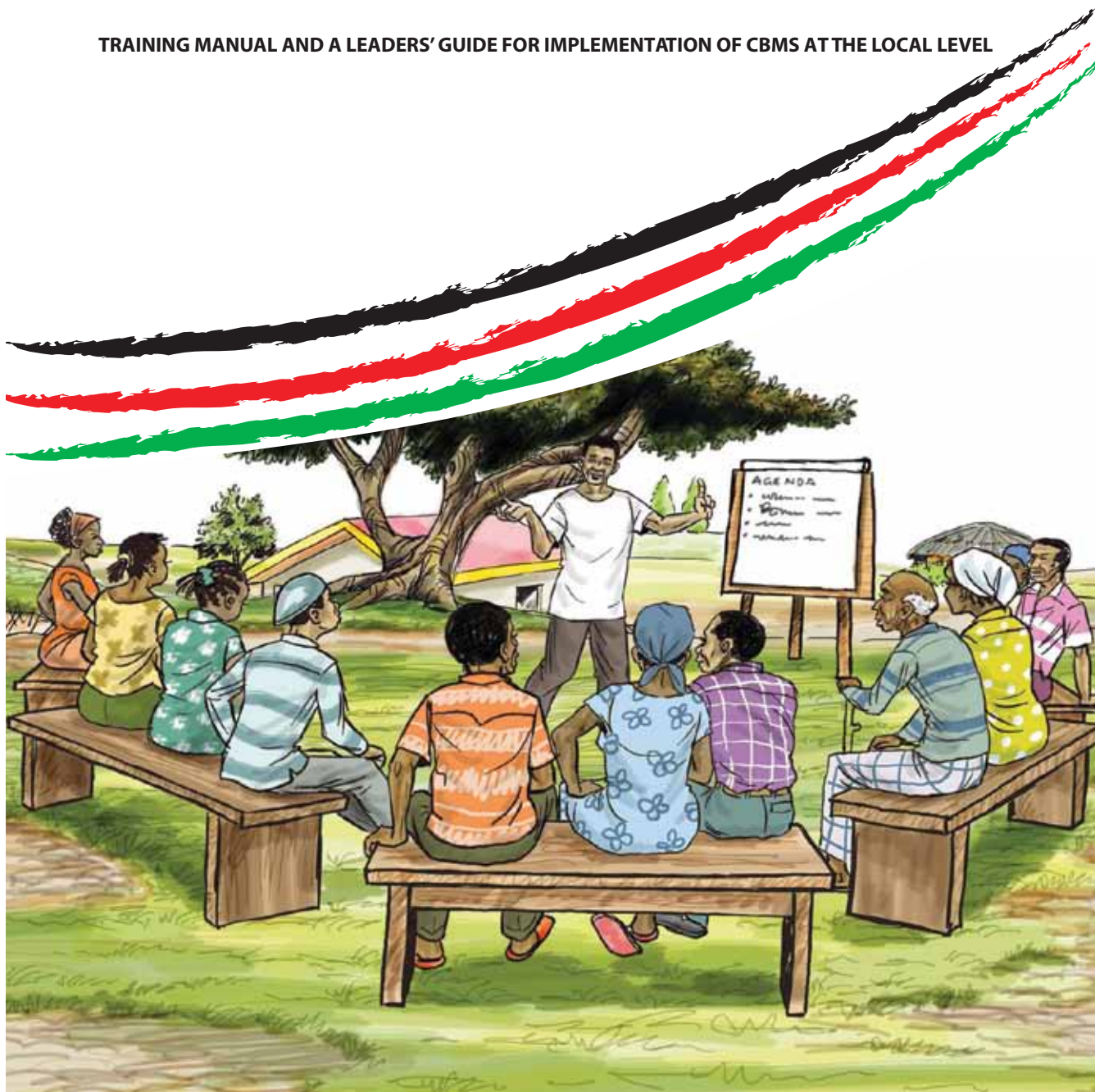


# COMMUNITY BASED MONITORING SYSTEM (CBMS) KENYA

TRAINING MANUAL AND A LEADERS' GUIDE FOR IMPLEMENTATION OF CBMS AT THE LOCAL LEVEL



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# Abbreviations and Acronyms

AIHD	African Institute for Health and Development
CBMS	Community Based Monitoring System
CIDA	Canadian International Development Agency
CSPPro	Census and Survey Processing System
DDO	District Development Officer
FGD	Focus Group Discussion
GGP	Globalization, Growth and Poverty
GoK	Government of Kenya
HH	Household
IDRC	International Development Research Cooperation
KEMRI	Kenya Medical Research Institute
KDHS	Kenya Demographic Health Surveys
KIHBS	Kenya Integrated Household and Budget Survey
KNBS	Kenya National Bureau of Statistics
LA	Local Authority
LGU	Local Government Unit
LPMS	Local Poverty Monitoring System
MDGs	Millennium Development Goals
MoH	Ministry of Health
MSPND&V2030	The Ministry of State for Planning, National Development and Vision and 2030
NGOs	Non Governmental Organisations
NRDB	Natural Resources Database
PEP	Poverty and Economic Policy
SPSS	Statistical Package for the Social Sciences

# 1 What is CBMS?

The Community-Based Monitoring System (CBMS) Network is part of the Poverty and Economic Policy (PEP) Network supported by the International Development Research Centre (IDRC) Canada through its Globalization, Growth and Poverty (GGP) Initiative, and by the Canadian International Development Agency (CIDA).

Launched in 2002, the CBMS network generally aims to assist its members develop, refine and institutionalize community-based monitoring systems in developing countries, and to promote CBMS knowledge and initiatives internationally. Furthermore, the Network promotes evidence-based policymaking, programme design and implementation while empowering local communities to participate in the process.

The CBMS approach was first developed in the Philippines, which remains to have the most advanced and widespread CBMS. To date, the Network has facilitated the development and implementation of CBMS in 12 countries including Bangladesh, Cambodia, Indonesia, Laos Peoples Democratic Republic, Pakistan, Philippines and Vietnam in Asia, and Benin, Ghana, Kenya, Tanzania and Zambia in Africa.

The CBMS was developed in response to the need for a regular source of up-to-date information at the local levels of social economic development. Typically, data that are used for planning and programming are secondary data, which often than not are unreliable and inadequate at the community contact level.

For example, the Kenya Integrated Household and Budget Surveys (KIHBS) and the Kenya Demographic Health Survey (KDHS) are generated after a period of time through surveys undertaken by the Kenya National Bureau of Statistics (KNBS). The KDHS is done after every three years. There are also data that can only be generated from one agency as an official source such as the Ministry of Health (MoH) for health matters; nutrition data from the MoH and from the Kenya Medical Research Institute (KEMRI) and its local counterparts; data on agriculture from the Ministry of Agriculture, etc. Most secondary data have different reference period. The aim of CBMS is to collate this information in one survey on a periodical basis with the involvement of the locals at the household level.



## 2 Why CBMS?

Poverty is a localised phenomenon and to tackle it comprehensively requires the involvement of all the stakeholders right from the grassroots level. This is because most centrally planned national poverty alleviation programmes may not adequately address the specific needs of local areas, thus the need to incorporate the local people, who are the chief beneficiaries, in these poverty eradication endeavours. CBMS makes deliberate effort to understand the regional dimensions of poverty that ensure poverty alleviation programmes work most effectively and achieve concrete results. Since local conditions and the problems faced by the communities are best understood by their members, CBMS nurtures a monitoring system that is conducted, monitored and owned by the communities.

CBMS was developed in response to the need for a regular source of up-to-date information at the local level. In particular, it was seen as a way of providing data for local development planning and monitoring. Such data is especially needed in countries where government functions are being decentralized. Decentralization advocates often argue that one of its most important benefits is that local-level decision makers have better grasp and knowledge of the prevailing situation than their counterparts at higher levels of government. They also argue that decentralization provides better opportunities for local people to participate in government's decision making on policies and programmes that affect them. But neither of these benefits are realized automatically. CBMS attempts to enhance the opportunities of these benefits being realized by providing regular, reliable, and relevant local data in a form that can be easily understood by local governments, decision makers and other development actors.

Decision making on policies must be based on a current understanding of the situation of people living in a particular area. It must also be based on knowledge of the strengths and weaknesses of past and current programmes and projects. CBMS aims to help in both areas by providing socio-economic information about individuals, households and communities in a particular area as well as information about the impact of government services and other activities on these people, households and communities. This second aspect constitutes a form of progress monitoring.

CBMS has been designed to focus explicitly on poverty. Understanding poverty—a function that is implicit in CBMS—is based on the concept that poverty extends beyond the income variable. Hence, CBMS incorporates other basic needs such as health, education, shelter, peace and order. As shown in Annex 1, the 'standard' CBMS has a carefully designed and relatively simple set of indicators. However, the questionnaires that form the main data collection instruments for CBMS provide a much wider range of information than this core set.

Specifically, CBMS seeks to provide the following:

- (i) an organised system of collecting information for policymakers and programme implementers at all geopolitical levels;
- (ii) up-to-date information on the welfare status and needs at the community and household levels;
- (iii) a tool for monitoring and evaluating the impact of projects and programmes; and
- iv) a means for better local governance.

A community-based monitoring system entails the participation of people in the community to collect process and use the data. The system will provide information on the welfare conditions of all members of the community using a predefined core set of indicators as found in Annex 1.

The objective of the CBMS is to play a central role in providing local decision makers with the evidence to actually make decisions. The CBMS is designed to capture almost all the basic data that we need especially so if our programmes and projects pertain to human and social capital like health, education, nutrition, housing, income, peace and order and the production sector. In particular, CBMS is a way of providing necessary data to guide planning and monitoring at the local level and practical, reliable, decision-making processes. The tool also provides adequate information to back up policy formulation, design and implement programmes and projects for beneficiaries.

How is CBMS different from other poverty eradication strategies?

- ❑ With CBMS, we have disaggregated data that can easily target and identify **who are the poor? where are the poor? why are they poor?**
- ❑ Community members are involved at all the stages of the process.
- ❑ The outcome of the household census are analysed and validated by the community members themselves. This builds the confidence and ensures ownership of the process by the community.



Training of CBMS Trainers in a Group Work Session



### 3 Who is the Manual For?

This manual has been produced for use by the team which will introduce and execute the Community Based Monitoring System (CBMS) at the local authority/community level. The manual is also useful in the training of the trainers who will in effect impact this knowledge onto the personnel working at the community level. In this manual, we refer to this process as 'training of trainers' (ToT).

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#### The Trainer

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He or she will be responsible for training the personnel charged with the responsibility of implementing CBMS at the community level. She/he will not necessarily be a member of a local authority but should possess advance knowledge on community participation in development work.



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#### Local Development Officers (LDOs)

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The LDOs will be responsible for contacting the communities, assisting the trainer in planning and implementation, monitoring and supervision, and for follow-up contacts with the communities for the management of the results of CBMS. The Local Development Officer is the permanent representative of the Ministry at the local level.

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#### CBMS Enumerators

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This manual is designed to explain to the interviewers (enumerators) how to conduct data collection. The manual includes information about planning and carrying out the survey, training activities and field procedures. It also details interview techniques, procedures for completing the questionnaires, as well as data analysis.

## 4 CBMS in Kenya

### CBMS Coverage in Kenya

In Kenya, the Global CBMS Network has been funding a Local Poverty Monitoring System (LPMS) in Tana River District since 2007, implemented by the African Institute for Health and Development (AIHD). Phase I of the study was conducted in 2007-2008, and the results have illustrated that CBMS can be utilized in several ways including:

- design of projects by civil society organisations in their areas of operation;
- monitoring of the Millennium Development Goals (MDGs);
- planning by local authorities;
- regular monitoring of welfare conditions for households and individuals;
- and policy formulation by Government based on the ability of the system to provide up-to date information on the welfare status and needs at the community and household levels.

Phase II of the study in Tana River District was conducted in 2009-2010. This study was part of the CBMS work aimed at capturing the impact of the global financial crisis (GFC) in various countries, including Kenya. A household census covering 5,882 households was conducted. The large number of households covered was due to the fact that this was Phase II of the survey and that entailed expansion from the initial three sub-locations (in 2007- 2008) to six (in 2009-2010).

In view of the CBMS benefits, the Ministry of State for Planning and National Development and Vision 2030 (MSPND&V2030), has been supporting the implementation of this approach at the local authorities' level. To date CBMS has been successfully piloted in Murang'a, Kisumu and Kilifi local authorities. A total number of 5963 households were involved and are distributed as follows: Murang'a 2,286; Kilifi 2,649; and Kisumu 2,990.



Map 1. Sites in 1. Murang'a 2. Kisumu 3. Kilifi. 4. Tana River

# 5 CBMS at the Local Authority Level

## About the Local Authority

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CBMS is typically designed for implementation at the lowest administrative level -- in this case the local authority. It is intended primarily to provide local decision makers with information they can use to design and implement policies that improve the well-being of constituents. Information through CBMS is also intended for use in decision making at ward, constituency and national levels of government. This happens when the local authority (LA) uses the CBMS data to inform decision makers at higher levels about its own needs and those of the people it serves. The CBMS tool is intended to fill gaps in the data on different dimensions of poverty provided by national surveys and censuses. In particular, CBMS fills gaps related to disaggregation and frequency. In terms of disaggregation, national surveys—because they are based on a sample—do not usually provide adequate data on populations covered by a particular local government. This problem is particularly acute in countries with very large populations. The sampling method may completely miss out local government areas, while others may have proportions of their populations covered but the samples are too small and unrepresentative to provide reliable estimates. In many developing countries, governments lack the financial resources to conduct national surveys on a regular basis. Results also often take some time to be released, resulting in their much-reduced usefulness in policymaking.

## Data Collection at the Local Authority

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Data analysis usually requires skills that are scarce at local authority level, especially in poorer, rural areas. Ideally, the national population census should cover every household and individual in detail. However, to limit the size and expense of the operation the tendency is increasingly to restrict the number of questions to the minimum. In addition, income and employment data collected through censuses tend to be of poor quality and substantially underestimates both income and employment levels. In terms of frequency, Kenya often conducts the national population census only once every 10 years, with the results taking at least a year, and often even longer, before they become officially available. This is not ideal for policymaking purposes.

CBMS addresses the issue of data disaggregation by focusing specifically on the area under the jurisdiction of a particular local government. In Kenya, this involves a census of all households in the area, thus permitting disaggregation into sub-areas. In other countries, such as Senegal and Vietnam, CBMS involves a sample survey rather than a census. However, the survey is designed to give reliable results in terms of small areas and/or specific community groupings.



## Data Validation at the Local Authority

Active involvement of key local actors and citizens' groups in the CBMS validation process enhances broad-based participation in budgeting and resource allocation decisions. If the current CBMS validation process is focused primarily on local government officials, this can be expanded to include other civil society groups. In countries like the Philippines, there exists a local budgeting system that explicitly provides for civil society participation in budget making. At the local level, this happens through the village development council, which includes representatives from different groups and sectors — women, village captains, the municipal/city mayor and the Congress representative. Sector representatives in the village development council are elected from NGOs accredited by the Local Government Unit.

In Kenya, CBMS has been piloted in three sites (Murang'a Municipal Council, Kisumu Municipal Council, and the Kilifi Town Council). Part of what has been used has been covered under the study objectives below:

## Study Objectives

This project has two general objectives:

1. develop a CBMS that generates data at the council level on a predetermined core set of indicators (Annex 1) and enhances participatory planning and budgeting for MDG-related indicators.
2. provide a basis for monitoring budgetary allocations at the Council level to MDG-related interventions.

### The specific objectives are to:

- provide communities with simple tools for data collection on MDG related indicators, to report on the impact of the interventions and monitor the trends in development;
- enhance the capacity at the council level for better collection, processing, analysis and interpretation of MDG-related data;
- generate information that can be utilized by policy makers (ward, council and constituency levels) for effective planning, implementation and monitoring of development in their areas of jurisdiction;
- monitor budgets by the wards, councils and constituencies in the pilot areas (as appropriate);
- facilitate the process of poverty profiling and development planning; and
- test a locally feasible data capturing, processing, interpretation and dissemination CBMS.

## The CBMS Implementation Process

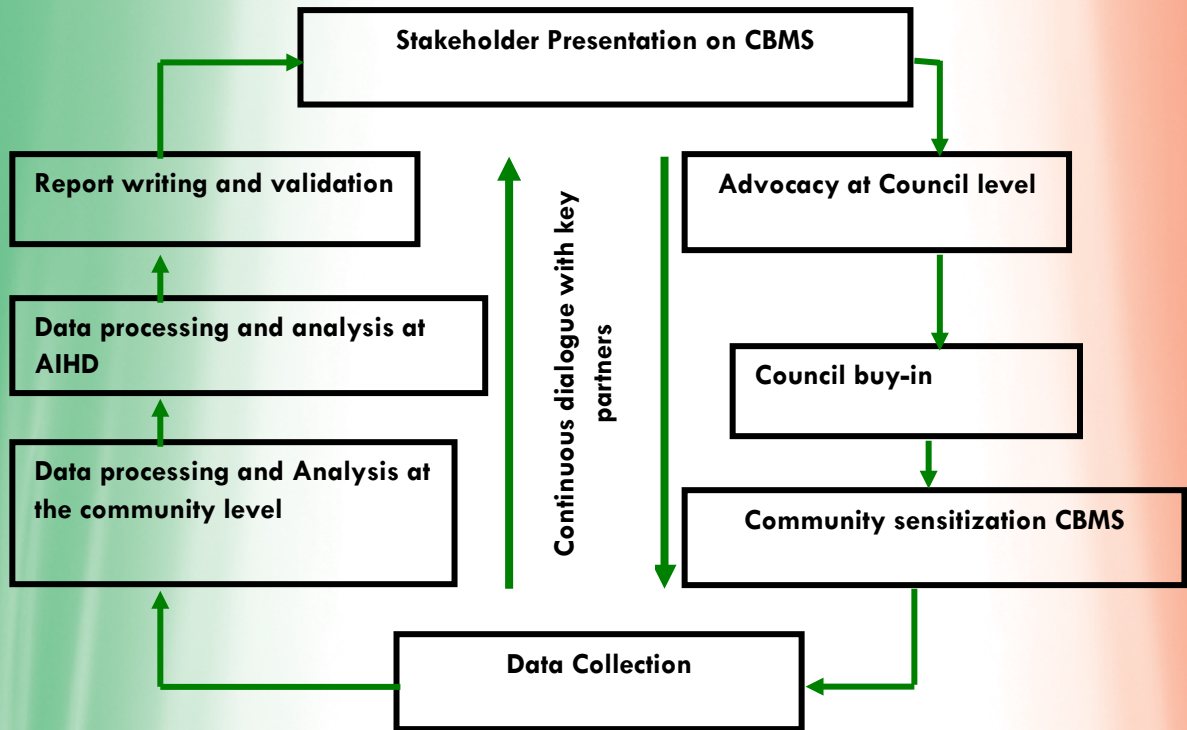


Figure 1: The CBMS implementation process

# 6 Data Collection

## 6.1 What is Data Collection?

Simply put, data collection is gathering information (figures, facts, words or responses) that describes a situation from which conclusions can be drawn<sup>1</sup>. To do so, one needs to identify the **key quality characteristics** to measure, how to measure them, and what to do with the data collected.

What exactly is a key quality characteristic? It is a characteristic of the product or service produced by a process that a community (consumers, customers, residents, constituents, etc) have determined is important to them. Examples of key quality characteristics are the speed of delivery of a service, the finish on a set of stainless steel shelves, the precision with which an electronic component is calibrated, or the effectiveness of an administrative response to a tasking by higher authority. Every product or service has multiple key quality characteristics. When you select the processes to improve, you need to understand the process steps that produce the characteristics that your customers perceive as important to product quality.

Data collection is the planning for and obtaining useful information on key quality characteristics that define your process. However, simply collecting data does not ensure that you will obtain relevant or specific enough data to tell you what is occurring in your process. The key issue is not how we collect data; rather, it is how we obtain useful data.

## 6.2 Why Do We Need to Collect Data?

Every process improvement effort relies on data to provide a factual basis for making decisions throughout the 'Plan-Do-Check-Act' cycle. Data collection enables a team to formulate and test working assumptions about a process and develop information that will lead to the improvement of the key quality characteristics of the product or service. Data collection improves your decision making by helping you focus on objective information about what is happening in the process, rather than relying on subjective opinions. In other words, *I think the problem is... becomes... the data indicate the problem is....*

## 6.3 Quantitative Data Collection

Quantitative data collection involves the use of numbers to assess information. This information can then be evaluated using statistical analysis which offers researchers the opportunity to dig deeper into the data and look for greater meaning. Certain information is by nature numerical. For example asking a person their actual age or yearly income will result in a number.

### 6.3.1 CONDUCTING AN INTERVIEW

Successful interviewing is an art form and should not be treated as a mechanical process. Each interview is a new source of information, so make it interesting and pleasant. The art of interviewing develops with practice, but there are certain basic principles that are followed by every successful interviewer. In this section, you will find a number of general guidelines on how to build rapport with a respondent and conduct a successful interview.

<sup>1</sup> [www.esomar.org/index.php/glossary-d.html](http://www.esomar.org/index.php/glossary-d.html)



## **A. Creating Rapport with the Respondent**

The field supervisor will assign an interviewer to make the first contact with a household selected for the CBMS census. Ideally, the household head should be interviewed in any household or his spouse in cases where the household head is unavailable. However, if none of these are available, then any household member who is 18 years and over is eligible. As an interviewer, your first responsibility is to establish rapport with the respondent.

Before you start to work in an area, your supervisor will have informed the local leaders, who will in turn inform the households in the area that you will be coming to interview them. You will also be given a letter or identification card that states that you are working with the African Institute for Health and Development. At the beginning of an interview, you and the respondent are strangers to each other. The respondent's first impression will influence her/his willingness to cooperate in the interview. Be sure that your manner is friendly as you introduce yourself. Make a good first impression.

When you approach the respondent for the first time, do your best to make her/him feel at ease. With a few well-chosen words, you can put the respondent in the right frame of mind for the interview. Open the interview with a smile and greeting, such as "good afternoon," and then proceed with your introduction.

The introduction for the questionnaires should be read exactly as they are in the questionnaire. For instance:

"My name is \_\_\_\_\_. I am a representative of the African Institute for Health and Development, working in conjunction with the Government of Kenya. We are conducting a welfare household census, and we are interviewing all people who are affected by poverty directly or indirectly. I would like to talk with you and ask you some questions."

### **1. Always have a positive approach**

Never adopt an apologetic manner, and do not use phrases such as "are you too busy?" Such questions invite refusal even before you start. Rather, tell the respondent, "I would like to ask you a few questions" or "I would like to talk with you for a few moments."

### **2. Stress confidentiality of responses when necessary**

If the respondent is hesitant about responding to the interview or asks what the data will be used for, explain that the information you collect will remain confidential. No individual names will be used for any purpose, and all information will be grouped together to write a report. Also, you should never mention other interviews or show completed questionnaires to other interviewers or supervisors in front of a respondent or any other person.

### **3. Answer any questions from the respondent frankly**

Before agreeing to be interviewed, the respondent may ask you some questions about the census or how the household or she was selected to be interviewed. Be direct and pleasant when you answer.

The respondent may also be concerned about the length of the interview. If asked about the length of the questionnaire, say that the interview usually takes about 30 to 45 minutes. Indicate your willingness to return at another time if it is inconvenient for the respondent to answer questions then.

### **4. Interview the respondent alone**

The presence of a third person during an interview can prevent you from getting frank, honest answers from a respondent. It is therefore very important that the individual interview be conducted privately and that all questions be answered by the respondent alone.

If other people are present, explain to the respondent that some of the questions are private, and ask where you can talk alone. Sometimes asking for privacy will make others more curious and want to listen; so you will have to be creative. Establishing privacy from the beginning will allow the respondent to be more attentive to your questions.

If it is impossible to get privacy, you may have to carry out the interview with the other people present. However, try to separate yourself and the respondent from the others as much as possible.

## **B. Tips for Conducting the Interview**

### **1. Be neutral throughout the interview**

Most people are polite and will tend to give answers that they think you want to hear. It is therefore very important that you remain absolutely neutral as you ask the questions. Never, either by the expression on your face or by the tone of your voice, allow the respondent to think that she/he has given the 'right' or 'wrong' answer to the question. Never appear to approve or disapprove of any of the respondent's replies. If the respondent gives an ambiguous answer, try to probe in a neutral way, asking questions such as the following:

"Can you explain a little more?"

"I did not quite hear you. Could you please tell that me again?"

"There is no hurry. Do you need a moment to think about it?"

A respondent may ask you questions during the interview, for example, about what he/she stands to gain from the interview. Tell her that the questions are good ones and that you will answer them to the best of your ability after you are done getting her answers. The idea here is that the interviewer should do what any good neighbour would do: answer basic questions to the best of her ability while informing the respondent that she is not an expert on the topic.

### **2. Never suggest answers to the respondent**

If a respondent's answer is not relevant to a question, do not prompt her/him by saying something like "I suppose you mean that...Is that right?" In many cases, she/he will agree with your interpretation of her/his answer, even when that is not what she/he meant. Rather, you should probe in such a manner that the respondent comes up with the relevant answer. You should never read out the list of coded answers to the respondent, even if she/he has trouble answering.

### **3. Do not change the wording or sequence of questions**

The wording of the questions and their sequence in the questionnaire must be maintained. If the respondent has not understood the question, you should repeat the question slowly and clearly. If she/he still does not understand, you may reword the question, being careful not to alter the meaning of the original question. Provide only the minimum information required to get an appropriate response.

