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Peace – Work – Fatherland

NATIONAL INSTITUTE OF
STATISTICS



RÉPUBLIQUE du CAMEROUN

Paix – Travail – Patrie

INSTITUT NATIONAL DE LA
STATISTIQUE

THIRD SURVEY ON EMPLOYMENT AND INFORMAL SECTOR IN CAMEROUN (EESI 3)

Mapping and enumeration of households

Interviewer's manual

June 2018

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Introduction

The third Survey on Employment and Informal Sector (EESI 3) in Cameroon is a two-stage statistical operation on the evaluation and monitoring of employment and informal sector. The first phase is a survey on employment aimed at collecting data on social and demographical features and employment. The second phase is an enterprise-type survey carried out in non-agricultural and informal production units identified during the first phase.

As a preparation for this survey, it is worth mapping and listing all households in the Enumeration Areas (EA) selected in the 12 survey regions.

The main objective of this households mapping and enumeration operation is to draw a complete and update list of all households in each of the selected EA. During the households mapping and enumeration operation, each village/quarter concerned will be visited and a listing sheet enabling to describe each structure will be registered by means of the CAPI application. This sheet will also enable to register the names of households heads found in the structure, as well as uninhabited structures. A map for cluster location, as well as a sketch of the EA showing all structures in the area will be made.

This manual is aimed at defining the duties of the mapping and enumeration personnel, defining concepts used and providing general guidelines for the achievement of the households mapping and enumeration operation on the field.

1. Duties of field personnel

People participating in households mapping and enumeration work as a team. Each team comprises two *agents* including one *cartographer*, and one *enumerator*. The team work under the authority of a supervisor appointed by the central coordination of the operation, and is administratively supported by the Head of Regional Agency of the NIS or any other administrative official.

1.1 Duties of supervisors

Supervisors shall:

- 1) contact authorities in the regions in order to inform them of the EESI 3 in general and households mapping and enumeration operation in particular in order to gain their cooperation;
- 2) assign areas to teams;
- 3) distribute against receipt tablets and equipment to agents;
- 4) provide the team with selected cluster base maps for the EESI 3;
- 5) provide the team with other equipment needed for mapping and enumeration (situation plan, sketch sheet, chalk, markers, etc.);
- 6) see to the proper use and conservation of tablets by enumeration agents;
- 7) closely follow up teams;
- 8) see to the payment of field allowances to agents;
- 9) organise transportation and deployment of teams on the field;
- 10) check and ensure that work is of good quality;
- 11) ensure that data are sent to the central server on a regular basis.

1.2 Duties of agents

Agents shall:

- 1) contact local administrative and traditional authorities of selected clusters in order to inform of the EESI 3, mapping and enumeration work to be carried out in order to gain their cooperation;
- 2) use tablets and other equipment with care and only for the purpose of the survey;
- 3) identify the boundaries of the cluster from the application MAPS ME;
- 4) establish a situation plan for the cluster;
- 5) systematically list all households of the cluster;
- 6) register GPS coordinates of households in the cluster and inhabited structures in the cluster;
- 7) draw a detailed map of the cluster, if possible, all listed structures;
- 8) observe good practices in the use of tablets (battery charging, WIFI deactivation when out of use, etc.) and keep them including accessories with the greatest care;
- 9) inform supervisors of issues faced on the field and follow their instructions in order to solve them;
- 10) transfer data files to the server on a daily basis and send all completed technical documents to the supervisor.

The two agents of each team must work together at the same time in the enumeration area. They must first identify the cluster's boundaries together, then the cartographer must prepare

the location map and sketches, while the enumerator is establishing the list of households. The sketch and enumeration sheet inserted in the tablet must be registered simultaneously.

The following documents/equipment are useful for the households mapping and enumeration operation:

- Instructions manual to cartographers and enumerators;
- Felts, markers or chalk to be used in the sequential numbering of structures and households;
- A notebook;
- Pencils and erasers;
- Base maps of selected EAs;
- Information sheets of the cluster (sheet I);
- Households registration sheets/forms (sheet II, it is inserted in the tablet);
- Segmentation sheets (sheet II) should segmentation appears useful;
- Tablets and accessories;
- Power banks.

2. Definition of key concepts

The basic documentation useful for the enumeration of households stems from the fourth General Population and Housing Census (GPHC4) carried out between 2017 and 2018 by the Central Bureau for Censuses and Population Studies (BUCREP).

Below is a list of some important concepts, whose meaning has been clarified as part of this task:

Enumeration definition and objective: The enumeration operation concerns all EAs covered by the survey sample. It is aimed at establishing a complete list of households in each sample EA from which the households to be interviewed will be drawn.

The enumeration of households consists in:

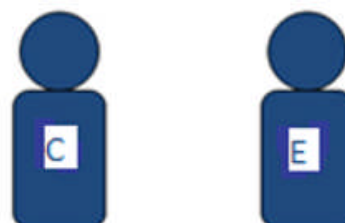
- Visiting each enumeration area;
- Identifying the boundaries of the enumeration area;
- Numbering all structures within the enumeration area;
- Listing all households in the various structures enumerated;
- Collecting some information from households (household size, main language spoken in the household, as well as the profession or sex of the household head);
- Mapping the enumeration area in order to help interviewers easily recognise the limitations of the EA, and easily find the various households, which will be selected for the survey.

In short, the enumeration steps are as follows:

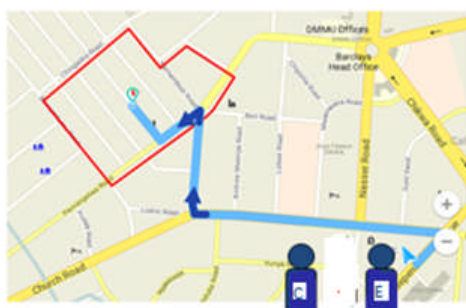
882 EAs selected for EESI-3



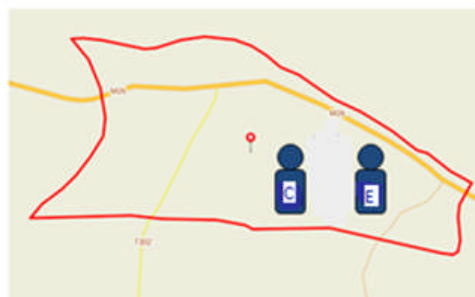
Group of two persons



1. To locate the EA



2. To go round the EA and to make the location plan



3. Listing and sketch of the EA



4. Transfer of data



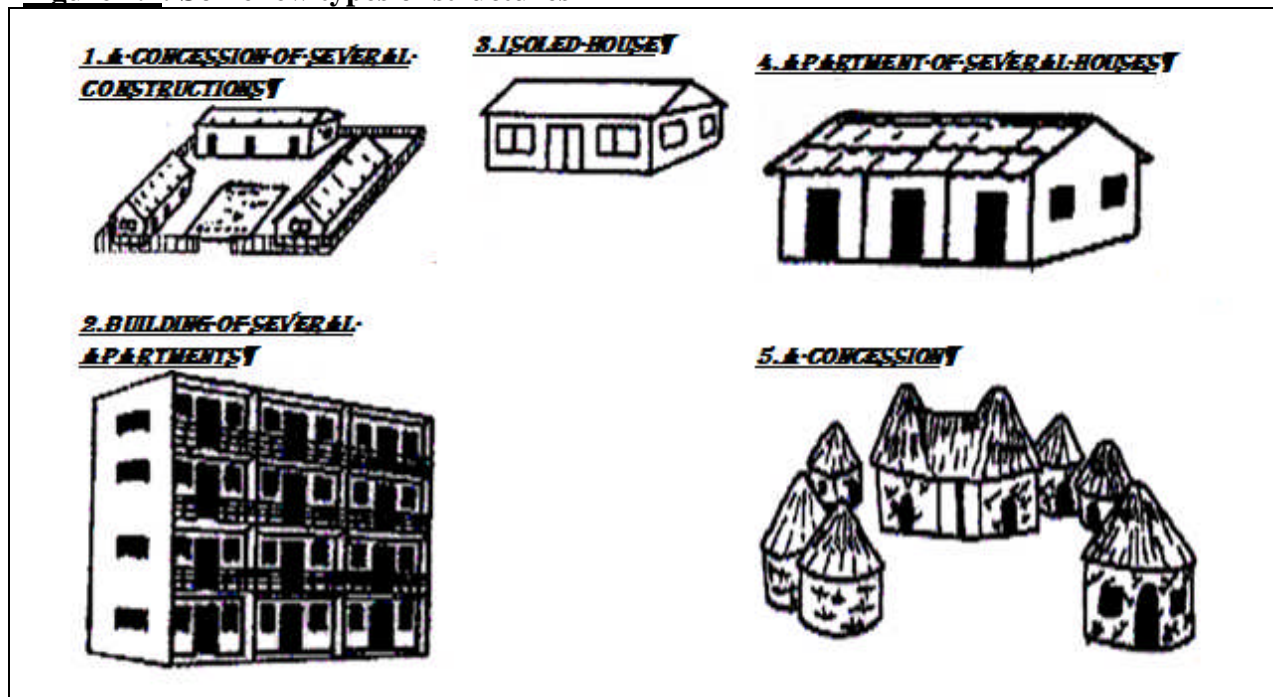
Enumeration Area (EA): The Enumeration Area is a habited portion of the national territory assigned to an interviewer during the census. It is the smallest geographical unit created for the purpose of the GPHC4. An Enumeration of Area may comprise one or several localities, one village or quarter or several villages or quarters, one or several blocks of a same quarter or village.

