

Livelihoods Fieldwork. A practical guide on data collection methods in pastoral regions in Sub-Saharan Africa

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Abstract: This paper presents a practical guide on relevant methods to be applied when carrying out research on pastoral livelihoods. It is apparent in the discussions that no single method could provide a holistic approach in understanding how pastoral households are able to sustain their livelihoods in increasingly arid conditions where they occupy. Combinations of different methods are discussed where each serves a different but complementary role within the overall research design. The research methods includes: documentary review, observation and informal interview, key informant interview, household survey, and case histories and mapping. It is documented that the collection of information concerning livelihoods of pastoral communities requires a good level of trust between the researcher and the respondents. Informal discussion with villagers and local leaders during the reconnaissance period, prior to conducting formal interviews is used as a way of achieving this trust among villagers. Furthermore, identifying research assistants who are resident in the research area also improves trust by village members. Using different methods and asking different people the same questions is a means of ensuring reliability of the information collected. The use of open-ended questions is aimed at obtaining a deeper and clearer understanding of the livelihood responses of different groups, with different level of access and rights to socio-economic resources. It is argued that analysis of pastoral livelihoods using the documented methods could lead to a successful development of strategic short, mid-term and long term interventions which may enhance the existing livelihoods strategies of the pastoral communities.

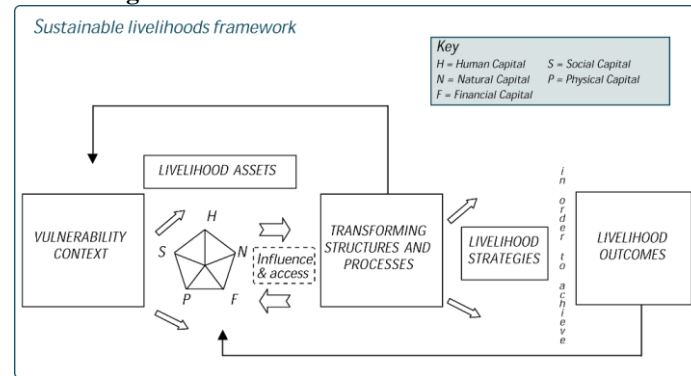
Keywords – *sustainable livelihoods, methods, key informant and household*

I. INTRODUCTION

The methods discussed in this paper allow a comprehensive understanding of the strategies and assets that constitute the livelihoods of the pastoral communities in Sub-Saharan Africa (SSA). The methods are based on a multi-scale approach which provides in-depth analysis of the livelihoods at a macro level (District), meso level (livelihood zones) and micro level (household level). At the macro-level, the analysis should show how institutional factors and the historical, cultural, socio-economic and bio-physical factors contribute to the contemporary and possibly to the future livelihood status of the population in the assted area or region. At a meso level, the analysis should describe the vulnerability and the hazards affecting each livelihood zone as well as the existing livelihood strategies and assets. At the micro level, the analysis helps in understanding how resources are accessed and utilised at household level. This paper argues that to identify better methods for collecting a comprehensive data on the livelihood situation of pastoral communities in Sub-Saharan Africa (SSA) which takes into consideration the macro, meso and micro levels, there is need to refer to the livelihood framework as designed by Ellis 2000; DFID 2001; and Scoones 1998. For instance, Scoones (1998) definition of livelihood is fundamental in developing research tools for research since it considers a wide range of factors that determine the livelihood of people in a particular setting, bridge the gap between macro and micro level, and focuses on livelihood sustainability. It is also people centered, holistic - give a comprehensive overview of the vulnerability context, and dynamic for coming to grips with the complex nature of the local peoples' livelihoods (see Table 1). According to Scoones (1998:5) "A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks maintain or enhance its capabilities and assets, while not undermining the natural resource base". Therefore, the livelihood framework should guide and inform the overall methodology and the actual questions asked in the field. Following Strauss and Corbin (1990), Kanbur (2001), and White (2002), complementary qualitative and quantitative is critical for a livelihood research. According to Salkind (2003), a qualitative research strategy is used to explore perceptions of people and gain deeper insights of specific issues, and to address the institutional context of livelihoods and changing livelihood responses to growing difficulties at both the household and community level. This line of thought is supported by Kane (1995) who argues that qualitative methods are participatory in nature and seek to understand the reality of the situation from the actors' points of view. Furthermore, I argue in this paper that a