### **4. Handle hesitant respondents tactfully**

There will be situations where the respondent simply says, "I don't know," gives an irrelevant answer, becomes bored or detached, or contradicts something she/he has already said. In these cases, you must try to re-interest the respondent in the conversation. For example, if you sense that she/he is shy or afraid, try to restore confidence before asking the next question. Spend a few moments talking about things unrelated to the interview (e.g. her/his town or village, the weather, her/his daily activities).

If the respondent is giving irrelevant or elaborate answers, do not stop her/him abruptly or rudely, but listen to what she/he has to say. Then try to steer her/him gently back to the original question. A good

atmosphere must be maintained throughout the interview. The best atmosphere for an interview is one in which the respondent sees the interviewer as a friendly, sympathetic and responsive person who does not intimidate her/him -- and to whom she/he can say anything without feeling shy or embarrassed. As indicated earlier, the major problem in controlling the interview may be one of privacy. This problem can be prevented if you are able to obtain a private area in which to conduct the interview.

If the respondent is reluctant or unwilling to answer a question, try to overcome her/his reluctance by explaining once again that the same question is being asked of so many people in his/her community and that the answers will all be merged together into a report. If the respondent still refuses, simply write REFUSED next to the question and proceed as if nothing had happened. If you have successfully completed the interview, you may try to obtain the missing information at the end, but do not push too hard for an answer. Remember, the respondent cannot be forced to give an answer.

#### **5. Do not form expectations**

You must not form expectations as to the ability and knowledge of the respondent. For example, do not assume that respondents from rural areas or those who are less educated do not know much about the issues being investigated.

On the other hand, remember that differences between you and the respondent can influence the interview. The respondent, believing that you are different from her/him, may be afraid or mistrustful. You should always behave and speak in such a way that she/he is put at ease and is comfortable talking to you.

#### **6. Do not hurry the interview**

To ensure that the respondent understands what she/he is being asked, ask the questions slowly but without being patronizing. After you have asked a question, pause and give her/him time to think. If the respondent feels hurried or is not allowed to formulate her/his own opinion, she/he may respond with "I don't know" or give an inaccurate answer. If you feel the respondent is answering without thinking, just to speed up the interview, say to the respondent, "There is no hurry. Your opinion is very important, so consider your answers carefully."

### **C. Language of the Interview**

The questionnaires for the CBMS project are in English, and you are required to translate them to a language that the respondent is comfortable with. It is very important not to change the meaning of the question when you rephrase it or interpret it in another language. During this training, we will be practicing interviews in the local languages.

One of the first things you will do when you approach a household to do an interview is to establish the language or languages that are spoken there. The field teams will be assigned in such a way that you will be working in an area in which your language is spoken; so there should be few cases in which respondents do not speak your language. In such cases, you may find another language that both of you speak and conduct the interview in that language.

However, in some cases, it will not be possible for you to find a language that both you and the respondent speak. In this case, try to find out whether the respondent speaks a language that another member of your team or the team supervisor speaks. If so, tell your supervisor so that she/he can arrange for that person to conduct the interview.

If the respondent does not speak a language that any of your team members speak, you need to rely on a third person to translate. It is best if you can find an interpreter of the same sex as the respondent. Avoid



using the respondent's spouse as an interpreter. Children are also unsuitable interpreters. Remember to avoid using interpreters at all if possible, since this will not only jeopardize the quality of the answers but will also mean spending more time conducting the survey.

### 6.3.2 FIELD PROCEDURES

The CBMS census Fieldwork will proceed according to a timetable. The census will be successful only if each member of the interviewing team understands and follows correct field procedures. The following sections review these procedures and describe the proper steps for receiving work assignments and keeping household records.

#### A. Preparatory Activities and Assignment Sheets

Each morning, your supervisor will brief you on your day's work and explain how to locate the households assigned to you. When your supervisor assigns households to you, you should write the identification information on the Interviewer's Assignment Sheet. The identifying information (e.g. household number, name of the head of the household) and the date of assignment. It is also important to note a summary of the results of your work in the field for each household. At the end of the day, you will be responsible for recording the final outcome for all household visits and individual interviews that you have conducted.

When you receive your work assignment, review it and ask any questions you might have. Remember that your supervisor will not necessarily be available on site to answer questions when the work begins. It is important that you have the identifying information such as:

- household's number on the interviewer's assignment sheet because this is the information you will need to identify the selected households;
- you have all the questionnaires for each household in your assignment;
- you fill in the identification information on the cover page of each questionnaire;
- you know the location of the selected households you are to interview and have sufficient materials (e.g. maps, written directions) to locate them; and
- you understand any special instructions from your supervisor about contacting the households in your assignment.

Allocate a questionnaire for the eligible respondent identified in the household. Fill in the identification information on the questionnaire cover sheet for the respondent identified in the household schedule.

You will then proceed to interview the eligible household members. After completing an interview, you will record the final result of the interview in the space provided in your Interviewer's Assignment Sheet. You will also record your name at the bottom of the Interviewer's Assignment Sheet. Once all interviews are completed, you will record the number of eligible household members and number of completed questionnaires at the bottom of the sheet and return it to your supervisor. The date when each questionnaire is returned to the supervisor should also be recorded.

#### B. Problems Obtaining Individual Interviews

The following are examples of the kinds of problems the interviewer may experience obtaining an interview with an eligible respondent:

- ❑ Eligible respondent not available. If the eligible respondent is not at home when you visit, enter Code '2' (NOT AT HOME). You should contact the household at least three times on at least two different days, trying to make each visit at a different time of day. Under no circumstances is it acceptable to conduct all three visits on the same day and then stop attempting to contact the respondent.

- Respondent refuses to be interviewed. The respondent's availability and willingness to be interviewed will largely depend on the initial impression you make when you meet them. Introduce yourself and explain the purpose of the visit. Read the informed consent statement printed on the questionnaire. If the respondent is unwilling to be interviewed, it may be that the present time is inconvenient. Ask if another time would be more convenient and make an appointment. If the respondent still refuses to be interviewed, enter Code '4' (REFUSED) as the result for the visit on the assignment sheet and report it to your supervisor.
- Interview not completed. A respondent may be called away during the interview or may not want to answer all of the questions at the time of your visit. If an interview is incomplete for any reason, you should try to arrange an appointment to see the respondent again as soon as possible to obtain the missing information. Be sure that you record Code '5' (PARTLY COMPLETED) on the cover sheet of the questionnaire, and indicate the time you agreed on for a revisit. You should also report the problem to your supervisor.
- Respondent incapacitated. There may be cases where you cannot interview a person because s/he is too sick, because s/he is mentally unable to understand your questions, because s/he has a disability, etc. In these cases, record Code '6' (INCAPACITATED) on the cover sheet of the questionnaire and on your Interviewer's Assignment Sheet.

It is important that you keep the visit record on the Interviewer's Assignment Sheet accurate since this form provides a summary of all respondents in the census. After completion of interviews, these forms will be returned to the central office for review and will be used to calculate response rates.

### C. Making Callback Visits

You must make every effort to conduct interviews with all the households assigned to you and with the eligible members identified. Sometimes a household member will not be available at the time you first visit. You need to make at least three different visits when trying to obtain a household interview and at least three different visits when trying to obtain an individual interview.

At the beginning of each day, you should examine the questionnaires cover sheets to see whether you made any appointments for revisiting a household or eligible respondent. If no appointments were made, make your call backs to a household or respondent at a different time of day than the earlier visits. For example, if the initial visits were made in the early afternoon, you should try to arrange your schedule to make a call back in the morning or late afternoon. Scheduling call backs at different times is important in reducing the rate of non-response (i.e. the number of cases in which you fail to contact a household or complete an individual interview).

### D. Checking Completed Questionnaires

It is the responsibility of the interviewer to review each questionnaire when the interview is finished. This review should be done before you leave the household so that you can ensure that every listed question was asked, that all answers are clear and reasonable, and that your handwriting is readable. Also check that you have followed the 'skip' instructions correctly. You can make minor corrections yourself, but any serious error should be clarified by the respondent. Simply explain to the respondent that you made an error and ask the question again.

Do not recopy questionnaires. As long as the answers are clear and readable, it is not necessary that the questionnaire itself be neat. Every time you transcribe the answers to a new questionnaire, you

increase the chance of making an error. For this reason you are not allowed to use worksheets to collect information. Record ALL information on the questionnaires you have been provided with. Any calculations you make should be written in the margins or on the back of the questionnaire forms.

Anything out of the ordinary should be explained either in the margins near the relevant question or in the comments section at the end. These comments are very helpful to the supervisor in checking questionnaires. Comments will also be useful later in the office and can be used to resolve problems encountered during data entry.

#### **E. Returning Work Assignments**

At the end of fieldwork each day, check that you have filled out the cover sheet of the questionnaire for each household assigned to you, whether or not you managed to complete the interviews assigned. You should inform your supervisor about any problems you experienced in locating a household, completing a questionnaire, or conducting an interview with an eligible respondent. For these difficult cases, at least three visits will be made to a household during the census in an effort to obtain a completed interview.

Completed questionnaires are returned to your supervisor. Make sure you have filled in the final result and date of all interviews you completed and the date you returned the questionnaires to the supervisor on your Interviewer's Assignment Sheet.

#### **F. Data Quality**

It is the supervisor's responsibility to review the questionnaires from each study area while the interviewing team is still on site. It is especially important for the questionnaires to be thoroughly edited at the initial stages of fieldwork. The supervisor will then discuss with each interviewer the errors found in the collection of data. It may sometimes be necessary to send an interviewer back to a respondent in order to correct some data error.

#### **G. Supplies Required for Fieldwork**

Before leaving for the field, you should make sure you have adequate supplies for the day's work. These supplies include the following:

- A sufficient supply of household questionnaires
- Interviewer's assignment sheets
- Interviewer's manual
- Identification documents
- Blue ballpoint pens
- A briefcase or bag in which to carry the questionnaires
- Any personal items you will need to be comfortable, given the circumstances and the area in which you are working.

---

## **6.4 Summary of Field Procedures**

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### **Preparing for Data Collection**

Key activities for area supervisors:

1. Schedule data collection visits
2. Prepare information materials and tools for data collectors
3. Arrange for reliable and regular means of communication



### Planning Data Collection Visits

For area supervisors:

- Contact (ideally in person or by phone) each sample outlet and back-up facility to seek permission for data collection
  - Introduce the survey and its objectives
  - Use the letters of endorsement and introduction provided by the survey manager
  - Stress that information given will not be used for any other purpose except for the survey
- If some households refuse to participate, alert lead researcher who will contact the outlet directly, and if necessary, provide you with a alternative outlet
  - Luckily, this rarely happens
- Make appointments for data collection visits avoiding peak hours of household activities
- Plan for 1-2 hours for each data collection visit, plus travel time
- Prepare a schedule for each pair of data collectors, including:
  - Date and time of each visit
  - Name, number, sector, and contact person for each site
  - Address and location of each site
- Contact information for back-up facility to be visited if any
- Call each facility and confirm appointment the day before

### Preparing Materials for Data Collectors

For area supervisor:

1. A list of data collection teams and contact information;
2. The contact details of their area supervisor, including a mobile phone number to call in case of difficulty in the field;
3. A schedule of visits to survey sites;
4. The contact details of the sites to be visited;
5. Details of back-up facilities to be visited if scheduled visits are not possible;
6. Copies of letter(s) of endorsement and letter of introduction (if necessary a badge for identification);
7. Relevant handouts or instruction sheets;
8. Pens (pencils should not be used to record data), a clipboard and other supplies;
9. A notebook to record any significant events or findings; and
10. Field allowance for local expenses

### Regular Communications

For area supervisor:

- Provide data collectors with a mobile phone and phone number where they can contact you during data collection; and
- Arrange to meet with data collectors at the end of each day of data collection

### Actual Data Collection

For data collectors/enumerators:

Before going out to collect data each day:

- Check that you have all necessary materials for data collection

On arrival at the Household:

- Introduce yourself and present the letter(s) of endorsement and the letter of introduction.
- Check that information about the site on the data collection form is correct
- Enter the following information on Page 1 of the data collection form:

- Date
- Names/ code of data collectors/enumerators
- Collect data with the aid of the household head
- If anyone arrives, pause the survey and explain why it is important not to have them around
- Never leave the local data collection form at the household to be filled in later!

Before leaving the household:

- Check that data collection form is legible, accurate and complete
- Ask the household head whether they have any concerns related to the survey that they wish to be addressed

At the end of each day of data collection:

- Meet with your area supervisor
- Submit completed data collection forms and report back on your activities

For supervisors:

- Meet with data collectors/enumerators to collect completed forms and resolve any problems encountered
- Review each data collection form completed that day:
  - to make sure they are complete and legible
  - to verify missing or suspicious information
  - to make sure that a back-up facility has been visited if fewer than 50% of medicines were available in a sample outlet
- Uncertain or illegible data should be checked with data collectors - may need to re-contact household head to clarify
- Sign the first page of each form to record that it has been checked, but only once you are sure that data is complete, legible and there are no obvious mistakes

## 6.5 General Procedures for Completing the Questionnaire

To collect the information needed, you must understand how to ask each question, what information the question is attempting to collect, and how to handle problems that may arise during the interview. You must also know how to correctly record the answers that the respondent gives and how to follow special instructions in the questionnaire. This part of the training manual is designed to familiarize you with the census questionnaire.

### A. Asking Questions

Note that all instructions for the interviewer are printed in **BOLD LETTERS**, whereas questions to be asked of the respondent are printed in ordinary letters. It is very important that you ask each question exactly as it is written in the questionnaire. When asking a question, be sure to speak slowly and clearly so that the respondent will have no difficulty hearing and understanding the question. At times, you may need to repeat the question to be sure the respondent understands it. Do not change the wording of the question but repeat it exactly as it is written.

If after you have repeated a question and the respondent still does not understand, you may have to restate the question. Be very careful when you change the wording so that you do not alter the meaning of the original question.

To obtain a complete answer from a respondent in some cases you may have to ask additional questions (we call this probing). If you do this, you must be careful that your probes are 'neutral' and that they do not suggest an answer to the respondent. Probing requires both tact and skill, and it will be one of the most challenging aspects of your work as an interviewer.

## B. Recording Responses

In the CBMS census, all interviewers will use blue ink pens to complete all questionnaires. Supervisors will do all their work using red ink. There are two types of questions in the questionnaire: (1) questions with pre-coded responses; and (2) questions without pre-coded responses, that is, 'open-ended' questions.

### 1. Questions with pre-coded responses

For most questions, we can predict the types of answers a respondent will give. The responses to these questions are listed in the questionnaire. To record a respondent's answer, you merely circle the number (code) that corresponds to the reply. Make sure that each circle surrounds only a single number.

**Example:**

Nº	QUESTIONS	CODING CATEGORIES	SKIP
5	Have you ever attended school?	YES.....1 NO.....2	— 8

In some cases, pre-coded responses will include an 'OTHER' category. The 'OTHER' code should be circled when the respondent's answer is different from any of the pre-coded responses listed for the question. Before using the 'OTHER' code, you should make sure the answer does not fit in any of the other categories. When you circle the code 'OTHER' for a particular question, you must write the respondent's answer in the space provided if there is a blank line with an instruction to SPECIFY the response. If you need more room, use the margins or the comments section at the end, and write, 'see note in comments section.' If the response codes are numerical, as in the example above, only one response must be circled. If the response codes are alphabetical (A, B, C, etc.), circle as many codes as the answer applies.

### 2. Questions without pre-coded responses

The answers to some questions are not pre-coded. When entering the response for these questions, you must write the respondent's answer in the space provided. Usually, you will record a number in the boxes provided.

PREVIOUS						
Nº	QUESTIONS	CODING CATEGORIES				SKIP
1	In what month and year were you born?	MONTH.....				
		DON'T KNOW MONTH.....98				
		YEAR.....				
		DON'T KNOW YEAR.....9998				

For example, for a woman born in February 1968, you record the month as '02' and the year as '1968.'

## C. Correcting Mistakes

It is very important that you record all answers neatly. For pre-coded responses, be sure that you circle the code for the correct response carefully. For responses that need to be specified in the OTHER category, the



reply should be written legibly. If you make a mistake in entering a respondent's answer or she changes her reply, be sure that you cross out the incorrect response and enter the right answer. **Do not try to erase an answer.** Use two parallel lines across the incorrect response. Remember that if there are two responses for a particular question that allows only one response, it may not be possible later, when the data are being coded, to determine which the correct answer is. Here is how to correct a mistake:

**Example:** Manually circle codes 1 and 2 and put two parallel lines through one of the circles before printing.

Nº	QUESTIONS	CODING CATEGORIES	SKIP
5	Have you ever attended school?	YES.....1 NO.....2	— ? 8

## D. Following Instructions

### 1. Skip instructions

It is very important not to ask respondent questions that are not relevant to her situation. For example, a respondent who has never attended school should not be asked what level of schooling she/he has attained. In cases where a particular response makes subsequent questions irrelevant, an instruction is written in the questionnaire directing you to skip to the next appropriate question. It is important that you carefully follow skip instructions.

**Example:**

Nº	QUESTIONS	CODING CATEGORIES	SKIP
39	Have you personally benefited from the Youth Development Fund?	YES.....1 NO.....2 DO NOT KNOW.....8	} 41 } 41

Note that if you circled Code '2,' you would skip to Q. 41. In this case, Q. 40 is only asked of beneficiaries of the Youth Development Fund.

## E. Checking Completed Questionnaires

After you have completed an interview, you must review the questionnaire by carefully checking the answer to each question. It is important to check that you have followed all appropriate skip patterns and that you have not omitted any sections. If necessary, you may correct your handwriting or clarify answers. You should review the questionnaire before you leave the household, so that if you need to question the respondent further, s/he is likely to be available. You should write any comments about the interview that you feel will clarify the answers you recorded or that will be of interest to your supervisor. If you have any doubts about how to record an answer, feel free to write a note on the questionnaire and then check with your supervisor.

# 7 Procedures for CBMS Data Processing and Analysis

The Kenya CBMS team utilizes Statistical Package for the Social Sciences SPSS<sup>2</sup> for data analysis and CSPro for data entry. In this section of the manual we are going to take you through data processing using SPSS.

SPSS is a computer application that provides statistical analysis of data. It allows for in-depth data access and preparation, analytical reporting, generating graphics and modelling. SPSS is widely used by social scientists because of several reasons:

1. Of the major computer packages, it seems to be the easiest to use for the most widely used statistical techniques;
2. One can use it with either a Windows point-and-click approach or through syntax (i.e., writing out of SPSS commands.) Each has its own advantages, and the user can switch between the approaches;
3. Many of the widely used social science data sets come with an easy method to translate them into SPSS; this significantly reduces the preliminary work needed to explore new data.

There are also two important limitations that deserve mention at the outset:

1. SPSS users have less control over statistical output than, for example, Stata or Gauss users. For novice users, this hardly causes a problem. But a researcher who wants greater control over the equations or the output will need to either choose another package or learn techniques for working around SPSS limitations;
2. SPSS has problems with certain types of data manipulations, and it has some built in quirks that seem to reflect its early creation. The best known limitation is its weak lag functions, i.e. how it transforms data across cases. For new users working off of standard data sets, this is rarely a problem. But a researcher who wants to significantly alter data sets will have to either learn a new package or develop greater skills of manipulating SPSS.

Overall, SPSS is a starting point for researchers who want to perform quantitative research in social science because it is easy to use, and because it can be the foundation to learn more advanced statistical packages.

## A. Getting Started on SPSS

To start SPSS you can either double click the SPSS shortcut icon on the desk-top if you have one, or select the sequence **Start⇒Programmes⇒SPSS for Windows⇒SPSS 17.0** for Windows. (Note: SPSS has different release versions. In our case we are using 17.0 but the applications for the different versions are more or else the same).

The notation **Start⇒Programmes⇒SPSS for Windows⇒SPSS 17.0** for Windows means that you are to first select the Start menu, then Programmes, then SPSS for Windows and finally SPSS 17.0 for Windows. Unless some of the default settings for SPSS have been altered, the windows shown in Figure 3 will appear. If the insert panel shown in Figure 2 appears, put a check in the Don't show this dialog in the future box and click OK. We won't need this panel again.

<sup>2</sup> [http://www.hmdc.harvard.edu/projects/SPSS\\_Tutorial/spsstut.shtml](http://www.hmdc.harvard.edu/projects/SPSS_Tutorial/spsstut.shtml)

## B. Inputting Data

The SPSS data editor is a good tool for entering your data. The data editor displays the contents of the active datafile. The information in the data editor consists of variables and cases. It has a friendly interface that resembles an MS Excel spread sheet, and by entering the data directly into SPSS, you do not need to worry about converting the data from some other format into SPSS. For example, you might enter your data in Excel, and then when you try to convert it to SPSS, find out that you used an Excel version that is incompatible with SPSS.

Figure 3 gives a screen snapshot of what the SPSS data editor looks like when you start SPSS. As you can see, it does look like an Excel spreadsheet. The columns will represent your variables, and the rows your observations (sometimes called records, subjects or cases). There are two sheets in the window:

- i) **Data View Window:** This sheet is visible when you first open the data editor and this sheet contains the data
  - Click on the tab labelled Variable View

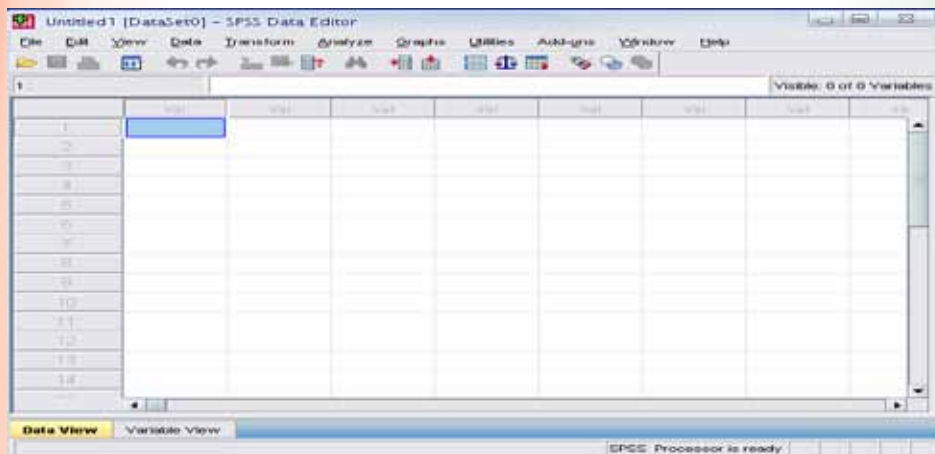


Figure 3: Screen appearance when SPSS is started



Figure 2: The unneeded screen that may appear when SPSS is started. (Click cancel to continue)  
Source: SPSS 17 Manual

- ii) **Variable View Window:** This sheet contains information about the data set that is stored with the dataset.
  - a) Name
    - The first character of the variable name must be alphabetic
    - Variable names must be unique, and have to be less than 64 characters
    - Spaces between characters are NOT allowed

### Different interfaces of the Variable View Window

- b) **Variable View Window - Type:** Click on the 'type' box. The two basic types of variables that you will use are numeric and string. This column enables you to specify the type of variable.



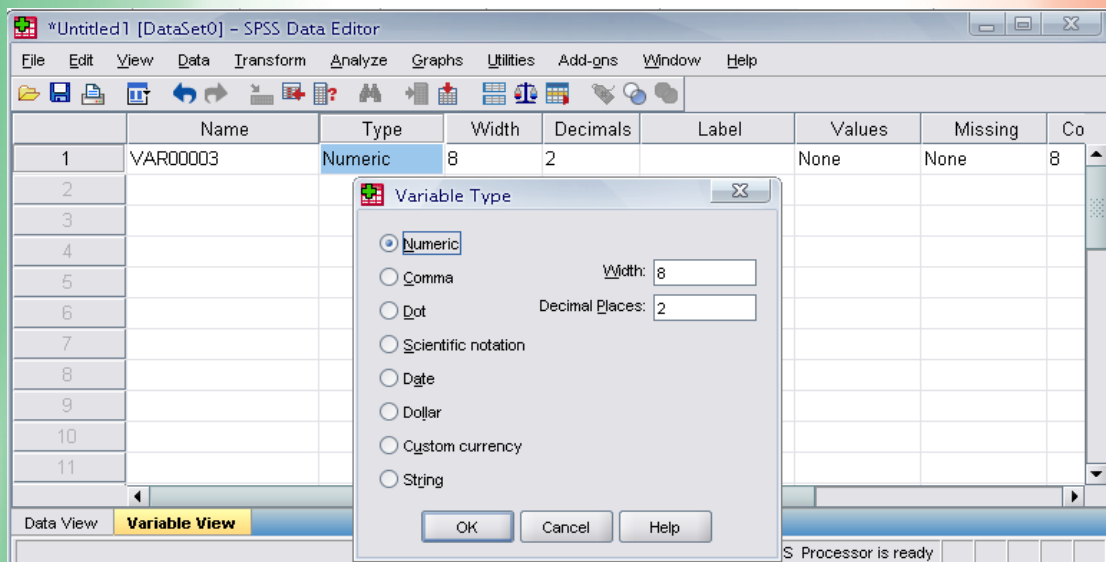


Figure 4: Screen appearance of variable view window: Type

Source: SPSS 17 Manual

c) **Variable View Window** – Width: Width allows you to determine the number of characters SPSS will allow to be entered for the variable.

