of bread last week.
     They purchased 2 breads. The enumerator should fill in number of quantity units "2" in C03 and fill in quantity unit code "1" (piece) under C04.
  - The respondent has answered "yes" for acquire/purchase/consume of beans last week. They purchased half a tin of beans. Since the quantity unit "half a tin" is not found in the coded list of quantity units, the enumerator need to probe with the

respondent f.exe how many cups of beans you need to fill half a tin – lets say 1 cup. The enumerator should then fill in number of quantity units "2" in C03 and fill in quantity unit code "9" (cup) under C04.

- For C04 quantity unit (kg, basket, piece, heap etc) use the unit codes that the respondent prefers to use limited to code 1-18 as listed at the bottom of the each page. If the respondent during the interview use other quantity units than those coded 1-18, probe and find the one of the given codes 1-18 that best matches the respondents answer. If possible, try to use kg, grams and liter and their corresponding codes as quantity of units.
- **C05** total amount of Sudanese Pound (SDG) should be given with <u>one decimal</u>. The <u>decimal</u> must be filled in the position indicated on the form.
- Write all figures neatly and do not cross over the box outline
- **C06** Mark only one box for where the main bulk of the items where purchased.
- **C07-C14** follows the same pattern for number of quantity units and type of quantity units as described for C03-C04 above.
- C15 "If [item] not purchased last 7 days, but consumed (C04-C06), what is the estimated unit price?" Here we request the respondent to give an estimate of what the price of one unit of the item would be if he/she should buy this item on the market. Price should be given in SDG with one decimal. Fill in decimal at the indicated position.

#### 22.2 Last 30 days (month) (M3)

- Ask question M3 and read out each commodity. For each commodity mark for "Yes" or "No" due to respondents answer.
- If "yes" in column C02, fill in column C03-C15 due to respondents answer. Se instructions under M2.

**NOTE:** Find quantity code for some items prefilled in the questionnaire. Note that quantity code for electricity is kW (kilowatt).

#### 22.3 Last 30 days (month) (M4)

When asking question M4 remember to read out all the headlines before you read out each commodity. *It is very important to be aware of the introductory screening question for some of the headlines.* If so you read out the headline as a question and tick off "Yes" or "No". If "Yes" continue with every item under the headline. If "No" skip to next headline.

- Ask question M4 and read out each commodity. For each commodity mark "Yes" or "No" due to respondents answer.
- If "yes" in column C02, fill in column C03 due to respondents answer.

**NOTE:** If "No" in screening headline *always* skip to *next* headline. <u>There is a wrong skip instruction in "630 Other hospital and healer services". If "No" Just go to next headline.</u>

#### 22.4 Last 12 months (year) (M5)

• The instructions for M5 are exactly as for M4. It is only the period of time witch is different. Instead of last 30 days you ask for last 12 months. Nevertheless read note:

**NOTE:** Some of the items you find in both M4 and M5. In M5 this items is optional. This is due to the following headlines:

On page 28, only **441-444** is optional

On page 29, only 711-714 is compulsory

On page 30, only 934, 941 and 121 are optional

#### 23 Agriculture (N1 – N6)

Agriculture and animal husbandry is the primary occupation of a large majority of rural households.

The earnings/produce generated from these activities is the mainstay for most of these households and so is directly related to their poverty or prosperity. So extensive information about agriculture is necessary in this survey

Additionally, this information will be useful as a baseline information in planning any Agricultural Survey in the future.

| We are looking for extensive information on agriculture. In particular, we look at the following: |
|---|
| ☐ Whether households cultivate at all   |
| What crops the cultivate and harvest  |
| ☐ The plots that they cultivate and their characteristics   |
| How much of the harvest they sell and what they receive for it                                    |
| ☐ The inputs into agriculture   |
| Ownership of poultry or livestock   |

## N1 "Does any member of the household currently own or use any agricultural land, forest land or pasture land?"

- This is a screening question to see if the household does any cultivation at all.
- Ask question N1. Mark for "yes" or "no".
- If "no" skip to question N6.

#### N2 "What is the tenure status of the land under cultivation?"

Ask question N2 and tick off all that apply.

### N3 "How much did the household spend on the following agricultural inputs last months?"

Ask question N3. Read out all items on the list and fill in the value of the all items that apply.

#### N4 Crop plot module

- 1) Start to fill in the table by listing all plots by "name" or fill in the expression the respondent uses in first column. Probe on identifying all plots.
- 2) Then finish all questions in the columns to the right in the table plot by-plot.
- 3) Read the different columns very carefully. The codes to use is within the columns except for: "What crops did you grow in this plot last 12 months?" You will find the codes at the bottom of the table.

**NOTE:** The unit code may cause problems. Do not put to much effort into this if the respondent is not able to give a good answer. We are only after a very rough estimate. Do not try to find out your self.

#### N5 Crop harvest module

- 1) Start to read question: "Have you harvested any [rice] during the past 12 months?" and tick off "Yes" or "No" I column c03.
- 2) Read the same question for all 18 crop types and tick off "Yes" or "No" in column c03 before you proceed to next question.
- 3) For all crop types with "Yes" continue, and read question: "How much [Crop type] did you harvest in the past 12 months?" and fill in both quantity number and quantity unit codes. All 20 quantity unit codes are in own text box.

- 4) Repeat same activity on question: "How much of the [crop type] you harvested during the last 12 month was sold?".
- 5) For all crop types with "Yes" finish with last question: "What price did you get for the [Crop type] you sold? If more than one price, get the average.

#### N6 Livestock and poultry module

#### N6.1 "Does any member of the household currently own any livestock or poultry?"

Ask question N6.1. Mark for "Yes" or "No". If "No" → END of interview

## N6.2 "Does any member of the household own any of the following animals?" (Mark all that apply)

- 1. Ask about all animals on the list and tick off for "Yes" or "No".
- 2. Proceed with the number of animals of all actual species on the list and finally let the respondent estimate value if sold to day for one of every actual species.

#### 24 End of interview second visit

Look over the questionnaire M - N (and A1-H1) to be sure it is complete before you leave the household. Thank the household members for their contribution to the National Baseline Household total survey 2009.

Your supervisor will then review your questionnaires following a detailed Check list. He/she will assess the completeness and quality of your work. If any gaps are found, you may have to return to the field to complete the work.

You should ensure that geographical information is on every questionnaire and are ticked off correctly and that all questions are completed on all the questionnaires. It is very important to ensure that all information has been collected and correctly filled in the questionnaires before you leave your EA.