Cluster: It is the smallest areal unit of the EESI 3, comprising an adjacent group of households in the adjoining geographical area. It coincides with the EA or part of the EA (for example half of an EA may be a cluster). For the EESI 3, a cluster is either an EA or a segment of a large EA. There are 882 selected clusters for the EESI 3. **Only your supervisor may authorise you to turn part of an EA into a cluster.**

Structure: A structure is an independent building, with one or several rooms use for residential or commercial purposes. This building may be used for residential purposes or not. It may contain one or several rooms and comprise one or several housing units, for

example: modern villa, isolated house, building with apartments, fenced house (urban area), compound (rural area). In cases where one household is living in several houses, as in rural areas, all houses, with or without fences, are considered as one structure.

Figure 2.1: Some few types of structures



A structure is referred to as **multiple house structure** if it comprises one household. Or else, it is referred to as **simple structure**.

House: It is a room where a group of rooms normally designed as a place of residence for a household (for example, an individual house, an apartment or a group of rooms in a house). However, a housing unit may also be shared by more than one household.

Note:

- *Isolated house:* a house separated from any other construction;
- *Multiple residence house:* it is a house of a single tenant, divided in several independent housing units and located at the same floor;
- *Modern mansion:* it is an isolated house in final material, large and comprising some amenities relating to standing (fence, swimming pool, garden...);
- *Apartment (Story) building:* it is a building with several floors, divided in apartments;
- *Compound/"saré":* a group of buildings or constructions standing as one or several housing units;
- *Church/mosque/temple:* A church structure may have one main building, with another building for pastors. The main building and that of pastors stand as a single structure, with their primary use, that is church;
- *Schools/universities;*
- *Shops/office/firm/commercial building:* a shop, an office, a mall may have residential units. Structures used for residential and business purposes (for example, a combination of shops and houses) must be classified as shops/office/firm/commercial building. However, the answer to the following question must be Yes: "Residence?"
- *Clinic/hospital;*
- *Other* (please specify in the next screen).

Household (ordinary): It is a group of people, with or without a genetic relationship, recognising the authority of a same individual referred to as "Household Head". They usually live under the same roof or in the same compound. They usually take their meals together and share common or vital household expenses together. In some cases, a

group of people may be living together in the same house, with everyone having a separate kitchen, eating separately or having separate household heads. In such cases, everyone is a household with a single member. Collective lifestyles such as hotels, prisons, military camps or boarding schools shall not be considered as households and, therefore, are not included in the survey. Examples of households include:

- A man living with his wife or wives, with or without children;
- A man living with his wife or wives, with their unmarried children and parents;
- A man living with his wife or wives and their married children, and who come together in order to cater for a number of vital needs (the group recognising the authority of a single person);
- A single man or woman, with or without children, and catering for his/her vital, food needs and others alone;
- A widow or widower or divorced man or woman, with or without children;
- Someone renting a room and who does not have his/her meals with the landlord household (landlady) shall be considered as an independent ordinary household. It is the case of bachelors;
- A group of bachelors sharing a same house is an ordinary household if they recognise the authority of a same person who is the household head. Or else, they are considered as separate households.

Household head: It is person responsible for the household (usual resident member) recognised as such by all household members.

Household size: It is the number of people usually in the household (whether they are present or not when your show up for the enumeration operation).

Beware of this notion of "person usually living in the household". Someone is considered as "usually living in the household" in the two following cases:

- 1- *The person has been living on an almost permanent basis in the household for the past 6 months;*
- 2- *The person has been living for less than 6 months in the household, but is intending to stay for at least 6 months.*

Please note: A husband who has left his household, wife and children back home in Banyo, and has been working in Yaounde for 6 months, is no longer a member of this household in Banyo. This is also the case of children who have left the household in order to undertake studies for 6 months or more.

Households are in houses, houses in the structures and structures in EAs. The notion of household should not be confused with that of family. As a matter of fact, all family members are related, and may not live in the same compound, which is not the case for the members of a household.

The decisive test to identify the household would consist in asking the four following questions:

1. Are these people living in the same residential structure (shelter, house, apartment, compound or "saré", etc.)?
2. Do they all recognise the same person as their household head?
3. Do they usually share the same meals?
4. Do they bring all or part of their resources together in order to cater for their current or vital needs?

If the answer to each question above is "yes", then you have properly identify a household.

Examples

Case (i): A son living in a separate shelter, but in his parents compound, sharing meals and using part of his income to cover compound expenditure (food, school attendance of younger brothers, house maintenance, etc.) is part of his parents household, as the answers to the four questions here are Yes, Yes, Yes, Yes.

If the answer to one of these questions is "no", then you have more than one household. Please note that househelps and other workers living and eating in the same home must be included as household members. Some difficult cases may occur: Consult your supervisor where appropriate.

Case (ii): Assume that you get to a household of a polygamist comprising a man and his 3 wives living in the same residential structure. It is assumed that every wife lives in a different residential unit and cooks her own food, and the 3 wives serve the food for their husband in the same room or in separate rooms. In this particular case, answers to test questions are:

- Yes, they live together (same residential structure);
- Yes, they all recognise the same household head;
- No, they do not eat same meals.

In such a case, the wives are not considered as members of a same household. Therefore, each of them is a household, while the husband will be the head of one of the households, usually the household where he spent the night preceding the enumeration.

Case (iii): A tenant living in his landlord's compound, but independently is not part of the latter's household.; even though this tenant is often invited to the house of his/her landlord to share some meals or regularly takes meals at his landlord's for a fee or free of charge. The answers to the four questions here are Yes, No, No, No.

Case (iv): Three bachelors live in a house, share the rent, water and electricity charges, but eat separately. The answers to these four questions are Yes, No, No/Does not know, No. This implies three households.

Case (v): Let us assume two households and a bachelor are living in a house. Each of the households is cooking separately, and the bachelor is eating with them. By applying the test, the answers are Yes, No/Does not Know, Yes, No and it is concluded that there are three households.

Case (vi): A poor neighbour (widower, disabled person, unemployed person, etc.) invited more or less regularly to share the meals of the household (or a neighbour to whom part of prepared food is sent) is not part of the household. This neighbour is helped by the household; he/she is not one of its dependants. The answers to the 4 questions here are No, No, Yes, No.

Important: From the foregone, it is clearly understood that if the answer to one of the four questions is "No", then you have more than one household. The four-question test should always be your guide.

Block: It is a series of structures bounded by natural boundaries such as streams, wetlands, bushes or by man-made boundaries such as roads.

Base maps: A base map is a reference map containing one or several counting areas. It shows the boundaries of the counting areas and main physical features such as mountains, rivers and roads. Base maps will be available in hard and soft versions. Files may be accessed through the application MAPS.ME inside tablets.

Localisation or location plan: It is a diagram produced during the household's enumeration operation, indicating the main access to the EA, as well as the main roads and points of reference of the cluster. It may be useful to include some important points of reference of the neighbouring EA in order to facilitate access or delimitation of the relevant EA.

Sketch: It is a diagram produced during the household's enumeration operation, with the location or marks of all structures identified during the enumeration operation in the EA, and which enables the interviewer to identify selected households. A sketch also contains EA identification information, location information (chief's/"lawan's" residence, schools, health facilities, boreholes, markets, bus stations, etc.), access information, the main physical features and points of reference such as mountains, river, roads and power poles.

3. EA location and boundaries identification

The supervisor will provide the team with a file containing the base map of the cluster assigned to the team. Upon arrival in the cluster, the team must first contact administrative and traditional authorities (Lamido, Belakat, quarter head or block head in urban areas, village head, Djaoro, lawan or other notables of the locality in rural areas), inform them of the EESI 3 and enumeration operation, and request for their assistance for the identification of the boundaries of the EA and collection of general information on the cluster, for example: the estimated number of residential households in the locality/cluster. In most cases, clusters boundaries are natural elements, which may be recognised as streams, rivers or infrastructure as roads or railways. However, in some cases, as in rural areas where clusters boundaries may not visible features, particular attention should be made to the information provided by the base map. In such cases, the authorities' assistance will be of utmost importance.

Before the listing of households, the team must first visit of the cluster in order to identify its boundaries and draw a cluster location plan (described below). During the first visit, the team must determine best and more effective way in order to proceed with the list of all structures and households in the cluster. Divide the cluster in various parts. One part may be a block of structures in urban areas or a portion following roads in rural areas. It is very useful that the cluster's plan be drawn rapidly by agents, while indicating house or section blocks boundaries, with the position of reference points such as administrative buildings, mosques, churches, main roads, etc. Even reference points in the neighbouring EAs will be useful in order to help interviewers easily find target EAs. This preliminary plan will serve as a guide to the team during the survey itself.