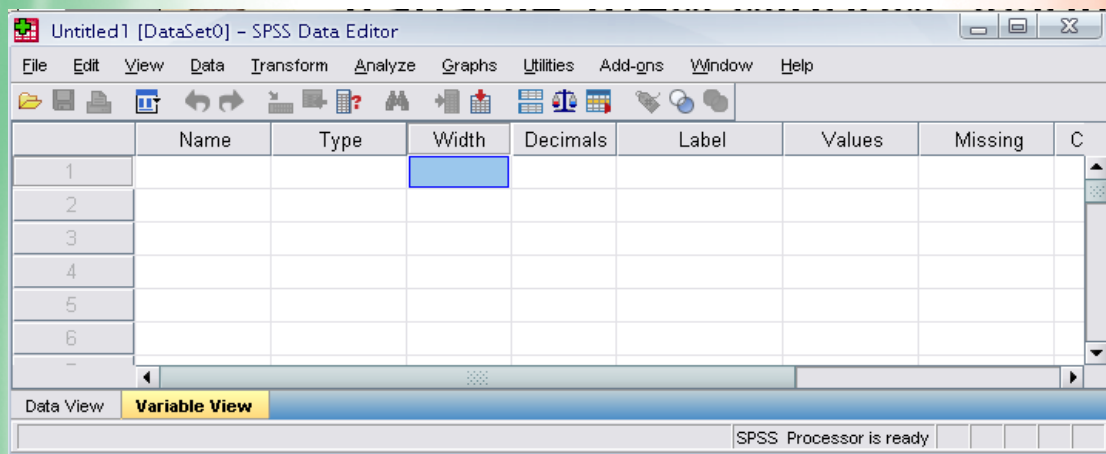


Figure 5: Screen appearance of variable view window: Width

Source: SPSS 17 Manual

d) **Variable View Window** – Decimals:

- Number of decimals
- It has to be less than or equal to 16

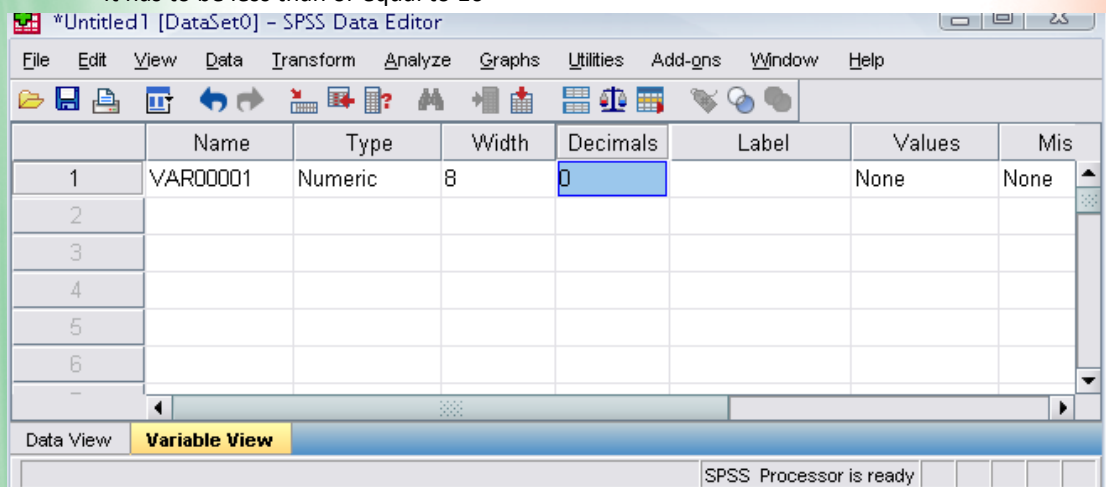


Figure 6: Screen appearance of variable view window: Decimals

Source: SPSS 17 Manual

e) **Variable View Window – Label**

- You can specify the details of the variable
- You can write characters with spaces up to 256 characters

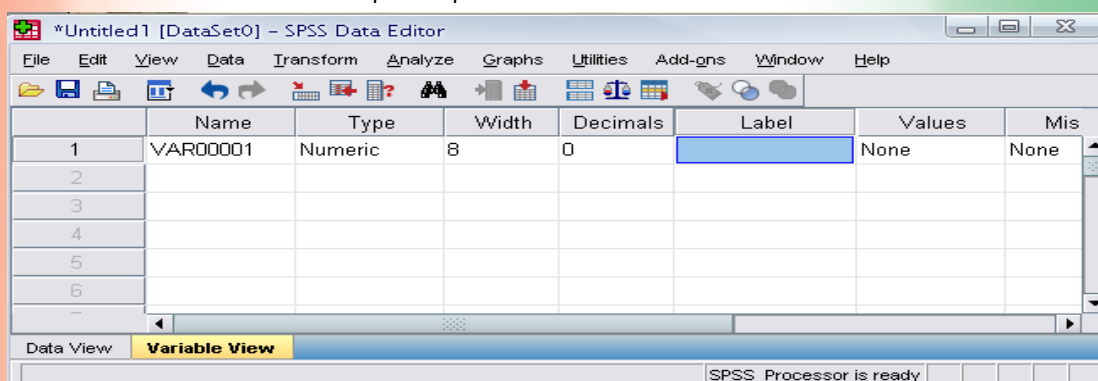


Figure 7: Screen appearance of variable view window: Label

Source: SPSS 17 Manual

f) **Variable View Window – Values:** This is used and to suggest which numbers represent which categories when the variable represents a category.

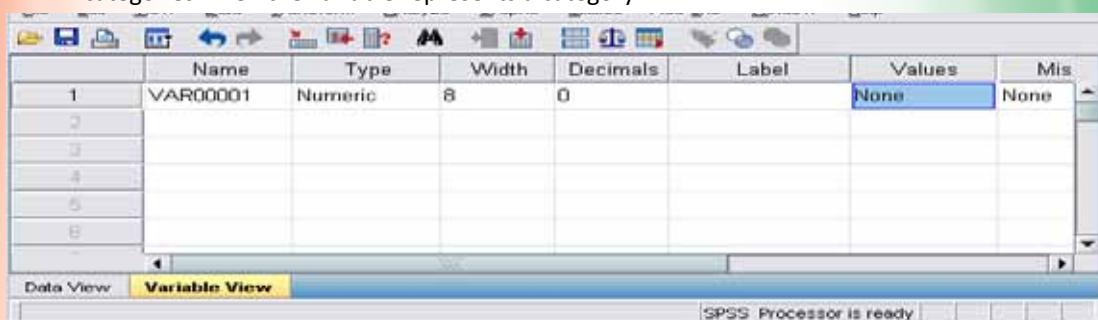


Figure 8: Screen appearance of variable view window: Values

Source: SPSS 17 Manual

a) **Procedure for Inputting Data in SPSS<sup>3</sup>**

Data can be entered into the data editor, which may be useful for small datafiles or for making minor edits to larger datafiles.

i) **Entering numeric data:**

Example 1: Let us illustrate how to enter numeric data into the SPSS data editor using the data file below.

Age	Marital status	Income
55	1	7200
53	0	153000
25	0	1000
18	0	2000
20	1	1500
30	1	25600
37	0	239000

**Procedure**

- Click the Variable View tab at the bottom of the Data Editor window.

You need to define the variables that will be used. In this case, only three variables are needed: age, marital status, and income.

<sup>3</sup> [www.hks.harvard.edu/.../A%20SPSS%20Manuals/SPSS%20Statistics%20Brief%20Guide%202017.0.pdf](http://www.hks.harvard.edu/.../A%20SPSS%20Manuals/SPSS%20Statistics%20Brief%20Guide%202017.0.pdf)

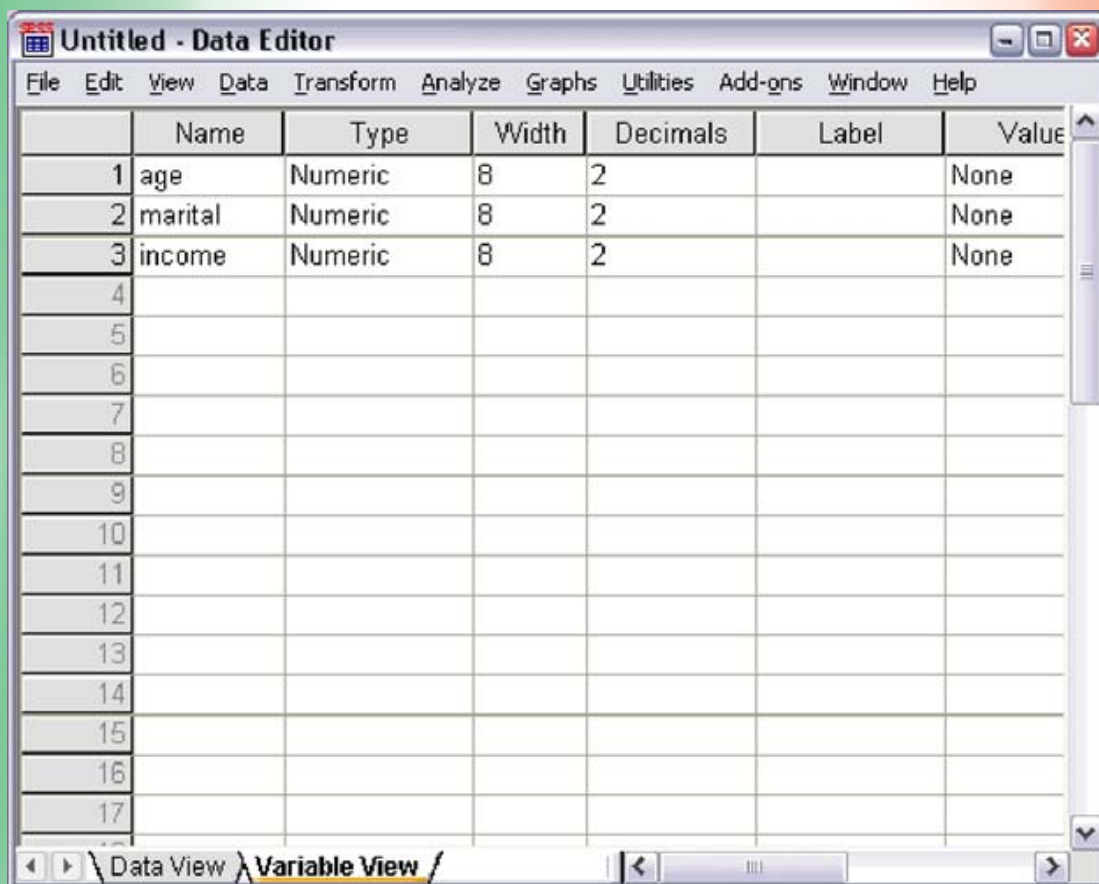


Figure 9: Variable names in variable view

Source: SPSS 17 Manual

- In the first row of the first column, type **age**.
- In the second row, type **marital**.
- In the third row, type **income**.
- New variables are automatically given a numeric data type.
- If you don't enter variable names, unique names are automatically created. However, these names are not descriptive and are not recommended for large data files.
- Click the **Data View** tab to continue entering the data.
- The names that you entered in **Variable View** are now the headings for the first three columns in **Data View**.
- Begin entering data in the first row, starting at the first column.



19 : age

	age	marital	income	var	var	var
1	55.00	1.00	72000.00			
2	53.00	.00	153000.0			
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

Data View Variable View

Figure 10: Values entered in data view

Source: SPSS 17 Manual

- In the age column, type **55**.
- In the marital column, type **1**.
- In the income column, type **72000**.
- Move the cursor to the second row of the first column to add the next subject's data.
- In the age column, type **53**.
- In the marital column, type **0**.
- In the income column, type **153000**.

Currently, the age and marital columns display decimal points, even though their values are intended to

be integers. To hide the decimal points in these variables: - Click the **Variable View** tab at the bottom of the Data Editor window.

- In the Decimals column of the age row, type **0** to hide the decimal.
- In the Decimals column of the marital row, type **0** to hide the decimal.

Untitled - Data Editor

	Name	Type	Width	Decimals	Label	Value
1	age	Numeric	8	0		None
2	marital	Numeric	8	0		None
3	income	Numeric	8	2		None
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

Data View Variable View

Figure 11: Updated decimal property for age and marital

Source: SPSS 17 Manual

## ii) Entering string data:

Non-numeric data, such as strings of text, can also be entered into the Data Editor. Click the Variable View tab at the bottom of the Data Editor window.

- In the first cell of the first empty row, type **sex** for the variable name.
- Click the Type **cell** next to your entry.
- Click the button on the right side of the Type **cell** to open the **Variable Type** dialog box.

## Creating a New Variable

Using a wide variety of mathematical functions, you can compute new variables based on highly complex equations. Click **'Transform'** and then click **'Compute Variable...'**

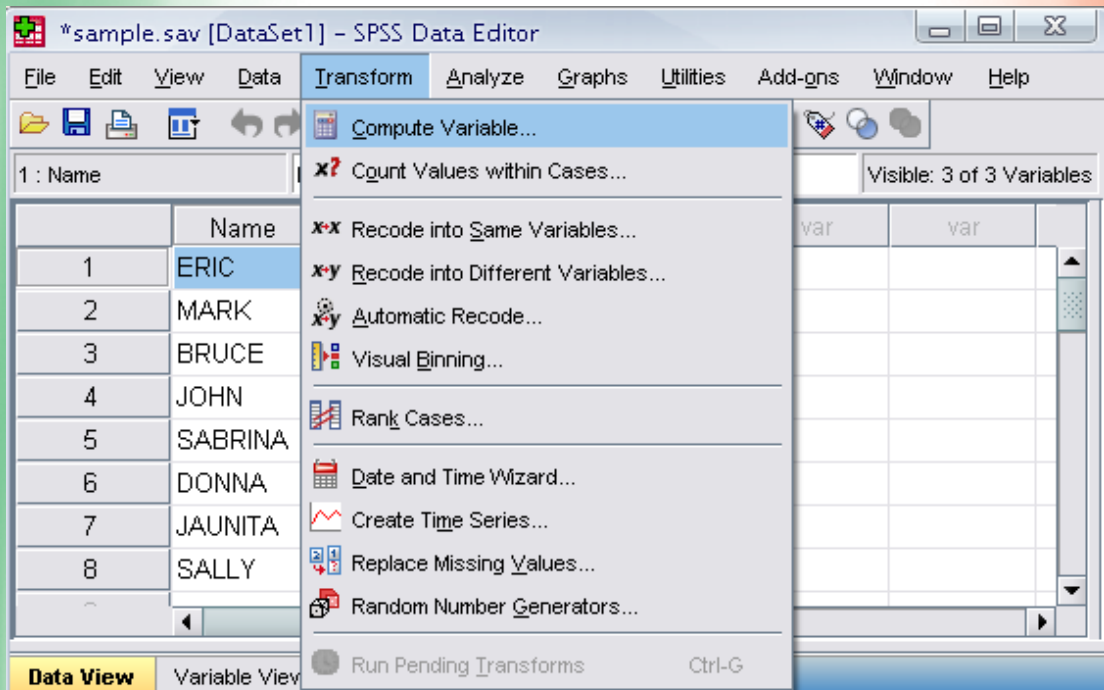


Figure 12: Creating a new variable

Source: SPSS17 Manual

Note: The new variable is displayed in the data editor. Since the variable is added to the end of the file, it is displayed in the far right column in data view and in the last row in variable view.

**Example 2:** Adding a new variable named 'Inheight' which is the natural log of height. Type in **Inheight** in the 'Target Variable' box. Then type in **ln(height)** in the 'Numeric Expression' box. Click **OK**

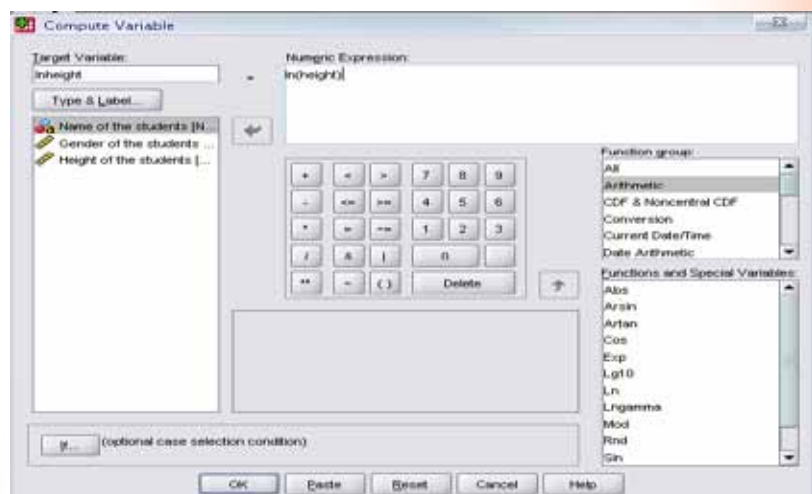


Figure 13: Adding a new variable

Source: SPSS17 Manual

### C. Basic Data Analysis Processes<sup>4</sup>

After you have entered your data, you can use SPSS to perform analyses on these data. SPSS uses two basic methods for performing analyses and other data management tasks. The first is menu driven while the second makes use of one of several programming languages. In this manual, we will cover the use of menus for data analyses in SPSS. We are going to tackle three simple methods of data analysis that we utilize in CBMS.

- **Frequencies**
- **Descriptive**
- **Cross tabulation**

#### Opening existing data

Before beginning the analysis, be sure your data are displayed in the data editor.

**Select File⇒Open⇒Data...**, navigate to the directory in which you saved your data (data source eg 'Employee data.sav') and open it.

**Example 3:** Open 'Employee data.sav' from the SPSS

- Go to 'File,' 'Open,' and Click 'Data'

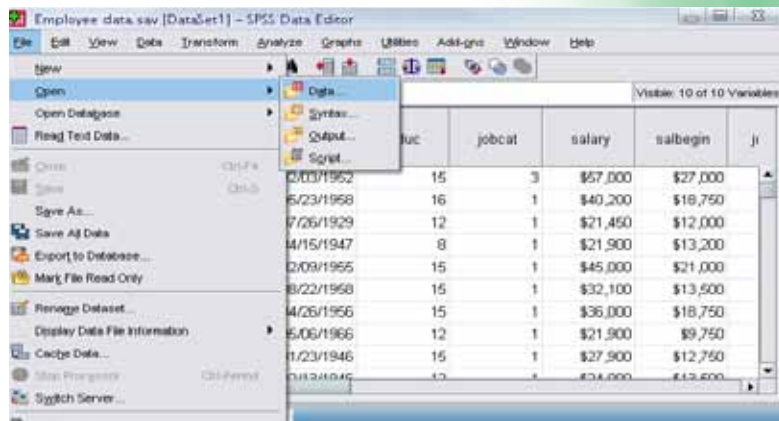


Figure 14: Opening existing data

Source: SPSS17 Manual

Go to **Programme Files** - Open '**Employee Data.sav**' file

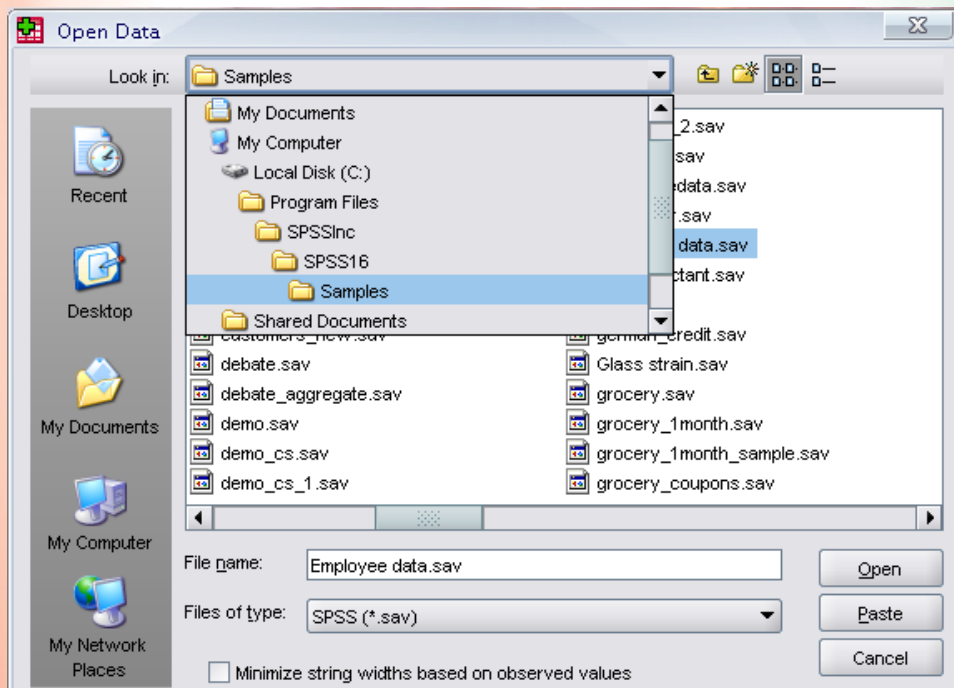


Figure 15a: Opening data file windows

Source: SPSS17 Manual

<sup>4</sup> www.uri.edu/its/ppt/spss.intro.ppt



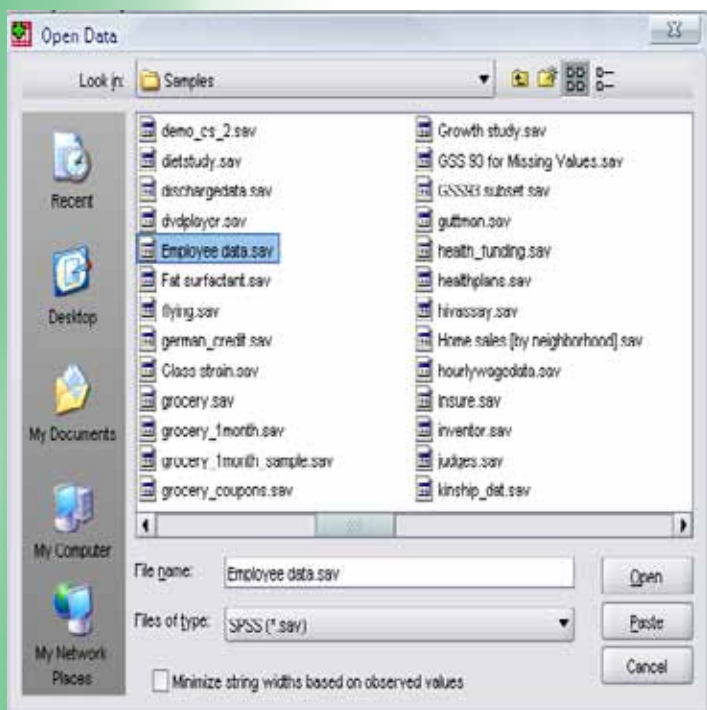


Figure 15b: Opening data file windows

Source: SPSS17 Manual

**FREQUENCIES:** This analysis produces frequency tables showing frequency counts and percentages of the values of individual variables. Generally a frequency is used for looking at detailed information on nominal (category) data and describing the results. Category data is for variables such as gender, i.e. males are coded as '1' and females are coded as '2.'

Frequencies options include a table showing counts and percentages, statistics including percentile values, central tendency, dispersion and distribution, and charts including bar charts and histograms.

The steps for using the frequencies procedure is to click the '**Analyse**' menu, '**Descriptive Statistics**' then from the submenu choose '**Frequencies**' and select your variables for analysis, e.g. gender, marital status etc and click Ok. You can also choose other statistics options, choose chart options, choose format options, and have SPSS calculate your request.

Here is the output produced by the frequencies commands CBMS Murang'a data file.

Statistics		
Main occupation		
N	Valid	7287
	Missing	0

#### Main occupation

Valid		Frequency	Percent	Valid Percent	Cumulative Percent
	Employed (salary)	1717	23.6	23.6	23.6
	Casual worker	2689	36.9	36.9	60.5
	Unemployed	1734	23.8	23.8	84.3
	Self-employed	<b>1147</b>	<b>15.7</b>	<b>15.7</b>	<b>100.0</b>
	<b>Total</b>	<b>7287</b>	<b>100.0</b>	<b>100.0</b>	

CBMS Kenya 2009

**DESCRIPTIVE:** This analysis shows the maximum, minimum, mean, and standard deviation of the variables

**Example 4:** Click 'Analyse,' 'Descriptive statistics,' then click 'Descriptive...'

- Click 'Educational level' and 'Beginning Salary,' and put it into the variable box.
- Click Options

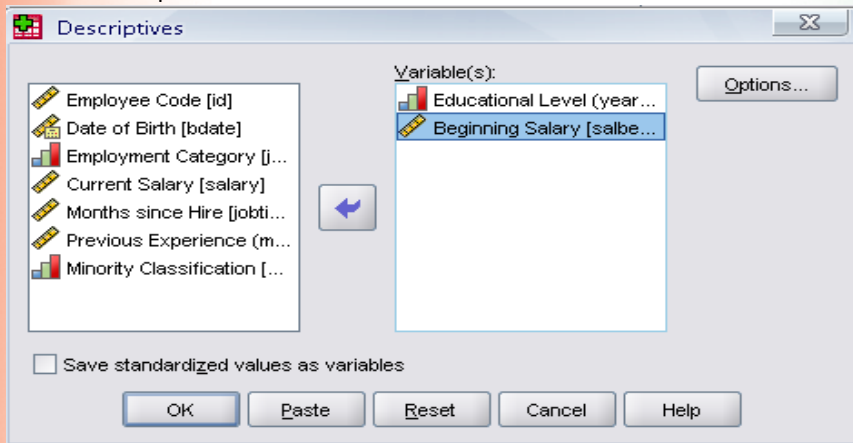


Figure 16: Descriptive analysis window

Source: SPSS17 Manual

The options allows you to analyse other descriptive statistics besides the mean and Std.

- Click 'variance' and 'kurtosis'
- Finally click 'Continue'



Figure 17: Descriptive options

SPSS17 Manual

Finally Click **OK** in the Descriptive box. You will be able to see the result of the analysis.