You must neatly pack all completed questionnaires in the envelope provided. Mark the envelope with the name and codes from your listing book, down to EA number. After completing the second interview for all household in your EA, you should return to your supervisor the following items:

- Completed questionnaires inside the envelope
- All unused and cancelled questionnaires in the satchel
- Completed listing form
- EA map

#### 25 Enumerator Responsibilities

#### 25.1 About the Enumerator

Your appointment as an enumerator is a privilege. A complete and accurate survey depends on the cooperation of the people of Sudan and the hard work of enumerators. You must study hard during training and read this manual to understand how to do your job. The success or failure of the survey is in your hands.

As survey enumerator, you will be assigned a geographical area called an Enumeration Area (EA). You are responsible for gathering complete and accurate information for all selected persons and households in your EA.

#### 25.2 Duties of an Enumerator

#### Duties Prior to Enumeration:

- Attend all the training classes, study the questionnaires, listing form and manual carefully and understand them thoroughly. If any part of instructions is not clear, ask your trainer for an explanation.
- Obtain all the material needed for enumeration before you leave the training centre at the end
  of training.
- Visit the Boma official and the village chief(s) to have their permission and assistance to learn to know the EA.
- Familiarize yourself with your EA:
  - o Check the boundaries of your EA with your supervisor, using your EA map.
  - o Travel around each block or village in your EA until the entire EA has been traversed.
- Make notes on your EA map of landmarks and features to help you find your way, such as boreholes, streams, buildings and eventually also household numbers...
- Record the coordinates of the building/compound and a serial number of each household living in the EA using a GPS device (record number and name of head if traditional listing).
- Select/sample the households in the EA to be included in the survey interviews in cooperation
  with your supervisor. Prepare visit plan with your supervisor to show the path you will take
  when enumerating your EA.

#### **Duties During 2 interviews for the NBHS:**

- Wear your ID-Card and Apron at all times.
- Visit each of the households selected. Knock on the door of each those household.
  - o If an acceptable respondent is home, conduct the first interview using a survey questionnaire.
  - During first visit; complete all questions for all persons belonging to the household as well as the housing information – interview visit 1
  - o If no one is home or there is no acceptable respondent present, make an appointment for when to come back for first interview
  - When first interview is completed, make an appointment (day and time) for a second visit to the household. Prepare the respondent to take record on spending on food and beverages in the coming week.
  - Record the date of the finalized first visit interview on the form.
  - Pay a second visit to the household to do the household purchase and consumption interview.
  - Record the date of the finalized second visit interview on the form.
- Meet with your supervisor to review your work and your progress.

#### <u>Duties after the interviews are completed:</u>

- Verify that you have visited and conducted the two interviews for all selected household in the FA
- Look through your questionnaires to ensure that all questions are completed and correctly marked.
- Turn in completed work and materials to your supervisor.

You must always follow your supervisor's instructions. Your supervisor may ask you to complete certain duties in addition to those listed above. It is your duty to complete the tasks assigned to you by your supervisor to ensure that all information is compiled.

#### 25.3 Confidentiality of Responses

The information gathered during enumeration should be treated as strictly confidential and never shared with anyone other than sworn survey workers. Sharing information includes discussing an interview with friends and family, allowing field guides to listen to interviews, or leaving completed questionnaires in a place where others can read them.

Revealing information obtained during your time as an enumerator is an offence. The policy of confidentiality encourages people to participate in the survey because they know that their personal information will not be gossiped about or made public. To enforce the confidentiality of survey information you will be required to take an oath of secrecy prior to enumeration.

| OATH of SECRECY (To be administered by SSCCSE staff) |
|--|
| I,   |
| Signature Date                                       |

#### 25.4 Falsification of Data

You are never to fill out questions based on your own opinion. You must faithfully record answers that are provided to you by an acceptable respondent during an interview. Your supervisor will be reviewing your work and will revisit households in your EA to verify the accuracy of the data you have collected. If any work you submit has been fabricated, you will be dismissed from your job and it may affect your chances for future employment.

You must not submit falsified work to your supervisor under any circumstance

#### 25.5 Working Hours and Duration of Enumeration

You will not have regular fixed working hours during the enumeration period. You can generally expect to begin work early in the mornings and close late at night. As enumerator you must study the habits of the people in the area and work during the period when heads of households or other responsible household members will be at home.

All will be given a contract of employment during training. This must be signed ahead of fieldwork.

#### 25.6 Materials Necessary for Enumeration

You will be provided with the materials listed below, which are necessary to complete your duties as an Enumerator. Keep these materials with you when you are working and keep them in a safe place when you are not working. You are responsible for these materials. Check your material when you receive it at the end of training and notify your supervisor if anything is missing or broken.

| Enumerator materials:    |                                     |  |  |  |  |  |  |  |  |
|--------------------------|-------------------------------------|--|--|--|--|--|--|--|--|
| 1. Survey Apron          | 7 GPS with batteries (two per team) |  |  |  |  |  |  |  |  |
| 2. Manual                | 8. Pen(s)                           |  |  |  |  |  |  |  |  |
| 3. Survey questionnaires | 9. Portfolio (Satchel)              |  |  |  |  |  |  |  |  |
| 4. Listing form          | 10. Notebook                        |  |  |  |  |  |  |  |  |
| 5. Plastic folder        | 11. Chalk                           |  |  |  |  |  |  |  |  |
| 6. Clip board            |                                     |  |  |  |  |  |  |  |  |

You must ensure that you have received all of your materials before leaving the training centre. Make sure that you have the correct map for your EA and verify the map identification information with your supervisor. Review the number of questionnaires and other materials with your supervisor. Remember that you are responsible for returning your materials after enumeration so keep them together in a safe place.

#### 26 Supervisor Responsibilities

#### 26.1 Introduction

Your primary responsibility as a survey Field Supervisor is to supervise, instruct and lead a team of enumerators

Each enumerator or team of enumerators will be assigned a specific geographical area known as an Enumeration Area (EA).

#### Link up with local official and leaders

As the team supervisor, you will be required to introduce your enumerators to the local leadership on the ground (Boma officials and Village chiefs). You will be expected to explain the importance of the survey and the need to have their cooperation. Without this cooperation, the enumerators will not be able to complete their work successfully. You should attempt to answer any questions which will be raised to clear any negative doubts on the census.

You will accompany the enumerators to their respective EAs. Before the commencement of the listing exercise, the enumerator must identify his/her EA boundary using the EA map provided. It is important to seek the assistance of a local guide, who will be identified by the village/local leadership.

You are required to continuously move around to review the work of each enumerator during the enumeration period. A final review will be conducted once the enumerator has completed interviewing each household in his or her EA.

#### Thorough understanding of the survey manual

Each enumerator will be given a copy of the survey manual. This manual contains detailed instructions on the enumerator's responsibilities and how the enumerators should conduct

enumeration. Your complete understanding of the manual is crucial to the success of the survey and for you to fulfill your duties as a supervisor.