The team may use MAPS.ME, the map application in the tablet as a guide in order to locate and identify the boundaries of the EA on the field. ***Please note: the map file MAPS.ME may not show the same boundaries as the printed copy. Given that the printed copy may be more updated, please use the printed map as base map in the event of any differences. In such cases, MAPS.ME will serve as an additional guide in order to go round the EA.***


3.1. Location of the EA

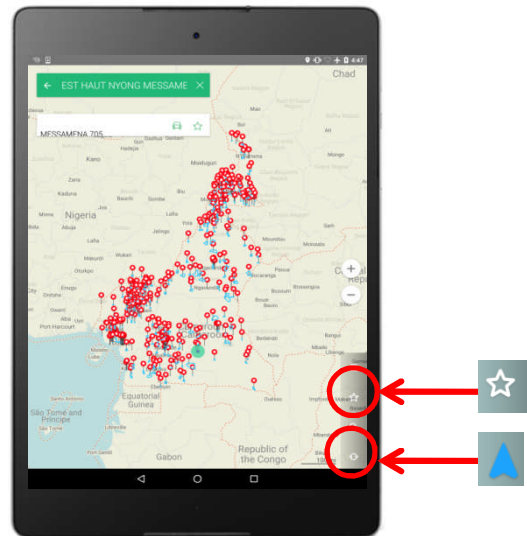
The cartographer will use the printed base map and **MAPS.ME** application file uploaded into the tablet in order to locate every EA assigned to the team. You do not need any Internet connection to use this application. To locate the EA using MAPS.ME:

- 1) Turn on the tablet and enter the password.
- 2) Open MAPS.ME by tapping on the green icon of MAPS.ME at the bottom left of the home screen.
- 3) Define your current position by tapping on the arrow icon at the bottom right of the screen.



arrow is white, then your current position is not captured. Type on the white arrow to update your current position. **The icon must turn:** . **Please wait until the icon goes blue:** . **This may take some minutes.**

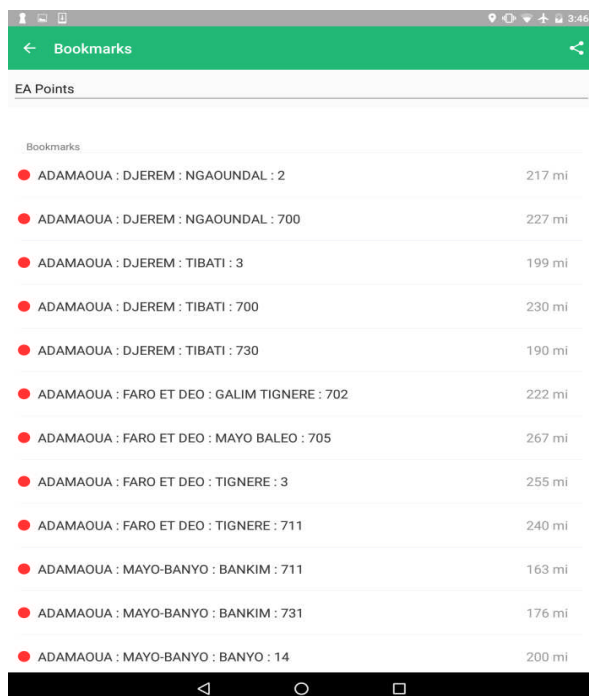
- 4) Open the bookmarks menu by tapping on the icon Bookmarks  at the bottom right of the main screen (see below).



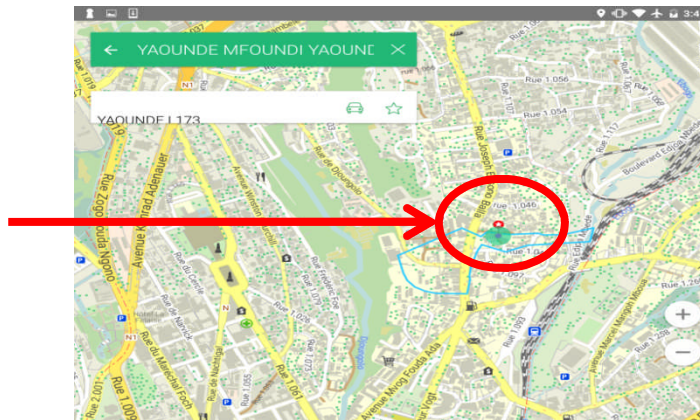
- 5) In the bookmarks menu, select "**EESI3 - EA Centers**" (see below).



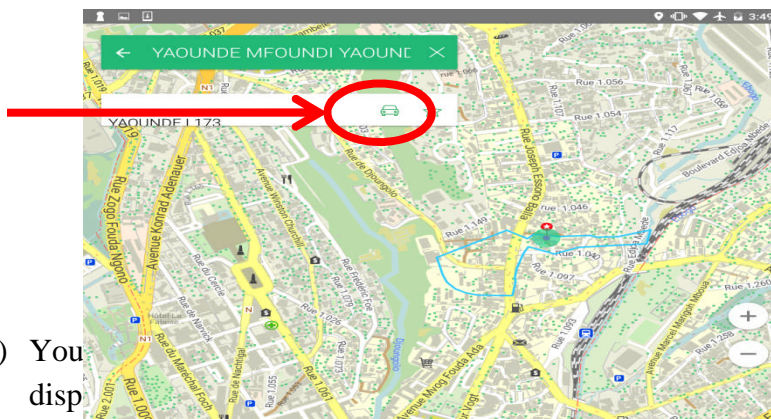
- 6) You will find a list of all EAs and the distance between your current position and the EA (see below). Select the EA where you want to work.



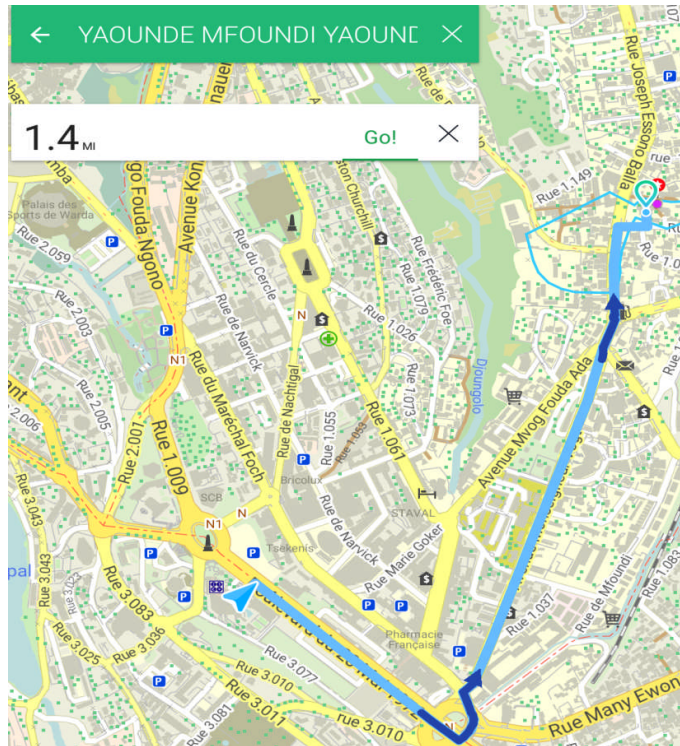
- 7) Once you have selected the EA, you will be directed to the main screen of the map with the selected and green highlighted EAs (see below) (EAs in the map will be in red dots with a white star inside). Information on the EA will appear in the box on the upper right side of the map.



- 8) In order to have the way to the EA, tap on the car icon in the information box (see below).



- 9) You disp information box will also EA.




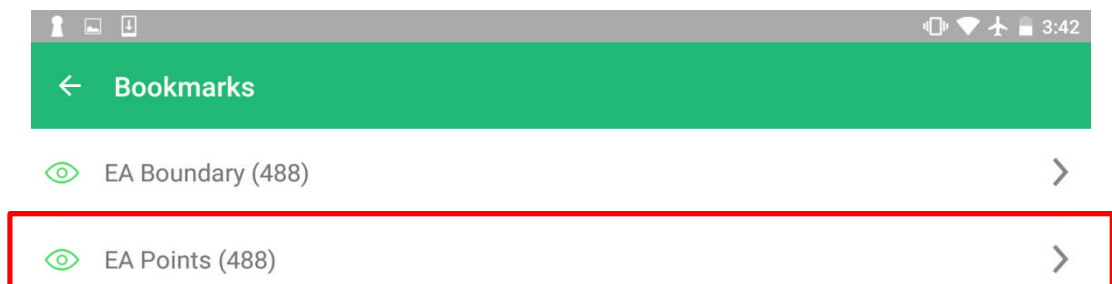
3.2 Identification of the EA boundaries

To identify the EA boundaries with MAPS.ME:

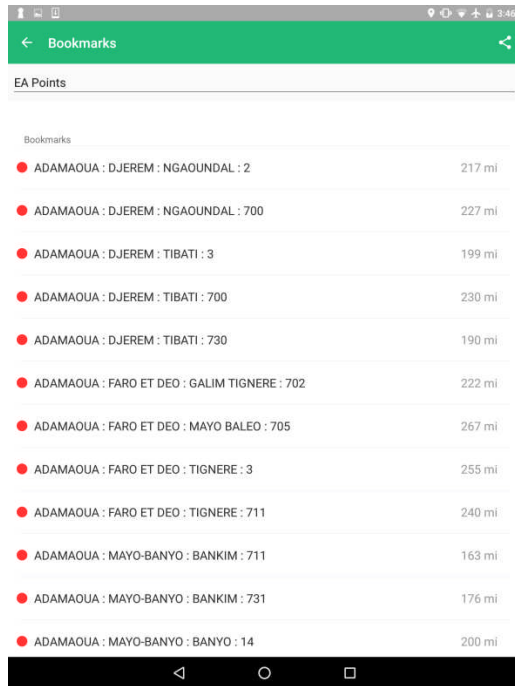
- 1) Open MAPS.ME by tapping on the green icon of MAPS.ME at the bottom left of the home screen.