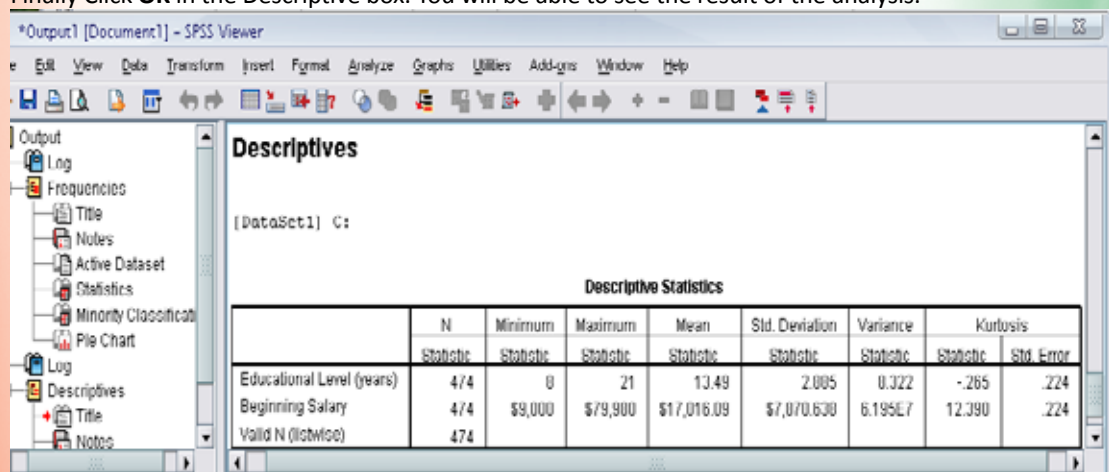


Figure 18: Descriptive analysis results window

Source: SPSS17 Manual

**CROSS TABULATION:** This is a way to examine the relationship between two variables. In SPSS, you can get a cross tabulation in **Analyze > Descriptive Statistics > Crosstabs...**

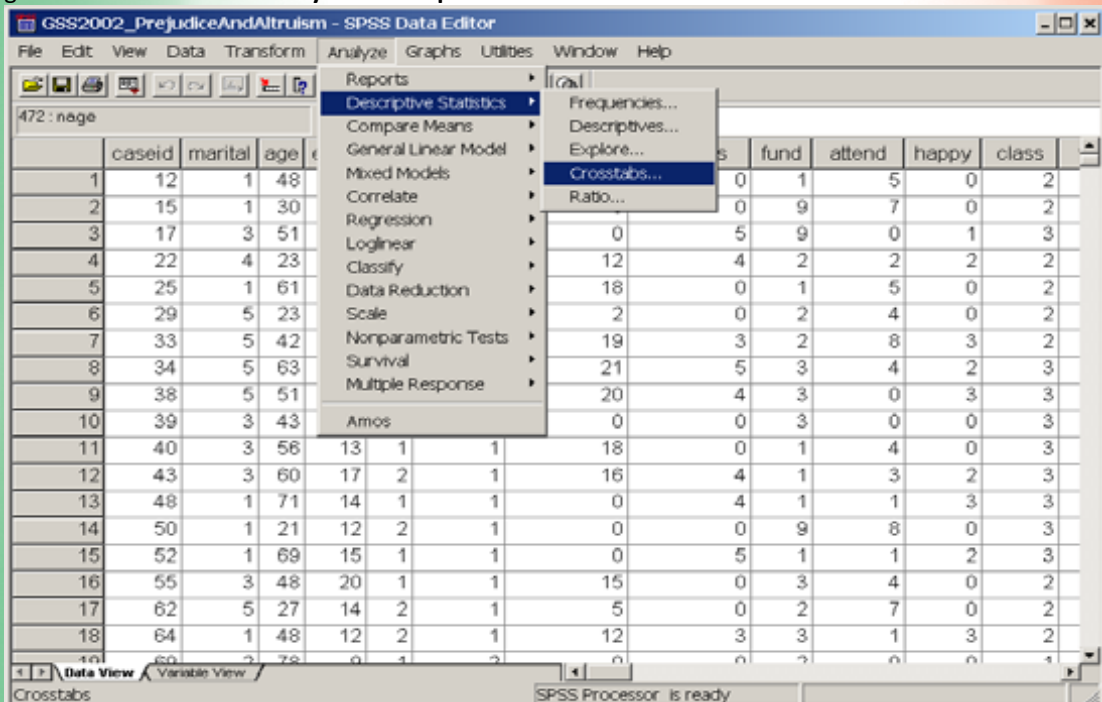


Figure 19: Cross tabulation window

Source: SPSS17 Manual

**Example 5:** You may want to determine the level of education attained by gender in your study results.

**Procedure:** In the **Crosstabs** window, find and move the independent and dependent variable to **Column(s):** and **Row(s):** boxes, respectively. In this case, the independent variable [gender] goes to **Column(s):** box and the dependent variable [level of education] goes to **Row(s):** box.

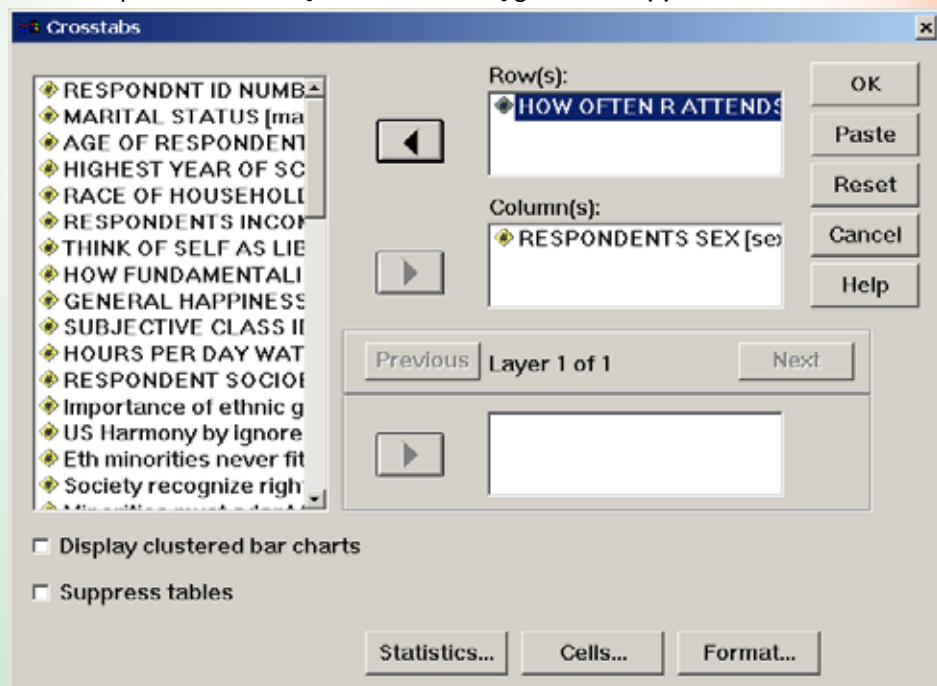


Figure 20: Cross tab variables

Source: SPSS17 Manual



Next, click on the **Cells...** button to get percentage values for each cell in the cross tabulation.

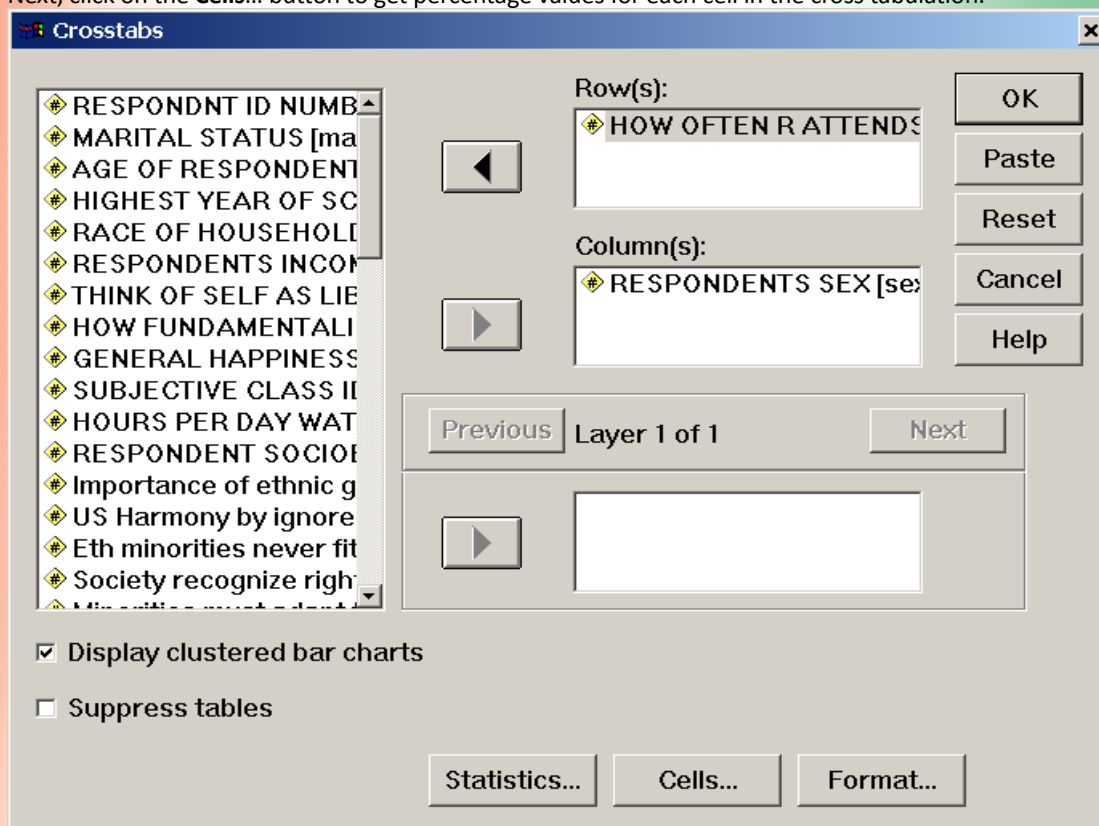


Figure 21: Generating percentage values

Source: SPSS17 Manual

In the **Cell Display** window, select the **Column** in the **Percentages** section. It allows you to have percentage value separately calculated for each category of the independent variable. Make sure that 'Observed' was selected in the 'Counts' section -- it should be checked by default. Click on **Continue** and **OK** buttons to see the cross tabulation.

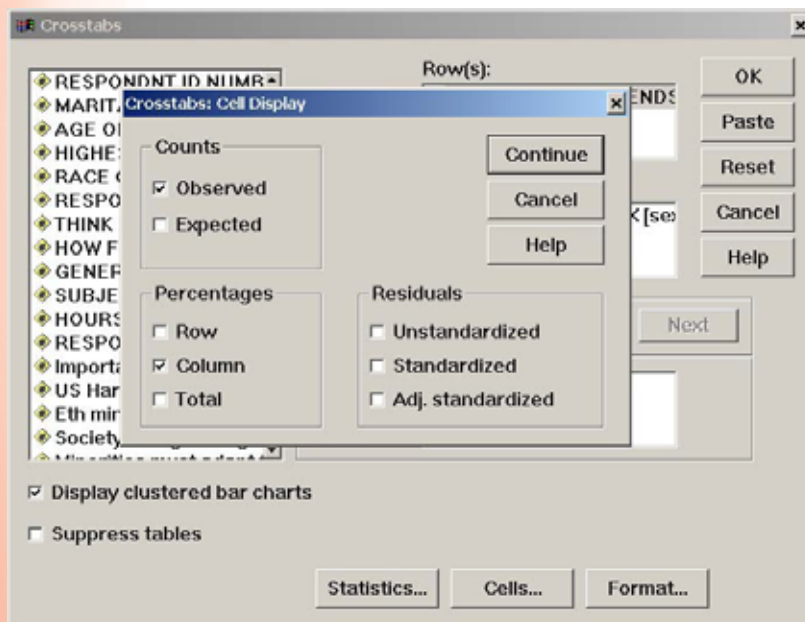


Figure 22: Crosstabs cell display window

Source: SPSS17 Manual

The output displays two tables, one for case processing summary and the other for cross tabulation of the two variables. Notice that 'gender' is on the column and 'level of education' is on the row of the cross tabulation as we assigned.

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	%	N	%	N	%
Highest education * Gender	7185	98.6%	102	1.4%	7287	100.0%

### Highest Education\* Gender Cross Tabulation

		Gender			
			Male	Female	Total
Highest education	No education	Count	485	518	1003
		% within Gender	13.0%	15.0%	14.0%
	Adult education	Count	36	55	91
		% within Gender	1.0%	1.6%	1.3%
	Pre-primary	Count	105	95	200
		% within Gender	2.8%	2.8%	2.8%
	Not finished primary	Count	823	891	1714
		% within Gender	22.1%	25.8%	23.9%
	Finished primary	Count	787	670	1457
		% within Gender	21.1%	19.4%	20.3%
	Finished secondary	Count	812	687	1499
		% within Gender	21.8%	19.9%	20.9%
	Not finished secondary	Count	254	260	514
		% within Gender	6.8%	7.5%	7.2%
	Finished college	Count	362	250	612
		% within Gender	9.7%	7.2%	8.5%
	Finished university	Count	67	28	95
		% within Gender	1.8%	.8%	1.3%
Totals		Count	3731	3454	7185
		% within Gender	100.0%	100.0%	100.0%

Source: CBMS Kenya 2009

Notice that the percentage values were calculated by column, i.e., gender. For example, the percentage value on the row labelled 'NO EDUCATION', '% within RESPONDENTS GENDER', in the column labelled '1 MALE' was obtained with the count of the cell (485) divided by the count of the males (3731). In other words, 13% of male respondents said that they had no education (never been to formal school).

## D. Graphs

SPSS can be used to create a wide variety of graph<sup>5</sup> types ranging from the simple to the complex. For the moment, we will provide only a simple example of one graph type by constructing a histogram.

<sup>5</sup> <http://www.cms.murdoch.edu.au/areas/maths/statsnotes/samplestats/spssprocs1.html>

Over time, SPSS has developed three different methods for constructing graphs. We will use the newest and easiest of these. Then click **Graphs⇒Chart Builder**.<sup>6</sup> The Chart Builder window opens.

- Click the 'Gallery' tab (if it is not selected).
- Click Bar (if it is not selected).
- Drag the 'Clustered' bar icon onto the canvas, which is the large area above the Gallery. Scroll down the 'Variables' list, and then choose 'Nominal' as its measurement level.
- Drag the variable to the x axis. Right-click and choose 'Nominal' as its measurement level.
- Drag the variable to the cluster drop zone in the upper right corner of the canvas.
- Click 'OK' to create the chart
- The bar chart is displayed in the Viewer.

#### Other options:

- Analyse > Descriptive Statistics > Frequencies - frequency histograms for many variables at a time.
- Analyse > Descriptive Statistics > Explore - frequency histograms for many variables at a time, possibly split according to a categorizing variable.
- Graphs > Legacy Dialogs > Histogram - simplest single plot method, but can't draw a relative frequency histogram.
- Graphs > Legacy Dialogs > Interactive > Histogram - can do relative frequency, 3-D effect and true 3-D (two variable) histograms (just don't mess with the start point)

### E. Editing and Printing Your Output

Once you have produced output in the 'Display' pane, you will likely want to edit and/or print it. For example, you may wish to add your name, date and a project number. You may then want to print out the result.

Before beginning the editing process, it will be helpful to understand the relationship between the items in the 'Outline' pane and various components of the 'Display' pane. Each element of the 'Outline' pane corresponds to a specific component of the 'Display' pane. To see how this works, click on 'Log' in the 'Outline' pane. Notice that a box appears around the scripting commands at the top of the 'Display' pane indicating that 'Log' corresponds to this portion of the 'Display' pane. Click a few other items in the 'Outline' pane to see how they correspond to portions of the 'Display'.

Begin editing by clicking the 'Log' item in the 'Outline' pane. We wish to insert some text under the scripting language commands so click Insert⇒New Text. A box with cross hatching appears beneath the scripting commands in the 'Display' pane.<sup>7</sup> Click inside the box. We want to bold your inserted text so click the 'bold' button. Now type your name followed by a space and then the date. Press 'Enter' to move to the next line. (Your typed text may disappear but it is still there in the background.) Now type Name of project eg CBMS Kisumu. Click anywhere outside the box. (You may have to click twice to make the box disappear completely.) Your inserted text is there in all its bold faced glory!

Let us clean up the output a bit more by getting rid of the scripting statements at the top of the Display Pane. To do this, click the '**Log**' item in the '**Outline**' pane. Now click **Edit⇒Delete**. The word Log disappears from the 'Outline' pane as does the scripting language statements from the 'Display' pane. You can change the relative position of elements in the 'Display' pane by clicking and dragging them up or down in the '**Outline**' pane. You can print or save your output by using the **File⇒Print...** and **File⇒Save As...** commands, respectively. You can close the output file as we will not need it again.

<sup>6</sup> The other two methods for constructing graphs are termed Interactive and Legacy Dialogs

<sup>7</sup> If there is no cross hatching you may need to double click the box. The cross hatching means the box is in editing mode.



# 8 Qualitative Data Collection

Four tools have been selected from a basket of participatory learning and action tools for use in CBMS:

- **resource and social mapping;**
- **seasonal calendars;**
- **focus group discussions (FGDs);**
- **and in-depth interviews (IDIs).**

These tools have been selected because they provide different types of information. Resource and social mapping allows a community to identify existing resources and the gaps, while the seasonal calendars link the different events in a community together in a 12-month period. Whereas FGDs provide an opportunity for researchers to explore issues with a group of people, thereby providing an opportunity for people's ideas to build on each other and therefore generate a rich set of data, the IDIs allow researchers to get more personal information from the respondents. The information gathered from the respondents through IDI allows the researchers to 'provide a voice to the community,' through citing reported individual experiences.

## 8.1 Resource and Social Mapping

This tool allows the community members to delineate their physical space and identify available resources and their uses. It is normal for communities to have resources that people often ignore yet during discussions they may realize their resourcefulness. The map provides a visual representation of the community including the households and community resources (schools, markets, health facilities, etc). Note that this visual representation is not drawn to scale.

### Procedure:

- Gather a group of people together in the community for the exercise of generating the map;
- Ensure a good mix of youth, adults, older persons and opinion leaders (this should include village elders, chiefs and youth leaders who may have a good understanding of the village and its boundaries);
- Identify a suitable place for developing the map. This can be a flat surface outside or inside a building;
- Facilitate the participants to identify someone to lead the process and someone else with skills to transcribe the map on paper;
- Facilitate the group to come up with a key (it is important to use local materials to develop the key).

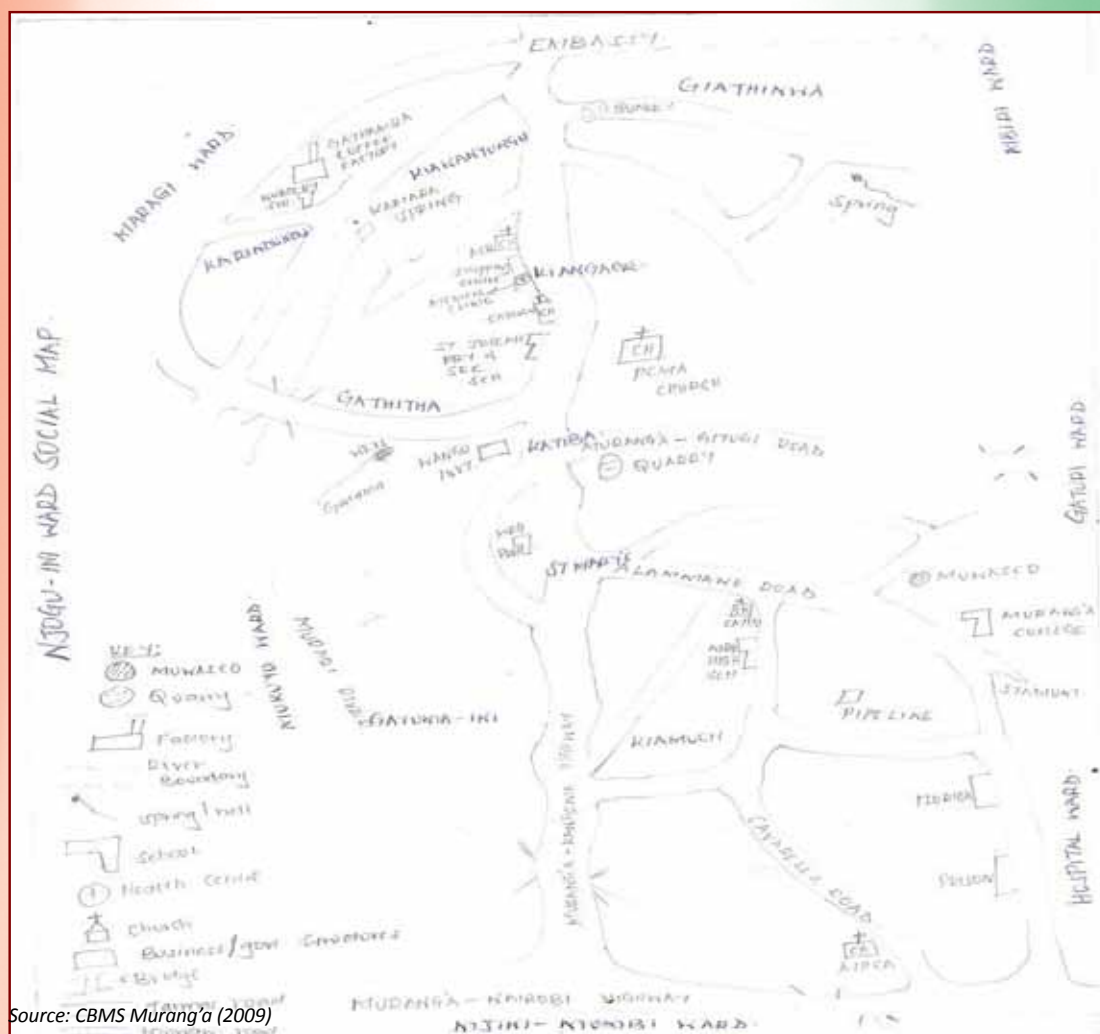
Resources identified on the map may include:

- Natural resources (forests, water sources, range lands, agricultural lands, resource use, conflict prone areas and environmental degradation);
- Social services (hospitals, schools, churches, roads, telephone, and electricity; and
- Commerce and trade (industries and shopping areas - growth centres).

**Transect walk:** This is taken after the completion of the mapping exercise. This is aimed at:

- Confirming items shown on the community sketch map (resource and social map); and
- Involves observations and interviews

### Example 1: A Resource and Social Map



Source: CBMS Murang'a (2009)

**Exercise:** Ask participants to share their experiences with resource and social mapping. If none has been involved in this exercise in the past, ask them to draw an imaginary map with key resources marked. Allow time for questions and discussion.

## 8.2 Seasonal Calendars

This is a diagram of the regular patterns or cycle of activities that occur within a given community. It shows the level of various activities month by month. It indicates whether there are certain problems that recur at set periods of the year. It can assist in determining availability of water and pasture, labour or cash and the appropriate timing of project activities. Events and month-by-month cited by the community include:

1. Rainfall
2. Drought
3. Food availability
4. Animal and human diseases
5. Internal conflicts
6. School dropouts
7. Insecurity
8. Unemployment
9. Festivities

### Procedure:

- Begin by explaining what a seasonal calendar is
- With the group, decide which issues of importance should be recorded

- Mark out the 12 months at the top and/or the bottom of the chart
- Remind the group that they should consider a normal year (not when there was drought, floods or a disease breakout)

### Example 2: A Seasonal Calendar

ISSUES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Rainfall	-	-	xx	xxx	xxxx	xxx	xx	xxx	xx	xx	x	x
Drought	xxxx	xxxx	xx	x	-	-	-	x	x	x	xx	xx
Food availability	x	xxx	xx	xx	x	xx	xx	xx	xxxx	xxxx	xxxx	xxxx
Human diseases	xxxx	xxxx	xx	xxx	xxxx	xxxx	xxxx	x	x	x	x	xx
Animal diseases	xxxx	xxxx	xxx	xx	xx	xxx	xxx	xx	xx	x	x	x
Floods	-	-	-	x	xxxx	xx	-	-	-	-	-	-
Internal conflicts	xxxx	xxxx	xxxx	x	xx	x	xxx	xxxx	xx	-	xx	xxxx
School dropouts	xxxx	xxxx	xxx	-	xxx	xxx	xxx	-	xx	x	-	-
Crime	xxxx	xxxx	xx	x	xxxx	xxx	xx	x	x	xx	xxx	xxxx
Unemployment	xx	xxx	x	-	-	xxx	x	x	-	x	xxx	x

Source: CBMS Kilifi (2009)

**Key:** - None    x    Little    xx    Moderate    xxx    High    xxxx    Very High

**Exercise:** Facilitate the group to discuss the linkages of the different events on the calendar and their implications on community development

### Interpretation of Social Maps

The last action of the social mapping process is the analysis task. Maps are intended to relay some meaning that will eventually assist the policy implementers to understand the socio-cultural patterns of phenomena as well as adding to their inputs to the cycles of their programmes at the grassroots level.

#### Analysis of Seasonal Calendar Example 2 Above

##### a. Harsh Weather Patterns and Relief Food

Part of Kilifi district lies in the arid and semi-arid region hence it qualifies for routine government relief food disbursement. This partly explains the anomaly in correlation to the amount of rainfall. Less rainfall/scorching drought has a direct relation to diminishing food returns at the subsistence farming level. In Kilifi, according to the calendar, residents are cushioned from the harsh weather conditions by the food donations from the government and other development partners (during the months of January-April) just when the long rains starts to fall in preparation for the planting season.