Remember, your role as a field supervisor is one that requires you to be a leader. To be an effective leader you must gain the confidence of the enumerators working under you. Your thorough understanding of all aspects of the field operations along with professional behavior will assist you in gaining the respect of the enumerators. If the enumerators question your ability and knowledge of census activities they will be reluctant to approach you with their problems.

#### Working hours

You will not have regular fixed working hours during the enumeration period. Given the large amount of responsibility of a survey team supervisor you can generally expect to begin work early in the mornings and close late at night. You and your enumerators must study the habits of the people in the area and work during the period when heads of households or other responsible household members will be at home.

#### Replacement of enumerators

If an enumerator becomes sick before or during enumeration, or an enumerator is dismissed on grounds of being inefficient you should immediately contact your immediate Supervisor who will make the necessary arrangements for a replacement.

Remember, YOU are responsible for keeping a close watch on the work and efficiency of your enumerators during both the training and enumeration period. If you detect signs of inefficiency or you realize that an enumerator is unable to cope with the work, you should immediately report this to your immediate supervisor who will take the necessary action.

#### 26.2 Responsibilities prior to and during the field work

#### **Training sessions**

You will be required to attend and participate in the enumerator training sessions. While you may be asked to assist in the specific aspects of the training program, your primary responsibility during this time is to ensure that the enumerators who will work under you fully understand their responsibilities and survey concepts.

Some enumerators may feel reluctant to raise their uncertainties or questions about various activities during class. You should give personal attention to each of your enumerators and go over any question they may have. Providing the enumerators with a forum in which they feel comfortable to raise their individual problems or questions will help you ensure that your enumerators have a good understanding of their responsibilities.

#### Assigning Enumeration areas to the enumerators

EAs were constructed for the Population Census 2008. At that time efforts was made to ensure that rural EAs will contain about 150 households and urban EAs about 200 households. In practice, very few EAs will have the exact numbers of households. Some will have more while others will have fewer numbers of households. It may be the case that you discover one EA to be too large to enumerate during the allotted time for enumeration. This will be discovered during the household listing phase. If this occurs you must contact your direct superior – the state statistician who again will report back to the central SSCCSE project administration in Juba. They will take the necessary action of deploying an additional enumerator or otherwise solve such problems.

#### Listing of all households in the EA

Once each of your enumerators has properly and clearly identified their EAs, they—should start the household listing operation, using the Household Listing Form/Booklet and/or GPS. Listing all the households in the EA is one of the means of identifying the households and therefore ensuring the achievement of complete coverage. As the supervisor, you must ensure that all the households in the EA have been listed. If you discover that an EA in the rural area has less than 100 households, you must investigate to ensure that no households have been missed. The same applies to urban areas. If the number of households listed is less than 150, you must investigate to ensure that all the households in this EA have actually been listed. You must go through the Household Listing form/GPS way point listing of each of your enumerators to make sure that they have been completed properly.

#### Prepare an itinerary

You should meet with your enumerator team prior to the enumeration period to develop an itinerary for their activities. This provides the enumerator with a tentative schedule and path that he/she she will take during enumeration and enables you to contact them in the field.

Purpose of planning an itinerary with your enumerators

- Provides you with an understanding of where your enumerators should be located any time during the enumeration period.
- Enables you to contact and assist your enumerators during your field visits.

Planning an itinerary is vital to fulfilling your requirement of being knowledgeable on where your enumerators will be located and assessing their work.

#### Survey documents and materials

Your immediate supervisor will distribute documents and other items to you and your enumerators that are necessary for completing the census enumeration activities. You are responsible for the distribution of the necessary materials to your enumerators. The materials you will receive include:

- 1. Enumerator Materials Receipt Form (4)
- 2. Identification Card (6)
- 3. Small scale maps of the State for logistics planning (2)
- 4. Enumeration Area Map (2 for each EA you are responsible for)
- 5. Survey Manual (6)
- 6. Household listing forms (2 for each EA you are responsible for)
- 7. Questionnaires (25 for each EA you are responsible for)
- 8. Pens (10)
- 9. Supervisor Material Receipt (1)

#### Constant contact with the supervisor

To be an effective leader you must remain in constant contact with your enumerators and be able to assist them in resolving any problems they may encounter. You must ensure that your enumerators have all the necessary materials for their work and that they start working in their assigned areas/ with their assigned households at the prescribed time. You should become familiar with the ability, pace and progress of your enumerators and the EAs which are likely to pose difficulties during enumeration.

When you visit the field during the enumeration your primary activities will include:

- 1. Ensuring complete coverage by the enumerators during the listing
- 2. Ensuring the enumerator visits the selected household for interviews
- 3. Optimize the itinerary of the anthropometrics specialist
- 4. Verifying that questionnaires are completed correctly

#### Supervisor's check of the questionnaire during and after the fieldwork

#### Legible response

The first questionnaire check you will conduct during your field visit is whether the handwriting of the enumerator on the questionnaire is clear and legible. You should check that markings are clear and in case of errors, that the marking box is completely shaded and a new diagonal cross is entered in the correct cell. Be sure that you have full understanding of the requirements to technical filling in due to the use of scanning.

#### Missing entries

Check the questionnaires for missing entries. This should be a rapid visual check by running through the columns of the questionnaire with your eyes.

#### Consistency checks

This is a more careful examination of the entries on the questionnaires to ensure that they are consistent and reasonable. It is more difficult and time-consuming than the visual check for missing entries. It is necessary to carry out consistency checks to make sure that the quality of an enumerator's work is of acceptable standard. Consistency checks involve the comparison of the various entries with respect to the same person or household to make sure that they are compatible and reasonable. If the quality of work is unacceptable, report back to the state statistician to discuss possible replacement. If possible send the enumerator back to the field to re-interview the households.

The following are consistency checks you should carry out

- 1. Identification and Location (A1-2) Verify that both name and code for State, County, Payam, Boma, Enumeration Area Number, Household number, Enumerator name& ID code and Village/block name are all filled out correctly. Verify that the household coordinates are reasonable and close to those on the listing form (i.e. that the correct household is interviewed) by cross checking with your own GPS coordinates
- 2. Household type and migration characteristics (Section A3) The type 'resident private household' is the typical household that has resided in the actual county for a long time and thereby is well established at this location. For questions about resided 12 months ago all Names and codes for State and Counties can be found in **annex 3**.
- 3. Interview characteristics (section A4) After ended interview round 1, both survey period, day, month and year of interview 1 completed and total number of booklets (questionnaires) used must be filled in. Very important in the pilot to have data about time used for the interview from the enumerator actually started with the questions until finalizing the last question. The time used outside the interview should not be put into the questionnaire.
- 4. Sex of head of household and spouse (B2-3) The sex of the head of household and spouse cannot be the same. If the head is male, the spouse must be female, and vice versa.
- 5. Relation to Head of Household (B2) and Age (B4-1) Verify that children of the head of household are not marked as being older than their parents. There should be a minimum of 12 years age difference between a child and his or her parents.