qualitative research implies an in-depth study that utilizes a variety of data collection techniques, which envisages the holistic nature of the data. In addition, a quantitative method is used as a means to document repetitive patterns of interest to the research, and to summarize assets and activities. The quantitative data also helps to increase understanding of the range of situations and the degree of variations (or homogeneity) within and between the villages chosen for research.

Figure 1: Sustainable Livelihood Framework



Source: DFID 2001; Scoones 1998

II. DATA COLLECTION TECHNIQUES

The approach to be adapted in pastoral livelihood research should view research as a process of interaction between theory and methodology. According to Crosbie Walsh (2005: 93) “methodology is a means for generating data to be used in testing hypotheses which derives from theory where applicable, the testing of the hypotheses leads to recasting of theory and emergence of new theoretical paradigms”. Similarly, Mikkelsen (2005) argues for a closer relationship between methodology and theory. According to her, advancing a set of hypotheses, which data generated by a given methodology cannot test, would be a futile exercise. It is argued that use of a variety of data collection techniques and sources of information to collect both qualitative and quantitative data helps the researcher not to end up with biased interpretations. Mikkelsen’s (1995: 223) argument supports this notion and states that “methods should not become straitjackets” and it is the objectives that should guide one to choose the methods, and not the other way around.

III. DOCUMENTARY DATA – RELEVANT REPORTS REVIEW

Mikkelsen (1995: 74) writes “no matter what your research topic is there is almost always a wealth of information hidden in a variety of sources”. For pastoral livelihoods, published and unpublished research and reports on historical, socio-economic, cultural, political, ecological, national, and area-specific issues have to be reviewed, and both used as background information to strengthen presentation of findings and analysis. From these documentary reviews, the researcher is able to identify key themes that had been tackled by various previous researchers, and note the existing gaps in knowledge hence construct a proper context of the research. However, in most cases, the records tend to blame pastoralists and their way of life (nomadism) and usually conclude that they should abandon nomadism and settle down as cultivators.

IV. RECONNAISSANCE SURVEY

Due to some limitations of the archival records, it is necessary to talk to the pastoralists themselves and learn from them. Therefore, much of the study time prior to the household surveys should be taken up by visiting the selected research sites for the purpose of observation and informal interviews. This is necessary to make the researcher be known, conceptualize the problem on the ground and consequently plan for intensive formal interviews. Minimal mapping of water points, grazing areas, villages, physical information (elevation, water drainage...), and migration patterns could also be done during the reconnaissance survey. This follows Zoomer’s (1999) argument that there is need to consider structural components while analyzing people’s livelihoods. She argues that structural components such as geographical settings, whether rural or urban, and different agro-ecological zones such as mountainous regions, distance to markets, and demographic structure, influence the set of opportunities and outcomes of the actor. Although observation and informal interviews are useful in introducing the research to the pastoral life style, it also helps the researcher to sharpen the focus of research. However, this method also has its limitations. Firstly, the respondents may not be systematically selected. The researcher just happens to live together with the respondents and talk. Secondly, the issues being discussed are never entirely controlled. A topic would come up and be discussed spontaneously.

Therefore, data generated in this way leave a lot of gaps in the subject of response to livelihood sustainability. Thirdly, the data generated through observation and informal interviews are not enough to bring out completely, the pastoral people's cultural interpretation of their situation, and how they cope with their conditions. There is then a need for a more systematic data collection technique.