##### b. Crime Rates and Rainfall Patterns

Being an economy whose backbone is subsistence agriculture, most jobs are found in the arable farms or closer to the neighbourhoods in farm-work related activities. Subsistence agriculturalists are often busy in the farms in times of ground-breaking (digging), harrowing, planting, weeding, pruning and harvesting. With erratic rainfall patterns, most farmers rely on hired labour to maximize on the availability of rain to finish farm work in time. This keeps most youths earning income for themselves and families. From the



calendar, it can be seen that criminal activities soar during times of less rainfall (January-March, October-December) when there are few opportunities for hired labour.

### **c. School Dropouts and Food Availability**

The joy of every Kenyan educationist is to see rural children enrol for formal learning in established settings – yet food has a role to play in their early development and mental growth. Living in an ASAL region, children in Kilifi naturally spend more time seeking food than education, and everyone understands why. In response to the endemic low school enrolment, the Government of Kenya, through the Ministry of Education, started a school feeding programme aimed at keeping children in schools and ensuring that learning continues uninterrupted by hunger.

In the calendar above, there is a peak in school dropouts in months when food availability goes down (January-March, May-July).

## **8.3 Focus Group Discussions (FGDs)**

The FGDs are used mainly to explore community perceptions on development issues within their communities. Four FGDs are conducted per site. The FGD participants are distributed as follows:

- a) 2 groups - women 15-24 and men 15-24 (these are young people who may be married or not).
- b) 2 groups - women 25+ and men 25+.

To ensure that the different age categories are included, the FGD participants (numbering 8-10) are drawn from the entire community. The selection is done a day prior to the discussions, and a suitable venue identified for the FGD. All study participants are required to sign or assent to a consent form before participation (refer to the consent form).

## **8.4 In-depth Interviews**

This method is used to provide an in-depth understanding of the lives of the people in the communities and their coping strategies. In as much as the FGDs focus on perceptions, the in-depth interviews will gather information on individual lives and experiences. Usually for CBMS, 10 IDIs are conducted in each study site. Through this method, we gather information on the individuals' life histories, their experiences, perceptions and experiences with poverty, participation in development activities, current circumstances and future aspirations. Due to our interest in establishing linkages between poverty development and community empowerment, the characteristics of the 10 people should range from the youth, opinion leaders (chiefs, religious leaders, youth and women leaders), older persons, service providers (teachers, health personnel, children's officers, etc) and the local authority leadership. Conducting the IDIs provides an opportunity to explore in detail some of the general discussions generated from the FGDs. The people to be involved in the IDIs should be those who did not participate in the FGDs.

# 9 Focus Group Discussions

## 9.1 Introduction to Focus Group Discussions (FGDs)

### The Focus Group Session

Definition: FGD is a qualitative data collection technique that provides a forum for a group of people (usually 7 – 10 in number) of similar characteristics to discuss issues of importance to their group or community.

#### Essential Features:

- The group members share key characteristics
- Similar characteristics enable participants to discuss freely
- The discussion is focused on specific issues or topics
- There are important group dynamics during the discussions (these should be observed and recorded)
- Agreements or disagreements may occur
- Large amount of information is gathered from many people in a short time

#### FGD Participants:

Definition: The people invited to a venue to discuss specific issues.

**Key Characteristics:** For this study, various groups of people will participate as noted in the introductory section.

#### The FGD Moderator

Definition: S/he coordinates the discussion for the group (acts like a referee in a soccer game)

#### Essential Qualities:

- Must have good knowledge of the subject of interest
- Must be familiar with each question and why each is in the guideline
- Must maintain a lively discussion
- Must ensure that the rules of the discussion are followed, only one participant should speak at a time, all participants should use nicknames, etc
- Must be able to move the discussion forward in a timely fashion
- Must be a good listener
- Must keep the discussion focused
- Must be able to communicate very well
- Must have leadership skills
- Must be non-judgmental, i.e. not take sides
- Must be patient and flexible
- Must listen to the discussion carefully
- Must follow leads when relevant

### Tips on good moderating

- Concentrate on one topic at a time
- Always have the objectives of the discussion in mind
- Give each participant time to talk
- Talk less than 10% of the entire time
- Avoid a question and answer series
- Avoid leading questions
- Know when to stray from the discussion guide and when to probe
- Avoid asking “why,” (avoid this word and all confrontational words specific to the context)
- Be aware of body language and surroundings
- Expect the unexpected
- Encourage the shy to talk
- Talk only about people “like” the participants
- Practice how to rephrase participants’ opinions or comments without being judgmental
- Know how to link one participant’s opinion to that of another participant and follow-up with a question or clarification
- Follow the “5-seconds rule” for waiting on a participant before following up with a probe (participants do not always have a ready response, they need some time to think)

### B3: Roles of the Note Taker or Recorder

**Characteristics:** A good note taker is someone who records, as much as possible, all information that transpired during the discussion. S/he accomplishes this task by writing down (usually on a notebook) what s/he hears and what s/he sees during the discussion session.

Note takers do the following:

- Tape record the discussion
- Take notes on what is said during the discussion
- Take notes on non-verbal cues/actions during the discussion (there should be double note taking where possible)

### Tips on good note taking

**Note:** The note taker(s) should meet immediately after the discussion session with the moderator, to fill in gaps in notes and do some editing. It is also advisable that two tape recorders should run concurrently, the second beginning five minutes after the first to ensure that there are no breaks in recording the discussion (e.g. while changing a tape, etc).

- Use pen and bound notebooks (not



*Focus Group Discussion in Session in Tana River*



sheets of paper)

- Write down as much as possible what you hear and what you see or observe
- Do not rely on your tape recorder because it may not be clear or there may be a mechanical fault
- Do double note taking to ensure completeness and accuracy (two note takers, if possible)
- Let the tape recorder be your backup
- Use shorthand or paraphrase
- Use numbers or nick names to identify participants
- Draw the positions of participants and write their numbers or nicknames on their positions
- Type all field notes as soon as possible after the FGD session.

### Sitting Arrangement

It is best to have participants and the field team members sit in a circle format, so that everyone can feel part of the group discussion and have eye contact with everyone else. Circular seating arrangement is helpful to the field team. The moderator can easily face and engage any of the participants, and the note taker/s can easily follow the dynamics of the discussion.

### Tips on How to Ask Questions



Types of questions: There are two types - open-ended vs. closed-ended. The first word that starts a question makes it to be either open or close. An open-ended question is likely to make participants describe or provide explanations while responding to a question. A closed-ended question is likely to make participants provide a short answer e.g. 'yes' or 'no.'

Examples of open-ended questions:

- What are some reasons that lead to the neglect of the elderly?
- What types of health problems do the elderly people suffer from?
- How would you describe the lives of the elderly in your community?
- We are really interested in learning about the experiences of the elderly in your community.

Examples of closed-ended questions:

- Do you know whether elderly people in your community are abandoned?
- Is there any problem for the elderly seeking healthcare from the hospitals around here?
- Why would anyone neglect his or her parent?
- Who provides assistance to the elderly in your community?

Note: Closed-ended questions are likely to elicit short responses unless put within a general question or are followed by a probe

**Exercise:** Ask trainees to practice phrasing some questions relevant to the topics in the FGD guide. Trainees should write five closed-ended and five open-ended questions on a piece of paper. Researcher should collect all questions and read out (or write on a flip chart board) and ask trainees to say whether questions are open-ended or closed-ended.

### The Art of Probing

**Definition:** The act of exploring a question more fully by asking a follow-up, open-ended question.

#### Essential skills:

- Do not accept the first response as the complete response
- Always follow 'don't know' with an open-ended question
- Don't take for granted that you know what is being said, ask for clarifications

Examples of how to probe for clarifications:

- What do you mean by that?
- Could you explain a little bit more, I don't understand?
- Could you be a little more specific in your explanations?

How to ask for examples to clarify:

- Could you give an example?
- Could you give an instance that this can happen to people of this community?

Using probes to crosscheck consistency:

- Earlier you said, .... could you explain the situation or the reasons for this?
- How is this related to the point on.... you made earlier on....

**Exercise:** Each trainee should give two to three examples of appropriate probes for each of the questions in the guide.

## 9.2 The Discussion Guide in the FGD Session

The moderator should begin the discussion in the following fashion:

- Prepare a conducive sitting arrangement, e.g. around a table, in a circle (avoid a traditional classroom type of set-up)
- Help participants determine the language of the discussion
- Explain the reasons for conducting the discussion
- Ask participants to respond to questions honestly
- Stress confidentiality
- Explain that there are no right or wrong answers
- Ask everyone to speak one at a time
- Acknowledge the tape recorder (the reasons for tape recording, and stress confidentiality again)
- Introduce note taker(s) and the purpose of notes
- Have each participant introduce themselves (they could use nick names if they want to, provide the opportunity for them to decide how they would like to be referred to).

# 10 In-Depth Interviews

In-depth interviews provide an opportunity to discuss issues in detail with the respondents. Unlike the FGDs that gather perceptions and views from the participants, the IDIs allow individuals to share personal experiences.

## 10.1 The Role of Interviewers

In general, the responsibilities of the interviewer will include:

- Locating the households in the sample area as assigned by the supervisor;
- Identifying the eligible respondents within the households;
- Conducting the interview;
- Checking completed interviews to ensure that all questions have been asked and the responses neatly and legibly recorded;
- Tape recording all discussions;
- Returning to the households for follow-up interviews;
- Submitting the notes to the supervisor at the end of the exercise.

## 10.2 Conducting an Interview

Successful interviewing is an art and should not be treated mechanically. Each interview is a new source of information, and so make it interesting and successful. The art of interviewing develops with practice but there are certain basic principles, which are followed by every successful interviewer. In the following section you will find general guidelines on building rapport with the respondent and conducting a successful interview.

### Building Rapport with the Respondent

The interviewer and the respondent are strangers to each other, and one of the main tasks of an interviewer is to establish rapport. The respondent's first impression of you will influence his or her willingness to cooperate with the interview.

#### A. Make a good first impression

When you first approach the respondent, do your best to make him/her feel comfortable. With a few chosen words you can put the respondent in the right frame of mind for the interview. Open the interview with a smile and salutation like "Good morning" and then proceed with your introduction.

#### B. Always have a positive approach

Never adopt an apologetic manner and do not use words such as "are you too busy?" or "would you spare a few minutes?" or "would you mind answering some questions?" Such questions invite refusal before you start. Rather, tell the respondent, "I would like to ask you a few questions" or "I would like to talk with you for a few minutes".



### **C. Stress confidentiality of responses when necessary**

Assure the respondent that the information provided will only be used for the purpose of the study. Indicate that names will not be used. You should never mention other interviews or show your notes to other interviewers or supervisors in front of a respondent or any other person.

### **D. Answer any questions from the respondent frankly**

Before accepting to be interviewed, the respondent may ask you some questions about the survey or how s/he was selected to be interviewed. Be direct and pleasant when you respond. However, if s/he asks questions touching on what she will be asked in the interview, tell him or her that you will answer the questions after you have finished the interview. The respondent may also be concerned about the length of the interview. If s/he asks, tell him/her that it usually takes about 45 minutes. Indicate your willingness to return at another time if s/he is unable to be interviewed.

### **E. Interview the respondent alone**

It is very important that the individual interview be conducted privately and that all questions are answered by the respondent himself/herself. If there are other people in the house, try to politely get away from them.

## **Tips on Conducting the Interview**

### **A. Be neutral throughout the interview**

Most people are polite and will tend to give answers that they think you want to hear. It is therefore very important that you remain absolutely neutral as you ask the questions. Never, either by the expression on your face or by the tone of your voice, allow the respondent to think that she has given the “right” or “wrong” answer to the question. Never appear to approve or disapprove of any of the respondent’s replies.

If the respondent gives an ambiguous answer, try to probe in a neutral way, asking questions such as: “Can you explain that a little more?” “I did not quite hear you, could you please repeat what you said?” “There is no hurry. Take a moment to think about it.”

### **B. Never suggest answers to the respondent**

If a respondent’s answer is not relevant to a question, do not prompt him or her by saying something like “I suppose you mean that ----- Is that right?” In many cases s/he will agree with your interpretation of his or her answer, even when that is not what s/he meant. Rather, you should probe in such a manner that the respondent himself or herself comes up with the relevant answer. You should never read out the list of coded answers to the respondent, even if s/he has trouble in answering.

### **C. Handle hesitant respondents tactfully**

There will be situations where the respondent simply says “I don’t know”, gives an irrelevant answer, acts very bored or detached, contradicts something she has already said, or refuses to answer the question. In these cases you must try to re-interest him/her in the conversation. If the respondent is reluctant or unwilling to respond to an issue, try to overcome his or her reluctance, explaining once again that the same question is being asked many other people and that the answers will be merged together. If s/he still refuses, simply write DECLINED next to the issue and proceed as if nothing has happened.

### **D. Do not form expectations**

You must not form expectations as to the ability and knowledge of the respondent. Do not assume that some people (depending on their appearance or education level) are more knowledgeable. On the other

hand, remember that differences between you and the respondent can influence the interview. The respondent, believing that you are different from him/her, may be afraid or mistrustful. You should always behave and speak in such a way that s/he is put at ease and is comfortable talking to you.

### **E. Do not hurry the interview**

Ask the questions slowly to ensure the respondent understands what she is being asked. After you have asked a question, pause and give her time to think (five seconds rule). If the respondent feels hurried or is not allowed to formulate her own opinion she may respond with “I don’t know” or give an inaccurate answer. If you feel the interviewee is answering without thinking just to speed up the interview, say to him/her “there is no hurry. Your opinion is very important”.<sup>8</sup>

### **General Guidelines for the Qualitative Study**

- You should conduct yourself professionally and your behaviour must be congenial in dealing with the public. You must always be aware of the fact that you are only able to do your work with the good will and cooperation of the people interviewed. Therefore, you should not be aggressive, abrupt, or disrespectful to the people in the study communities.
- This study is community-based and as you are aware the community is very sensitive to personal appearance. You will endeavour to dress decently throughout the fieldwork period. Women should particularly avoid tight trousers, long slit skirts and very short dresses.
- It is imperative that the data gathered during the fieldwork be both accurate and valid. Do not provide information just for the sake of fulfilling our expectations.
- The data collected is confidential and should not be discussed with anyone else. Under no circumstances should confidential information be passed to third parties.

### **EXAMPLE 3: FGD GUIDE FOR MALE/FEMALE YOUTH, ADULT MEN/WOMEN, AND ELDERLY MEN/WOMEN**

#### **Introduction and Consent**

Good morning/afternoon. My name is \_\_\_\_\_. I am from the \_\_\_\_\_ (name of the Council). We are conducting a study on development issues in this council with the aim of developing a system that would allow the council to gather important information that would help it to plan and monitor the development initiatives. Your participation in this study will provide information that will help us to understand the areas that we should focus on and therefore allow us to plan appropriately. I will moderate the discussion and my colleague \_\_\_\_\_ will take the notes. All the information provided will be kept strictly confidential and will only be used for the purposes of this exercise. You are free to stop the discussion at any time. Do you have any questions? Do I have your permission to continue?

Yes 1 (Continue with the discussion)

No 2 (End the discussion)

#### **A. Warm up question**

What are the main problems in this community? (Probe on drought, floods and ethnic conflict)

Note: These questions should be general because they are used as icebreakers. Note that the moderator needs to use the responses to get into the substantive discussion.

#### **B. General community life**

Note: asking about community life provides insights into the changes that the community had experienced over time. Be keen to note whether there are more recent changes of interest to CBMS.

<sup>8</sup> Information based on the CBMS processes in Kenya.



1. What are the main economic activities in this area? (Probe on major and minor activities and whether they receive money from relatives living abroad)
2. How would you describe the relationship between this community and the neighbouring communities? (Probe on intermarriage, sharing of resources, trade, etc)
3. What changes have occurred over time in the ways in which this community relates with its neighbours? (Probe on why these changes have occurred)

### C. Poverty and characterization of wealth in the community

Note: People's perceptions of poverty are important in providing an understanding of how it is manifested in the communities. The government characterizes poverty as a dollar rate – what do the communities use to differentiate their wealth status?

1. What is your understanding of poverty as it is experienced by the people in this community?
2. How would people in this community describe a poor person? (Probe on indicators for poverty determination, levels of poverty and criteria used to determine this levels)
3. What local terms are used to describe poverty? (Probe on the local meanings of these terms)
4. What terms are used to signify the different levels of poverty? (Probe on why there is a differentiation on poverty levels)
5. What are the main factors that make people poor? (Probe on factors that deepen poverty levels)
6. Who are mostly affected by poverty? (Probe on children, women, the elderly, people with disability, etc)
7. What public services are available for the poor in this community? (Probe on health, education, safe drinking water, and wealth creation opportunities)
8. What are some of the ways in which people try to survive or to cope with poverty? (Probe on migration, change in sources of livelihood, in eating habits, etc)
9. What are the impacts of poverty in this area? (Probe on health, education, livestock, shelter, etc)
10. How has the government tried to reduce poverty in this district? (Probe on CDF, youth development fund, bursary fund, women's enterprise fund, etc. Probe further on their long term viability)
11. What are the community members' views towards the current effort to



Community members during the dissemination of CBMS results in Tana River



- address poverty? (Probe on reach, effectiveness, sustainability)
12. What challenges/barriers does your community face in trying to overcome poverty? (Probe on sources of barriers and how the members deal with these challenges)

#### **D. Causes of conflict/crime**

Note: Conflict disenfranchises communities by depleting resources and discouraging investments. However, the factors that determine crime and conflict differ and the coping strategies vary in different places.

1. What types of conflict/crime does this community experience? (Probe on silent resentment between communities)
2. What are the main causes of conflict/crime in this community? (Probe on drought, famine, pasture, water, etc)
3. What are some of the signs that show that a conflict/crime is about to happen?
4. How often is this conflict/crime experienced? (Probe on time within the year, how long the conflicts last, etc)
5. What strategies are used to restore normalcy during these conflict/crime situations?

6. What are the main challenges you face in resolving conflict/crime in this community? (Probe on challenges faced on all conflicts mentioned. Probe further on external interference; political, etc)

#### **E. Linkages between drought, conflict/crime and poverty**

Note: it is important to see what connections people make between the different aspects of their community life. The discussion around these linkages would be in line with the discussion generated through the seasonal calendar.

1. When is drought experienced in this community? (Probe on seasons of the year when drought is experienced, duration of drought)
2. What relationship is there between drought and conflict/crime in this community? (Probe on this issue if it has not been addressed in initial discussions around conflict)
3. In your view, what is the relationship between conflict/crime and poverty? (Probe on the relationship between drought and poverty)

Thank the group (ask if anyone has any question)



# 11 Digitizing Maps Using CBMS-NRDB

## 11.1 Introduction

This section contains guidelines and instructions on the use of the CBMS-NRDB software in digitizing maps for the CBMS Database<sup>9</sup>.

The Community Based Monitoring System (CBMS) Database provides a facility for storing a wide array of information generated from the conduct of a CBMS Survey. One of its key features is that it can be used to generate desired information for presentation or reporting purposes in the form of maps aside from the tables and reports. It is freeware originally intended for the use and maintenance of local government units (LGUs).

The Database was customized for CBMS application using the Natural Resources Database (NRDB) and NRDB Pro<sup>10</sup> as base software.

### The CBMS-NRDB Interface

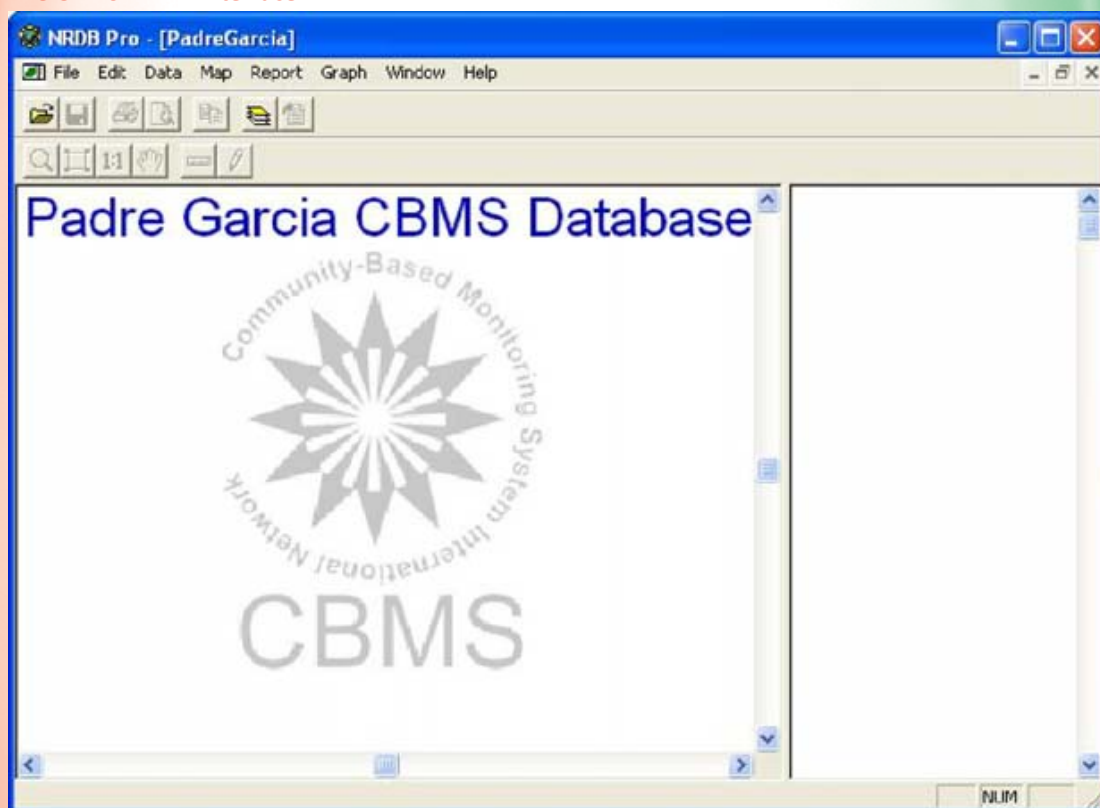


Figure 23: The CBMS Interface

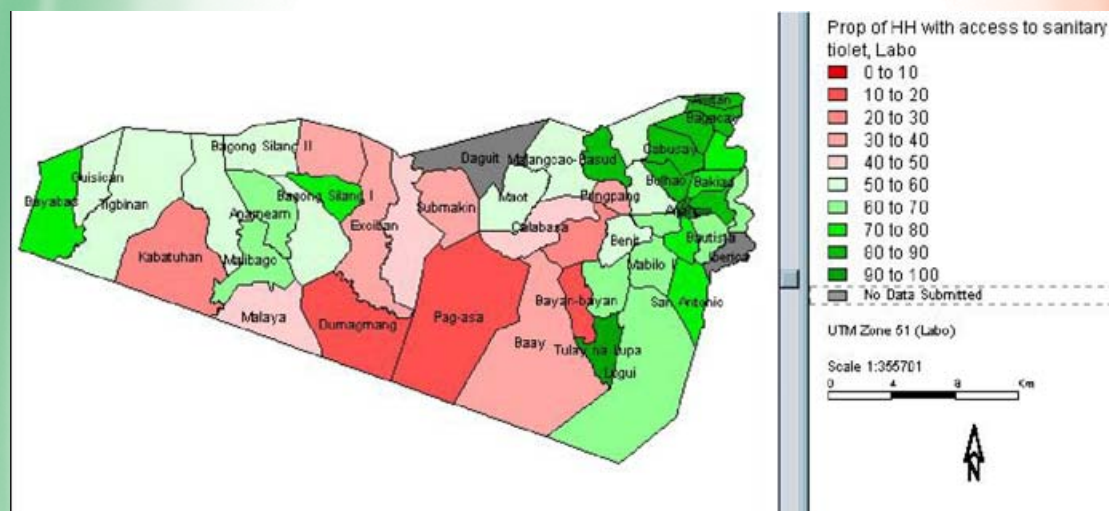
<sup>9</sup> Developed by the CBMS Network Coordinating Team of the Angelo King Institute for Economic and Business Studies

<sup>10</sup> The NRDB and NRDB Pro were originally developed by Richard Alexander. The CBMS Network Coordinating Team acknowledges the generosity of Mr. Alexander in sharing the software with the CBMS Team. His technical advice on the refinement of the NRDB for CBMS application is likewise acknowledged.

The database is intended to store CBMS survey results processed from the CBMS computerized data encoding system as well as other relevant data such as Administrative Boundaries (Villages (village), Municipalities); Demography; Development Indices (Human Development Index, Human Poverty Index); Education and Literacy; Education Facilities; Employment; Health and Nutrition; Health Facilities; Income and Livelihood; Infrastructure and Utilities; Participation in Community Development; Security and Shelter; Water and Sanitation; Road Network; River Networks and others. The database can be expanded to accommodate other information that is relevant or may be needed by users at a particular point in time.

Aside from the conventional way of viewing data in tables and charts, desired information from the database may be viewed in map format. A simple selection of preferred data or a more advanced query of desired information from the database can be generated in map, report and chart formats. Since socioeconomic and political boundaries and other relevant parameters change over time, it is important to note that all information in the database has a date associated with it.

Furthermore, since data contained in the CBMS Database is hierarchical, geographical or political relationships can be used for selecting data, e.g. a barangay (village) is part of a municipality, which is part of a province. Data can then be associated with the appropriate geographical location.



Source: CBMS Survey, 2003

The database is a stand-alone application. The data is held as a Microsoft Access database file, accessed through ODBC (Open Database Connectivity Standard). It is compatible with other software that facilitates importing of data directly from spreadsheets and from other databases. Moreover, map-based data can be imported from text files or shapefile format. Conversely, outputs can be exported back to spreadsheets or text files.