- 6. Education Status (C1-C9) Make sure that the Education Status questions are completed for each individual aged 6 years and above.
- 7. Economic Activity (D1-D8) Turn to the first page of the questionnaire and verify that there is information for every person aged 5 years and above and that the skip pattern in D1 is correctly understood.
- 8. *Health (E1-E7)* Verify that the skip pattern in E1 and E6 is understood.
- 9. Women giving birth (F1-F4) Verify that every woman aged 12 years and above with "yes" in question F1 also filled in number of children ever born alive question F2.
- 10. Anthropometrics (G1-G3) Check that all children under 5 are measured or if not, that reason for not measuring is stated in G3. Check that at least all children under 5 that are measured also have age given in months in B4-2.
- 11. Control of questionnaire flow (H1) In the case of households with more than 12 members (need for more than 1 questionnaire) check that housing information and economic information(I-L) is filled in ONLY on the last booklet used for that household i.e. the booklet with information about the last household member.
- 12. Household characteristics (I-J) Check that all boxes are completed and that markings are reasonable and according to skip pattern.
- 13. Household transfers (K1-K5) Check that all boxes are completed according to the skip pattern.
- 14. Number of people in the household last week (L0)- Check that the number given in L0 is "fair" compared to total members named in B1.
- 15. Purchase and consumption (N1-2) Check that the enumerator has understood the use of "Quantity unit code" and "Quantity purchased". And that the decimal place is correctly used in column C05 and C15. Check also for extreme values of prices and volumes/weights.
- 16. *Purchase (N3-5)* Check that decimal place is correctly used in column C03. Check also for extreme values.
- 17. Be sure to be diligent and work. If you are not satisfied with the work of your enumerators send them back to the field to correct their mistakes.

When you have checked the above thoroughly, you should mark for supervision in A4, sign off the questionnaire and store it properly.

When you receive the documents from each of your enumerators you should make the following checks:

Every questionnaire which was distributed to the enumerators must be accounted for, whether filled or not.

NOTE – This is your last opportunity for you and your enumerators to correct any serious errors. You must examine the questions carefully. You should not forget that your primary duty is to assure that the questionnaires are completed accurately. You may therefore have to send some enumerators back into the field to correct errors. DO NOT MAKE UP ANSWERS

#### 26.3 Responsibilities after the field work

It is your responsibility to check in and collect all documents and materials your enumerators used during the enumeration period. The items you must collect from each your enumerator include:

- All used questionnaire booklets
- All cancelled and unused questionnaire booklets.
- Survey listing sheets
- Enumeration Area Map

- Enumerator Identification Cards
- Enumerator's Manual
- Portfolio

You should use the Enumerator Materials Receipt Form for verifying that each enumerator handed over all of the materials described in that form.

You should then verify that you have all of the materials that were in your possession during the enumeration period. Make sure that you have everything discussed in the Supervisor Materials Receipt Form.

Once all these documents and materials are collected and organized hand them over to your immediate supervisor i.e. the state statisticians or the person appointed by him/her.

#### Handing over

The need to handle the documents with great care cannot be overemphasized. You should remember that the results of the census are recorded on the questionnaires and other documents and are therefore very valuable. You should make sure that no document is lost, spoiled or damaged in any way.

Make sure that your immediate supervisor checks the items with you and signs the appropriate part of the Supervision Material Receipt Form.

#### ANNEX 1

#### A. Sampling of private households within the EA

(For supervisor and enumerator)

Sampling of the 12 private households in each EA that actually should be included for interviews in the current survey (stage 2 of sampling) is done by the supervisor jointly with the enumerator after the completed listing procedure.

In case of traditional listing, the enumerator should together with the supervisor count the total number of households listed in the enumerator's listing book. This total number should be divided into 12 strata (divide total number of household by 12). Within the first stratum (household 1,2,3....n), a household number is selected by using the random sample sheet (annex 2). The remaining household should be selected as fixed interval sampling with one household selected in each of the 11 remaining strata. Total number of households in the EA and the 12 sampled household numbers and head (in case of traditional listing) of household names are recorded in the listing form.

#### Example:

- Total number of household in an EA = 170
- Divided in 12 strata = (1-14) (15-28) (29-42) .... (155-170)
- Random sheet sampled household number is f.exe 3 in the first strata
- Fixed interval sampling of the remaining households gives household number 3, 17, 31, 45, 59, 73, 87, 101, 115, 129, 143, 157 for filling in on the listing form and for further interview

#### GPS

#### **B.** About the GPS tool

A GPS is in principle a high precision digital watch combined with a signal receiver. It is equipped with 2 AA Duracell alkaline batteries (or Energizer batteries), and <u>only</u> this type of batteries should be used. The Supervisor will be responsible for ensuring availability of batteries. The GPS equipment should be handled with great care and stored in a safe cool and dry place when not in use. If necessary to change batteries, be sure that the new batteries are positioned correctly.

The GPS makes it possible to find the geographical position on the earth surface by longitude and latitude (ref. representation point above). The position is found by continuously measuring the time that a signal uses to reach from satellites in the sky to the signal received by the GPS device on the earth surface. Clear signals from at least four satellites are necessary to calculate the geographical position with reasonable accuracy. The better sight to the sky the GPS device has, the clearer and more signals are received. Shadows of trees, buildings etc. should be avoided while using the GPS equipment in the field.

## C. Step by step instruction for use of GPS (Garmin e-trex vista) equipment for household listing

#### C1. Start up and Reset for new waypoint listing

- 1. Go near to the location (tukul, compound entrance, villa entrance etc) of the first household you plan to list in an EA. Find a location with free sight to the sky.
- 2. Switch on the GPS by pressing and holding the lowest right side button of the device for ca half a second. The GPS will respond with an e-trex opening page in the display "owned by SSCCSE".
- 3. Stay still with GPS free sight to the sky, press the upper right side button once and let the GPS search for satellites signal (1-2 minutes variation). You will see an image of the satellite positions on the display and also indicators on the strength of signals received (black bars pulsing).
- 4. When at least 3 satellite signals are received (3 or more black bars visible on the lower part of the display), press the upper right side button repeatedly until the GPS display shows the page with icons for "Mark", "Find", "Routes", "Tracks", "Setup" etc.
- 5. Use the "rocker" button located just over the display and move the black cursor on the display in position over the "Find" and press the "rocker" button 3 times. (Pressing three times moves you to submenus "Find" > "Waypoints" > "By name")
- 6. In the display you now see partly the waypoint list and partly an alphabetic key board. The cursor is locked inside the key board.
- 7. Use the "rocker" button and move the black cursor in the keyboard to the "OK" field and press "OK". Then the alphabetic keyboard disappears
- 8. Use the "rocker" button to scroll the black cursor up to the very top of the display and highlight the "Menu" symbol jus left of the "X" field. Press the "Rocker". A menu with "Find nearest", "Delete all" and "Delete by symbol" appears in the upper half of the display.
- 9. Use to "Rocker" button and scroll the black cursor to "Delete all" and press the "Rocker button".
- 10. Use the "Rocker" and scroll the cursor to "Yes" and press. This will delete all the old waypoints in the GPS memory and you are ready to start a completely new listing exercise.