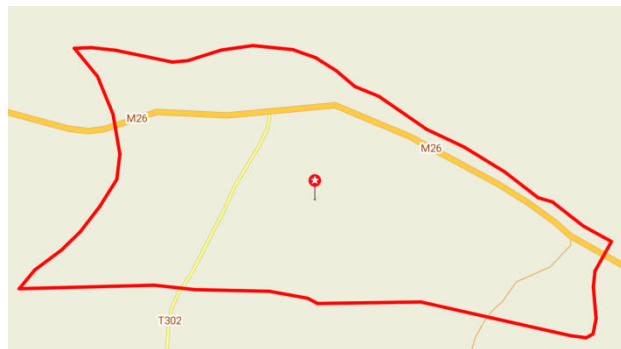
- 2) Open the tabs menu by tapping on the star icon of the tabs  at the bottom right of the home screen.
- 3) In the tabs menu (Bookmarks), select "**EESI3 - EA Boundary**" (see below). Ensure that the eye icon is enabled (green) in order to display the boundaries of the EA on the map screen. To enable the eye icon, tap on this icon on the left hand side of the tab Bookmark "**EESI3 EA Boundary**" so it should go green. To deactivate the eye icon, you must tap again on it so it should go white.






- 4) You will find a list of all EAs with codes. The approximate length of the perimeter of the EA will also be displayed. Select the EA that you want to look at.



- 5) Once the EA is selected, you will be directed to the map screen. The EA boundary will be in red line, with a white star inside, see below.



- 6) You may expand with your finger by double-tapping on the screen, or clicking on the icon  on the right hand side of the screen. You may also reduce by clicking on the icon  on the right hand side of the screen
- 7) When you are in your EA you may identify its boundaries by walking or by driving on the boundary line. You may see whether you are inside the EA or not, by checking whether the icon  (which shows your current position) is inside or outside the EA demarcated in MAPS.ME map. ***Please note: if the EA boundaries file is different from that of the printed copy provided by the NIS, please instead consider the printed copy as work base.***

4. Preparation of the location plan and cluster sketch

For every team, supervisors will appoint one of the agents as cartographer and another on as enumerator. Even though both agents complete different tasks, it is compulsory that they travel together in the cluster. The cartographer will design plans and the enumerator will collect information on the structures and households.

The mapping of the cluster and the household enumeration list must be drawn systematically so that no omission or duplication be registered. The cluster must be divided in parts if possible, of which one may be a block of structures. The team must finish with each block before proceeding with the following block. In each block, you should start in one corner and move to the right around this block. In rural areas where structures are often in small groups, the team must work in only one group at a time. In each group, you should start from the center and move clockwise around the center. Illustrations of movement in a cluster are made below.

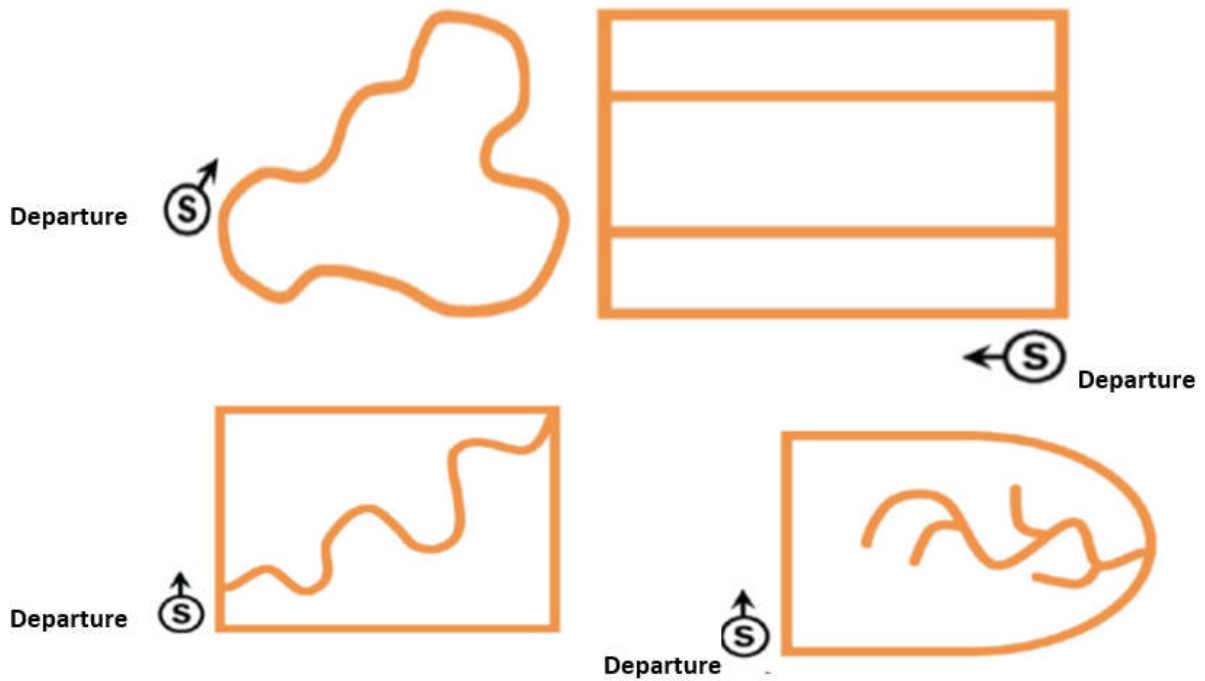
➔Continuous movement path

Once you are sure about the geographical situation of the EA and its precise boundary, you must determine the most effective way to move along the roads and paths within this EA. Inside the EA, you must ensure that you move in such a way to cover both sides of the streets or roads of the EA completely. To facilitate things, it is advised that you move by following the right side (clockwise). All the boundaries of the EA must be followed (including railways, waterways, power lines and other invisible boundaries) as they may enable you to find some hidden structures. This is referred to as the Continuous movement path. For maps with squared streets, in standard quarters, the path to follow is relatively simple. However, for quarters with several junctions, particular angles and internal areas, this may become more complicated. Rules on how to successfully cover an EA are described below:

➔Point of departure

Always start your movement at a logical point of departure. The point of departure may be an intersection at the boundary of two EAs, often a corner. **Figure 4.1** provides examples, with letter "S" representing the point of departure and lines representing streets, roads, paths, etc.

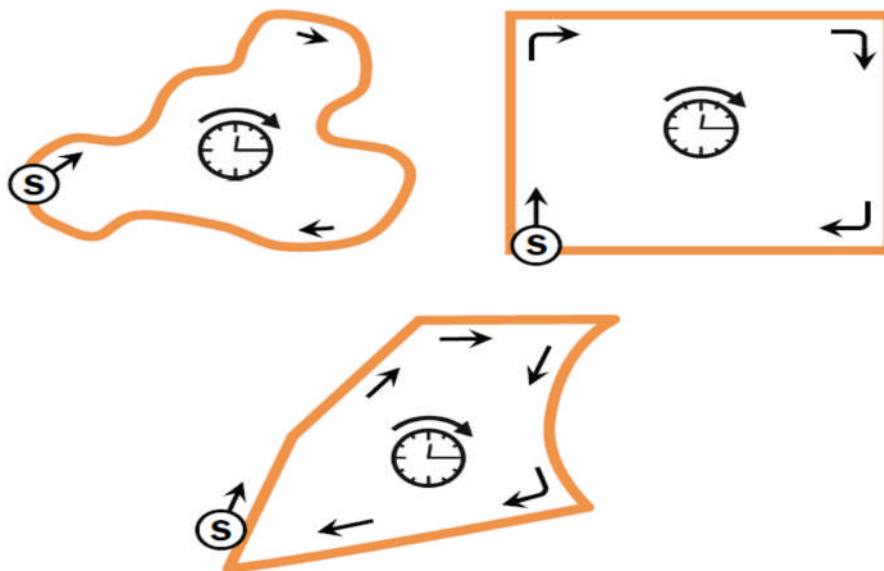
Figure 4.1: Example of point of departure



➔Clockwise movement

Move clockwise. While you walk clockwise from the point of departure, draw arrows indicating the path taken. Marking the path taken enables you to be sure of the roads you have taken, to map and list the structures on your right. The arrows enable you to remain concentrated while you are on the field and, subsequently enable the survey staff to check the path taken as part of quality control. Simple examples showing how to move clockwise are provided in **Figure 4.2**.