### Minimum Hardware and Software Requirements

- Personal Computer (PC), Pentium Processor III or higher
- Minimum 256Mb Memory
- Windows 95 or later operating system
- CD-ROM drive



## Data Requirements

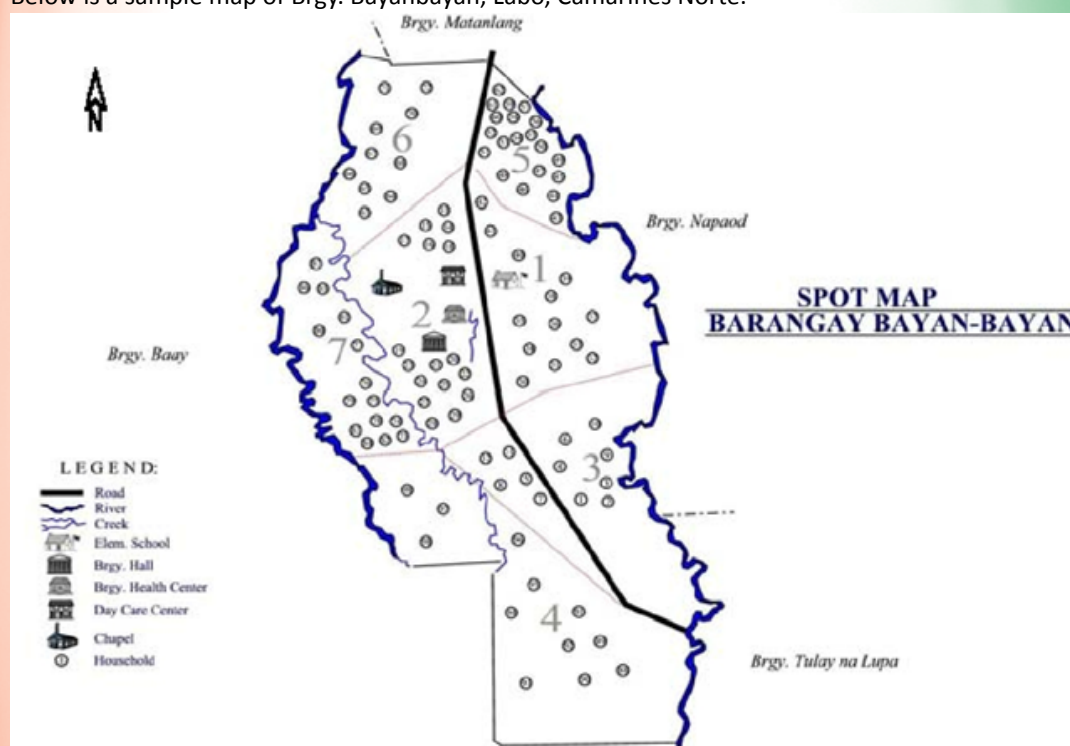
Each municipality in the province will be provided with a municipal CBMS-NRDB file (e.g. Marilao.mdb), which have been prepared by the CBMS Network Coordinating Team. Each file already contains municipal and village boundaries, whenever available. Please note that the municipal shapefiles are official, and the village shapefiles provided are sketch maps created by the National Statistics Office.

In case a geo-referenced<sup>11</sup> map from the National Mapping and Resource Information Authority (NAMRIA) is available at the municipality, the LGU can use it because this contains the official coordinates of the area. Details on how to use this is discussed in Section II.B.

To create the needed features in the CBMS Database, the following are needed:

1. Village-level spotmap. The spotmap should contain the following:
  - a. natural boundaries such as bodies of water (river, creeks, waterfalls, etc.), caves, hills, etc.
  - b. historical landmarks, if any.
  - c. Administrative boundaries (subvillage(purok) boundaries etc)
  - d. Infrastructure such as road networks, bridges, railroads, schools, village halls, health centers etc.
  - e. location of all households in the village, wherein each household have a unique household number. This household ID number should match the household ID number in the household profile questionnaire.
  - f. legend to indicate what are included in the spotmap.
  - g. a north sign 📍 to indicate the direction of the map.

Below is a sample map of Brgy. Bayanbayan, Labo, Camarines Norte.



Map 2. Sample map of Brgy. Bayanbayan, Labo, Camarines Norte

Source: CBMS Survey, 2003

Corresponding complete list of names of household head per household indicated in the spot map of the village (to ensure that each household location corresponds to an accomplished CBMS household profile questionnaire).

<sup>11</sup> Geo-reference refers to the geographic values found around the sheet edge. This provides the values of latitude and longitude at intervals.

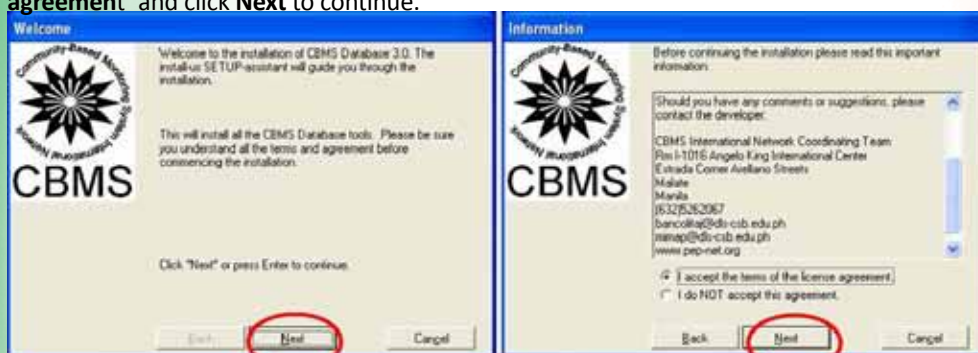
## 11.2 Installing CBMS-NRDB Software

After inserting the data source CD, a window will pop-up. Select **CBMS-NRDB Mapping Tool** and click the button **Install**.



Figure 24

Click **Next** to continue. After reading the CBMS license agreement, select the option '**I accept the agreement**' and click **Next** to continue.



To start installation, Click **Next**. The setup for the NRDB will open, click **Next**.

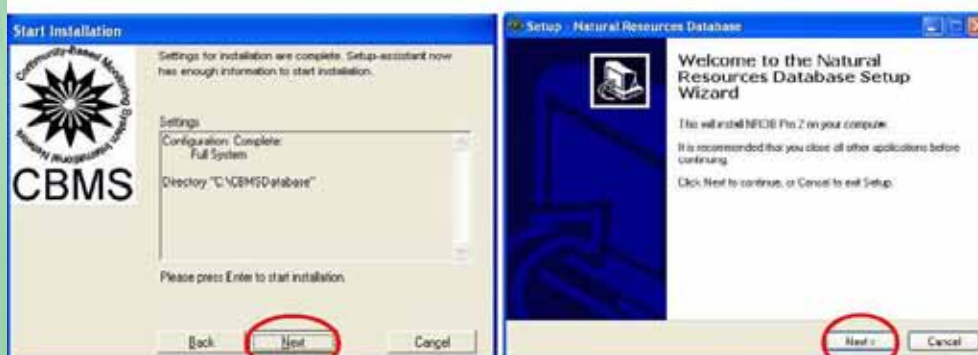


Figure 25

After reading the NRDB license agreement, select the option '**I accept the agreement**' and click **Next** to continue. Click **Next** to continue installing in the default folder **C:\Program Files\Natural Resources**

**Database.** Users have the option to click browse to select another folder where the database will setup. Click **Next** to install the database in the folder.

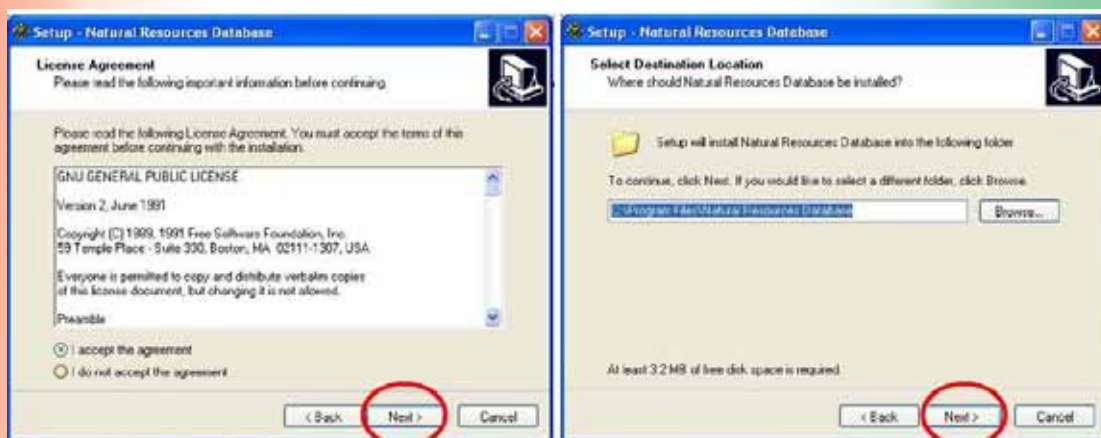


Figure 26

Click **Install** to proceed installing the software. To complete the setup, click on **Finish**. As a default, the NRDB will automatically launch itself.

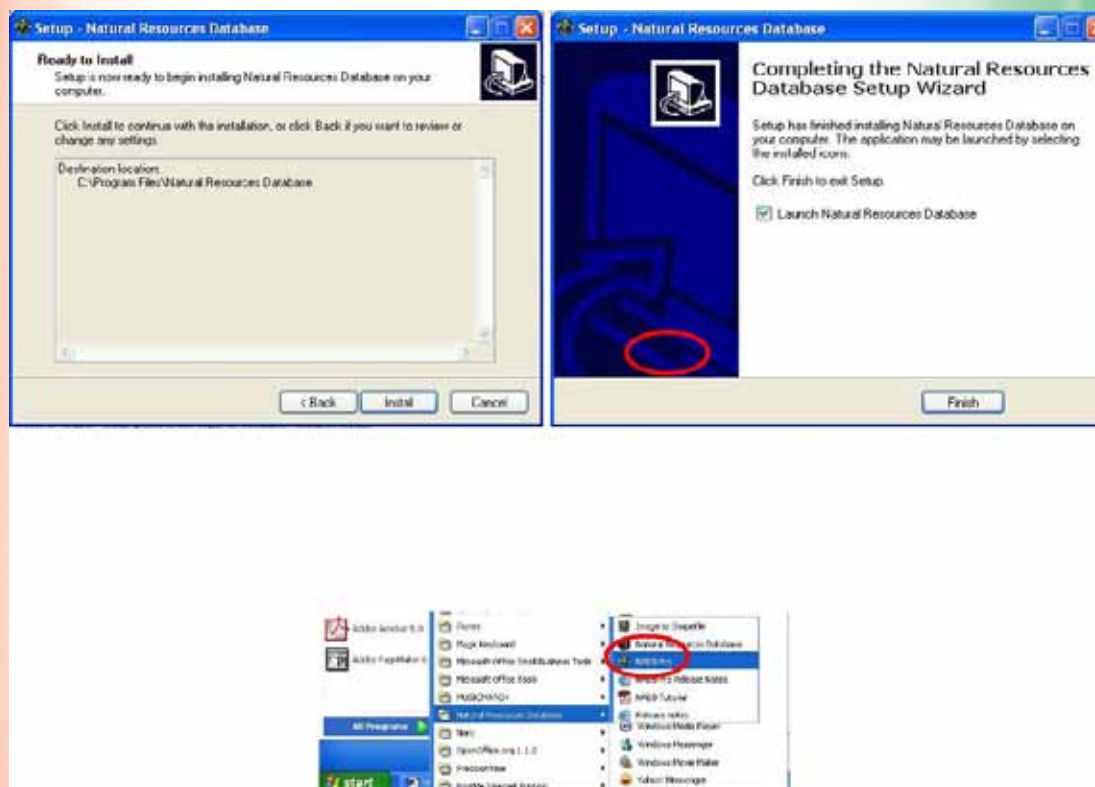


Figure 27

Once installed, the database programme will automatically open. The Login prompt appears. The setup process is complete. To re-open the database programme, move the mouse to the bottom of the screen and click on the Start button, and then select Programmes, Natural Resources Database and NRDB Pro button.



## 11.3 Shapefiles

Shapefiles consist of three types of data:

- 1) **coordinates** which represent a single point such as location of households, schools, village hall and other infrastructure;
- 2) **polylines** which may represent features such as rivers and road networks and;
- 3) **polygons** representing closed-area features such as municipal and village boundaries.

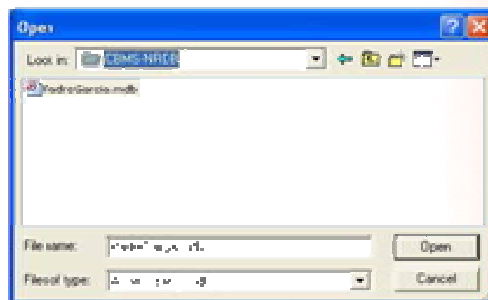
Coordinates or points are entered either as latitude, longitude value or as Cartesian coordinates (x,y). Polylines and Polygons, on the other hand, are both series of coordinates. Whenever shapefiles are available, from different LGUs or NGAs, that the user can access, there is no need to digitize the shapefiles. In this case, it becomes redundant activity that may result in different versions of the same map. Existing shapefiles can be imported into CBMS-NRDB.

### Viewing Existing Shapefiles


Open the NRDB programme. To open your municipal CBMS-NRDB file in the log-in menu, Click Browse in the pull-down list and click the button open.



Go to the folder in the directory containing the access file containing the municipal database, for example, PadreGarcia.mdb and click Open. All CBMS text and nrdb files are found in the directory C:\CBMSDatabase and follows the Philippine Standard Geographic Codes in locating the regional, provincial, municipal and village level files. For example, to locate PadreGarcia.mdb, the folder is located at C:\CBMSDatabase\04\10\20\CBMS-NRDB\



Note: The Selection of the source database needs to be done only once. Next time, if you wish to access the database, you can connect directly.

To view the provincial map by municipality, click on the Map in the Main Menu (shortcut: click icon)  and select Map Layers. The Map Layers window will appear. Click Add button. Select the FEATURE Municipality with the following specifications: Name: By default, all the municipal boundaries of the province of Batangas are highlighted. To view a specific municipality, highlight only the specific name of the municipality Display: Municipal boundaries (polylines/polygons) Label: Municipality (name)

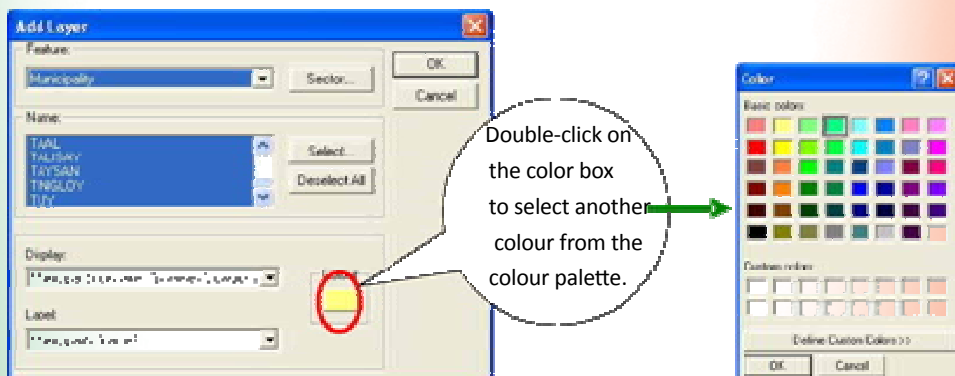


Figure 28

Ok. In the Map Layers window, click **Close** and the map of the municipalities of Batangas will appear.



Figure 29

To view the municipal map by village boundary, follow the same procedure as viewing the municipal boundaries. Click on Map in the Menu and select Map Layers. The Map Layers window will appear. Click Add button. Select the FEATURE Village with the following specifications:  
Name: <By default, all the village boundaries under the specified municipality are highlighted.  
To view a specific village, highlight only the specific name of the village >

Display: Village boundaries (polylines/polygons) Label: Village (name)

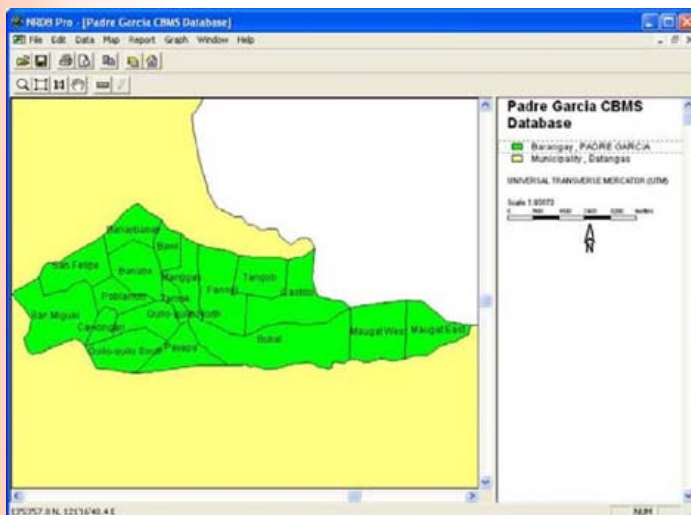


Figure 30

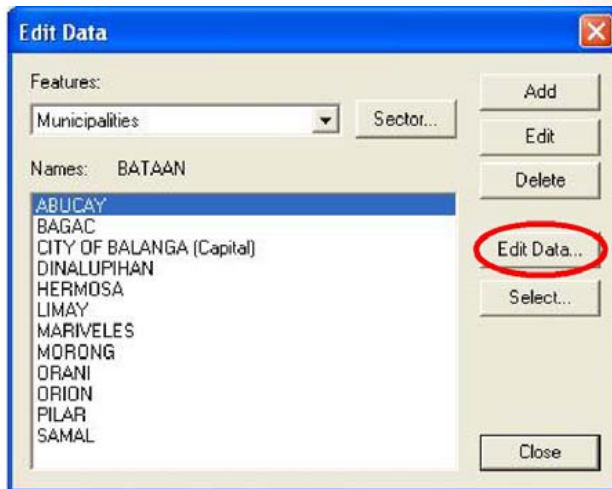
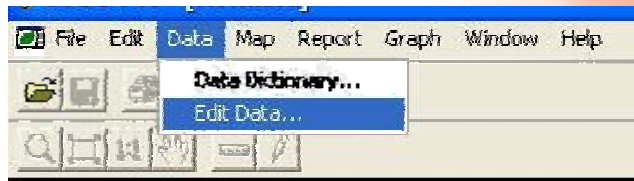
## 11.4 Utilizing Existing Shapefiles

As the shapefiles included in the municipal NRDB files are sketch maps, if the LGU have available official shapefiles of their boundaries, then they can also use them. To do this, here are the steps:

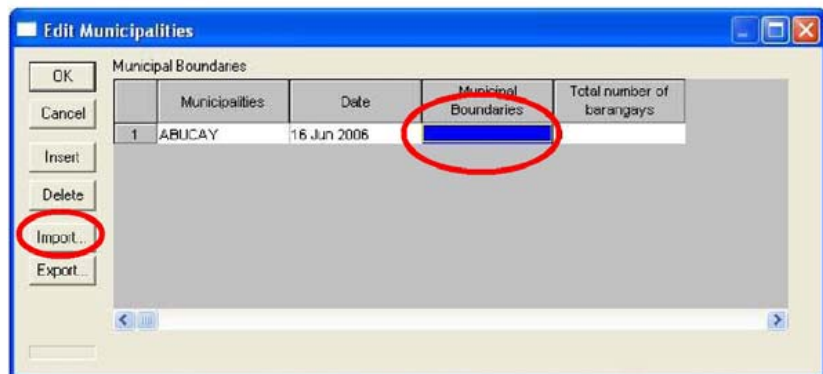
## 1. Replacing a Single Shape

a. Click **Data, Edit Data...**

b. At the top-most portion, select the Feature you wish to edit. Then select the specific name of the feature (For example, select the feature Municipality, then select the municipality Abucay). Click the button **Edit Data...**



c. Another window will open. Highlight the cell where the data for the shapefile is located. In the CBMS-NRDB, the cell containing polygon or polylines data are coloured blue. Click **Import...** button and select from the directory the shapefile that you want to use (Note: selected file should have extension name .shp).



d. Click the button **Open** once you have selected the desired shapefile.

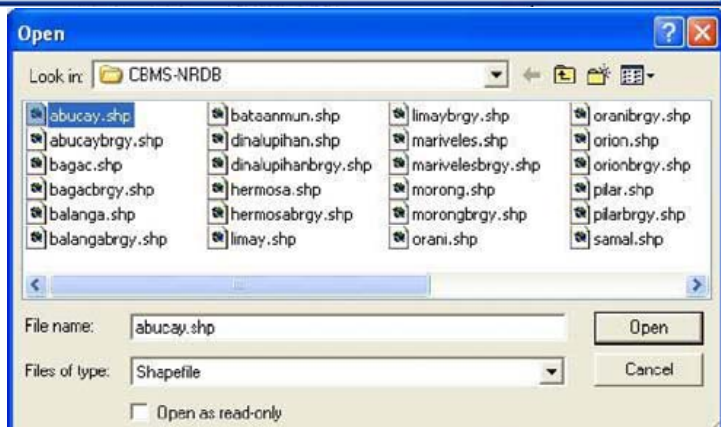


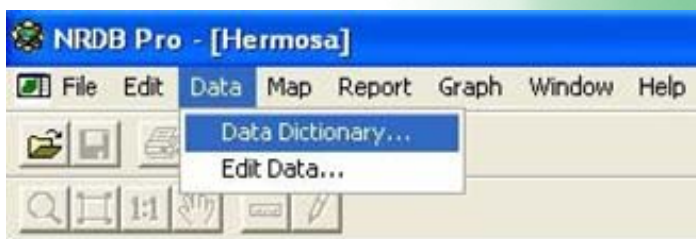
Figure 31



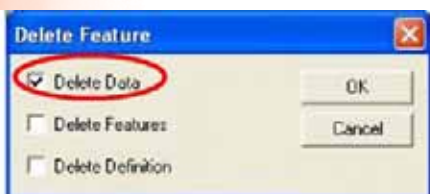
e. Afterwards, click **Ok** button and **Close** buttons to return to the main interface.

## 2. Replacing all the shapefiles

a. Go to **Data, Data Dictionary...**



b. Select the desired feature and click the button **Delete...** from the **Delete Feature window**, put a check besides **Delete Data** and press **OK** button. You will be asked if you are sure that the Feature is to be deleted. Click the button **Yes**. A window will appear indicating that the selected Feature has been deleted. Click **OK**. Then Click **Close** button in the **Data dictionary** window.



c. From the file menu, select **Import, File..**



d. The **Open** dialog is displayed. Select the shapefile to be imported and click on **Open**. The Import dialog will be displayed. Click the pull-down list and select the Feature where the shapefile is to be imported. Click the button **Select**. The other half of the import dialogue will appear.

The *Import columns* contain the names of the headings (variable name) found in the shapefile. The *Attributes* contain the attributes belonging to selected Feature (ex. Municipality) as defined in the data dictionary of the database.

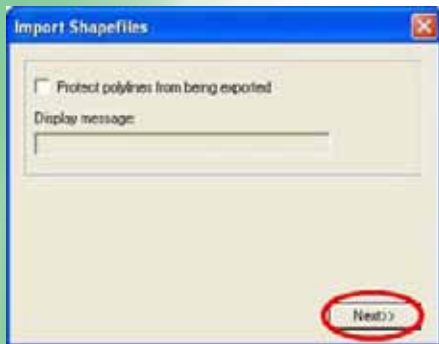


Figure 32

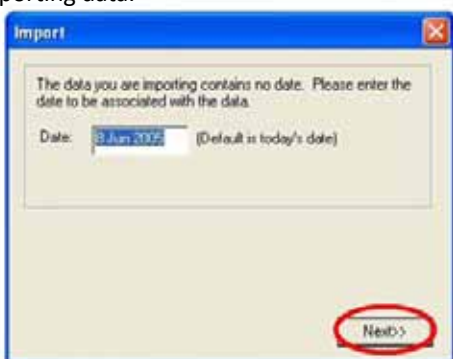
e. Highlight the matching variables in the *Import Columns* and *Attributes*. For example, the variable Shapefile (*polygons/polylines*) in the Import Column is matched with the village boundaries in the Attributes box while village corresponds to village [name]. Click the button **Add** to add the matched import column and

attribute items to the Import box. When all the names have been matched, click **Import**. The Import window will ask if you want to protect the shapefiles from being imported, skip this and click **Next>>** (you may need the shapefiles in the future as you can use this in other compatible software).

The Import window will ask if you want to protect the shapefiles from being imported, skip this and click **Next>>** (you may need the shapefiles in the future as you can use this in other compatible software).



f. You will be asked to encode the date. Default date is the current date. Click the button **Next** to start the importing data.



g. The Import Status window will appear. Click the button **Save** to save the imported shapefiles.

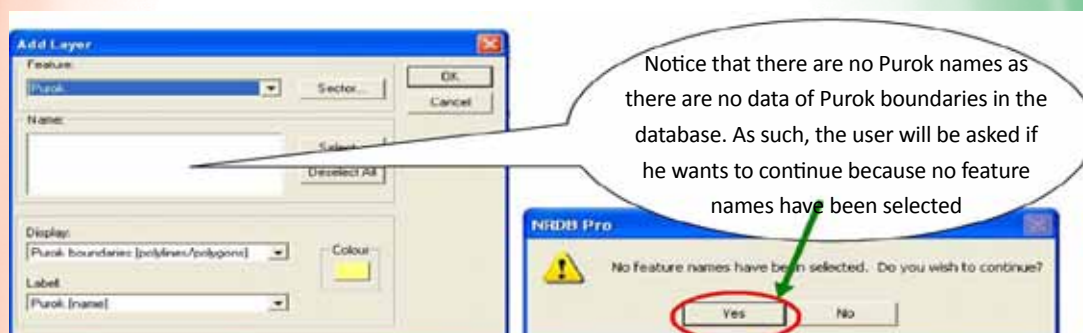


Figure 33

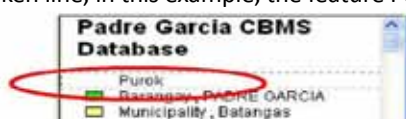
## 11.5 Digitizing Maps (Creating Polygons, Polylines and Coordinates)

If the needed shapefiles are not available from existing data sources, there is a need to digitize the shapefiles example: purok boundaries, location of household and other infrastructures found in the village. This activity merely translates the information from the paper spot map into the computerized database.