V. HOUSEHOLD SURVEY

Household interview method is chosen because informants are individual actors with different experiences, status, needs, and motives. It is also important to acknowledge and categorize individual people's experiences, behaviours, and values to be able to say something general about that specific group of people being studied and their livelihood. This conforms to conventional livelihoods literature where a household is usually regarded as the suitable social unit for livelihoods research (Mikkelsen 2005; Bryman 2004). Furthermore, in most pastoral communities in SSA, even though households may also form larger groups 'neighborhoods', matters relating to food security are still decided at the household level as it is the main production and consumption unit. Therefore, household survey remains the main source of both qualitative and quantitative data. The first interview task should be to pre-test the questionnaire to establish irrelevant questions, and whether it is lengthy so as to make changes where necessary. Some good questionnaire could be guided by these two texts: "Rural livelihoods and diversity in developing countries" by Ellis 2000 and "measuring social capital: an integrated questionnaire" by Grootaert, Narayan, Jones, and Woolcork. The head of the household should be interviewed in-depth. Female household member should also be interviewed on issues related to food. Therefore, household's interviews should shade more light on the following:

- i. Trends in livelihoods in order to identify the typology of livelihoods
- ii. Vulnerability context
- iii. The coping strategies related to the different livelihoods
- iv. Trends in access and use of resources (water, wood, fish, grazing area...) for domestic purposes as well as economic activities of the family.

VI. SAMPLING HOUSEHOLDS

Sampling can be defined as the process of selecting a representative set of cases from a much larger set (Ragin 1994). A random sampling method is recommended for selecting the households. However, there is need for a researcher to get a clear meaning of what a household mean from the pastoral community point of view. This is because the concept of a 'household' is a fairly contested and complex term, and defining it may not be as straightforward as it seems. No matter which definition one decides to use, it may not be applicable to all societies and cultures. The specific forms and characteristics of households often depend on context, a combination of social and cultural norms and economic incentive (World Bank 2001). According to World Bank (2001), the way in which households are constituted changes in response to demographic and economic change, as well as changes in norms. According to Eriksen (1996), the most frequent definition of the household is relatives who live under the same roof, and regularly eat their main meals together. However, the character of 'live under the same roof' may not be very essential because the living arrangements vary throughout different communities. In some communities men and women do not share the same domicile. The household is sometimes composed of a nuclear family with details; husband, wife, and children, and is other times a compound family with details; husband, wives, and children. For instance, households in pastoral communities in SSA may not be as typical as in Eriksen's definition above. Since there are great seasonal variations and combinations concerning who shares food with whom in pastoral society, this definition may be too narrow to identifying a discrete unit on which a consistent analysis can be built. For instance, you may find in a particular pastoral community, the household members eat their main meals from the same pot but not together; women and girls eat separately from men and boys. Secondly, polygamy is common among pastoral societies and wives may either live close to each other or scattered. The husband may stay permanently at one of his wives' houses or can move around between them. It is also common for members of the nuclear family to follow grazing cattle and live in cattle camps while some move back and forth between their houses in the villages and the cattle camps. In the cattle camps, the units living together are not the same as in the village, and people who do not share the same house in the village can share food and sleep together in the camp. However, notably within pastoral regions, there are always large numbers of households at each site living roughly in loose clusters. Due to this characteristic, this paper suggests a multi-stage sampling method is the best way of selecting the respondents. The households in each cluster are listed then sampled as follows :

Sampling stage 1: The clusters are given numbers for example 1-6. Two or more clusters are picked at random for example 2 and 5.

Sampling stage 2: Once the sample frame is ready, respondents should be selected for the study (using a paper and basket method). All the households on the sample frame are assigned numbers. The numbers should be

written onto separate pieces of paper and folded. All the folded papers should thereafter be put in a basket then shaken thoroughly. Numbers are then drawn from the basket, one after another, until the sample size is reached. However, due to the fact that pastoralists are normally mobile, the researcher should be prepared to repeat the sample process to select another household within the same sample area if a sample household had migrated. Another contingency measure is that if an entire sample community had moved out of the area, a new sample area should be selected.