Figure 4.2: Examples of clockwise movement

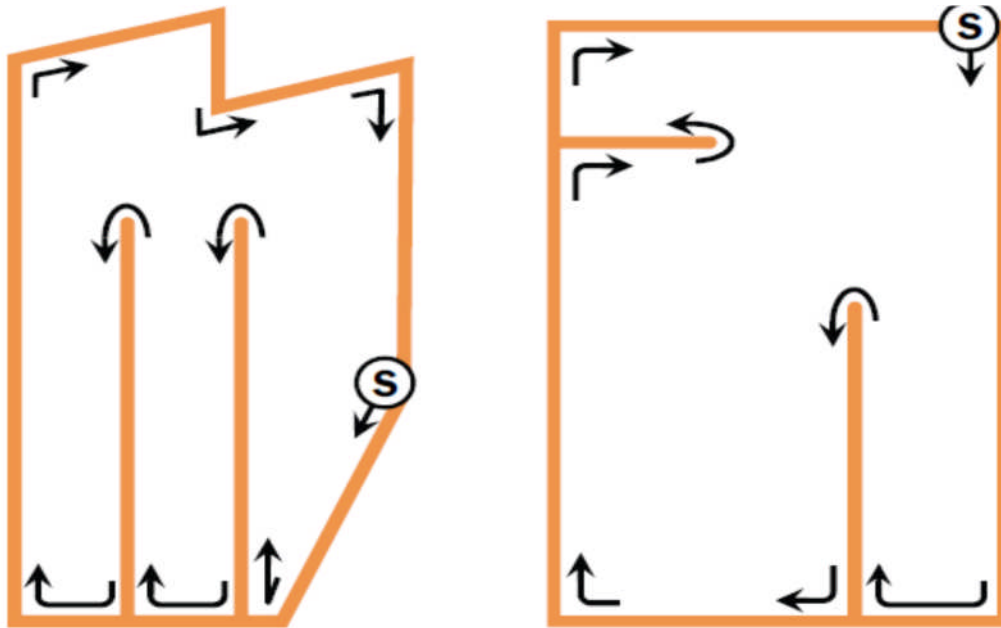


➔Always turn right

While you move clockwise, always turn right as much as possible. When you get to a road, street or path, turn right and move along the road, by mapping or taking note of all structures on your right. If you are on a dead end, make a U turn and move to the other side

of the road, then continue mapping the structures on your right. You must not change your way of doing things even if movement in the street is one way. **Figure 4.3** provides examples of turns you must always take on the right side.

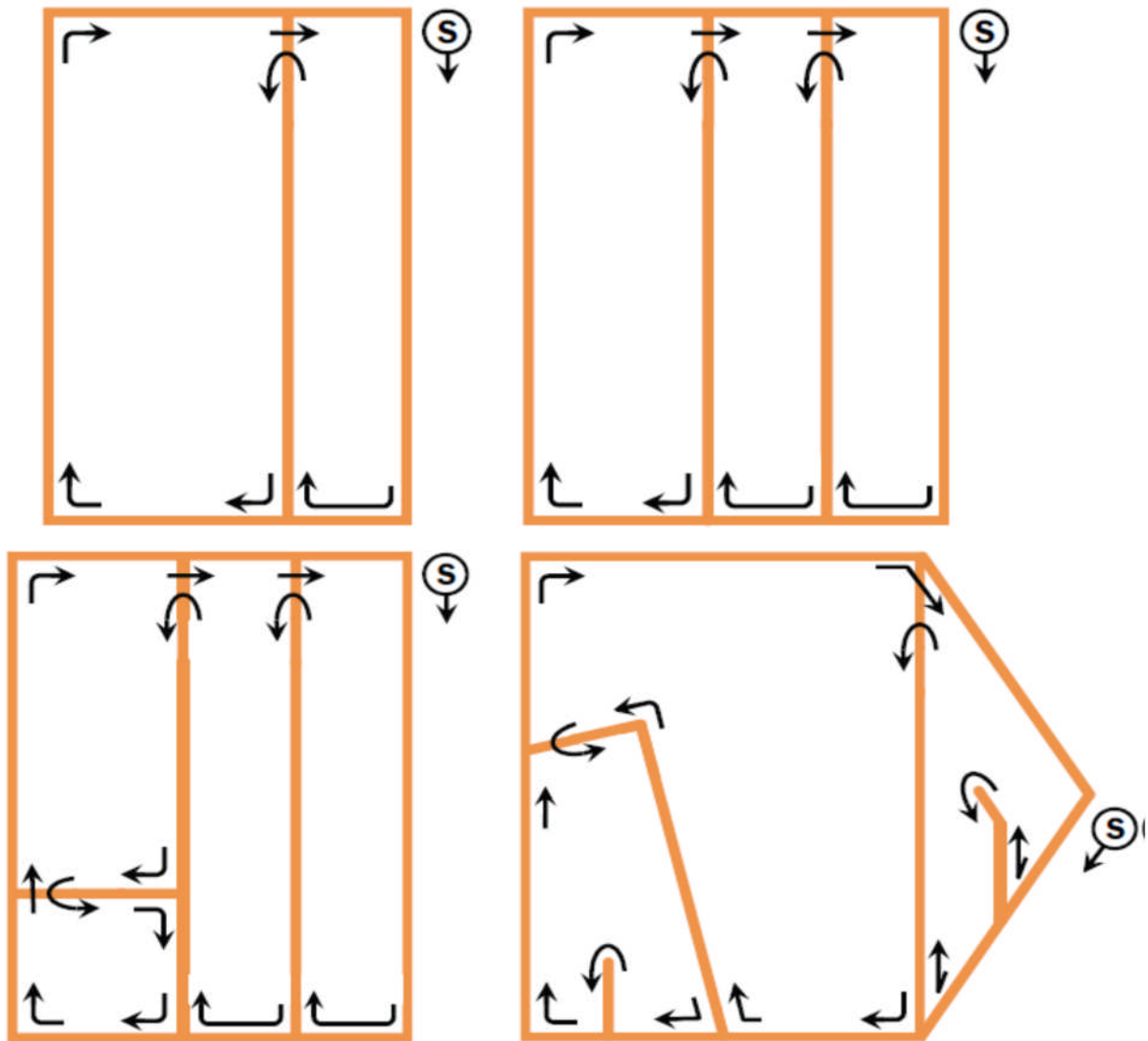
Figure 4.3: Examples of movements you must always make on the right side



➔U turn at the boundaries of an EA

When you get to the boundaries of an EA, U turn and move to the other side of the road, then list the structures on the right. Ensure this does not get you away from the boundaries of the EA. In most cases, a U turn will be made on streets which are divided on both sides of the street, dead-ends or streets ending at the boundary of the EA. If you find yourself in a situation wherein the boundaries of the EA are blurred, have changed or do no longer exist, phone your supervisor for assistance. **Figure 4.4** provides examples of U turns at the boundaries of an EA.

Figure 4.4: Examples of U turns at the boundaries of an EA



➔ Do not cut road sections

A street section is a portion of street between two junctions or between a junction and the end of the street. This means that if you start at a junction and move along a street, you will continue on this street until the dead-end, or until you get to another junction cutting the road on both sides or only on the right. If the street leading to the street in which you find yourself is on your left, then the street is not cut. It is important that road sections be continuous in a way that the staff controlling quality subsequently is able to follow your footsteps. Turns to the right on themselves DO NOT CUT street sections, even though you should probably skip a turn on the right hand side in order not to cut a street section. Making a U turn at the wrong time or a turn to the left cuts a street section. **Figure 4.5** provides examples of street sections and how to move along these sections without cutting them.