1.	Digitizing Polygons
a.	To create a polygon, add the layer of the desired feature to digitize by clicking the <b>Map</b> Layer icon. Select the desired feature with the corresponding display and label from the respective pull-down list. Click on the <b>OK</b> button to add the map layer. Click the <b>Yes</b> button when asked if you want to continue because no feature names have been selected.
	Example: To digitize the purok boundaries, click on the <b>Map</b> Layers with the following specifications:
	Name: <blank>
	Display: Purok boundaries (polylines/polygons)
	Label: Purok (name)



a. Also, in the right hand of the interface, there is no colored square adjacent to the feature as normally seen from the other existing features in the database. Ensure that the desired feature that the user will digitize is bordered with a broken line, in this example, the feature Purok.



b. To start digitizing, right-click on the desired area in the map and select **Map**, then select **Add...**



c. The first time that the user will create a polygon, a window will appear to verify the type of shapefile he wants to digitize. A purok is a closed-area feature, thus, it is a polygon. Choose **polygons** and click **OK**.

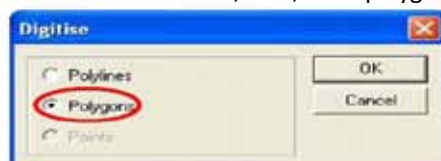




Figure 34



d. The arrow cursor will become a cross cursor (★). To create a new node, left click on a desired corner. To create the polygon, add more nodes as tracing the shape of the boundary. Please note that you are digitizing a polygon, which means that shape is automatically a closed-area.

Press Del key (in the keyboard) to delete a node. Move left and right arrow keys (in the keyboard) to move between nodes. To facilitate more accurate digitizing, the user can also zoom in or out in the map by clicking the icons. To go to the full view of the province, click the icon . To pan around in the map, use the icon .

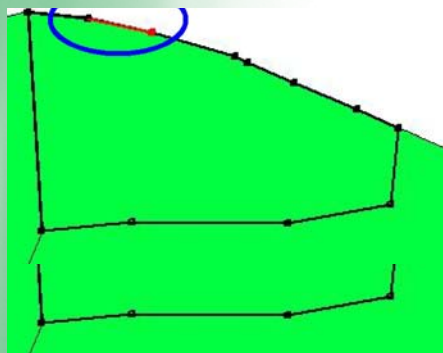


Figure 35

Please note that the **differently-coloured node and line is only where the user may add or delete a node or a series of nodes.**

e. To save the created polygon, right-click and a window **Add Name** will appear prompting the user to add the name of the feature and select in which parent feature it belongs.

Note: When digitizing, it is important to check if the digitized shapefile (whether polygon or coordinates) belong to the correct parent feature. In this example below, Bny\_Purok1 belong to Barangay Banaybanay (parent feature). If the digitized barangay was wrongly placed in a municipality, go the specific Map; right-click on the desired area and select Data and Edit name. Click the pull-down list to select the appropriate parent feature where the shape really belongs. Click OK.



Figure 36

f. Another window, **Edit [feature]**, appears containing the name of the purok, the date when the shapefile (polygons) was digitized and the cell containing boundaries (blue-colored cell indicating the presence of a series of coordinates). Click **OK** to save the data.

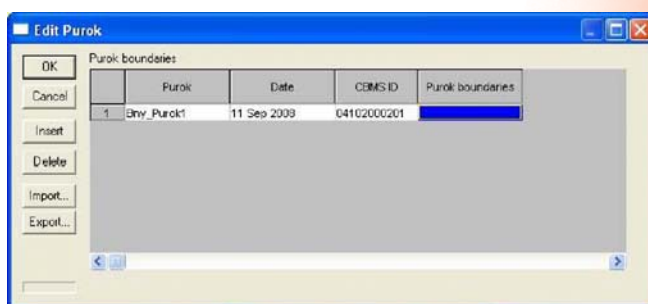



Figure 37

2.	Digitizing Polylines
a.	<p>To create <b>polylines</b>, which may represent features such as rivers and road networks, add the layer of the desired polylines feature to digitize by clicking the Map Layer icon . Select the desired feature with the corresponding display and label from the respective pull-down list. Click on the button <b>Ok</b> to add the map layer. Click the button <b>Yes</b> when asked if you want to continue because no feature names have been selected.</p> <p>Example: To digitize the road network, click on the Map Layers with the following specifications:  Name: &lt;blank&gt;  Display: Village Road length (polylines/polygons) Label: Village Road [name]</p>

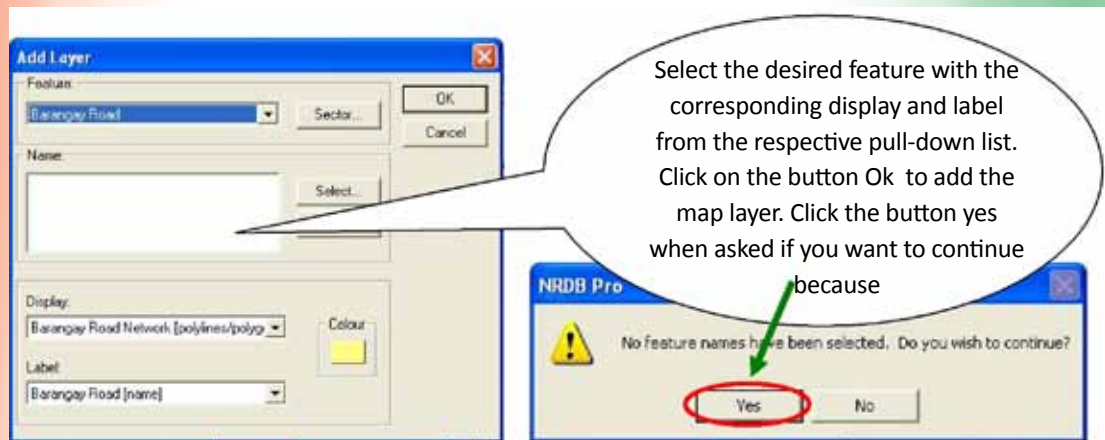


Figure 38

In the right hand of the interface, note that there is no coloured square adjacent to the feature as normally seen from the other existing features in the database. Ensure that the desired feature that the user will digitize is bordered with a broken line, as shown the example below highlighting the feature Village Road.

b. To start digitizing, right-click on the desired area in the map and select **Map**, then select **Add...**

c. The first time that the user will create a polyline, a window will appear to verify the type of shapefile s/he wants to digitize. Choose **Polylines** and click **OK**.

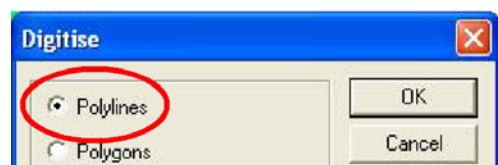
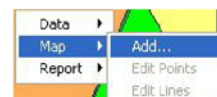
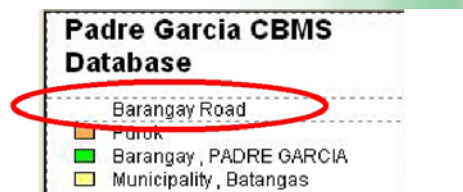




Figure 39

d. The arrow cursor will become a **cross cursor (★)**. To create a new node, left click on a desired corner. To create the polyline, add more nodes as tracing the shape of the road. Press **Del** key (in the keyboard) to delete a node. Move left and right arrow keys (in the keyboard) to move between nodes. To facilitate more accurate digitizing, the user can also zoom in or out in the map by clicking the icons province, click the icon  To pan around in the map, click the icon 

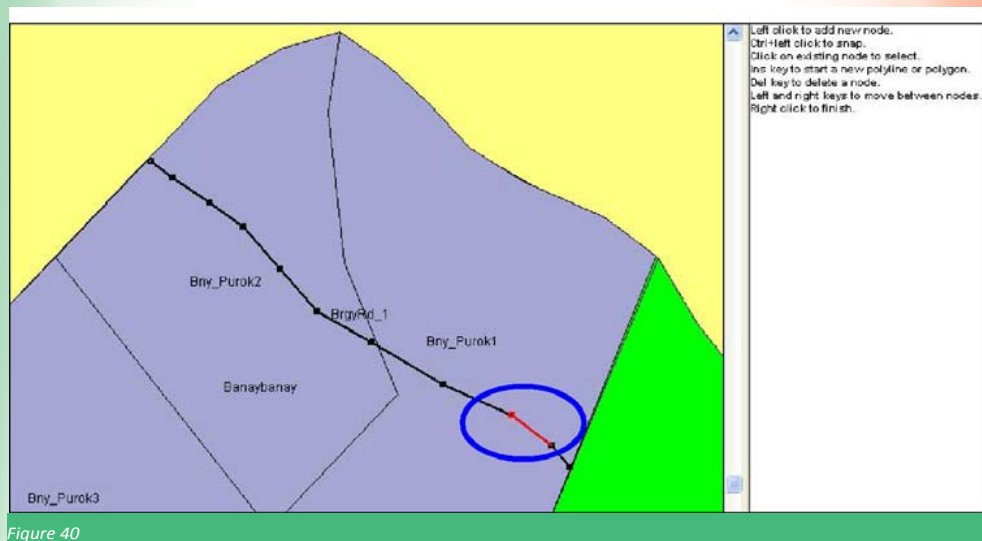


Figure 40

Please note that the differently-coloured node and line is also where you may add or delete a node or a series of nodes. In some cases, road, river and other polylines features cross one another. It is recommended that different names of roads be made to refer to parallel or crossroads. Do not create crossroads within a feature name for easier management of shapefiles.

e. To save the created polyline, right-click on the map and a window Add name will appear prompting the user to add the name of the feature and select in which parent feature belongs.

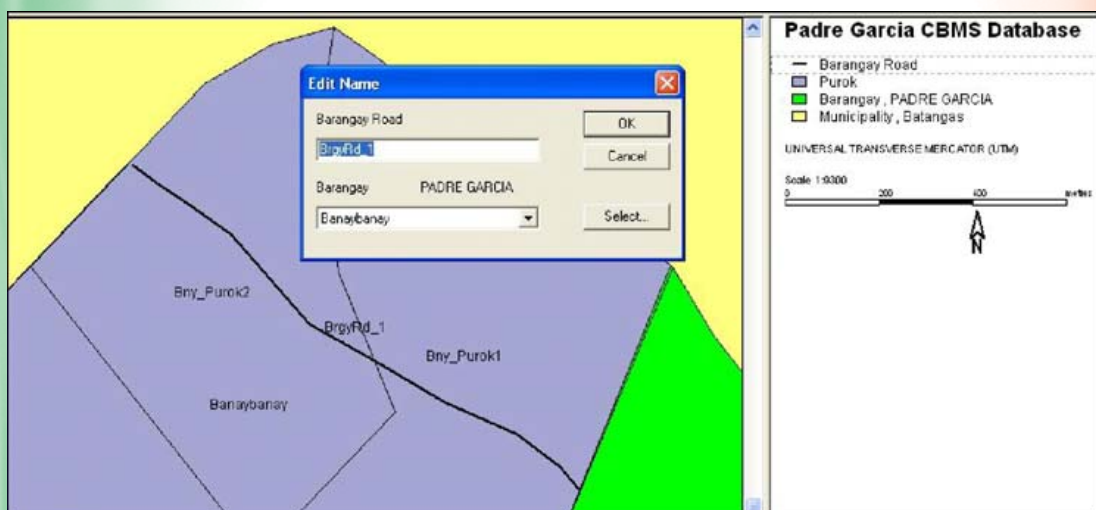



Figure 41

f. Another window, Edit Village Road, should appear containing the name of the village, the date when the shapefile (polyline) was digitized and the blue-coloured cell indicating that the lines are already contained in the database. Click OK to save the data.



3.	Digitizing Coordinates
a.	<p>To digitize coordinates (such as location of households, schools, churches, village health center and other infrastructure), click the Map Layer icon . Select the desired feature with the corresponding display and label from the respective pull-down list. Click on the button OK to add the map layer. Click the Yes button when asked if you want to continue because no feature names have been selected.</p> <p>To digitize the household locations, click on the <b>Map</b> Layers with the following specifications:  Name: &lt;blank&gt;  Display: Household location (coordinates) Label: Household (name)</p>

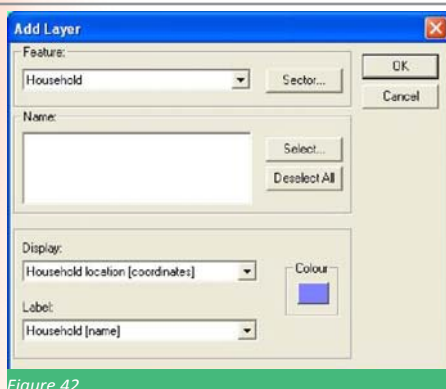


Figure 42

The user can also observe that there are no household names and the user will be asked if he wants to continue because no feature names have been selected. Meanwhile, there are no coloured square adjacent to the household feature in the right-hand corner of the interface.

Before digitizing the location of households, go to the Map Menu, click **Projections**. Then uncheck the box adjacent to Display as Latitude /Longitude. Click **Update** and close the **Projection** window.

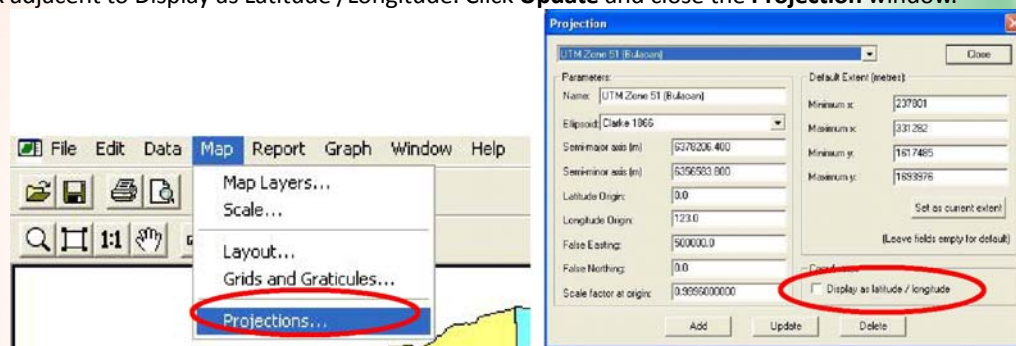
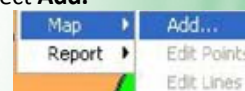


Figure 43

Always ensure that the desired feature to be digitized (example: household) is bordered with a broken line. Before digitizing coordinates, make sure that the parent features have already been digitized and defined. In the case of digitizing household locations, ensure that the purok boundaries have been digitized because the household is a child feature of the purok.

b. To start digitizing a household, right-click on the **map** and select Map, then select **Add**.



c. The arrow cursor will become a cross cursor. Click on the specific point in the map to add a coordinate. The **Add Name** window will appear prompting the user to input the household id number. Please note that this should be consistent with the household id number in the accomplished household profile questionnaire.

d. The window **Edit Household** will then appear containing the name of the household (hh id no), the date when the shapefile (coordinate) was digitized and the actual coordinates. Click **OK** to save the data.

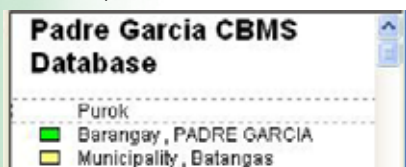
Figure 44

Note: If you placed the point in the wrong spot, click the button Cancel in the Add Name window and start again.

## 11.6 Editing Existing Sketch Maps

### 1. Editing Polygons

a. In order to edit the boundaries of a village, be sure to select the feature you wish to edit. When a feature is selected, a broken line is visible around the name of the feature.



b. When editing the digitized boundaries (example: purok), select the desired feature and click on the map (be sure that the desired feature is at the top layer of the interface. Right-Click on the map and a small window showing **Data**, **Map** and **Report** will appear. Click on **Map** and select **Edit Lines**. (Note that the Edit points option is disabled because you are editing a polygon/polyline and not coordinates.)



c. Notice that the boundary now becomes a series of nodes with one of them differently-coloured. Between this differently-coloured node and another node, notice that the line is also differently-coloured to guide the user where to edit. You may add another node by clicking a desired spot to include that area.

You may move the differently-coloured nodes and line with the left and right arrow keys in your keyboard. **Zoom** in or out to add more.

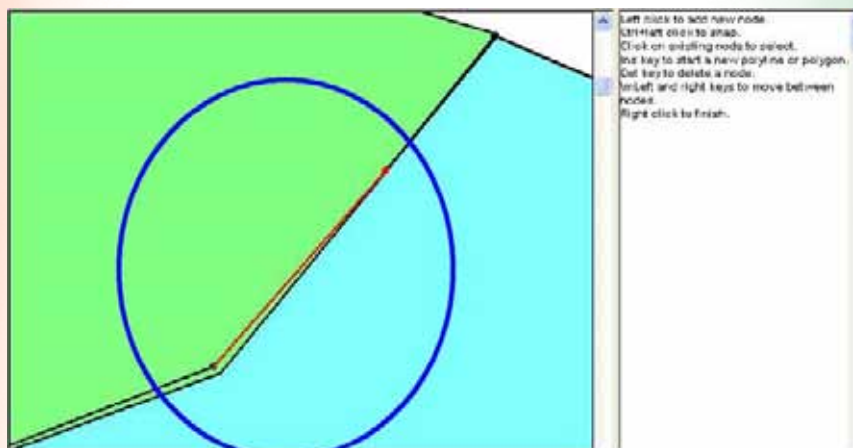
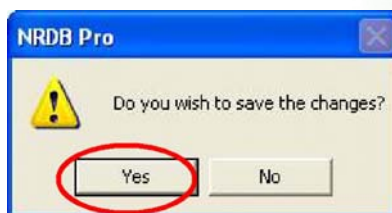


Figure 45

d. When you have completed editing the map, right click to save the edited map. The user will be asked “Do you want to save changes?” Click **Yes** if you have correctly edited the map.

e. To edit the village and purok boundaries any other polygon, follow the same procedure as discussed above.



or

## 2. Editing Polylines

Editing polylines follows the same procedure as editing polygons.

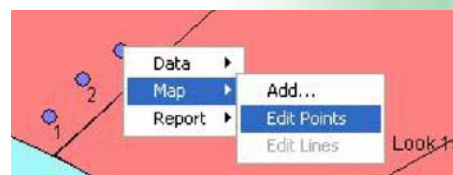
## 3. Editing Coordinates

a. To edit a household point, first, ensure that the feature household is highlighted. Next, point the arrow into the dot and left-click to select **Map and Edit** points.

b. Click on the dot and hold to transfer to the desired location of the household.

Note: When many dots have been digitized, which distances are visible only when zoomed-in, editing coordinates using (a) and (b) procedure may not produce the desired results. Instead, go to Data in the main menu, click Edit Data.

Choose the feature containing the coordinates the user wants to edit (example: Household). Select the corresponding name and click the button Delete. Then add the coordinate in the nearest estimated location possible.



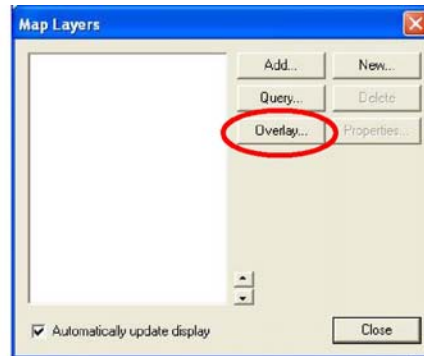


## 11.7 Using Scanned Maps

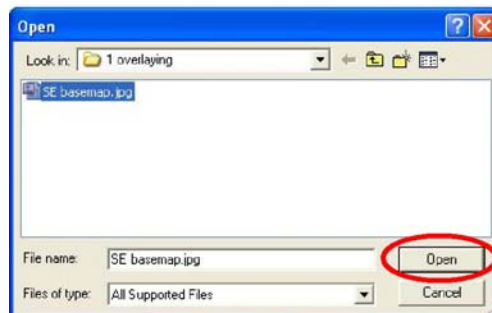
If at least two (2) opposing geo-reference points are known in the drawn spot maps, the spot map can be scanned using a desktop scanner. Scanned maps can then be geo-referenced and the data digitized on-screen.

The CBMS-NRDB comes with a programme Image to Shapefile, which can be used in using a scanned map to help in digitizing.

1. Open your NRDB file, e.g. SantaElena.mdb. In the **Map** layers dialog, click the button **Overlay**.



2. Browse and select the jpg or png file that will be used, for example, map of Santa Elena, Camarines Norte (SE\_basemap.jpg). Click Open.



3. The Image to Shapefile will open and the map will be displayed on the screen. Left click on a point and enter its coordinates. In the example below, the coordinates of the 1<sup>st</sup> point have coordinates 14°15'N, 122,20E.

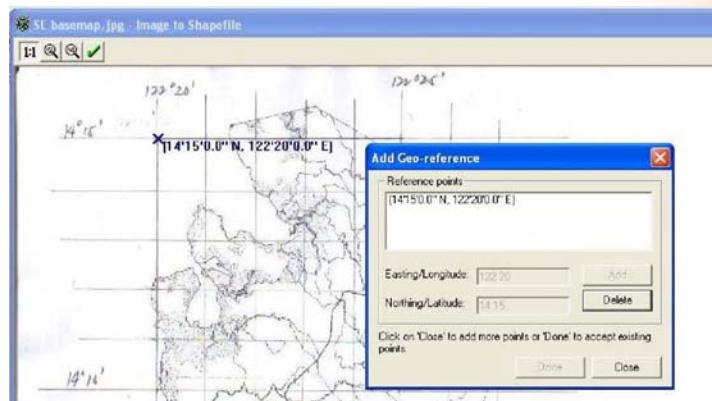


Figure 46

Note: If the geo-reference entered was wrong, user can click button Delete and start over.

4. Click Close then add again the next point. This should be done for points where their coordinates can be identified e.g. the corners of the map. At least two opposing points should be selected. Using 4 points is ideal. The selected points will be displayed on the screen along with their coordinates.

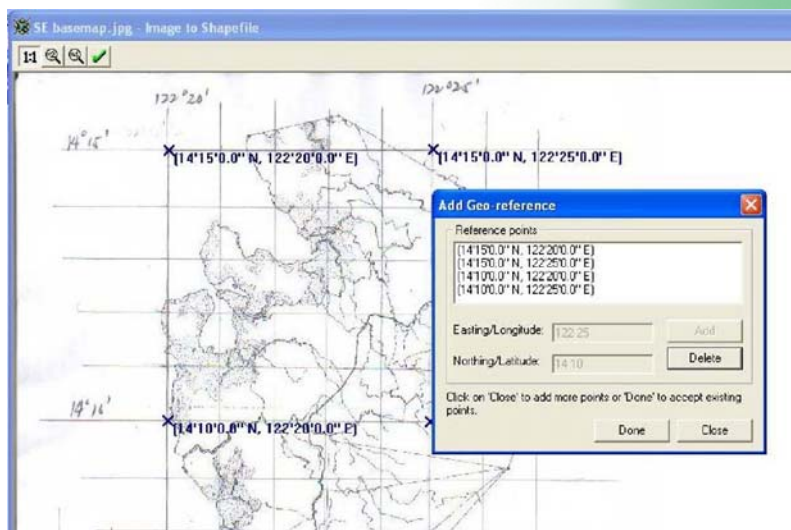


Figure 47

5. When done, click Close. The scanned map will appear in the map layers, you can now digitize the shapefiles (refer to section II.C.).

## 11.8 Saving the Database

As the programme is a database, anything written or done in the database after digitizing and editing is automatically saved.

### 1. NRDB Map Layout

Whenever the user wants to continue working using the same map layers with the same properties (such as color, legend, position of text and others), he/she may save the map lay-out in the computer as NRDB Map Lay-out (filename with .nrm extension). To illustrate this, save the sample file used in this manual, click the icon (or go to File, Save As...) and go to the desired directory to save the map lay-out. as sample.nrm.

To open the file again, the user may double-click the file sample.nrm with icon in the directory.

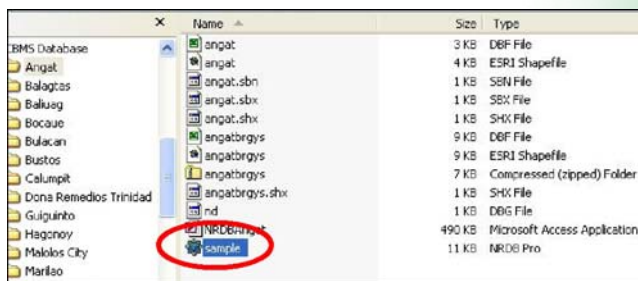


Figure 48

# 12 Community Data Analysis

In CBMS, the community members analyse data on the core indicators manually using tally sheets. Tally sheets provide the community with simple tools to analyse, interpret and use the collected data. The tally sheets are easy to construct, and they are easily interpreted by local people.