VII. KEY INFORMANT INTERVIEW

To assemble systematic information on the history of livelihood in a pastoral land, cultural interpretation, and modes of adaptation in the past and today, key informants should be identified and interviewed. Due to the nature of information required from them, the best practice is to interview old people above sixty five (65 years). These key informants also helps to clarify issues touched in the household questionnaire but which may require to be elaborated on so as to reach plausible conclusions on the findings.

VIII. SAMPLING KEY INFORMANT

There is no sample frame prepared for the selection of key informants. During the reconnaissance survey, the researcher is meant to establish rapport with many villagers, and, through observation, informal meetings, interaction and discussion with various groups of people in market places and in other social places, he or she should be able to identify key informants. Key informants are people perceived to have particular insight or opinions about the topic under study. They may be ordinary people and not necessarily the specialists, the better educated, those in power or the officials (Mikkelsen 2005). The main criteria suggested in this paper for selecting the key informants is their ages, especially the old, (65 years and above), and those assumed to have extensive knowledge of their pastoral cultural practices related to livelihood sustainability both current and in the past, and lastly, their length of stay in the research site.

IX. FOCUS GROUP DISCUSSION

These FGD's will provide qualitative information on migration routes, as well as a description of a "normal" year, week and day. Hazards affecting livelihoods and coping strategies of the community in a crisis (conflicts, drought, floods...) will also become known. A focus group discussion is a useful participatory investigation tool where there is an open debate between community members producing perspectives on their livelihood and data on their yearly activities.

X. DATA ANALYSIS

Livelihoods research usually uses qualitative analytic tools to organize, summarize, interpret and present research findings in relation to the research objectives. The analysis of the qualitative data should start right from the field. The work should be edited at different stages while out in the field during data collection. Editing each interview soon after it is conducted gives the researcher a chance to get back to respondents to fill in missing information. After data collection, the field notes should be organized into categories and subjected to thorough analysis to eliminate any errors. This included rationalized selection of evidence after corroboration with other sources to ascertain authenticity and validity of information, and then edited for quality control purposes before developing a coding scheme. The responses should then be coded and categories assigned numbers. Thereafter, analysis should be conducted within the context of the sustainable livelihood framework as designed by Scoones, 1998; Ellis, 2000 and DFID 2001. This is done with the aim of searching for emerging patterns, themes, or consistency in ideas. The information should finally be evaluated to determine its usefulness in answering the research objective (s). The facts and opinions heard from the informants are presented as well as author's own observations. Quantitative statistics could be used to generalize the study findings to the entire study population.

XI. RESEARCH ETHICS

A research on people's livelihood involves human subjects hence need for ethical approval. Eventhough such a research is not sensitive, I am still of the opinion that some ethical issues and concerns could still be raised. It is therefore necessary to maintain a high ethical standard. Most pastoral villagers feel very uneasy, scared, or reluctant to give written consent. Villagers normally become very curious when asked for written consent. They don't have a clear understanding of written consent as it is not part of their everyday life. Therefore researchers could ask for a verbal consent from his or her respondents.

An information sheet (translated into the local people's mother tongue) explaining the purpose of the research should be prepared in advance and sent to the respondents. For those who could not understand the contents of the form, research assistants (who should from the local area) explain to the villagers. To develop their

confidence during the interview, the researcher to continuously ask for permission whenever he or she wants to take any photograph or use an audio recorder. During and after the research, all data must be safely stored by the researcher with reasonable security safeguards against loss, unauthorized access, use, modification or disclosure and other misuse. The confidentiality of the participants must also be carefully protected.

XII. CONCLUSION

This paper gave an account of the methodological approaches which could be considered while collecting data on pastoral livelihoods. The research should be exploratory and a combination of qualitative and quantitative methods could be used. The major source of data is primary, with most of the information coming from in-depth interviews with key informants and household heads. These should be supplemented by secondary sources such as documentary materials in the form of records kept in the archives.

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