Figure 4.5: Examples of continuous movements along street sections

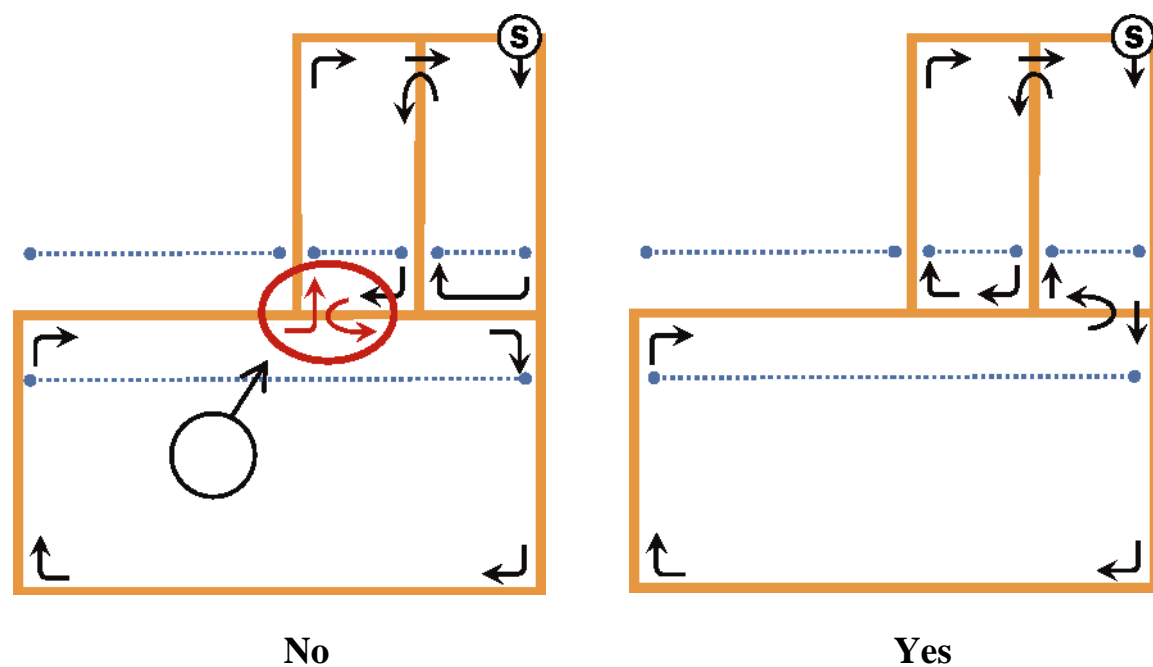


Figure 4.6: How to walk in a EA with dense homes

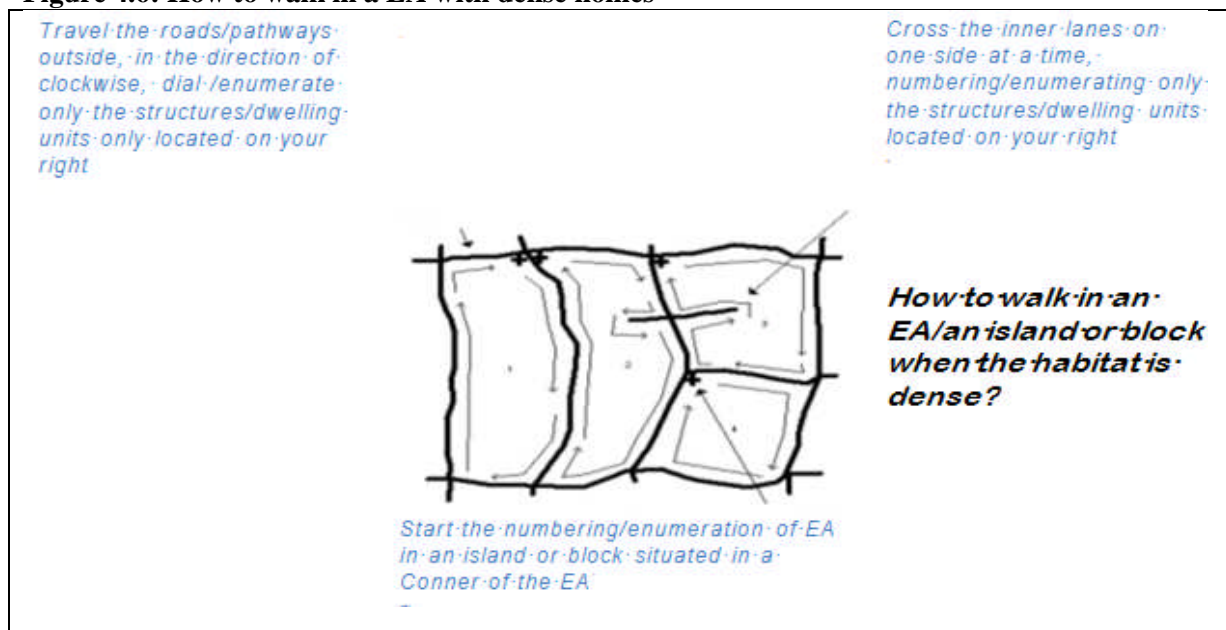
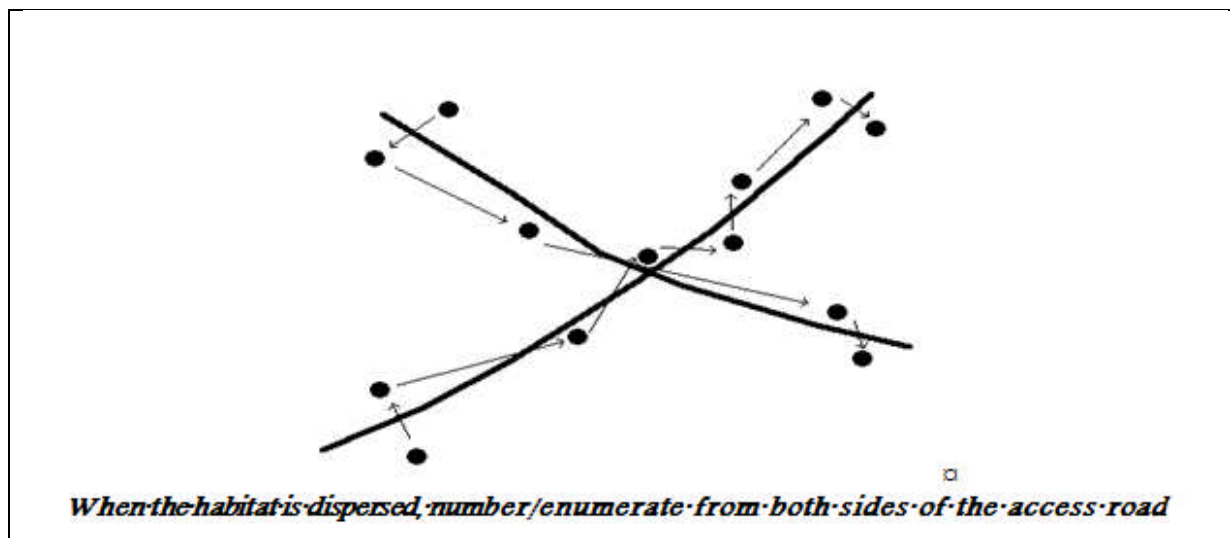


Figure 4.7: How to walk in an EA with scattered homes



During the first visit of the cluster, by using the cluster information sheet (Sheet I), the cartographer will have to:

- Write in the first instance the cluster identification information on page 1. These information are provided by the supervisor;
- Prepare a cluster location plan comprising a drawing on page 1 of a map showing the location of the cluster with its boundaries and the boundaries of its parts. This location map must comprise all the instructions on the way to reach the cluster, as well as any useful information on how to find the cluster and its boundaries.

During the second visit of the cluster, by using page 2 of the cluster sheet (Sheet I), the cartographer will draw a sketch of all the structures in the cluster including empty structures and the structures under construction. It is important that the cartographer and enumerator work together, and coordinate their activities, because the numbers of the structures included by the cartographer in the sketch of the EA must match with the sequential numbers assigned by the enumerator to the same structures.

Mark the point of departure on the EA sketch sheet with a big "S" or "X", represent each structure on the map by a small square where it is found in the cluster. Non-residential structures must be identified by their use (for example: school, warehouse or factory). Number all structures in the sequential order by starting by "001". Each time there is a break in the numbering of structures (for example: during the movement from one block to the other), an arrow must be drawn to indicate where to go from a set of structures to another. Even though it may be difficult to determine the exact location of structures on the map, an approximate locate is useful in order to find them subsequently. Add marks such as public buildings (for example: park, school, temple) and street or road to the map. It is sometimes useful to add monuments outside the boundaries of the cluster to the map, especially when they are useful for the identification of other structures inside the cluster.

Use the marker or chalk to write the number it was assigned at the entrance of the structure. Please note that it is the same structure number which will be written on the household enumeration sheet. In order to distinguish between the numbering of the EESI3 and other numbers, which may already exist on the structure's door, write EESI3 in front of the door. For example, on structure N° 5 of cluster 026, write EESI 3/026/005, and on structure N° 054 of the same cluster, write EESI3/026/054.

A **multiple house structure** comprises more than one household. All households in a multiple house structure must be numbered by a sequential number from **1 to m** inside the structure. The structure's number and household number in the structure make a single identifier of the household in a given cluster, and of all households in the cluster. For example, household N° 5 of structure 054 of cluster 026 has a single identifier EESI3/026/054/05; it is very useful to write the household identifier in front of its door in order to facilitate the location of the household later by interviewers.

In general terms, to distinguish between structures, you will therefore write numbers **EESI3/XXX/YYY/ZZ** (first format) or **EESI3/XXX/YYY/01 to ZZ** (second format) depending on cases.

XXX is the sequential number in the cluster (Number EESI3);

YYY is the structure's number in the cluster;

ZZ is the total number of households in the structure.

If there is no household where there is only one household, then ZZ is respectively 00 or 01, and the number on the structure will take the first format. However, if there is more than one household in the structure, the number on the structure will take the second format.

Within different structures, you will have to write the numbers in front of the doors of the various inhabited households. The number in front of the door of a household must be written in the format **EESI3/XXX/YYY/ZZ**. Here, ZZ stands for the household number in the structure. Thus, the household number of a structure, which has only one household is at the same time its structure's number.

5. Enumeration of households

The enumerator will use sheet II integrated in the tablet to register all households in the cluster. Start by entering the cluster's identification information. Fill in the remaining part of the form as follows:

Column (1) [Serial number of the structure]: The cartographer must register on the sketch, and for every structure, the same structure's number provided by the enumerator.