#### C2. Start registration of way points

- 11. Press the upper right side button repeatedly until the GPS display shows the page with icons for "Mark", "Find", "Routes", "Tracks "Setup" etc.
- 12. Use the "Move" button to <u>scroll the black cursor in to position over "Mark".</u> You are now ready to start to mark waypoints for households in the Enumeration area.

#### C3. Mark a waypoint

- 1. Be sure that you are in front of a tukul or other position where the household is located, be sure that the GPS have free sight to the sky and that signals from at least 3 satellites are received. Press the "Rocker" button over the "Mark" field twice (first click gives you a new waypoint page second click is OK and storing the waypoint) and thereby enter a new way point to your GPS internal memory waypoint list. Repeat this exercise for each household in the EA.
- 2. When all households are "listed" with the "Mark" function, or you temporary break off the exercise (if long distance between the households, or other breaks) switch off the GPS by pressing the lower right side and hold it for ca half a second.
- 3. Start up GPS by following step 2-3 described under B2 above
- 4. To see the waypoint list created, use the "Rocker" button to scroll the cursor over "Find" and press the move button 3 times through the following menus "Find" > "Waypoints" > "By name" and the waypoint list appears in the display.
- 5. Use the "Rocker" button to see and take note of specifically selected waypoints i.e. N/E coordinates and other characteristics
- 6. Press upper right button to come back to the previous page.

#### D. Set up of GPS GARMIN e-trex vista (done by the supervisor before the listing starts)

- 1. Switch on GPS and press upper rights side button repeatedly until main menu appears at the display.
- 2. Scroll to "Set up" and press "Move" button
- 3. Activate "Units" and set up as follows:

Position format: hddd.ddddd

Map datum: WGS 84 Distance/Speed: Metric

Elevation: Meters Depth: Metric Pressure: Millibars

1. Activate "System" and set up as follows:

GPS: Normal WAAS: enabled Language: English Compass: On

Battery: Alkaline (Use DURACELL AA Alkaline only)

Auto calibration: On

2. Activate "Time" and set up as follows:

Time format: 24 h Time zone: Other

UTC Offset: +04hrs 00 min

Time: etsdTUMuse scroll to main menu "

3. From Main menu activate "Find" and do the following set up:

Scroll and press "Go to" waypoint and set up lower right cell to "accuracy" and lower left cell to "distance"

#### **ANNEX 2 Table of random numbers**

For the numbers selected to be random, it is important that you do <u>not</u> deliberately choose where In the table to start. This must be left to chance. Proceed as follows to select the numbers:

- 1. Lay the sheet with random numbers on a flat surface
- 2. Close your eyes and rest your left hand forefinger on the sheet
- 3. Open your eyes and check that your finger is resting on a figure. If not, repeat the steps above. If it does, keep your finger on the figure.
- 4. If this number is smaller than or equal to your first stratum series of household numbers, then it is the selected as the first household
- 5. If it is bigger, go down the table to the number immediately under it and repeat the exercise above. If there is no number immediately under it (you are at the bottom of the table), use the number at the top of the column to the right.