The tally sheets, which are usually kept at the chiefs' offices, are updated on a regular basis by the CBMS monitors and community members. During data analysis at the local level, discussion among the community members gives insights to the research team on the beliefs, values and perception of community members on issues related to education, maternal mortality, child deaths, etc. During the CBMS training of enumerators, they are trained on how to facilitate community member to manually analyse data.

## **Procedure:**

- Gather a group of people (per village) together for data analysis;
- Ensure a good mix of youth, adults, older persons and opinion leaders (this should include village elders, chiefs and youth leaders who may have a good understanding of the village);
- Identify a suitable place for conducting the exercise. It could be outside or inside a building;
- Facilitate the participants to identify someone to lead the process and someone else with skills to write down discussion emerging from the exercise;
- Take the group through the CBMS core indicators (health, education, maternal mortality, child deaths, water and sanitation etc)
- During these processes the community members are encouraged to discuss other issues that affect them.

Examples of questions to engage community members with during the data analysis process:

- In this village, how many women have died in the past 6 months due to pregnancy related complications?
- In this village what is the main source of water?
- Has any household member been sick in the last two weeks prior to the study?



### Example of a Community Tally Sheet for Murang'a Municipal Council

	ST MARYS	KIAMUCII	GATHITHA	KATIBA	KIANGAGE	GATUMAINI	GIATHINWA	KARIANDUNDU	KIAWANYUNGU	Total
<b>1. Health and Nutrition</b>										
a. Number of children 0-5 year who died	4	50	3	11	3	3	3	6	0	<b>80</b>
b. Prevalence of 0-5 malnourished children	49	0	39	45	6	45	39	6	1	<b>275</b>
c. Number of women deaths due to pregnancy related causes	10	10	0	4	0	11	0	0	0	<b>35</b>
<b>2. Housing</b>										
d. Number of households living in makeshift housing	160	380	100	127	135	150	100	130	129	<b>1411</b>
e. Number of households who are squatters	50	120	0	0	0	75	0	0	0	<b>245</b>
<b>3. Water and Sanitation</b>										
f. Number of households without access to safe water	214	60	160	157	35	65	147	160	150	<b>1148</b>
g. Number of household without access to sanitary toilets	243	4	128	160	60	45	32	90	30	<b>792</b>
<b>4. Basic Education</b>										
h. Number of children 6-12 who are not in elementary school	10	10	13	12	3	2	26	10	0	<b>86</b>
i. Number of children 13-16 who are not in high school	138	35	25	56	26	30	90	85	9	<b>494</b>
<b>5. Income and Livelihood</b>										
j. Number of household with farm land	337	400	100	42	80	130	144	100	45	<b>1378</b>
k. Number of households with livestock	15	300	165	73	85	5	145	80	65	<b>933</b>
l. Number of household that lost farm produce	450	350	165	160	120	135	144	160	130	<b>1814</b>
m. Number of households that lost livestock	39	20	150	134	80	10	5	85	5	<b>528</b>
n. Number of households that experienced food shortage	297	580	100	170	140	147	100	160	129	<b>1823</b>
o. Number of households who have unemployed members of the labour force	316	380	100	110	80	140	143	155	135	<b>1559</b>
<b>6. Peace and order</b>										
p. Number of households who are victims of crime	24	17	30	90	28	21	7	8	26	<b>251</b>

# 13 Community Data Validation

Validation of survey results is a vital component of the implementation of a community-based monitoring system (CBMS). For one, it is an important mechanism to ensure that the local leaders and the rest of the community members are informed of the results of the survey.

Furthermore, it provides an avenue for verifying the accuracy of the findings of the survey by facilitating discussion on the possible reasons for the said findings. This activity is intended to be undertaken at all geopolitical levels to be participated in by the CBMS focal persons at each level as well as community/sectoral leaders and volunteers.

## Objectives of the Validation Workshop

The validation workshop aims to:

- Present in an assembly the major findings of the CBMS survey on the socioeconomic status of community where the information was collected.
- Get feedback from the community on the accuracy of the information gathered by the CBMS enumerators.
- Identify and prioritize the major problem areas and possible interventions.
- Facilitate for the integration of CBMS Results in the preparation of the Annual Development Plan and Socioeconomic Profile.

## Expected Outputs:

1. Validated CBMS data
  2. Documentation of Proceedings of the Validation Workshop
- (Please see suggested outline of the workshop documentation report below.)

## Duration

Half-day activity

## Preparatory Phase

1. The CBMS Technical Team together with the involved community officials should meet at least a week before the scheduled community validation workshop to plan and discuss the following:
  - Community mobilization
  - Invitations to key participants
  - Logistical requirements of the workshop
  - Preparation of needed materials and documents
2. As a team, they should review and familiarize themselves with the activities to be undertaken in order to facilitate a smooth staging of the event.

### Key Participants

1. Community members
2. Designated CBMS enumerators
3. Designated CBMS field supervisors
4. Community local leaders

5. Local CBMS coordinator/partners
6. Other Community Representatives (FBOs, CBOs and NGOs)

The basic programme for the validation workshop is as follows:

### **1) Overview of the CBMS Survey Conducted**

- a. Provide the participants with a brief background on what the survey was all about, how and when it was conducted, its coverage and who were the key persons from the community who have administered and facilitated the survey operation and the processing of the data.
- b. Emphasize that the information gathered from the survey is intended to serve as inputs for the budgeting, planning and prioritization of development projects by the local leaders, as well as to further enrich the preparation of the socioeconomic profile of the community.

### **2) Presentation of CBMS Survey Results**

The status of development of the community based on the pre-identified core set of indicators shall be presented to the assembly in the form of tables and digitized maps. Any other community - specific indicators should also be presented. Prior to presenting the respective findings of the survey, it is important to carefully explain to the participants the operational definitions of each indicator.

It is recommended that the presenter immediately get feedback/possible explanations from the participants on why the piloted village/sublocation/ward fared best or worst on each particular indicator.

#### **Example1. Low Elementary School Participation Rate**

Low school participation rate in certain communities may indicate any of the following:

1. No Elementary School in the Community
2. Location of the nearest Elementary School is too far from the community
3. Lack of money of parents to send their children to school
4. Children are already working to help the family earn additional income
5. Parents simply do not want to send their children to school
6. Cultural reasons e.g early marriages

#### **Sample guide questions:**

1. What are some of the possible reasons why children are not going to elementary school in these areas?
2. How far is the nearest school facility in the community?

### **3) Identification of Major Problem Areas/Action Planning**

After a thorough discussion of the problem areas based on the results of the survey, the moderator highlights the top unmet needs of the community, and facilitates brainstorming of the possible interventions that can be done in order to address the said needs.

### **4) Recommendation from the Development Council Members**

At this point, it would be important to get feedback from these local leaders on how they intend to deal with the major problems and interventions validated as well as prioritized by the community.

### **5) End of the Workshop**

To conclude the activity, the moderator runs through the outputs produced for this workshop and informs the participants of the next set of activities where these outputs will be utilized.



# Annexes

## Annex I: CBMS Core Indicators

VARIABLES	
<b>Health and Nutrition</b>	
1	Proportion of HHs with children aged 0-5 years old who died
2	Proportion of HHs with women who died due to pregnancy related causes
3	Proportion of HHs with children aged 0-5 years old who are malnourished
4	Proportion of HHs with household members who have been sick in the last two weeks (prior to the date of data collection)
5	Proportion of HHs with members suffering from preventable conditions e.g. malaria and diarrhea in the last two weeks
6	Proportion of households who has access to health services
<b>Shelter</b>	
7	Proportion of households living in makeshift housing
8	Proportion of households that are squatters
<b>Water and Sanitation</b>	
9	Proportion of households with access to safe water supply
10	Proportion of households with access to sanitary toilet facilities
11	Average distance covered by women in search of water
<b>Education</b>	
12	Proportion of children aged 6-12 years old who are not attending elementary school
13	Proportion of children aged 13-16 years old who are not attending secondary school
14	Proportion of youth aged 15-24 years who are not literate
<b>Income Proxies</b>	
15	Proportion of households that experienced food shortage
16	Proportion of households who had balanced diet
17	Proportion of households with farmland
18	Proportion of household with livestock
19	Proportion of households that lost livestock
20	Proportion of households that lost farm produce
21	Proportion of HHs that received remittances from relatives working abroad

<b>Local Employment</b>	
22	Proportion of persons who are employed
23	Proportion of youth aged 15-24 who are not engaged in income generating activities
<b>Peace and Order</b>	
24	Proportion of persons who were victims of crime/conflict
<b>Gender Equity</b>	
25	Proportion of women who experienced gender-based violence
26	Proportion of women who have access and control of land and other resources
27	Proportion of women who have power to decide family size
28	Proportion of women who can bargain for safe sex
<b>Political Participation</b>	
29	Proportion of HHs who have eligible members who voted in the last general elections
<b>Government Programmes</b>	
30	Proportion of HHs who availed of any government programmes

## Annex II: CBMS Questionnaire - CBMS Form 1

### Questionnaire: Community-Based Monitoring System (CBMS) – Local Authorities

<b>Identification</b>	
Province: _____	
Constituency: _____	
Municipal Council: _____	
Ward: _____	
Village: _____	
Interviewer's Name: _____	
Household Number: _____	
<b>Language</b>	
Language of Questionnaire: English	
Language of Interview _____	
Time Started _____	
Time Ended _____	
<b>Introduction and Consent</b>	
<p>Good morning/afternoon. My name is _____. I am from the AIHD/Municipal Council of Kisumu. We are conducting a study on development issues in this ward with the aim of developing a system that would allow the council to gather important information that would help it to plan and monitor development initiatives. Your participation in this study will be highly appreciated. All the information provided will be kept strictly confidential and will only be used for the purpose of this study. You are free to stop the interview at any time.</p>	
May I begin the interview now? 1) Yes..... 2) No.....	
Signature of interviewer: _____ Date: _____	
<b>1. Ethnic group of household head</b>	
<b>2. Marital status (tick)</b>	1) Single 2) Married 3) Divorced 4) Widow/widower 5) Separated 6) Cohabiting (come-we-stay)
<b>3. Main occupation</b>	1) Employed(salary) 2) Casual worker (kibarua) 3) Unemployed 4) Self-employed



## Education

4.	4a.	4b.	4c.	4d.	4e.	4f.	4g.
	Status in family	Gender 1) Male 2) Female	Age	Literate 1) Yes 2) No	Attending school 1) Yes 2) No	Working 1) Yes 2) No	Highest education 1) No education 2) Adult education 3) Pre-primary 4) Not finished primary 5) Finished primary 6) Finished secondary 7) Not finished secondary 8) Finished college 9) Finished university
1	Head						
2	Spouse						
3	Spouse						
4	Spouse						
5	Spouse						
6	Child						
7	Child						
8	Child						
9	Child						
10	Child						
11	Child						
12	Child						
13	Child						
14	Child						

5. Does your household have any students who shifted from private to public schools?	1) Yes 2) No	If No skip to 7
6. What is the main reason for shifting to public schools?	_____	
7. How much do you pay for their tuition fees (monthly) and other school expenses?	1) Less than Kshs1000 2) Kshs 1000-2000 3) Kshs 2000–3000 4) Over Kshs 3000 96) Other specify _____	
8. Was there any decrease in your monthly educational expenses during the last 6 months?	1) Yes 2) No	

## Employment

9. Is there any household member 15 years old and below who has been working in the last six months (for income)?	1) Yes 2) No	If No skip to 12
---	-----------------	------------------

10. If yes, how many?	1) One 2) Two 3) Three 4) More than three	
11. Did they drop out of school to work?	1) Yes 2) No	
12. Does your household have any member 60 years old and above who has been working for the last six months (for income)?	1) Yes 2) No	If No skip to 14
13. Were they previously working?	1) Yes 2) No	
14. During the past 6 months, are there household members who had sought or currently seeking additional work besides their primary occupation?	1) Yes 2) No	If No skip to 16
15. What is the reason for seeking additional employment?	_____	
16. During the last 6 months, are there household members who lost jobs?	1) Yes 2) No	If No skip to 18
17. What is the reason for the job loss?	_____	
18. During the last 6 months, is there any employed persons in your household who experienced wage cut?	1) Yes 2) No	
19. During the last 6 months, is there any member of your household who experienced reduced working hours?	1) Yes 2) No	

#### Food and Nutrition

20. Have there been changes in how the household eats, prepares, or purchases food during the past 6 months?	1)Yes 2)No	If No skip to 22
21. What are these changes?	_____ _____	
22. In the last 3 months, did it happen even once that your household experienced hunger?	1) Yes 2) No	If No skip to 24
23. How many days did your household experience hunger during the past 3 months?	Names of the month	No. of days
	a. First Month _____	_____
	b. Second Month _____	_____
	c. Third Month _____	_____

In Q 24, interviewer to elaborate the meaning of a balanced meal to the respondent - a meal that has proteins, carbohydrates and vitamins (from vegetables and fruits)		
24. Did your household have at least three balanced meals a day in the last one month?	1) Yes 2) No	
25. If the household has a child below five years, is the child suffering from disease of malnutrition such as Kwashiorkor or Marasmus? (As assessed by the interviewer or respondent or by using clinic card)	1) Yes 2) No 98) Don't know 97) Not Applicable	
26. How close is your nearest food market?	1)1km 2)2-5Km 3)>5km 96) Other, _____ Kms	
27. What is the cost of maize in the market you use per 2Kg (Gorogoro)?	_____	
28. What is the cost of oil/cooking fat per 250ml/g?	_____	
29. Do you produce food for household consumption?	1) Yes 2) No	

#### Health

30. If couple in the household is currently married, are they	1) Yes 2) No	
31. If yes, what type:	1) IUD 2) Injection 3) Condom 4) Pill 5) Implant 6) Natural methods	
32. Was there any child death during the past three years?	1) Yes 2) No	
33. Is there any child in the household younger than five years old?	1) Yes 2) No	
34. If household has child, did the mother receive routine prenatal treatment (minimum 4 times)	1) Yes 2) No	
35. Did the mother receive postnatal treatment up to 40 days after the birth?	1) Yes 2) No	
36. Who assisted the last child delivery?	1) Doctor 2) Hospital midwife 3) Traditional Birth Attendant 96) Others, _____	



37. Types of immunization received by the youngest child: Interviewer: ask to see the clinic card  Card seen: Yes No	a) BCG 1) Yes 2) No b) DPT 1) Yes 2) No c) Polio 1) Yes 2) No d) Measles 1) Yes 2) No e) Hepatitis B 1) Yes 2) No	
38. Has any female member of this household died due to pregnancy related complications?	1) Yes 2) No	
39. Has any household member been sick in the last two weeks (prior to the study)?	1) Yes 2) No	
40. Did the sick household seek for medical assistance?	1) Yes 2) No	
41. If no to Q 40, why did the household member fail to seek medical assistance?	_____	
42. Has any household member suffered from malaria in the last two weeks (prior to the study)?	1) Yes 2) No	
43. Has any household member suffered from diarrhea in the last two weeks (prior to the study)?	1) Yes 2) No.	
44. Where did any ill household member go for treatment during the last 6 months?	a) Public hospital b) Public health centre c) Private clinic d) Nurse/midwife e) Over-the-counter medicine f) Alternative healer g) Others, specify _____	
45. What was the main source of funds to go to formal health facilities e.g. hospital.	1) Out-of-pocket 2) Borrow 3) Health insurance 96) Other, specify _____	
46. In the last 3 months how much did your household use on medical expenses on average?	1) Less than Kshs 1000 2) Kshs. 1-2,000 3) Kshs. 2,000-4,000 4) Kshs. 4,000-5,000 5) Over Kshs. 5,000 96) Others, specify _____	

47. Was there a decrease in your medical expenses during the last 6 months?	1) Yes 2) No	If No skip to 49
48. What is the main reason for the decrease in your medical expenses?	_____	

#### Household Members with Disabilities

49. Does the household have any member with a physical/mental disability?	1) Yes 2) No	If No skip to 53
50. What type of disability does s/he have?	1.Total blindness _____ 2. Partial blindness ____ 3.Totally deaf _____ 4. Partial deaf _____ 5. Crippled(kilema) ____ 6. Mental disability ____ 7. Dumb(bubu) _____ 96.Other(specify) _____	
51. Does the member with disability receive any assistance?	1) Yes 2) No	
52. From whom does she/he receive this assistance?	1) Government 2)NGO/CBOs/FBOs 96)Other, specify _____	

#### Water and Sanitation

53. What is your household's main source of drinking water?	1 )Tap water 2) Unprotected wells 3) Protected wells 4) Bottled water 5) Rivers/springs 96) Other, specify _____	
54. What is the average distance to the water source?	1) Less than 1km 2) 1-3kms 3) 4-6kms 4) 7-9kms 5) 10kms and above	
55. What kind of toilet facility does your household use?	1) Flush toilet connected to sewer 2) Flush toilet connected to septic tank 3) Pit latrine 4) VIP pit latrine 5) River 6) Bush 96) Other, specify _____	

56. How many other households use the above mentioned toilet facility (including the respondent's household)		
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#### Sources of Income Part A

Entrepreneurial Activities	Net Income	
57. During the past 6 months, did you or any member of your household engage in any of the following entrepreneurial activities to earn income or profit?	Codes: 1. Yes 2. No	What was the total net value of income from these activities in the past 6 months in Kshs?
58. Crop farming such as growing of water melons, bananas, mangoes, cowpeas, rice, etc		a) In cash      b) In kind
59. Livestock and poultry raising such as cattle, camels, sheep, goats, donkeys, chicken, etc		
60. Fishing activities such fish farming, fish drying, etc		
61. Forestry and hunting activities such as tree planting, firewood gathering, charcoal burning or hunting of wild animals and birds, etc.		
62. Wholesale and retail trade e.g. market vending, hawking, etc.		
63. Manufacturing activities such as mat weaving, tailoring, dress making, etc.		
64. Community, social and personal services such as medical and dental practice, operation of schools, restaurants, hotels, etc.		
65. Transportation, storage and communication services such as operation of boda bodas, simu ya jamii, storage and warehousing activities, etc		
66. Mining and quarrying activities such as gravel, stone and sand quarrying, etc.		
67. Construction like repair of houses, building, etc.		
68. Activities not elsewhere classified.		
<b>69. TOTAL NET INCOME FROM ENTREPRENEURIAL ACTIVITIES</b>	69 a. Add net income from 57 a. to 68 a.	69 b. Add net income from 57 b. to 68 b.



### Sources of Income Part B

<b>Salaries and Wages from Employed Members</b>		
70. During the past 6 months, how much was the gross salaries and wages earned by employed members of your household?	<b>Gross Salary</b>	
	a) In cash	b) In kind
Name of employed member		
1 _____		
2 _____		
3 _____		
4 _____		
<b>TOTAL SALARIES AND WAGES</b>	70 a.	70 b.
<b>Assets Transfers</b>		
71. During the past 6 months, did you or any member of your household borrow money?	1) Yes 2) No	If No skip to 73
72. Where did you/your household borrow money from?	_____	
73. During the last 6 months, did you or any member of your household sold belongings?	1) Yes 2) No	If No skip to 75
74. What kinds of assets were sold?	_____	
75. During the past 6 months, were you or any member of your household received assistance from a charity organisation?	1) Yes 2) No	If No skip to 77
76. What kind of assistance?	_____	
77. Do you or any of your household members have savings in any local bank?	1) Yes 2) No	If No skip to 79
78. During the past 6 months, have you made use of your savings?	1) Yes 2) No	
<b>Diminishing Remittances</b>		
79. Did you/your household receive remittances from relatives working abroad during the last six months?	1) Yes 2) No	If No skip to 84
80. Did your household see a decline in remittances received from relatives working abroad during the last 6 months?	1) Yes 2) No	
81. What is the reason for the decrease in remittances received?	_____	
82. Had there been changes in the schedule when the household receive remittances from relatives working abroad in the last 6 months?	1) Yes 2) No	
83. What is the reason for the changes in the schedule for the receipt of remittances?	_____	

### Agriculture (For those who answered Yes in Q 58)

84. What is the ownership status of the agricultural land being tilled by the household?	1) Own 2) Communal 3) Hired 4) Not owned but with permission from owner 5) Not owned and without permission from owner 96) Others, specify _____	
85. What is the area of the agricultural land? 1) Less than 1 hectare	2) 1-3 hectares 3) 1- 5 hectares 4) More than 5 hectares	
86. During the last 6 months, how much of the crop or fruit bearing trees did you harvest? (In bags/kilograms)	Crop 1. Maize 2. Bananas 3. Mangoes 4. Cowpeas 5. Water melons 6. Tomatoes 7. Beans 8. Sugar-cane 9. Paw-paw 10. Rice 11. Green grams 96. Other (specify)	Quantity _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
87. Do you or any member of the household use any of the following agricultural equipment/facilities?	1) Donkey/ox/camel, etc 2) Plough 3) Insecticide/pesticide 4) Farm tractor 5) Harvester, any type 6) Farm shed 7) Irrigation pumps 8) Jembe/Hoe 9) Panga 96) Other, specify _____	1) Yes    2) No 1) Yes    2) No 1) Yes    2) No 1) Yes    2) No 1) Yes    2) No 1) Yes    2) No 1) Yes    2) No 1) Yes    2) No 1) Yes    2) No

### Livestock (For those who answered Yes in Q 59)

88. For the past 6 months, what number of livestock or poultry has your household raised to earn income?		Codes 1) Yes 2) No	How many
	1) Cow 2) Goats 3) Sheep 4) Camel 5) Chicken for meat 6) Chicken for eggs 7) Ducks 8) None 96) Other, specify	_____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____
89. For the past 6 months, what was the usual volume of production of livestock or poultry raised by your household?	1) Live animals (number of heads) _____ 2) meat (weight in kilograms) _____ 3) Milk (in litres) _____ 4) Eggs (numbers) _____		

90. In the past 6 months, was your household severely affected by natural or man-made calamities such as drought, flood or conflict?	1) Yes 2) No	If No skip to 93
91. What was the natural or man-made calamity that affected your household?	1) Drought 2) Ethnic conflict 3) Flood 4) Human-wildlife conflict 96) Other, specify _____	
92. What did you lose in the calamity?	1) Livestock 2) Crops/farm produce 3) Household members 4.) Shelter 96) Other, specify _____	
<b>Shelter Condition and Facility</b>		
93. House ownership status	1) Own 2) Rent 3) City council 5) Borrow 96) Other, specify _____	
94. Are there any other families living in the same house?	1) Yes 2) No	If No skip to 96
95. If yes, how many families are living in the house	_____ families	
96. How many persons (including respondent's family) are living in this house?	_____ persons	
97. House area	_____ M2	
98. Type of floor	1)Tile 2)Cement 3)Wood 4)Mud 96)Other, specify _____	
99. Type of roof	1)Iron sheets 2) Makuti 3) Grass 96) Other, specify _____	
100. Type of wall	1 )Cement 2) Mud 96) Other, specify _____	
101. Main source of light	1)Electricity 2)Generator 3)Kerosene lamp 4)Torch/candle 5) Tin lamp (Koroboi) 96)Others, specify _____	



102. Main cooking material	1)Firewood 2)Kerosene 3)Gas 4)Charcoal 5)Electricity 96) Other, specify _____	
103. Does your household own any of the following items? (Functional)	a) Radio                      1)Yes              2) No b) Television set            1)Yes              2) No c) Landline telephone      1)Yes              2) No d) Mobile telephone        1)Yes              2) No e) Bicycle                    1)Yes              2) No f) Motorcycle                1)Yes              2) No g) Car/truck                  1)Yes              2) No h) Refrigerator                1)Yes              2) No	
<b>Politics and Security</b>		
104. Did any eligible household member vote in the last general elections? (2007).	1)Yes every member 2)Yes some members 3)No	
105. During the past 6 months, have you or any member of your household become a victim of crime?	1) Yes 2) No	If No skip to 107
106. If yes, what type of crime?	1)Murder/Homicide 2)Theft 3)Rape 4) Physical injury 96)Other (specify) _____	
<b>Gender Equity (This section should be answered by eligible women in the household)</b>		
107. Do you have access and control of land and other resources?	1) Yes 2) No	
108. Would you ask your spouse or partner to use a condom if you suspected that he was unfaithful?	1) Yes 2) No	
109. Do you decide with your spouse or partner the number of children that you want to have?	1) Yes 2) No 3) Decide together	
110. Have you been beaten by your spouse or partner in the last 6 months?	1) Yes 2) No	If No skip to 112
111. If yes, how many times in the last 6 months?	_____	
<b>Access to Credit</b>		
112. Did your household access loan for the last 6 months?	1) Yes 2) No	If No skip to 114
113. What was the main purpose of the loan?	_____	

### Access to Government Programmes

114. During the past 6 months, did you or any member of your household receive or avail of any of the following programmes?	1) Youth Development Fund      1) Yes      2) No 2) Bursary Fund                      1) Yes      2) No 3) Higher education loan          1) Yes      2) No 4) CDF                                      1) Yes      2) No 5) Women Enterprise Fund        1) Yes      2) No 6) Agriculture Extension Services 1) Yes      2) No 7) Livestock restocking programme 1) Yes      2) No 8) Local Authority Transfer Fund (LATF) 1) Yes      2) No 9) Relief food services                      1) Yes      2) No 10) Kazi kwa vijana                      1) Yes      2) No 96) Others, specify _____	
115. How did this programme affect your household?	1) Less than Kshs.1000 2) Kshs 1000- 2000 3) Kshs. 2000 – 3000 5) Over Kshs. 3000 96) Others, specify _____	
117. Was there any decrease in your household's monthly clothing expenses during the last 6 months?	1) Yes 2) No	

### End of Interview: Thank The Respondent for his/her Time

Interviewer's Observations

Comments About Respondent

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Comments on Specific Questions

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Name of Enumerator: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor's Observations

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Name of Supervisor: \_\_\_\_\_ Date: \_\_\_\_\_