Column (2) [Address/description of the structure]: Indicate the street address of the structure. In places where structures have no visible address (particularly in rural areas), give a description of the structure and any other useful details, which may enable to locate the structure (for example: 5 km to the north-east of the chiefdom, in front of the primary school, colours of walls and/or doors, presence of trees, etc.);

Column (3) [Type of structure]: Select the appropriate type of structure for the structure from the following categories:

- Isolated house: a house separated from any other construction;
- Multiple residence house: it is a house of a single tenant, divided in several independent housing units and located at the same floor;
- Modern mansion: it is an isolated house in final material, large and comprising some amenities relating to standing (fence, swimming pool, garden...);
- Apartment (Story) building: it is a building with several floors, divided in apartments.
- Compound/"saré": a group of buildings or constructions standing as one or several housing units;

- Church/mosque/temple: A church structure may have one main building, with another building for pastors. The main building and that of pastors stand as a single structure, with their primary use, that is church;
- Schools/universities;
- Shops/office/firm/commercial building: a shop, an office, a mall may have residential units. Structures used for residential and business purposes (for example, a combination of shops and houses) must be classified as shops/office/firm/commercial building. However, the answer to the following question must be Yes: "Residence?"
- Clinic/hospital;
- Other (please specify in the next screen).

If the structure is multi-purpose, the type of structure must be chosen depending on the primary use of the structure;

Column (4) [Residence (Yes/ No)]: Indicate whether the structure is used for residential purposes (eating and sleeping) by writing Y for "Yes" In cases where a structure is used for commercial purposes or others, write N for "No". Structures used for residential and commercial purposes (for example; a combination of warehouse and residence), must be classified as residential (Y in column 3). Make sure you take into account a housing unit found in a non-residential structure (for example: a security agent living in a factory or church). All structures must be listed, including vacant structures, structures under construction, as well as structures where household members refuse to cooperate or are not home when you show up.

Column (5) [Household GPS Coordinates]

Column (6) [Serial number of households in the structure]: It is the serial number assigned to each household in the structure. There may be more than one household in a structure. The first household in the structure will always have number "1". If there is a second household in the structure, then it must be registered on the following line, and "2" must be written in column (6). If the structure is a building with several apartments or a square, assign only one order number to the building or square (on the cluster plan, only one small square will appear, with only one number), but fill in columns (2) to (9) for each household separately. Each household must have its own address, that is the household number. In the case of separate households within the square, assign a number to each household.

Column (7) [Name of household head]: Write the name of the household head. You can only have one head per household;

Column (8) [size of household]: Write the number of people who usually live in the household.

Column (9) [Comments on the household/household occupation condition]: take note of all special comments considered necessary for the identification of a household (for example: person at home or refusal of the household).

If the structure comprises apartments, you should assign only one structure's number (only one number with a single square should appear in the EA sketch sheet for this structure). However, all columns from (2) to (9) should be filled for each apartment. Each apartment should have its address, which is the number of the apartment in the structure.

The mapping and enumeration team should ensure it locates the hidden structures. In some regions, structures were constructed randomly in such a way that they might easily be missed. Especially in rural areas, structures might be hidden by tall weeds and trees. If there is a way

in from the counted structure, check whether the way leads to another structure. Talking with the people living in the locality may enable to identify the hidden structures.

Before submitting all sheets to supervisors, the agents must ensure that the location plan of the cluster and sketch are properly drawn, that information on the location of the cluster are incomprehensible, and that the household counting sheets are properly and carefully filled.

6. Segmentation of large EAs

A number of selected EAs may be large. A complete list of the households of these EAs may represent an important cost and may not be appropriate to a survey. These EAs may be subdivided in several small segments, of which only one will be retained for the survey and will be counted. In this case, the EESI 3 cluster corresponds to a segment of the EA. Whenever the team arrives in a large EA, which may need segmentation, it will first go round the EA and rapidly count in order to obtain the estimated household number residing in the EA. If the estimated size of the EA is higher than 400 households, the team must tell the supervisor, with the exact number of clusters, the estimated number of households and the number of segments to be created. The decision to segment and the number of segments to be created may be only be made by the supervisor. For easy operation, the recommended number of segments is 2. You should avoid having a large number of segments (above 3) if it is not really necessary in order to avoid errors.

You should ideally have segments with approximately equal size, but it is also important to adopt easily identifiable segments boundaries. You should first draw the location plan of the whole EA. With identifiable boundaries such as roads, streams and power lines, divide the EA in a given number of segments with almost equal size. On the cluster location map, clearly display the boundaries of the segments created. Sequentially scan the segments. Assess the size of each segment in the following manner: rapidly complete the number of houses in each segment, add them and calculate the proportion of houses for each segment.

Please note: the decision to segment shall only be made by the supervisor.

Example: In an EA with 400 structures divided in 2 segments whose rapid counting enabled to obtain the following numbers of structures:

Segment 1	251 structures, that is	251/400	63%
Segment 2	149 structures, that is	149/400	37%
EA Set	400 structures, that is	400/400	100%

On the *segmentation sheet*, write for each segment, the number and percentage of structures, as well as the cumulative percentage of structures. The last cumulative percentage of structures is always equal to 100.

Segment N°	Number of structures	Percentage	Cumulative percentage
1	251	63	63
2	149	37	100

For each large EA to be segmented, a random number will be selected at the central office and included in the file. Compare this random number with the cumulative size. Select the first segment whose cumulative size is higher than or equal to the random number.

Random number: 67

Selected segment: Segment N° 2







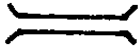















Proceed with the households counting operation in segment N° 2 as described in the sections below, see Appendix 3 for an example of filled segmentation sheet. Draw a detailed sketch of the selected segment and count all households found in the selected segment.

7. Quality control

In order to ensure that work completed by each team is acceptable, quality control will be completed. The supervisor should go round the EA during the mapping and counting operation and assess the quality of completed clusters. The supervisor must control all counting areas from the application. The agent will regularly display data collected on the map in order to ensure that he/she has covered all the EA, and examine the error list of each cluster.

Appendices

Appendix 1: Standard mapping symbols

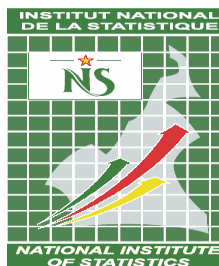
Orientation to the north	
Boundaries of the EA	
Tarred road	
Carriage road	
Path or trail	
Stream	
Bridge	
Pond, lake, etc.	
Mountain	
Water hole (wells, fountain, etc.)	
Market	
School, high school, etc.	
Administrative building	
Church, temple, etc.	
Mosque	
Cemetery	
Residential structure	
Non-residential structure	
Empty structure	
Hospital, dispensary, PMI, etc.	
Electric pole	
Tree or bushes	

Appendix 2: Examples of mapping and enumeration sheets

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THIRD SURVEY ON EMPLOYMENT AND THE INFORMAL SECTOR IN CAMEROON (EESI 3)

LOCATION PLAN OF THE EA

Region:|_|_|

Division:|_|_|

Subdivision:|_|_|

EA N°: |_|_| CLUSTER N°: |_|_|

Name of locality:

Area of residence:|_|

Form I, EESI 3

EESI 3:|_|_|

Observations :

Acces

.....

.....

Accommodation possibilities:

.....

Other useful information :

.....

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.....

.....

.....

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.....

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SKETCH FORM

Region:|_|_|

Division:|_|_|

Subdivision:|_|_|_|

EA N°:|_|_|_| CLUSTER N°: |_|_|_|

Name of locality:

Area of residence:|_|_|

Form I, EESI 3

EA EESI 3: |_|_|_|

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Segmentation Form

Form III, Segmentation

Identification	
Labellings	Code
Name of locality:	
Grappe EESI 3 :	_ _ _
Urbain/Rural:	_
N°RGPH ZD:.....	_ _ _
Subdivision:	_ _ _
Division :	_ _
Region :	_ _
Mapper's name:	_ _
Lister's name:	_ _