| 99  | 11 | 04  | 61  | 93  | 71  | 61  | 69  | 94  | 66  | 08 | 32  | 16  | 53  | 84  | 60  | 95  | 82 | 32 | 0 | 8  | 61  | 81       | 91  | 61  |  |
|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|----|----|---|----|-----|----------|-----|-----|--|
|     |    |     |     |     |     | 61  | 68  |     | 66  |    |     | 46  |     |     |     |     |    |    |   |    | 61  |          |     |     |  |
| 55  | 59 | 55  | 54  | 32  | 88  | 65  | 68  | 80  | 08  | 35 | 55  | 08  | 60  | 29  | 73  | 54  | 77 | 62 | 7 |    | 29  | 92       | 38  | 53  |  |
| 54  | 67 | 37  | 04  | 92  | 05  | 24  | 65  | 15  | 55  | 12 | 12  | 92  | 81  | 59  | 07  | 60  | 79 | 36 | 2 |    | 95  | 45       | 89  | 09  |  |
| 64  | 35 | 28  | 61  | 95  | 81  | 90  | 24  | 31  | 00  | 91 | 19  | 89  | 36  | 76  | 35  | 59  | 37 | 79 |   | 0  | 86  | 30       | 05  | 14  |  |
| 57  | 26 | 87  | 77  | 39  | 51  | 03  | 59  | 05  | 14  | 06 | 04  | 06  | 19  | 29  | 54  | 96  | 96 | 16 | 3 | 3  | 56  | 46       | 07  | 80  |  |
|     |    |     |     |     |     |     |     |     |     |    |     |     |     |     |     |     |    |    |   |    |     |          |     |     |  |
| 12  | 26 | 65  | 91  | 27  | 69  | 90  | 64  | 94  | 14  | 84 | 54  | 66  | 72  | 61  | 95  | 87  | 71 | 00 | 9 | 0  | 89  | 97       | 57  | 54  |  |
| 19  | 63 | 02  | 31  | 92  | 96  | 26  | 17  | 73  | 41  | 83 | 95  | 53  | 82  | 17  | 26  | 77  | 09 | 43 | 7 | 8  | 03  | 87       | 02  | 67  |  |
| 53  | 22 | 17  | 04  | 10  | 27  | 41  | 22  | 02  | 39  | 68 | 52  | 33  | 09  | 10  | 06  | 16  | 88 | 29 | 5 | 5  | 98  | 66       | 64  | 85  |  |
| 78  | 89 | 75  | 99  | 75  | 86  | 72  | 07  | 17  | 74  | 41 | 65  | 31  | 66  | 35  | 20  | 83  | 33 | 74 |   | 7  | 53  | 90       | 88  | 23  |  |
| 22  | 36 | 33  | 79  | 85  | 78  | 34  | 76  | 19  | 53  | 15 | 26  | 74  | 33  | 35  | 66  | 35  | 29 | 72 |   | 6  | 81  | 86       | 03  | 11  |  |
|     | 20 | 00  | .,  | 0.0 | . 0 | ٥.  | , 0 |     |     | 10 |     |     | 00  |     | 00  |     |    |    | - |    | 0.  | 00       | 0.0 |     |  |
| 36  | 59 | 46  | 53  | 35  | 07  | 53  | 39  | 49  | 42  | 61 | 42  | 92  | 97  | 01  | 91  | 82  | 83 | 16 | 9 | S. | 95  | 37       | 32  | 31  |  |
| 79  | 94 | 24  | 02  | 56  | 62  | 33  | 44  | 42  | 34  | 99 | 44  | 13  | 74  | 70  | 07  | 11  | 47 | 36 | 0 |    | 95  | 81       | 80  | 65  |  |
| 96  | 00 | 74  | 05  | 36  | 40  | 98  | 32  | 32  | 99  | 38 | 54  | 16  | 00  | 11  |     | 30  | 75 | 86 |   |    | 91  | 70       | 62  | 53  |  |
|     |    |     |     |     |     |     |     |     |     |    |     |     |     |     | 13  |     |    |    |   | 5  |     |          |     |     |  |
| 32  | 25 | 38  | 45  | 57  | 62  | 05  | 26  | 06  | 66  | 49 | 76  | 86  | 46  | 78  | 13  | 86  | 65 | 59 |   | 9  | 64  | 09       | 94  | 13  |  |
| 22  | 09 | 47  | 47  | 07  | 39  | 93  | 74  | 08  | 48  | 50 | 92  | 39  | 29  | 27  | 48  | 24  | 54 | 76 | 8 | 5  | 24  | 43       | 51  | 59  |  |
| 75  | 15 | 72  | 60  | 60  | 0.0 | 00  | 52  | 39  | 15  | 17 | 04  | 82  | 55  | 90  | 65  | 12  | 25 | 06 | 0 | 13 | 15  | 21       | 01  | 21  |  |
| 75  | 15 | 72  | 60  | 68  | 98  | 00  | 53  |     |     | 47 |     | 83  |     | 88  | 65  | 12  | 25 | 96 | 0 |    | 15  | 21       | 91  |     |  |
| 49  | 29 | 93  | 82  | 14  | 45  | 40  | 45  | 04  | 20  | 09 | 49  | 89  | 77  | 74  | 84  | 39  | 34 | 13 |   | 2  | 10  | 97<br>52 | 85  | 08  |  |
| 93  | 44 | 77  | 44  | 07  | 48  | 18  | 38  | 28  | 73  | 78 | 80  | 65  | 33  | 28  | 59  | 72  | 04 | 05 |   | 4  | 20  | 52       | 03  | 80  |  |
| 88  | 84 | 88  | 93  | 27  | 49  | 99  | 87  | 48  | 60  | 53 | 04  | 51  | 28  | 74  | 02  | 28  | 46 | 17 |   | 2  | 03  | 71       | 02  | 68  |  |
| 21  | 21 | 69  | 93  | 35  | 90  | 29  | 13  | 86  | 44  | 37 | 21  | 54  | 86  | 65  | 72  | 11  | 40 | 14 | 8 | 7  | 48  | 13       | 72  | 20  |  |
| 0.4 |    |     | 4.5 |     | 0.5 |     | 2.2 | 2.5 | 2.4 |    |     | 0.2 | 0.0 |     | 0.4 | 0.5 | 40 |    |   |    |     |          |     | 40  |  |
| 84  | 98 | 45  | 47  | 46  | 85  | 05  | 23  | 26  | 34  | 67 | 75  | 83  | 00  | 74  | 91  | 06  | 43 | 45 |   | 9  | 32  | 58       | 15  | 49  |  |
| 35  | 23 | 30  | 49  | 69  | 24  | 89  | 34  | 60  | 45  | 30 | 50  | 75  | 21  | 61  | 31  | 83  | 18 | 55 |   | 4  | 41  | 37       | 09  | 51  |  |
| 80  | 79 | 62  | 94  | 14  | 01  | 33  | 17  | 92  | 59  | 74 | 76  | 72  | 77  | 76  | 50  | 33  | 45 | 13 | 3 | 9  | 66  | 37       | 75  | 44  |  |
| 70  | 10 | 83  | 37  | 56  | 30  | 38  | 73  | 15  | 16  | 52 | 06  | 96  | 76  | 11  | 65  | 49  | 98 | 93 | 0 | 2  | 18  | 16       | 81  | 61  |  |
| 27  | 53 | 63  | 98  | 81  | 30  | 44  | 85  | 85  | 68  | 65 | 22  | 73  | 76  | 92  | 85  | 25  | 58 | 66 | 8 | 8  | 44  | 80       | 35  | 84  |  |