Segment number: |_|_|

Segment number	Number of structures	Percentage	Cumulative percentage
1			
2			
3			

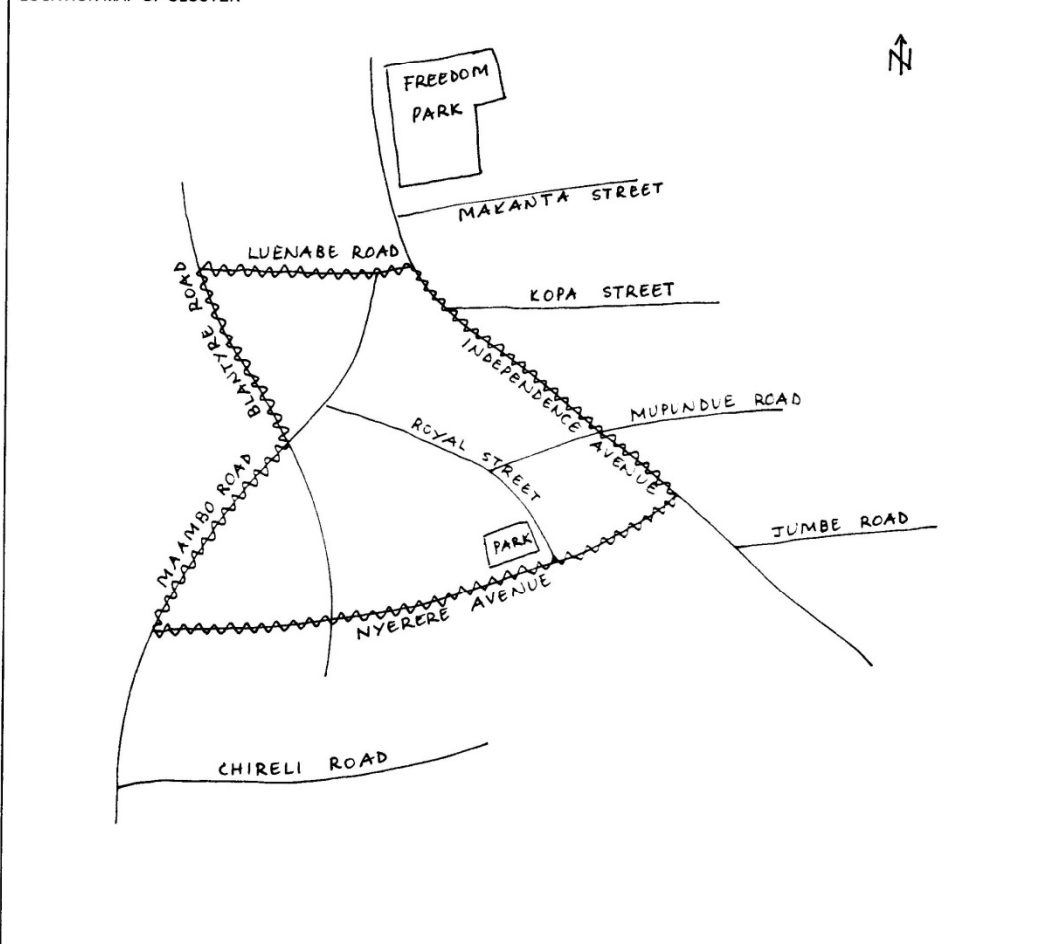
Random number :.....

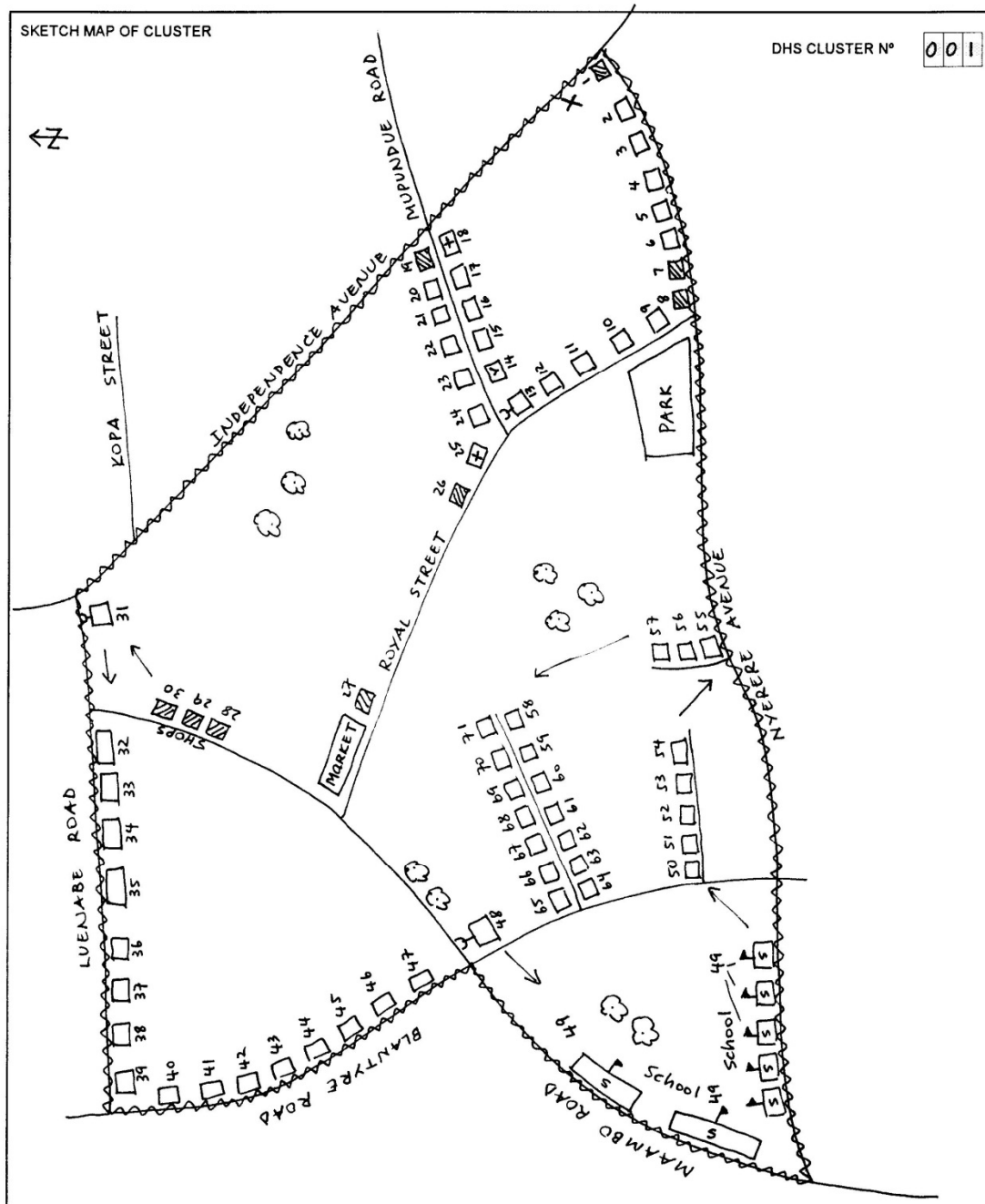
Segment choosen :.....

IDENTIFICATION				
PROVINCE <u>KAYES</u>	PROVINCE CODE <table border="1"><tr><td>1</td></tr></table>	1		
1				
DISTRICT <u>DIEMA</u>	DISTRICT CODE <table border="1"><tr><td>0</td><td>4</td></tr></table>	0	4	
0	4			
TOWN/VILLAGE <u>DIEMA</u>	TOWN/VILLAGE CODE <table border="1"><tr><td>0</td><td>2</td></tr></table>	0	2	
0	2			
NAME OF MAPPER <u>Harrison Sidibe</u>	CLUSTER CODE <table border="1"><tr><td>0</td><td>1</td><td>7</td></tr></table>	0	1	7
0	1	7		
NAME OF LISTER <u>John Melaku</u>	DHS CLUSTER N° <table border="1"><tr><td>0</td><td>0</td><td>1</td></tr></table>	0	0	1
0	0	1		

OBSERVATIONS:

LOCATION MAP OF CLUSTER





Laisser en blanc		Numéro de la structure (1)	Adresse / Description de la structure (2)	Résidence O/N (3)	Numéro du ménage dans la structure (4)	Nom du chef du ménage (5)	Taille du ménage (6)	Observation/ état d'occupation du ménage (7)
Numéro des ménages tirés	Numéro séquentiel du ménage							
	001	001	maison en terre et toit en paille	0	01	M ^{re} AGWE	10	
	✓	002	maison en brique - 11 - 11 -	N	00			ou l'actuel.
	002	003	maison en terre et toit en paille	0	01	M ^{re} PROUDSI	06	
A	003	004	maison en terre et toit en paille	0	01	M ^{re} KIDINA	15	
	✓	005	maison en paille et toit en paille	N	00			Eglise.
	004	006	maison en terre, toit en paille	0	01	M ^{re} KARIO	10	
	005	007	maison en terre et toit en paille	0	01	M ^{re} KARIO	02	
	006	008	maison en terre et toit en paille	0	01	M ^{re} KARIO	06	
	007	009	maison en terre et en toit	0	01	M ^{re} KARIO	10	
	008	010	maison en terre et en toit	0	01	M ^{re} KARIO	03	
	009	011	maison en terre et en toit	0	01	M ^{re} KARIO	10	
B	010	012	maison en terre et en toit	0	01	M ^{re} KARIO	05	
	011	013	maison en terre et en toit	0	01	M ^{re} KARIO	16	
	012	014	maison en terre et en toit	0	01	M ^{re} KARIO		Abbaye.
	013	015	maison en terre et en toit	0	01	M ^{re} KARIO	10	
	014			0	02	M ^{re} KARIO	04	
	015			0	03	M ^{re} KARIO	03	
	016			0	04	M ^{re} KARIO	01	Le faillir.
3	017			0	05	M ^{re} KARIO	01	
	018			0	06	M ^{re} KARIO	01	
	019	016	maison en terre et en toit	0	01	M ^{re} KARIO	06	M ^{re} BINYET
	020		petite maison en terre et en toit	0	02	M ^{re} KARIO	02	

maison en terre et en toit