| 0.5 |    | 2.4 |     |     | 20  | 4.0 | 40  | 2.5 | =0  | 2= | =0  |     | 20  | 0.4 |     |     |    |    |   |    |     |          | 0.0 |     |  |
| 85  | 77 | 31  | 56  | 70  | 28  | 42  | 43  | 26  | 79  | 37 | 59  | 52  | 20  | 01  | 15  | 96  | 32 | 67 |   | 0  | 62  | 24       | 83  | 91  |  |
| 63  | 38 | 49  | 24  | 90  | 41  | 59  | 36  | 14  | 33  | 52 | 12  | 66  | 65  | 55  | 82  | 34  | 76 | 41 |   | 6  | 22  | 53       | 17  | 04  |  |
| 69  | 44 | 82  | 97  | 39  | 90  | 40  | 21  | 15  | 59  | 58 | 94  | 90  | 67  | 66  | 82  | 14  | 15 | 75 |   | .9 | 76  | 70       | 40  | 37  |  |
| 61  | 31 | 90  | 19  | 88  | 15  | 20  | 00  | 80  | 20  | 55 | 49  | 14  | 09  | 96  | 27  | 74  | 82 | 57 | 5 | 0  | 81  | 60       | 76  | 16  |  |
| 68  | 83 | 24  | 86  | 45  | 13  | 46  | 35  | 45  | 59  | 40 | 47  | 20  | 59  | 43  | 94  | 75  | 16 | 80 | 4 | 3  | 85  | 25       | 96  | 93  |  |
| 1.0 | 20 | 1.0 | 00  | 70  | 0.1 | 4.1 | 50  | 21  | 44  | 20 | 0.6 | 70  | 10  | 7.1 | 0.5 | 7.1 | 50 |    |   |    | 0.7 |          | 1.4 | 0.2 |  |
| 16  | 30 | 18  | 89  | 70  | 01  | 41  | 50  | 21  | 41  | 29 | 06  | 73  | 12  | 71  | 85  | 71  | 59 | 57 |   | 8  | 97  | 11       | 14  | 03  |  |
| 25  | 10 | 76  | 29  | 37  | 23  | 93  | 32  | 95  | 05  | 87 | 00  | 11  | 19  | 92  | 78  | 42  | 63 | 40 | 1 | 8  | 47  | 76       | 56  | 22  |  |
| 81  | 54 | 36  | 25  | 18  | 63  | 73  | 75  | 09  | 82  | 44 | 49  | 90  | 05  | 04  | 92  | 17  | 37 | 01 |   | 4  | 70  | 79       | 39  | 97  |  |
| 39  | 71 | 16  | 92  | 05  | 32  | 78  | 21  | 62  | 20  | 24 | 78  | 17  | 59  | 45  | 19  | 72  | 53 | 32 | 8 | 3  | 74  | 52       | 25  | 67  |  |
| 51  | 52 | 56  | 24  | 95  | 09  | 66  | 79  | 46  | 48  | 46 | 08  | 55  | 58  | 15  | 19  | 11  | 87 | 82 | 1 | 6  | 93  | 03       | 33  | 61  |  |
|     |    |     |     |     |     |     |     |     |     |    |     |     |     |     |     |     |    |    |   |    |     |          |     |     |  |
| 76  | 16 | 08  | 73  | 43  | 25  | 38  | 41  | 45  | 60  | 83 | 32  | 59  | 83  | 01  | 29  | 14  | 13 | 49 |   | .0 | 36  | 80       | 71  | 26  |  |
| 38  | 70 | 63  | 45  | 80  | 85  | 40  | 92  | 79  | 43  | 52 | 90  | 63  | 18  | 38  | 38  | 47  | 47 | 61 | 4 | 1  | 19  | 63       | 74  | 80  |  |
| 32  | 19 | 22  | 46  | 80  | 08  | 87  | 70  | 74  | 88  | 72 | 25  | 67  | 36  | 66  | 16  | 44  | 94 | 31 | 6 | 6  | 91  | 93       | 16  | 78  |  |
| 47  | 20 | 00  | 08  | 80  | 89  | 01  | 80  | 02  | 94  | 81 | 33  | 19  | 00  | 54  | 15  | 58  | 34 | 36 | 3 | 5  | 35  | 25       | 41  | 31  |  |
| 46  | 65 | 53  | 06  | 93  | 12  | 81  | 84  | 64  | 74  | 45 | 19  | 05  | 61  | 72  | 84  | 81  | 18 | 34 |   | 9  | 98  | 26       | 84  | 16  |  |
|     |    |     |     |     | . – |     |     |     |     |    |     |     |     |     |     |     |    |    |   | _  |     |          |     |     |  |
| 52  | 87 | 24  | 84  | 82  | 47  | 42  | 55  | 93  | 48  | 54 | 53  | 52  | 47  | 18  | 61  | 91  | 36 | 74 |   | 8  | 61  | 11       | 92  | 41  |  |
| 61  | 61 | 87  | 11  | 53  | 34  | 24  | 42  | 76  | 75  | 12 | 21  | 17  | 24  | 74  | 62  | 77  | 37 | 07 |   | 8  | 31  | 91       | 59  | 97  |  |
| 58  | 61 | 61  | 20  | 82  | 64  | 12  | 28  | 20  | 92  | 90 | 41  | 31  | 41  | 32  | 39  | 21  | 97 | 63 | 6 |    | 19  | 96       | 79  | 40  |  |
| 76  | 70 | 42  | 35  | 13  | 57  | 41  | 72  | 00  | 69  | 90 | 26  | 37  | 42  | 78  | 46  | 42  | 25 | 01 | 1 | 8  | 62  | 79       | 08  | 72  |  |
| 18  | 82 | 81  | 93  | 29  | 59  | 38  | 86  | 27  | 94  | 97 | 21  | 15  | 98  | 62  | 09  | 53  | 67 | 87 | 0 | 0  | 44  | 15       | 89  | 97  |  |
|     |    |     |     | _   |     |     |     | 0-  |     |    |     |     |     |     |     |     | c- |    |   | _  |     |          |     |     |  |
| 41  | 48 | 21  | 57  | 86  | 88  | 75  | 50  | 87  | 19  | 15 | 20  | 00  | 23  | 12  | 30  | 28  | 07 | 83 |   | 2  | 62  | 46       | 86  | 91  |  |
| 43  | 97 | 53  | 63  | 44  | 98  | 91  | 68  | 22  | 36  | 02 | 40  | 08  | 67  | 76  | 37  | 84  | 16 | 05 | 6 |    | 96  | 17       | 34  | 88  |  |
| 04  | 90 | 90  | 70  | 93  | 39  | 94  | 55  | 47  | 94  | 45 | 87  | 42  | 84  | 05  | 04  | 14  | 98 | 07 |   | .0 | 28  | 83       | 40  | 60  |  |
| 49  | 50 | 41  | 46  | 52  | 16  | 29  | 02  | 86  | 54  | 15 | 83  | 42  | 43  | 46  | 97  | 83  | 54 | 82 | 5 | 9  | 36  | 29       | 59  | 38  |  |
| 70  | 3  | 05  | 52  | 04  | 73  | 72  | 10  | 31  | 75  | 05 | 19  | 30  | 29  | 47  | 66  | 56  | 43 | 82 | 9 | 9  | 78  | 29       | 34  | 78  |  |
|     |    |     |     |     |     |     |     |     |     |    |     |     |     |     |     |     |    |    |   |    |     |          |     |     |  |

ANNEX 3
State / County names and codes

|             | ounty names         | and cod                    | es                                       |
|-------------|---------------------|----------------------------|--|
| State       |                     | County                     |  |
| <del></del> | me                  | Code                       |  |
|             | per Nile            | 01                         | Renk                                     |
| 7 1 Upp     | DEI INIIE           | 02                         |  |
|             |                     | 03                         | Manyo                                    |
|             |                     |                            | Fashoda                                  |
|             |                     | 04                         | Meluth                                   |
|             |                     | 05                         | Maban                                    |
|             |                     | 06                         | Maiwut                                   |
|             |                     | 07                         | Lukapiny/Nasir                           |
|             |                     | 08                         | Longochuk                                |
|             |                     | 09                         | Ulang                                    |
|             |                     | 10                         | Bailiet                                  |
|             |                     | 11                         | Malakal                                  |
|             |                     | 12                         | Panyikang                                |
| 72 Jon      | alei                | 01                         | Old Fangak                               |
| 72 3011     | gici                | 02                         | Khorflus                                 |
|             |                     |                            |  |
|             |                     | 03                         | Ayod                                     |
|             |                     | 04                         | Duk                                      |
|             |                     | 05                         | Wuror                                    |
|             |                     | 06                         | Nyirol                                   |
|             |                     | 07                         | Akobo                                    |
|             |                     | 08                         | Pochalla                                 |
|             |                     | 09                         | Pibor                                    |
|             |                     | 10                         | Twic East                                |
|             |                     | 11                         | Bor South                                |
| 73 Unit     | tv                  | 01                         | Pariang                                  |
| 73 0111     | ıy                  | 02                         | Abiemnhom                                |
|             |                     |                            |  |
|             |                     | 03                         | Mayom                                    |
|             |                     | 04                         | Rubkona                                  |
|             |                     | 05                         | Guit                                     |
|             |                     | 06                         | Koch                                     |
|             |                     | 07                         | Leer                                     |
|             |                     | 08                         | Mayendit                                 |
|             |                     | 09                         | Payinjar                                 |
| 81 Wa       | rrap                | 01                         | Abyei                                    |
|             |                     | 02                         | Twic                                     |
|             |                     | 03                         | Gogrial West                             |
|             |                     | 04                         | Gogrial East                             |
|             |                     | 05                         | Tonj North                               |
|             |                     | 06                         | Tonj East                                |
|             |                     | 07                         |  |
| 00 11       |                     |                            | Tonj South                               |
| 82 Nor      | thern Bahr el Gazal | 01                         | Aweil North                              |
|             |                     | 02                         | Aweil East                               |
|             |                     | 03                         | Aweil South                              |
|             |                     | 04                         | Aweil West                               |
|             |                     | 05                         | Aweil Centre                             |
| 83 Wes      | stern Bahr el Gazal | 01                         | Raga                                     |
|             |                     | 02                         | Jur River                                |
|             |                     | 03                         | Wau                                      |
| 84 Lak      | es                  | 01                         | Cueibet                                  |
|             |                     | 02                         | Rumbek North                             |
|             |                     | 03                         | Rumbek Centre                            |
|             |                     | 04                         | Wulu                                     |
|             |                     | 05                         | Rumbek East                              |
|             |                     |                            |  |
|             |                     | 06                         | Yirol West                               |
|             |                     | 07                         | Yirol East                               |
|             |                     | 08                         | Awerial                                  |
| 91 We:      | stern Equatoria     | 01                         | Tambura                                  |
|             |                     | 02                         | Nagero                                   |
|             |                     |                            | Nzara                                    |
|             |                     | 03                         |  |
|             |                     | 03                         |  |
|             |                     | 04                         | Ezo                                      |
|             |                     | 04<br>05                   | Ezo<br>Yambio                            |
|             |                     | 04<br>05<br>06             | Ezo<br>Yambio<br>Ibba                    |
|             |                     | 04<br>05<br>06<br>07       | Ezo<br>Yambio<br>Ibba<br>Maridi          |
|             |                     | 04<br>05<br>06<br>07<br>08 | Ezo<br>Yambio<br>Ibba<br>Maridi<br>Mvolo |
|             |                     | 04<br>05<br>06<br>07       | Ezo<br>Yambio<br>Ibba<br>Maridi          |

| State   |                         | Count    | V                             |
|---------|-------------------------|----------|-------------------------------|
| Code    | Name                    | Code     | Name                          |
|         |                         |          | Terekeka                      |
| 92      | Central Equatoria       | 01       |                               |
|         |                         | 02       | Juba                          |
|         |                         | 03       | Lainya                        |
|         |                         | 04<br>05 | Yei                           |
|         |                         |          | Morobo                        |
|         |                         | 06       | Kajo Keji                     |
| 93      | Eastern Equatoria       | 01       | Torit                         |
|         |                         | 02       | Lafon/Lopa                    |
|         |                         | 03       | Kapotea North<br>Kapotea East |
|         |                         | 04       | Kapotea East                  |
|         |                         | 05       | Kapotea South                 |
|         |                         | 06       | Budi                          |
|         |                         | 07       | Ikotos                        |
|         |                         | 08       | Magwi                         |
|         |                         |          |                               |
|         |                         |          |                               |
| Country | codes for the pilot     | •        | •                             |
| 1       | Sudan                   |          |                               |
| 2       | Other African countries |          |                               |
| 3       | Other                   | 1        |                               |
|         |                         | +        |                               |
|         |                         | +        |                               |
|         |                         | +        |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         | +        |                               |
|         |                         | +        |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         | +                       |          |                               |
|         |                         | +        |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         |          |                               |
|         |                         | İ        |                               |
|         |                         | +        |                               |
|         |                         | 1        |                               |
|         |                         | +        |                               |
|         |                         | +        |                               |
|         |                         | +        |                               |
|         | +                       | +        |                               |
|         |                         | 1        |                               |
|         |                         | 1        |                               |
|         |                         |          |                               |
|         | İ                       | ı        | Ī                             |

ANNEX 4 Events calendar: 1955 to 2005, Southern Sudan (Source: PHC 2008)

| Event description                   | Month    | Year | Age/Duration in |
|-------------------------------------|----------|------|-----------------|
|                                     |          |      | years           |
| Rebellion (Torit Mutiny)            |          | 1955 | 53              |
| Independence                        |          | 1956 | 52              |
| Coup by General Abboud              |          | 1957 | 51              |
| Juba Wau massacre                   |          | 1965 | 43              |
| Clement Mboro Incident              |          | 1965 | 43              |
| Population displacement             |          | 1965 | 43              |
| Nimeri comes to power               | August   | 1969 | 39              |
| Communist party coup                |          | 1971 | 37              |
| Primary health care in S Sudan      |          | 1977 | 31              |
| Voluntary repatriation              |          | 1977 | 31              |
| Akobo mutiny                        |          | 1973 | 35              |
| Juba mutiny                         |          | 1974 | 34              |
| Hassan Hussein coup                 |          | 1978 | 30              |
| Division of S Sudan, displacement   |          | 1983 | 25              |
| Bor mutiny                          |          | 1983 | 25              |
| Formation of SPLM/A                 |          | 1984 | 24              |
| Sidik Mahadi took over              |          | 1984 | 24              |
| SRRA                                |          | 1989 | 19              |
| SPLA force entered Yei              | January  | 1990 | 18              |
| SPLA front near Yei                 |          | 1990 | 18              |
| Arabs took over Kaya, exodus        |          | 1993 | 15              |
| Yei recaptured by SPLA              | March    | 1997 | 11              |
| Majority of residents return to Yei |          | 1998 | 10              |
| SRRC HQ moved to Rumbek             |          | 2000 | 8               |
| Bombing of Yei market               | March    | 2001 | 7               |
| SPLA/GOS cease fire                 |          | 2002 | 6               |
| Beginning of Darfur conflict        |          | 2002 | 6               |
| Sudanese women convention           |          | 2003 | 5               |
| SPLA/GOS Naivashs protocols         | June     | 2004 | 4               |
| Comprehensive peace agreement       | December | 2004 | 4               |
| Census                              | April    | 2008 | 1               |